

# DOCUMENT RESUME

ED 236 301

UD 023 191

**AUTHOR** Farkas, George; And Others  
**TITLE** Impacts from the Youth Incentive Entitlement Pilot Projects: Participation, Work, and Schooling Over the Full Program Period.  
**INSTITUTION** Manpower Demonstration Research Corp., New York, N.Y.  
**SPONS AGENCY** Employment and Training Administration (DOL), Washington, D.C. Office of Youth Programs.; Employment of Training Administration (DOL), Washington, D.C. Office of Research and Development.  
**PUB DATE** Dec 82  
**GRANT** 28-36-78-36  
**NOTE** 328p.  
**PUB TYPE** Reports - Evaluative/Feasibility (142)  
**EDRS PRICE** MF01 Plus Postage. PC Not Available from EDRS.  
**DESCRIPTORS** Black Employment; \*Demonstration Programs; Disadvantaged Youth; \*Dropout Prevention; Economically Disadvantaged; \*Education Work Relationship; High School Graduates; High School Students; Hispanic Americans; Job Development; \*Low Income Groups; Out of School Youth; Program Effectiveness; Program Evaluation; Reentry Students; Secondary Education; \*Student Employment; \*Welfare Recipients; Youth Employment  
**IDENTIFIERS** \*Youth Entitlement Incentive Pilot Projects

## ABSTRACT

The Youth Incentive Entitlement Pilot Projects (YIEPP) demonstration, which was in full operation from 1978 to 1980, was established to test the efficacy of work combined with education as a remedy for high unemployment, low labor force participation, and the excessive school dropout rate of teenagers. YIEPP offered Federal minimum-wage jobs (part-time during the school year, full-time during the summer) to 16- to 19-year-olds from low-income or welfare households, with the condition that they complete their high school education, either through traditional or alternative education programs. Analysis of the impact of the demonstration found that (1) over 56 percent of the eligible youths participated in YIEPP at least once; (2) YIEPP increased the employment/population ratio for eligible youth by 67.5 percent over the ratio expected in the absence of the program; (3) YIEPP was particularly successful with black youth, whose employment, increased by 102.8 percent, became nearly equal to the employment percentages of white male youth; and (4) the smallest statistically significant YIEPP effect was found for Hispanic females, and there were no significant effects for Hispanic males. Additional effects were that total school enrollment increased significantly, the dropout rate decreased, and the rate of return to school (whether in traditional or alternative programs) for out-of-school youth increased. Finally, YIEPP caused a positive joint increase in schooling and work behavior among the key groups of program youth. (CMG)

ED236301

Manpower  
Demonstration  
Research  
Corporation

IMPACTS FROM THE  
YOUTH INCENTIVE  
ENTITLEMENT  
PILOT PROJECTS

PARTICIPATION,  
WORK, AND  
SCHOOLING  
OVER THE FULL  
PROGRAM PERIOD

TM023191

"PERMISSION TO REPRODUCE THIS  
MATERIAL IN MICROFICHE ONLY  
HAS BEEN GRANTED BY

KATHRYN ROBINSON  
Manpower Demonstration  
Research Corp.  
TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

George F.  
D. Alton  
Ernst W.  
Gail Trast  
Robert Je  
ABT ASS

Decem

## BOARD OF DIRECTORS

**RICHARD P. NATHAN**, *Chairman*  
Professor  
Woodrow Wilson School of  
Public and International Affairs  
Princeton University

**M. CARL HOLMAN**, *Vice-Chairman*  
President  
National Urban Coalition

**PAUL H. O'NEILL**, *Treasurer*  
Senior Vice-President  
International Paper Company

**ELI GINZBERG**, *Chairman Emeritus*  
Director  
Conservation of Human Resources  
Columbia University

**BERNARD E. ANDERSON**  
Director  
Social Sciences Division  
Rockefeller Foundation

**JOSÉ A. CÁRDENAS**  
Director  
Intercultural Development Association

**ALAN KISTLER**  
Director of Organization and Field Services  
AFL-CIO

**RUDOLPH G. PENNER**  
Resident Scholar  
American Enterprise Institute for  
Public Policy Research

**DAVID SCHULTE**  
Vice-President  
Salomon Brothers

**ROBERT SOLOW**  
Institute Professor  
Massachusetts Institute of Technology

**GILBERT STEINER**  
Senior Fellow  
Brookings Institution

**PHYLLIS A. WALLACE**  
Professor  
Alfred P. Sloan School of Management  
Massachusetts Institute of Technology

**NAN WATERMAN**  
Treasurer, Board of Directors  
Children's Defense Fund

---

## EXECUTIVE STAFF

**BARBARA B. BLUM**, *President*

**JUDITH M. GUERON**, *Executive Vice-President*

**GARY WALKER**, *Senior Vice-President*

**ROBERT C. PENN**, *Vice-President*

**MICHAEL R. BANGSER**, *Vice-President*

**Manpower Demonstration Research Corporation**

**IMPACTS FROM THE YOUTH INCENTIVE ENTITLEMENT PILOT PROJECTS:  
PARTICIPATION, WORK, AND SCHOOLING OVER THE FULL PROGRAM PERIOD**

George Farkas  
D. Alton Smith  
Ernst W. Stromsdorfer  
Gail Trask  
Robert Jerrett, III

Abt Associates Inc.

Prepared for:

Manpower Demonstration  
Research Corporation

December 1982

40 023191

This report was prepared pursuant to the Youth Employment and Demonstration Project Act of 1977 (PL-95-93), Title II, "Youth Incentive Entitlement Pilot Projects."

Funding for this national demonstration was provided by the Office of Youth Programs of the Employment and Training Administration, the U.S. Department of Labor, under Grant No. 28-36-78-36 from the Office of Research and Development of ETA.

Researchers undertaking such projects under government sponsorship are encouraged to express their professional judgments. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the federal government sponsors of the demonstration.

Copyright 1982 by the Manpower Demonstration Research Corporation

## ACKNOWLEDGEMENTS

The author for the Executive Summary and Chapter 1 was Ernst W. Stromsdorfer. Robert Jerrett wrote Chapter 2. The analysis for Chapters 3 through 6 was designed by George Farkas and D. Alton Smith, in consultation with Messrs. Stromsdorfer and Randall J. Olsen. Data management, variable creation, and associated computer and statistical work was performed by Gail Trask, who was assisted by Jane Kulik and Linda Sharpe. Computations in Chapters 3 and 4 were carried out by D. Alton Smith, who also wrote these chapters in association with George Farkas. Computations in Chapter 5 were carried out by Trask and by Smith in Chapter 6, while both chapters were written by Farkas. All material was edited by Ernst Stromsdorfer and Felicity Skidmore. Annette Butler produced the report.

Valuable technical criticism and editorial advice were provided by Judith Gueron, Robert Cook, and Sheila Mandel of the Manpower Demonstration Research Corporation and Alan L. Gustman of Dartmouth College.

## YIEPP SITES AND CETA PRIME SPONSORS

### Tier I

<u>Site</u>	<u>Prime Sponsor</u>
Baltimore, Maryland	Mayor's Office of Manpower Resources
Boston, Massachusetts	Employment and Economic Policy Administration
Cincinnati, Ohio	City of Cincinnati Employment and Training Division
Denver, Colorado	Denver Employment and Training Administration
Detroit, Michigan	Employment and Training Department
King County, Washington	The King County Consortium
Southern Rural Mississippi	Governor's Office of Job Development and Training

### Tier II

Alachua County, Florida	Alachua County CETA
Albuquerque, New Mexico	City of Albuquerque Office of CETA
Berkeley, California	Office of Employment and Community Programs
Dayton, Ohio	Office of the City Manager Manpower Planning and Management
Monterey County, California	Monterey CETA Administration
Nashua County, New Hampshire	Southern New Hampshire Services/CETA
New York, New York	Department of Employment of the City of New York
Philadelphia, Pennsylvania	City of Philadelphia Area Manpower Planning Council
Steuben County, New York	Steuben County Manpower Administration
Syracuse, New York	City of Syracuse Office of Federal and State Aid Coordination

## PREFACE

A number of studies have documented the employment problems faced by low-income, often minority, youths who are growing up with minimal exposure to the work world. Many of these same youths have either dropped out of school or are at risk of doing so. These patterns threaten to severely undermine their aspirations for a positive work future.

Although the past decade has witnessed a number of efforts designed to help these youths find a place in the labor market, there have been some important gaps in the nation's overall approach to this problem. First, many such programs gave young people jobs, but failed to address their schooling; there was even the danger that, rather than reinforce their learning experience, some programs would draw youths away from school. Another consequence, too, was that the two institutions most intimately involved with the improvement of skills among young people -- the employment and training system and the schools -- were often given little reason to work together. Finally, these programs were usually not implemented on a scale sufficient to have a major impact on the youths' opportunities.

The Youth Incentive Entitlement Pilot Projects (YIEPP) provided an unusual occasion to learn about the feasibility and outcomes of a large, coherently defined program designed to link schooling and work. The

---

MDRC is publishing simultaneously the full impact and implementation findings on the operational period of the Youth Incentive Entitlement Pilot Projects demonstration. This preface introduces both this impact report and its companion volume, Linking School and Work for Disadvantaged Youths: The YIEPP Demonstration: Final Implementation Report.

---



YIEPP demonstration introduced two major innovations: the program model itself -- where 16- to 19-year-old disadvantaged youths were offered a part-time job during the school year and a full-time job in the summer on the condition that they stay in school and meet academic and job-related performance standards -- and the scale of implementation, where the job offer was extended to all eligible youths in 17 designated demonstration areas. Over 76,000 youths joined and were given jobs during the full demonstration period.

In 1977, the Department of Labor's Office of Youth Programs contracted with the Manpower Demonstration Research Corporation (MDRC) to conduct the research and oversee the operations of the YIEPP demonstration. Based on an agenda identified in the 1977 Youth Act, a large, four-part research program was designed to address: (1) the number of youths to participate from among those eligible and the program's short- and longer-run impacts on employment and schooling behavior; (2) the feasibility of the program model and other operational lessons; (3) the cost of the demonstration and its replication or expansion; and (4) a number of special issues, including the quality of work provided to the youths and the significant role of businesses in an unprecedented private sector job creation effort.

Reports issued to date have covered the initial period of program implementation, early impacts, and many special issues. The two reports published at this time summarize the implementation and impact lessons from the full 30-month demonstration period and provide cost data. A final report scheduled for 1983 will examine whether YIEPP had longer-

term, post-program effects on the youths' educational and employment behavior.

The two current volumes contain significant findings about the YIEPP approach. Somewhat surprisingly, the implementation report indicates that the prime sponsors did not encounter major problems in meeting the difficult challenges of delivering on a job guarantee. What proved more troublesome was the enforcement of the school performance conditions, a responsibility shared with the school systems involved. However, despite start-up difficulties, the report suggests that the demonstration's overall record was one of significant managerial achievement.

Perhaps the most compelling part of the program's record, as seen in both of these reports, is its success in attracting black youths: they are seen joining YIEPP in greater numbers and staying in it longer than any other group. This finding is particularly significant in the context of the experience of the past 25 years, when there has been a consistent and dramatic decline in minority youth employment, particularly for males. Thus, while in 1955 black male youths were employed at the same rate as whites, by 1981 their employment rate had been cut in half, while that of white youths remained constant or improved. A similar, though somewhat less dramatic, story holds true for young minority women.

While these facts are clear, the explanation is not. Before the YIEPP demonstration, there had been relatively little evidence to help in sorting among the conflicting explanations of job shortages, discrimination, lack of motivation, unrealistic wage expectations, or the attraction of more profitable extra-legal alternatives. YIEPP, with its job guarantee, provided a unique, direct mechanism to test youths' interest

in working. The striking finding in the impact study, where YIEPP is seen to double minority youths' school-year employment rates -- bringing them essentially equal to or exceeding those for white youths -- suggests that the prevailing low employment rate is not voluntary. YIEPP's impacts on school enrollment, while more modest, are also positive. While the program did not reverse declining enrollment as youths' progressed through high school, it slowed this down, through both reducing the drop-out rate and increasing the numbers of youths returning to school.

From the varied lessons in both reports, YIEPP emerges as a programmatic intervention that encourages school completion and the compilation of a work-history. Moreover, the program proved feasible to implement on an extremely large scale. The management record of the YIEPP prime sponsors is testament to the fact that large numbers of jobs can be developed to alleviate youth unemployment, and that these jobs can provide a meaningful work experience. Perhaps, most of all, YIEPP has shown that, when jobs are available, young people do want to work -- even at the minimum wage, and even while still continuing in school.

While a job guarantee as a solution to large-scale labor market weaknesses may not seem currently affordable, the lessons on the YIEPP model itself are of pointed relevance. The guarantee itself was not essential to the rest of the program model. YIEPP could be operated as a slot program while still retaining its other features; in fact, this occurred in a transition year immediately following the demonstration period. Much of the YIEPP experience should be of interest in view of the new Job Training Partnership Act, which reflects the country's

continued focus on preparing youths for employment and on models that link school and work, demanding performance from the youths in exchange for a job. In short, these two reports provide many lessons that future planners of youth programs will find instructive.

Judith M. Gueron  
Executive Vice-President

Manpower Demonstration  
Research Corporation

## Table of Contents

### Page No.

Overview.....	xvii
CHAPTER 1 THE PROGRAM AND ITS NATIONAL POLICY CONTEXT.....	1
- The Policy Problem.....	1
- The Features and Goals of the Youth Incentive Entitlement Project.....	7
- Implementation Factors.....	12
- Plan of the Study: Expected Effects of YIEPP during the Program Period.....	15
CHAPTER 2 RESEARCH DESIGN AND SAMPLE ISSUES.....	17
- Research Design.....	17
- The Longitudinal Survey.....	22
- Analysis Sample.....	24
- Pilot and Comparison Sites.....	32
- Attrition from the Baseline Longitudinal Sample.....	40
- Program Eligibles.....	42
- Summary.....	45
CHAPTER 3 PROGRAM PARTICIPATION.....	47
- Introduction.....	47
- Measuring Program Participation.....	47
- Program Participation Rates.....	49
- Participant Program Experiences and the Duration of Program Participation.....	61
- Summary.....	67
CHAPTER 4 PROGRAM EFFECTS ON SCHOOL ENROLLMENT.....	71
- Measurement Issues.....	71
- Program Effects on School Enrollment by Type of Degree Program.....	75
- Program Effects on School Enrollment for the 15- to 16-year-old Cohort.....	83
- Program Effects on School Enrollment by Site, Race and Sex.....	90
- Summary.....	98

Table of Contents  
(Continued)

	<u>Page No.</u>
CHAPTER 5	
PROGRAM EFFECTS ON EMPLOYMENT AND LABOR FORCE PARTICIPATION.....	101
- The Context of the Analysis.....	101
- Program Effects on the Employment/Population Ratio..	108
- Net Job Creation.....	123
- Program Effects on Labor Force Participation, Employment, and Unemployment Rates.....	127
- Program Effects for the 15- to 16-year-old Cohort....	131
- Employment/Population Ratios and Wage Rates for Employed Youths.....	134
- Comparison with United States Average Employment and Unemployment Statistics.....	135
- Summary.....	137
CHAPTER 6	
PROGRAM EFFECTS ON SCHOOL ENROLLMENT AND EMPLOYMENT, JOINTLY CONSIDERED.....	139
- Total Program Effects.....	140
- Program Effects by Primary School and Work Status in the Preprogram Period.....	142
- Summary.....	146
APPENDIX A	
Supplementary Impact Tables.....	151
APPENDIX B	
Regression Models for Basic Program Impacts.....	173
APPENDIX C	
Tests of Sample Attrition Bias.....	241

## List of Tables

<u>TABLE</u>	<u>Page No.</u>
1.1 Percent of High school Dropouts among Persons 16 to 19 Years Old, by Age, Race and Sex: United States, October, 1977, 1978 and 1979.....	3
1.2 Number of Youths Assigned in YIEPP Projects.....	12
2.1 Number of Youths Working in YIEPP Jobs.....	21
2.2 Characteristics of the Analysis Sample at Baseline.....	25
2.3 Marital and Parental Status of the Analysis Sample over Time.....	30
2.4 The YIEPP Sample Compared with the National Longitudinal Survey of Young American Samples.....	31
2.5 YIEPP Evaluation Sites Compared to YIEPP Total and the Nation.....	34
2.6 Selected Characteristics of the Pilot and Comparison Sites.....	36
2.7 Analysis Sample Characteristics of Pilot and Comparison Sites.....	38
2.8 Characteristics of Baseline Longitudinal and Analysis Samples.....	41
2.9 Program Eligibles, Spring 1978 - Summer 1980.....	44
3.1 Program Participation Rates by Site and Period.....	50
3.2 Program Participation Rates by Cohort and Period.....	53
3.3 Program Participation Rates (Spring 1978 - Summer 1980) by Cohort, Race and Sex.....	55
3.4 Adjusted Program Participation Rates.....	57
3.5 Program Participation Rates by Sex, Family Status and Period.....	58
3.6 Program Participation Rates by School and Work Status in the Previous Period.....	60
3.7 Participant Program Experience by Site.....	62

List of Tables  
(Continued)

<u>TABLE</u>		<u>Page No.</u>
3.8	Duration of Program Participation by Site, for Program Participants.....	65
3.9	Duration of Program Participation by Cohort, Race and Sex, for Program Participants.....	66
3.10	Adjusted Duration of Program Participation by Site, Cohort, Race and Sex, for Program Participants.....	68
4.1	School Enrollment Rates by Type of Degree Program and Pilot or Control Sites.....	76
4.2	Program Effects on School Enrollment Rates by Type of Degree Program.....	78
4.3	Program Effects on Dropout and Return-to-School Rates...	80
4.4	Enrollment Characteristics by Pilot or Control Site.....	84
4.5	Program Effects on Enrollment, Dropout and Return-to-School Rates for the 15- to 16-year-old Cohort.....	86
4.6	Cumulative Program Effects on School Enrollment Rates for the 15- to 16-year-old Cohort.....	88
4.7	Program Effects on Total School Enrollment Rates By Site.....	91
4.8	Program Effects on Enrollment, Dropout and Return-to-School Rates by Race.....	93
4.9	Program Effects on Enrollment, Dropout and Return-to-School Rates by Sex.....	96
5.1	Total Unemployment Rates (Individuals of All Ages) in Pilot and Control Sites: Annual Averages, 1975-1980....	103
5.2	Average Employment/Population Ratios, by Pilot or Control Site, and Period.....	109
5.3	Program Effects on Employment/Population Ratios, Full Study Sample.....	110
5.4	Program Effects on Employment/Population Ratios for the 15- to 16-year-old Cohort, Separately by Period.....	113
5.5	Program Effects on Employment/Population Ratios, Separately by Site.....	115



---

List of Tables  
(Continued)

<u>TABLE</u>		<u>Page No.</u>
5.6	Program Effects on Employment/Population Ratios, Separately by Sector.....	117
5.7	Program Effects on Employment/Population Ratios Separately by Period, Sex, and Race.....	120
5.8	Net Job Creation, by Season and Period.....	125
5.9	Average Labor Force Participation, Employment, and Unemployment Rates, by Pilot or Control Site and Period.....	128
5.10	Program Effects on Labor Force Participation, Employment, and Unemployment Rates.....	129
5.11	Program Effects on Labor Force Participation, Employment, and Unemployment Rates for the 15- to 16-year-old Cohort, Separately by Period.....	132
5.12	Employment/Population and Unemployment/Population Ratios for 16- to 19-year-old youths by Race and Sex: YIEPP Sample and United States Averages for October 1978.....	136
6.1	Program Effects on the Percentage of Program-Eligible Time Spent in Different School and Employment States....	141
6.2	Program Effects on the Percentage of Program-Eligible Time Spent in Different School and Employment States, by Primary State in the Preprogram Period.....	143

## List of Figures

### FIGURES

### Page No.

1.1	Employment/Population Ratios by Demographic Characteristics, 1955-80.....	4
1.2	Civilian Labor Force Participation Rate by Demographic Characteristic, 1955-80.....	5
1.3	Unemployment Rates by Demographic Characteristics, 1955-80.....	6
5.1	The Mechanism of Program Effect on Total Employment for the Target Population.....	106

## OVERVIEW

### INTRODUCTION

The Youth Incentive Entitlement Pilot Projects (YIEPP) demonstration was established to test the efficacy of work combined with education as a remedy to high unemployment, low labor force participation, and the excessive school dropout rates of teenagers. The demonstration began in the spring of 1978, and the period of full operations -- the focus of this report -- extended through August of 1980.

#### Description of the Program

The YIEPP program was targeted to youths aged 16 to 19, from low-income or welfare households, who had not yet graduated from high school. Its primary feature was an offer of a guaranteed, federal minimum wage job, part-time during the school year and full-time during the summer, on condition that youths remain in or return to school or pursue a General Equivalency Diploma (GED) through an alternative educational program. For YIEPP participants, getting and keeping this subsidized job was conditional on satisfactory schooling and job performance.

An important difference between this and previous programs intended to draw youths back to school was that both school and work performance standards were to be met as a condition of remaining in the program. The schooling requirement eliminated the possibility that some youths would quit school to take advantage of a subsidized job -- a potential problem in other subsidized employment programs and strategies (such as a youth subminimum wage) designed to increase employment for this population.

The program was based on the empirically suggested premise that youths who are both in the labor market and attending school fare better in terms of earnings and employment after leaving school than those who drop out of either school or the labor market. In particular, youths who are neither in the labor market nor in school appear to suffer long-term economic disabilities. While such youths are a prime target for this program, YIEPP concentrated as well on providing work experience for an in-school population.

The short run goals of YIEPP were to:

- Reduce the school dropout rate
- Increase the high school graduation rate
- Provide work experience
- Provide income

The long-run goal was to increase labor productivity and thereby improve life-cycle employability and earnings. In addition, participants might acquire additional postsecondary education.

These goals were to be accomplished through the participants' improved performance in school and a meaningful work experience. The operational objectives of the demonstration were to document the potential demand for the program by youths and employers and to demonstrate its administrative feasibility.

### The Social Problem

The social problem addressed by YIEPP is chronic youth joblessness. This joblessness has developed and worsened over the past several decades, particularly among black youths, who represent the core of the problem.

The evidence is striking. During the past 25 years, the employment/population ratio<sup>1</sup> for white teenage males (aged 16 to 19) has remained at about 90 percent of that for all workers. In contrast, the employment/population ratio for black male teenagers, which was comparable to that for white teenage males in 1954, has declined by about 50 percent in the last 15 years, even falling below that of white teenage females in 1968. For black teenage females -- the group with the worst experience of all -- the employment/population ratio dropped in 25 years from 48 to 39 percent of that for all workers. The story is similar for labor force participation and unemployment rates.

School dropout statistics are equally discouraging. While dropout rates at ages 16 and 17 are similar for blacks and whites, both male and female, by ages 18 and 19 black males and females experience dropout rates ranging as much as 37 to 58 percent higher than 18- and 19-year-old comparable white youths over the 1977 to 1979 time period. Hispanic youth dropout rates are even worse when compared to rates for white youths.

The potential causes for these phenomena are multiple and interacting. First, much of the high level of unemployment (looking for but unable to find a job) and nonemployment (not looking for a job), regardless of sex and race, is attributable to normal life cycle patterns of work activity for this age group. Business cycle adjustments also fall disproportionately on new labor force entrants and persons with

---

<sup>1</sup> The employment/population ratio is the number of employed individuals in a given group divided by the total number of individuals in that group.

short job tenure. Second, the geographic distribution of employment demand is a contributing factor, exacerbated by the movement of jobs from the central city. Finally, the minimum wage requirement may play a negative role in the hiring of entry-level young unskilled workers (Wise and Meyer (1982)).

However, these factors alone cannot explain youth joblessness. For example, the employment situation for white female teenagers has improved dramatically despite relatively depressed economic growth over the past decade. Factors that go beyond the characteristics and conditions that affect available jobs (the demand side of employment) and deal with the special characteristics of the teenager labor force (the supply side of employment) are also at work. Yet while these factors are explored below, it is important to note that the demand and supply conditions operate jointly to account for the joblessness problem.

Among the significant supply side factors is an increase in the population size of young persons which has led to more competition for jobs and, in addition, depressed their wage rates in comparison to adults. Ironically, the similarity of wage rates for this age group may work against blacks to the extent that some employers may discriminate racially in their hiring in favor of white youths.

A second set of factors involves inadequate education, skills and motivation levels of youths, as well as broad socioeconomic problems associated with inner-city life. The specification and measurement of these factors are difficult but it is clear that drug and alcohol abuse, youth crime, broken homes, high teenage pregnancy rates, and poor schooling and work habits contribute in the aggregate to youth jobless-

ness. The increased level of welfare payments, which may lower the incentive to work at current wage rates, is seen as another contributing factor.

The YIEPP policy response to both demand and supply side factors is a joint strategy: it deals with the demand side problem of job availability by directly providing jobs; it deals with the structural and supply side problem by enhancing educational and job-related skills.

#### The Potential Significance of YIEPP

The YIEPP demonstration, among all the programs and demonstrations fostered by the Youth Employment and Demonstration Projects Act of 1977 (with the possible exception of the Job Corps), offered the most coherent and focused attack on the joint problems of youth joblessness and school dropout behavior.

Analyses of previous youth employment and training programs suggest the following lessons in policy and design (Stromsdorfer 1980):

- Work experience alone may not improve the long-run employability or school attendance of youths, especially if the jobs are ill-defined, with low-quality supervision.
- Work experience may be more effective when it is combined with other services such as job placement, skills training, or basic education.
- Though poorly tested, services aimed at changing personality traits and personal values have not yet been shown to be successful. Of all the services offered to youths other than skills training and work experience, job placement services appear to be the most effective.
- Success in the workplace is directly related to basic writing, communication, and computational skills.
- Successful program administration requires the development and maintenance of minimum behavioral and program performance standards. Effective management is a necessary condition for an effective program.

In response to these lessons, the YIEPP demonstration incorporated the

following positive features:

- A job at the federal minimum wage was provided to all eligible youths who wanted one.
- While the program itself only provided employment, work experience and schooling (or participation in a GED program) were joint requirements for participation; one could not occur without the other.
- Work and school performance standards were established, and efforts were made by program managers to enforce them.
- The emphasis on return to, and completion of, schooling (or acquiring a GED) implied an emphasis on basic language and computational skills.
- Services were directed mainly toward the successful completion of school and a meaningful work experience.
- The quality of program management was relatively high, in part, because of an extensive third-party monitoring.

This combination of features created a relatively straightforward and coherent program model. The "treatment" provided was explicit; it attempted to combine work and school experiences for youths in a complementary and mutually reinforcing way.

#### RESEARCH DESIGN

The research design underlying the impact analysis had two major characteristics. First, it made use of matched comparison sites, chosen to help measure net program effects. Second, it focused on program eligibles, not just participants.

Comparison sites. The matched pairs on which the evaluation was based were:

##### Pilot Site

Denver, Colorado  
Cincinnati, Ohio  
Baltimore, Maryland  
Mississippi  
(eight rural counties)

##### Comparison Site

Phoenix, Arizona  
Louisville, Kentucky  
Cleveland, Ohio  
Mississippi  
(six rural counties)



These eight sites were paired on the basis of similar economic and demographic characteristics, and in each one, a random sample of program-eligible youths was identified. The study sample of youths eligible for YIEPP in June, 1978 shortly after its inception was weighted heavily (over 35 percent) toward youths aged 15 and 16. This strategy allowed a large portion of the youths to age into eligibility during the demonstration and attain the maximum potential period of exposure to the program. The behavior of youths in this cohort would thus approximate the experience of an ongoing program.

A series of four questionnaires was administered to the sample, covering the youths' schooling, work, and related experiences. The first examined their preprogram period behavior, the second and third, the period during program operations, and the fourth, their post-program experiences. This document is based on an analysis of the first three waves of interviews, and thus uses longitudinal data from January, 1977 through the fall of 1980.

The data indicate that the sociodemographic characteristics of pilot and comparison site youths, while not perfectly matched, were quite similar. Multiple regression analysis was used to adjust for residual differences across sites, but the four pilot sites still must be regarded as four distinct experiments in program administration. This impact evaluation therefore considers each pilot site or pilot/comparison pair on its own terms as revealing what happens when a program such as YIEPP is introduced into a particular environment. Four-site and three-site aggregations (the latter exclude the Denver-Phoenix pair for reasons discussed below) are used to express average program impacts.

The Focus on Eligibles. In an entitlement program, it is not possible to assign youths randomly to program and nonprogram groups and to systematically deny YIEPP services to the latter group. The alternative strategy chosen, therefore, used comparison communities, as noted above, and program-eligible youths in both pilot and comparison sites. While this approach risks the possibility of attributing effects to the program that really result from differences among communities, it has a key advantage in that it can ignore competition for jobs in the pilot site between participants and nonparticipants -- an important fact in a program where participants are entitled to a job guarantee.

One additional policy reason for focusing on eligibles was the Congressional mandate to measure program take-up rates, the composition of program participation, and the factors that influenced participation.

#### PROGRAM IMPLEMENTATION AND OPERATIONS

The program and research has been coordinated throughout by the Manpower Demonstration Research Corporation (MDRC), which made major efforts to impose a uniform program on the pilot sites. Participant eligibility was carefully checked, and standards were set for the verification and reverification of age and income eligibility, on-the-job performance, and school enrollment and performance.

Over the period of full operations -- from the spring of 1978 through August of 1980 -- almost 82,000 youths enrolled in 17 pilot areas of various sizes in different geographic regions. Seven large Tier I sites, each encompassing a full or partial city or a multi-county region, enrolled a total of 72,000 youths. These sites tested the feasibility of

operating YIEPP under large-scale conditions, where sufficient jobs had to be found to meet the demand. The remaining ten Tier II sites, typically covering less populated areas or small sections of a city, were chosen to allow broader program innovation.

Five key program characteristics could be expected to affect the relative success of the program: the scale of operations; management; recruitment; job development; and enforcement of standards. Each is discussed briefly to establish the operational context of the program.<sup>1</sup>

- Timing and Scale of Operation. The program began enrolling youths during the spring of 1978. After an initial recruitment drive, almost 30,000 youths had enrolled across sites by June 1978, over one-half of them at the four pilot sites selected for the impact study. Cumulative enrollment increased to over 59,000 (over 31,000 in the four sites) by September, 1979, and to almost 82,000 by the end of August, 1980, when full operations ended. Youths actively participating, or working, numbered 76,000 over the entire demonstration period. YIEPP reached a roughly steady state participation level of about 20,000 youths per month by June, 1978.

The overall level of program operations, however, encompassed some major site distinctions. Of particular importance to this evaluation was a series of management difficulties encountered in Denver. For a number of reasons -- including organizational problems, negative publicity, and a breakdown of relationships with the public schools -- the program was never fully implemented in that site. Program intake was closed down in June, 1979; with new enrollments frozen, the participation level remained low.

As a result, Denver cannot be considered an entitlement program in the same context as the other sites because while participants in Denver did receive program treatments that may have resulted in impacts, the program, as implemented there, was basically a limited slot program after June, 1979. The impact findings on participation, school retention, and employment in Denver must be regarded in this light. When aggregations of impacts across study sites are shown later in this report, we

---

<sup>1</sup> See Diaz, et al. (1982) for a full discussion of these issues.

<sup>2</sup> See Diaz et al. (1980).

show them, when it makes a difference, with and without the Denver/Phoenix pair.

- Management. Baltimore was an effectively managed project, with strong central control and mayoral support. Denver, as indicated above, was the least effectively managed. While Mississippi was a rural site, with a large number of separate political jurisdictions, its management was relatively effective, despite some initial conflict between the State Employment Service and the Governor's Office of Job Development and Training, the CETA prime sponsor. Here, too, however, there were some problems obtaining sufficient jobs for youths and delays in job assignments.

The Cincinnati situation reflected a prime sponsor that had difficulty managing various aspects of the program. However, even with management functions spread among six subcontractors and mixed implementation results, some nine-tenths of its enrolled youths were placed in jobs.

- Recruitment. Recruitment efforts were generally successful in reaching a high proportion of program eligibles. By the end of the demonstration in August, 1980, 94.2 percent of in-school eligibles and 75.3 percent of dropouts had been informed of the program. Of the in-school youths who knew of the program, some 85 percent applied; of the out-of-school youths, 61 percent. This difference is generally attributable to a combination of prime sponsor recruitment emphasis on the easier to reach in-school population, and the relatively lower interest among dropouts, especially older dropouts, in returning to school.

Of the four pilot sites, the dropout participation rate was highest in Baltimore, where it reached 36 percent and lowest in Denver, at 11 percent. Recruitment efforts generally tapered off after the first year of program operations, and word-of-mouth thereafter generally accounted for new enrollments.

- Job Development. For the most part, job developers successfully found adequate numbers of jobs for the youths enrolling in YIEPP. Over the course of the demonstration, the 17 YIEPP prime sponsors assigned some 76,000 youths to subsidized work experience with 10,816 work sponsors. About 93 percent of all enrollees received work positions. The large proportion of jobs developed were in the public or nonprofit sectors, but as time passed and available job slots in the public sector were increasingly absorbed, emphasis on private sector placement increased at most sites.

The average proportion of hours worked in the private sector doubled from the first months of the demonstration to the last full year, from 10 to 23 percent. Among evaluation sites, Denver developed the highest proportion of private sector

jobs. Private sector firms accounted for 28 percent of the total hours worked in that site. In the other three sites, the private sector was responsible for between 12 to 14 percent of the hours worked.

Overall, there appeared to be little difference in the quality of the jobs between the private sector and the public and private nonprofit employers. A research study has found that, for the most part, jobs in all sectors were meaningful ones. Over 86 percent of the worksites<sup>1</sup> were judged adequate or better by independent field assessors.

- Enforcement of School and Job Standards. One major operational issue facing YIEPP was an inherent conflict between the program operators and school administrators. For their part, program operators were charged with the obligation of setting up and enforcing school standards which, if not met, could result in a youth's dismissal from YIEPP. The consequence of such standards, somewhat ironically, could be a reduced incentive to school retention, even though the conditional offer of a YIEPP job was intended to spur a youth's school attendance. Any such discouragement effect would be antithetical to the philosophy of educators who see schooling as a right and are generally opposed to any institutional device that denies that right or otherwise discourages school attendance.

In practice, this potential conflict was muted, in part, because the school performance and attendance standards were not set high. Additionally, once the schooling standards were established, they were haphazardly enforced, especially at the large Tier I sites, primarily because of a variety of coordination problems between the schools and prime sponsors. Enforcement tended to increase over the demonstration period, but was never satisfactory. The basic condition, requiring youths to be enrolled in school, however, appears to have been effectively enforced.

Standards for job performance and attendance, on the other hand, appeared to be satisfactorily enforced, primarily because of the self-interest of employers in seeing that poorly performing or attending youths were removed from their work-sites. While employers were provided with some guidance by prime sponsors, they were generally left to define standards of attendance and performance for themselves. If these standards were violated, employers usually turned to the program, which enforced the appropriate sanction, either suspension or termination.

---

<sup>1</sup> See Ball, Gerould and Burstein (1980).

## KEY FINDINGS ON PARTICIPATION, EMPLOYMENT AND SCHOOLING

The following key questions are addressed in this report:

- What were the levels and determinants of program participation?<sup>1</sup>
- What was the during-program impact on youth employment?
- What was the during-program impact on school enrollment?
- What was the during-program impact on the tradeoff between school enrollment and employment?

This study puts forth the following general conclusions:

- The program participation rate was very high (56 percent), suggesting that the youth unemployment problem was more on the demand side than on the supply side of the labor market. The effects occurred even at the federal minimum wage.
- In the presence of YIEPP, employment rates of black males approached those of white males and the employment rate of black females exceeded that of white females. This indicates that these youth want jobs and may suggest that there is discrimination in the demand for black youths.
- Displacement was sufficiently low so that large net employment effects resulted.<sup>2</sup> This also suggests that demand side constraints are a significant contributing factor to the youth employment problem;
- There was a small, but significant, increase in school enrollment for the sample as a whole in the fall of 1979, and an even more significant increase for the younger teens and black youths, those groups most likely to participate in YIEPP.
- Youths did not substitute work for school. The direction of the YIEPP school enrollment and substitution effects is in contrast to other youth employment programs where recent studies suggest that an increase in employment opportunities without a school enrollment requirement may result in a drop in school enrollment.

---

<sup>1</sup> Program participation is defined as enrolling in YIEPP and holding a program job for at least two weeks.

<sup>2</sup> Job displacement occurs when an otherwise qualified youth loses his or her job or is not hired because a subsidized program-eligible youth is.

The findings presented below assess the effects of the YIEPP program during its full operational period and offer an initial indication of its potential impact. These during-program issues of participation and program impacts are particularly important since YIEPP must first demonstrate its ability to attract participants and place them in appropriate jobs and in school before later postprogram effects can be found. While the full sample of participants is discussed, primary attention is focused on the 15- to 16-year-old cohort since this group's experiences are most likely to reflect those of youths participating in an ongoing national program.

#### Participation

The extent of program participation and the characteristics of participants are important determinants of YIEPP's impacts. If few youths join the program, it can exert relatively little impact on area-wide youth employment and school dropout rates. Alternatively, if program participation is high, but participants are eligible youths who would have been enrolled in school and working in the absence of the program, YIEPP's impact will be small, and social resources misdirected to that degree. However, if YIEPP is successful in returning dropouts to school and retaining potential dropouts in school, in providing useful work experience for youths, and in employing otherwise unemployed youths, then the program will have exerted a positive impact on the target population during the program period. The stage is then set for possible postprogram impacts.

First, this study presents estimates of the program participation rate: the number of youths ever holding a program job for at least two

weeks divided by the number of program-eligible youths. Youths not working for a minimum two-week period can be considered as never having received the basic YIEPP treatment of simultaneous school and work. For participating youths, the extent of participation is measured by the number of weeks worked in a program job relative to the total weeks eligible. Underlying this is the youth's own evaluation of the costs and benefits of program participation.

Participation Rates. Table 1 displays estimated program participation rates by site, cohort, sex, and race.

Across the 32-month period of full program operations, over 56 percent of the eligible youths participated at least once in YIEPP. Participation reached a high of 68.8 percent in Baltimore, where a strong program with aggressive outreach was combined with a weak labor market. The rate was lowest in Denver (38.8 percent), where truncation of the entitlement provision was combined with a strong labor market.

The 15- 16-year-old Cohort. Because of the dynamics of program participation explained earlier, the behavior of the 15- to 16-year-old cohort is the best predictor of a participation pattern that might result as successive cohorts age through an ongoing national program. The 15- to 16-year-olds in YIEPP show a cumulative participation rate of 65.8 percent -- 9.6 percentage points (about 17 percent) higher than the rate for the sample as a whole, and almost 20 percentage points (43 percent) greater than that for the 17- to 20-year-old cohort. This indicates that demand for and participation in YIEPP was very high among this target population of youths.

Other Groups. Participation differences by race are large and



Table 1. Program Participation Rates and Durations  
by Site and Selected Characteristics--Cumulative:  
Spring 1978 through Summer 1980

	Percent of eligible youths ever participating in YIEPP	Average weeks participating, for participant
All Sites	56.2	56.1
Denver	38.8	47.8
Cincinnati	49.3	50.4
Baltimore	68.8	64.6
Mississippi	56.2	47.0
Years of age in June, 1978		
15-16	65.8	57.3
17-20	46.0	54.2
Male	55.3	54.9
Female	57.1	57.1
White	21.5	46.3
Black	63.4	56.7
Hispanic	38.3	54.2

Source: Tables 3.1, 3.2, and 3.3.

Note: These cumulative rates are estimated from a sample that is continuously adjusted to reflect program eligibility with respect to age, location, and high school graduation.

significant. Over 63 percent of eligible blacks participated at some time, compared to only 21.5 percent of whites. Though not shown in Table 1, black females, at 64.8 percent, had the highest participation rate while white females, at 19.4 percent, had the lowest. Young women participated at a marginally higher rate than young men once one adjusts for such factors as race.

A youth's previous schooling and employment experience -- key policy variables for this program -- had significant effects on participation rates over time. Over the first 18 months of program operation, for example, 57 percent of the eligible youths already enrolled in school at the program's inception joined YIEPP. In contrast, about three out of ten (29 percent) of the eligible dropouts participated in YIEPP and returned to school. Obviously, the schooling requirement tied to the job offer represented less of a barrier to students than to the dropouts at program inception; a return to school would represent a major change in their lives, given their prior decision to drop out. Additionally, employed dropouts were even less likely to enroll over the first 18 months: only 22 percent. (Farkas, et al. 1980: Table 2.3.)

Finally, in tracking participation experience over time, it is notable that once individuals were employed in a program job, they had a much higher absolute and relative probability of persisting in program participation over successive time periods compared to those youths who were employed in a nonprogram job or not working at all.

Duration of Program Participation. On average, participants were employed by the program for 56.1 weeks, or 51.2 percent of the weeks they were eligible, ranging from an average of 64.6 weeks in Baltimore to

47.07 weeks in Mississippi. Denver youths had the lowest duration of all -- 40.6 percent of eligible weeks. The 15- to 16-year-old cohort participated 57.3 weeks, on average, in contrast to the 17- to 20-year-olds, who participated 54.2 weeks.

Black females registered the highest mean weeks of participation and the highest participation rates for the available time -- 57.8 weeks and a 53.6 percent participation rate. White males were the lowest, participating 43.8 weeks, on average, and they participated for only 40.7 percent of the available time. This contrasting experience may reflect the relative ability of these two groups to find non-YIEPP employment.

#### Impact on Employment

Program participation implied that a youth was holding a job. However, high participation rates cannot automatically guarantee a high level of increased employment for eligible youths. At least some participants would have been employed in the absence of the program, and for those persons, there could, by definition, be no net increase in the employment rate due to the program. In addition, some employers might substitute YIEPP participants for other unsubsidized youths. Employment in the pilot sites could thus not simply increase by the total number of YIEPP jobs.

Given these general caveats, the data indicate that YIEPP did have a significant net positive effect. (See Table 2.) The total during-program effect of YIEPP was to increase the employment/population ratio for eligible youths by 67.5 percent over the ratio expected in the absence of the program. YIEPP was particularly successful with black youths, especially during the school year; for black male youths alone,

Table 2. Program Effects on Employment/Population Ratios by Total Sample, Sex, Race, and 15- to 16-year-old Cohort for Summary Time Periods

	Pilot site ratio	Estimated pilot site ratio in the absence of the program	Program effect	Program effect as a percent of ratio in the absence of the program
<u>Total sample</u>				
School-year average <sup>a</sup>	40.3	21.5	18.9***	87.9
Summer average	42.7	30.9	11.8***	38.2
Total during-program average	41.2	24.6	16.6***	67.5
<u>White male</u>				
School-year average	46.6	34.5	12.1**	35.1
Summer average	47.0	42.6	4.4	10.3
Total during-program average	46.7	37.2	9.5*	25.5
<u>Black male</u>				
School-year average	43.0	21.2	21.8***	102.8
Summer average	46.5	34.4	12.1***	35.2
Total during-program average	44.1	25.6	18.5***	72.3
<u>Hispanic male</u>				
School-year average	51.3	47.9	3.4	7.1
Summer average	55.1	50.0	5.1	10.2
Total during-program average	52.6	48.6	4.0	8.2
<u>White female</u>				
School-year average	29.1	25.3	3.8	15.0
Summer average	30.8	29.5	1.3	4.4
Total during-program average	29.6	26.7	2.9	10.9

Table 2. (Continued)

	Pilot site ratio	Estimated pilot site ratio in the absence of the program	Program effect	Program effect as a percent of ratio in the absence of the program
<u>Black female</u>				
School-year average	38.5	13.8	24.7***	179.0
Summer average	39.0	23.3	15.7***	67.4
Total during-program average	38.7	17.0	21.7***	127.6
<u>Hispanic female</u>				
School-year average	33.3	30.3	3.0	9.9
Summer average	41.8	27.3	14.5**	53.1
Total during-program average	36.2	29.3	6.9*	23.5
<u>15- to 16-year-old cohort</u>				
School-year average	39.6	18.4	21.2***	115.2
Summer average	42.8	29.3	13.5***	46.1
Total during-program average	40.7	22.1	18.6***	84.2

Source: Tables 5.3, 5.4 and 5.6.

a School-year average includes the periods of fall 1978, spring 1979, fall 1979 and spring 1980.

b Summer average includes the summers of 1978, 1979 and 1980.

\* = significant at the 10 percent level

\*\* = significant at the 5 percent level

\*\*\* = significant at the 1 percent level

employment, increased by 102.8 percent (to 43.0 percent), to become nearly equal to the employment/population ratio of white male youths (46.6 percent). YIEPP also decreased the overall youth unemployment rates in the areas where it operated, and its impact on the 15- to 16-year-old cohort was the largest of any on the age cohorts.

As implemented in the pilot sites, YIEPP achieved, to a substantial degree, the goal of providing an appropriate federal minimum wage job to all target population youths who desired one. Adequate numbers of jobs were provided in a timely manner, and job assignments were relatively typical of the employment opportunities available to youths in general. There was also considerable private sector involvement, and most jobs, whether public or private, were of good quality. Finally, as reported in this document, the overall net job creation rate was relatively high (that is, the displacement of unsubsidized by subsidized workers was low). Every one and two-thirds jobs subsidized by YIEPP achieved one net job addition for the target population youth.

As discussed previously, participation rates were relatively high, and if net job creation were also high, these two factors, among others, would create large employment effects. This was, indeed, the result. As Table 2 shows, during the two school years of full program operation, YIEPP is estimated to have raised youth employment in the four sites from 21.5 percent (in the absence of the program) to 40.3 percent -- an increase of 87.9 percent.

Effects by Race. In many ways, YIEPP served black youths most effectively: they had the highest participation rates and their employment/population ratio during the school year essentially doubled.

The largest effect by race -- a 127.6 percent employment increase (or 21.7 percentage points) for the during-program period -- is found for black females, suggesting that this occurred because of the large gap for this group between minimum wage supply and demand in the absence of the program. For black males, discussed previously, the results were also dramatic. These findings suggest that racial discrimination may be operating in the labor market in the absence of YIEPP.

The smallest statistically significant YIEPP effect was found for Hispanic females, and for Hispanic males, there were no significant effects at all. These results are probably due to the fact that almost all Hispanics were located in Denver, where there was both a strong labor market and a limited program. However, a 25 percent increase in the employment of white males can be seen over the total during-program period, although there were no significant impacts for white females.

The 15- to 16-year-old Cohort. As noted before, the employment effects for this cohort are stronger than for the sample as a whole. Over the full program period, the incremental employment effect is 18.6 percentage points, or an increase of 84.2 percent in contrast to 16.6 percentage points for the sample as a whole. Omitting Denver from the estimation results in an employment effect of 21.3 percentage points for this cohort -- a relative increase of 28 percent.

Program Effects by Period. Program effects during the summers were large, positive, and statistically significant, although they were smaller than those for the school year. This smaller summer effect is due, in part, to the competition of other summer youth programs. Across the three summers, the YIEPP employment effect averaged 11.8 percentage

points higher than youth employment in the absence of the program -- a 38.2 percent increase. The school year and summer effects combined to yield an increase in employment from 24.6 percent (in the absence of the program) to 41.2 percent -- a 67.5 percent increase.

Tests for statistical bias due to sample attrition indicate that attrition does not significantly change these results. Thus, YIEPP was meeting its goal of significantly increasing youth employment.

#### Program Effects on School Enrollment

The YIEPP school enrollment requirement, one of the major innovations of the demonstration, had several possible goals. One was to remove the potentially negative effect of an employment offer on school enrollment and attendance, and instead offer a job as an inducement to the youths' increased school enrollment and performance. This contrasts with such completely demand-oriented programs as the Targeted Jobs Tax Credit or the youth subminimum wage, which could create incentives for the youths to leave school. Second, at a minimum YIEPP was intended not to draw youths out of school, but to keep them there and see that scholastic performance was maintained. Another goal was to benefit youths already in school by providing them with an employment experience.

An important YIEPP outcome, therefore, was whether the subsidized job offer caused school enrollments to suffer.

YIEPP increased total school enrollment by 4.8 percentage points in the fall of 1978 and by 2.5 percentage points in the fall of 1979. These statistically significant increases were, respectively, 7.0 and 4.3 percent of the school enrollment levels expected in the absence of the program. Regular school enrollment increased by 2.9 percentage points



during the fall of 1978 and by 0.9 percentage points during the fall of 1979. GED enrollment increased by 2.4 percentage points, or by 72.7 percent, during the fall of 1978. For the fall of 1979, the effect was 1.7 percentage points, or an increase of 37.8 percent. These findings suggest that alternative education programs -- those leading to a GED -- played a significant role in the overall YIEPP school enrollment effect. Tests for possible biases suggest that attrition is no problem and, in fact, that the program effects may be understated.

The schooling effects on the 15- to 16-year-old cohort were more significant, with the overall school enrollment rate of this cohort increasing by almost 5 percent in both 1978 and 1979. As Table 3 shows, these effects can be broken out into separate effects on the rate at which youths dropped out of school and the return-to-school rate of out-of-school youths. For this younger cohort, during the full demonstration period, YIEPP is estimated to have significantly lowered the dropout rate by 3.3 percentage points, representing a 12.0 percent decrease in the rate expected in the absence of the program. Thus, in the fall of 1979, 27.6 percent of the eligible youths would have dropped out of school without YIEPP compared to 24.3 percent in areas where the program was in operation.

The effect on the return-to-school rate among out-of-school youths was even stronger, with YIEPP increasing it by 9.0 percentage points, an increase of 63.4 percent over the rate expected in the absence of the program. This larger effect occurs, in part, because of the small number of 15- to 16-year-olds who were out of school when the demonstration began and the fact that they had been out of school for a shorter period

Table 3. Program Effects on School Enrollment, Cumulative Dropout and  
Return-to-School Rates for the 15- to 16-year-old Cohort, Fall 1979

	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
School Enrollment Rate	75.7	72.4	3.3*	4.6
Cumulative Dropout Rate	24.3	27.6	-3.3*	-12.0
Cumulative Return-to-School Rate <sup>a</sup>	23.2	14.2	9.0	63.4

Source: Tables 4.5 and 4.6

<sup>a</sup> Return-to-school rates are for 79 respondents out of school in the fall of 1977.

\* = significant at the 10 percent level

of time. However, an analysis on a year-by-year basis suggests that the impact on both dropout and return-to-school rates was concentrated in the first 18 months of program operations. For all youths in the sample, there was a significant reduction of 4.4 percentage points in the dropout rate and an increase of 6.6 percentage points in the return-to-school rate in the first year of the program. There were no significant effects for the full sample in the second year.

Effects by Site, Race and Sex. The largest program effects were observed in Cincinnati, but these may have been due, at least in part, to an unusual (and unexplained) school enrollment decline in Louisville, its matched comparison site. Based on our judgment of program operations and the stability of economic and educational conditions in the sites, the estimated effects in Baltimore and Mississippi are generally the most reliable, and these resemble the overall effects discussed above.

Effects for blacks generally resembled those for the sample as a whole, which is not surprising since black youths constituted over three-quarters of the analysis sample. White youths, though participating at a lower rate, experienced larger than average, positive effects on school enrollment. The reported school enrollment effects for Hispanic youths were estimated as essentially zero. Both of these sets of findings, however, must be interpreted carefully since we are not confident that we have successfully disentangled site effects -- most whites were in Cincinnati and Louisville, most Hispanics were in Denver and Phoenix -- from race effects.

Program effects were similar for the full sample of males and females during the fall of 1978, but there are important differences in

the estimated effects for the fall of 1979. For 1978, the program contributed between 4 and 5 percentage points to the enrollment levels for each sex. For the fall of 1979, the effects on the return-to-school and the dropout rates for females were 6.3 and -4.0 percentage points, respectively (translating into a relative effect of 11.0 percent and 22.3 percent). The 1979 effect for males, in contrast, was essentially zero for the return-to-school rate and actually positive for the dropout rate.

Program Effects On School Enrollment and  
Employment, Jointly Considered

The findings described thus far have estimated program effects on education and work considered separately. A more comprehensive test is to analyze the program's effects on schooling and work considered as joint occurrences. This is particularly important since, as noted, recent studies show that school disincentives can result when policies to increase the employment demand of youths from low-income households are implemented without attention to school enrollment (Gustman and Steinmeier 1981). In describing the joint effects in YIEPP four policy groups are of particular significance:

Youths primarily enrolled and employed in the preprogram period.

Youths primarily enrolled and not employed in the preprogram period.

Youths primarily not enrolled and employed in the preprogram period.

Youths primarily not enrolled and not employed in the preprogram period.

Of these four groups, the last two are of the greatest policy concern, with the fourth group constituting the hard core within the

YIEPP target population. This is the subgroup in greatest risk of reduced future employment and earnings, made up of about 17 percent of the study sample; only 4 percent of the sample falls into the third grouping. By far the major part of the sample was enrolled but not employed (about 74 percent), while the first group contained about 5 percent of the sample. Both proportionately and in terms of likely program behavior, this first group, composed of youths both enrolled and employed prior to YIEPP, is not a major concern. (See Table 4.)

As Table 4 shows, YIEPP had important effects in changing the behavior of these groups. For the group most at risk, school enrollment increased by 3.2 percentage points, or by 22.1 percent, while employment increased by 7.0 percentage points, or 35 percent. (See panel D.) In effect, the trade-off between schooling and work was defeated.

Youths already in school tend to remain in school, so the program had less latitude in which to affect their schooling behavior. Thus, for those youths enrolled but not employed (panel B), school enrollment rose by 3.4 percentage points, a modest 6.0 percent increase over the estimated rate in the absence of the program. YIEPP's impact on this group's employment, however, was very large, increasing it by 19.0 percentage points, or 87.6 percent.

Among youths who were primarily in school and employed prior to program eligibility (panel A), employment was increased by one-fifth. More importantly, there was a significant (14 percent) increase in school enrollment among this group.

Finally, YIEPP exerted no statistically significant effects on those youths who were primarily employed and out of school in the

Table 4. Program Effects on School Enrollment and Employment,  
by Primary Preprogram Enrollment and Employment Status

Percentage of program-eligible time spent:	Observed rate	Estimated rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<u>A. Youths primarily enrolled and employed in the preprogram period (N=194)</u>				
Enrolled	61.5	53.9	7.6*	14.1
Employed	56.2	47.0	9.2*	19.6
<u>B. Youths primarily enrolled and not employed in the preprogram period (N=2995)</u>				
Enrolled	60.1	56.7	3.4***	6.0
Employed	60.7	21.7	19.0***	87.6
<u>C. Youths primarily not enrolled and employed in the preprogram period (N=147)</u>				
Enrolled	11.1	10.3	0.8	7.8
Employed	52.9	56.2	- 3.3	- 5.9
<u>D. Youths primarily not enrolled and not employed in the preprogram period (N=697)</u>				
Enrolled	17.7	14.5	3.2**	22.1
Employed	27.0	20.0	7.0***	35.0

Source: Table 6.2.

\* = significant at the 10 percent level  
 \*\* = significant at the 5 percent level  
 \*\*\* = significant at the 1 percent level

pre-program period (panel C). These are the individuals for whom the program-tied school and work offer can be expected to be least attractive.

In summary, these findings indicate that YIEPP caused a positive joint increase in schooling and work behavior among the key groups of program youths, resembling the Job Corps by acting positively on both schooling and employment. It resembles less closely the simple demand-side policies, such as the Targeted Jobs Tax Credit or the youth subminimum wage, which are likely to exert some negative effects on school enrollment.

### CONCLUSIONS

The findings reported in this summary represent the impacts of YIEPP on its eligible youth population during the entire period of full program operations. These findings establish the conditions under which post-program impacts can be analyzed, for without a respectable participation rate, plus impacts on school enrollment and employment during the program, the possibility of postprogram impacts on labor productivity and the employment of youths is negligible.

Given this set of conditions, the following conclusions are relevant and important:

- In terms of program design, YIEPP's incentive structure clearly and consistently induced program-eligible youths to participate in the program, and to work and enroll in school. The program produced dramatic increases in employment and modest overall increases in school enrollment within the target population.
- The employment increases were most dramatic for black youths. Employment of black males increased from two-thirds that of

white males to become essentially equal to this group. The employment rate of black females increased from half that of white females to one-third more than the rate for white females. For males and females, the school-year employment rate more than doubled.

- YIEPP substantially achieved the goal of providing an appropriate federal minimum wage job to all target population youths who wanted one. Overall, for the summer and school years combined (fall, 1978 through summer, 1980), employment in the total sample increased 16.6 percentage points. This represents a 67.5 percent increase due to YIEPP. This employment effect was high, in part, because YIEPP overcame labor demand problems that afflict minority youths.
- Net job creation was relatively high. Every one and two-thirds jobs subsidized by YIEPP achieved one net job addition for the target population youth. Thus, YIEPP clearly met its primary short-run goals.
- The likely effects of an ongoing national program are best indicated by the experiences of the 15- to 16-year-old cohort, among whom the demand for and participation in YIEPP, studied longitudinally, was higher than for the sample as a whole. The cumulative participation rate of this cohort was 65.8 percent: 9.6 percentage points or about 17 percent higher than for the sample as a whole, and almost 20 percentage points, or 43 percent, greater than that of the 17- to 20-year-old age cohort.
- The net program employment effect of 18.6 percentage points for the 15- to 16-year-old cohort was 12 percent higher than for the sample as a whole. During the school year, the employment rate of this group increased by 115 percent. In general, a program like YIEPP can be expected to have larger effects on younger individuals who are still in school or have recently dropped out and to whom a minimum wage job is more attractive.
- For the sample as a whole, total school enrollment increased significantly, by 4.8 percentage points in the fall of 1978 and 2.5 percentage points in 1979. The increase for the 15- to 16-year-olds was 4.1 percentage points in the first year and 3.3 percentage points in the second, representing an increase in both years of almost 5 percent over the enrollment rate, expected in the absence of the program.
- For the 15- to 16-year-olds, YIEPP led to an overall cumulative 12.0 percent decrease in the dropout rate, expected in the absence of the program (27.6 percent dropped out without YIEPP compared to 24.3 percent in the program sites). In addition, the rate of return to school for out-of-school youths increased



by 63.4 percent (14.2 percent without YIEPP compared to 23.2 percent in the program sites).

- Alternative educational programs -- those leading to a GED -- played a significant role in the overall school enrollment effect, accounting for most of the increase in return-to-school rates. Such a finding suggests that more emphasis on this aspect of the schooling choice could increase the impact on school enrollment.
- Finally, the evidence on participation rates and employment impacts suggests that a program such as YIEPP should be targeted to relatively weak labor markets.

## OVERVIEW BIBLIOGRAPHY

- Ball, Joseph; David M. Gerould and Paul Burstein. The Quality of Work in the Youth Entitlement Demonstration. (1980) New York, New York: Manpower Demonstration Research Corporation.
- Diaz, William A., et al. The Youth Entitlement Demonstration, Second Interim Report on Program Implementation. 1980. New York, New York: Manpower Demonstration Research Corporation.
- Diaz, William A., et al. 1982. Linking School and Work for Disadvantaged Youths. The YIEPP Demonstration: Final Implementation Report. New York, New York: Manpower Demonstration Research Corporation.
- Gustman, Alan L. and Thomas L. Steinmeier. "The Impact of Wages and Unemployment on Youth Enrollment and Labor Supply." The Review of Economics and Statistics. Vol. 63. No. 4. November, 1981.
- Stromsdorfer, Ernst W. "The Effectiveness of Youth Programs: An Analysis of the Historical Antecedents of Current Youth Initiatives," in Bernard E. Anderson and Isabel V. Sawhill, editors. Youth Employment and Public Policy. 1980. Englewood Cliffs, New Jersey: Prentice Hall, Inc.
- Wise, David A. and Robert H. Meyer. "The Effects of the Minimum Wage on the Employment of Youth." NBER Working Paper No. 849. 1982. Cambridge, Massachusetts: National Bureau of Economic Research.

**IMPACTS FROM THE YOUTH INCENTIVE ENTITLEMENT PILOT PROJECTS:  
PARTICIPATION, WORK, AND SCHOOLING OVER THE FULL PROGRAM PERIOD**

## CHAPTER 1

### THE PROGRAM AND ITS NATIONAL POLICY CONTEXT

For more than a generation, policy makers, concerned citizens, and educators have been aware of the serious social problems of high school dropout rates and worsening trends in the labor market performance of teenage youths. In response to this critical situation, the Youth Incentive Entitlement Pilot Projects (YIEPP) demonstration, originally enacted by the Youth Employment and Demonstration Projects Act of 1977, was established to demonstrate the efficacy of work combined with education or training as a partial remedy to high youth unemployment, low labor force participation, and excessive school dropout rates.

The YIEPP demonstration was targeted on youths aged 16 to 19 living in poor and/or welfare households, who had not received a high school diploma or its equivalent. For YIEPP participants, getting and keeping a subsidized job at the federal minimum wage was strictly conditional on school participation, as well as satisfactory performance on the job.

The Department of Labor was given the responsibility for the YIEPP demonstration, and it, in turn, selected the Manpower Demonstration Research Corporation to design and carry out the extensive research connected with the demonstration. The impact analyses, of which this report is part, are being conducted under subcontract by Abt Associates Inc. MDRC's direction also included oversight of local program operations, carried out by Comprehensive Employment and Training Act (CETA) prime sponsors at 17 sites across the country, and other aspects of the research. The two and a half year demonstration began in the early spring of 1978.

#### The Policy Problem

Serious youth unemployment and high school dropout problems have been developing for almost three decades, and public programs to alleviate them have been in existence for almost as long. The first major policy effort directed toward youth employment was the Economic Opportunity Act of 1964, which established the Job Corps and the Neighborhood Youth Corps. The Job Corps program offered training and employment to youths, who were also housed by the program during their participation in it. The Neighborhood Youth Corps was the historical antecedent of YIEPP, and included

in-school, out-of-school, and summer youth employment components. Both the Job Corps and the Summer Youth Employment Program continue to operate, although the latter may be eliminated when the Comprehensive Employment and Training Act expires in 1982. In spite of these and subsequent policy efforts, however, the youth unemployment and dropout problems have become increasingly serious.

By the end of the 1970s, as shown in Table 1.1, school dropout rates for 18- and 19-year-olds ranged between 15 and 25 percent. While at ages 16 and 17 dropout rates are similar for black and whites, males and females, by ages 18 and 19, dropout rates for black males and females were as much as 10 percentage points higher than their white counterparts. These phenomena existed even in an environment where school enrollment rates for black youth aged 16 to 19 were higher than for whites the same age.<sup>1</sup>

Blacks are also in a worse situation than whites with respect to labor market activity. As shown in Figure 1.1, during the past 25 years the employment/population ratio for white teenage males has remained at somewhat over 90 percent of that of all workers.<sup>2</sup> For black male youths, however, it has dropped in 25 years from 95 to 48 percent. For white teenage females the employment/population ratio as a proportion of all workers has risen over the same time period from 67 to 82 percent, but for black teenage females, the group with the worst experience of all, this figure has dropped from 48 to 39 percent. Figures 1.2 and 1.3 present a similar story for the labor force participation rate and the unemployment rate. Thus, it is evident that the youth schooling and employment problems

---

<sup>1</sup> See Grant and Eiden (1981).

For 1978, the most recent available year, the dropout rate for Hispanic youths aged 16 and 17 was 14.1 percent, while for those aged 18 and 19, it was 38.2 percent. See U.S. Department of Commerce (1979).

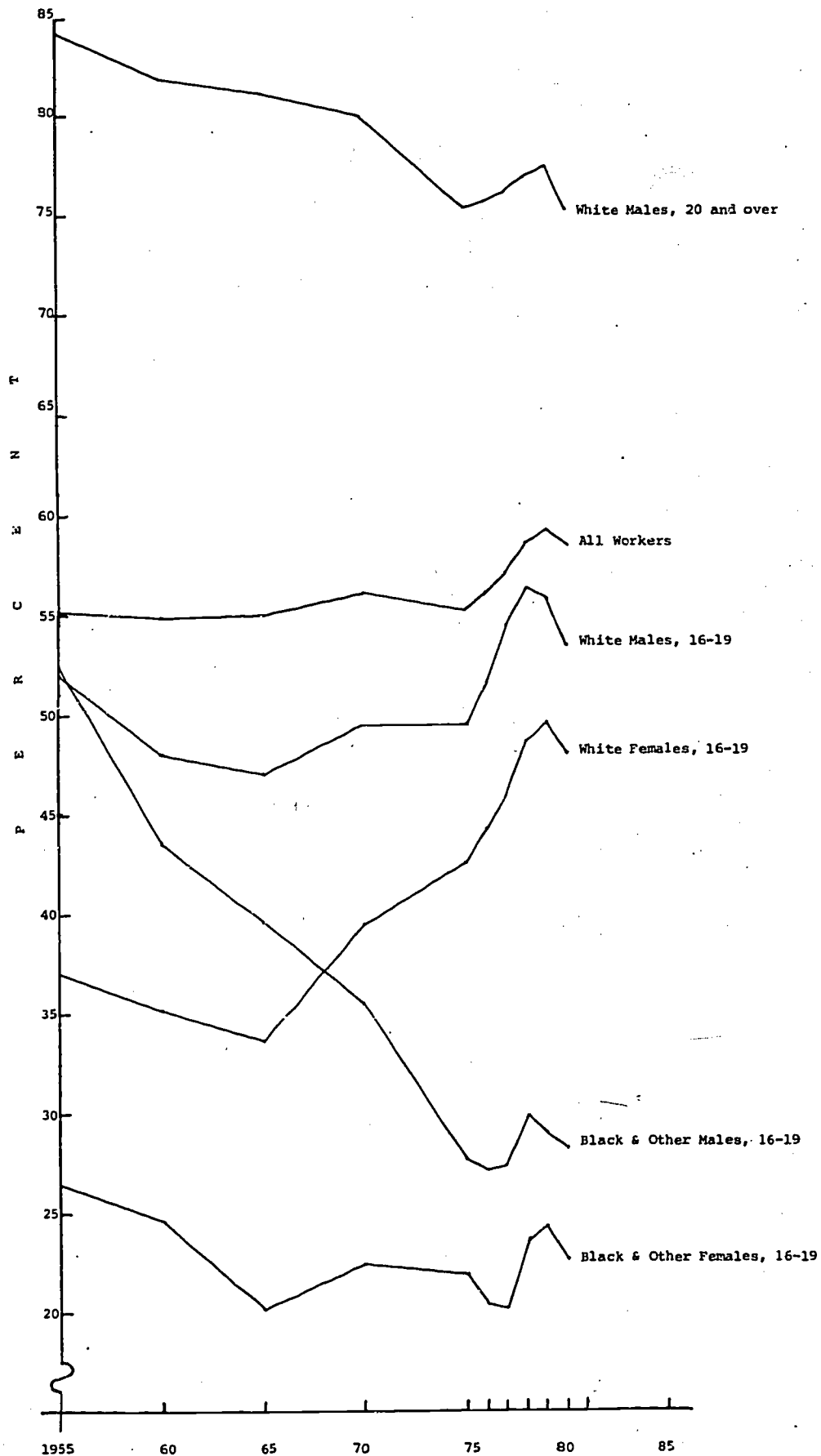
<sup>2</sup> The employment/population ratio is the total number of employed persons in a given group divided by the total number of persons in that group.

**Table 1.1. Percent of High School Dropouts among Persons 16 to 19 Years Old,  
by Age, Race and Sex: United States, October, 1977, 1978 and 1979**

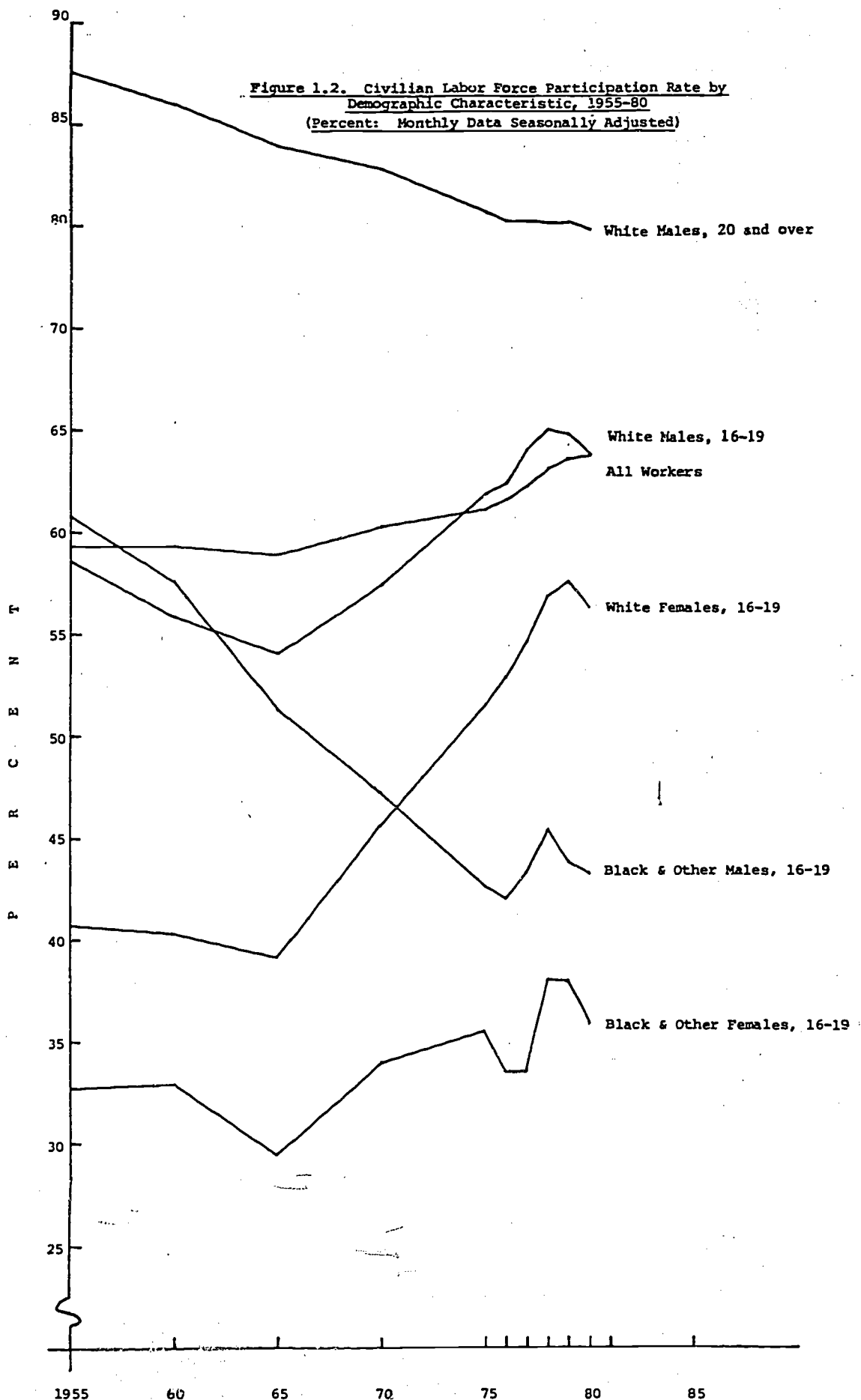
	16 and 17			18 and 19		
	1977	1978	1979	1977	1978	1979
<b>All Races:</b>						
Total	8.6	8.8	8.6	16.6	16.7	16.8
Male	8.3	8.9	8.0	17.7	17.4	18.4
Female	9.0	8.6	9.3	15.6	16.0	15.4
<b>White:</b>						
Total	8.8	9.1	8.7	15.9	15.6	16.0
Male	8.6	9.6	8.4	17.0	16.3	17.7
Female	9.1	8.7	9.0	14.8	15.0	14.3
<b>Black:</b>						
Total	7.6	7.3	7.9	21.9	24.2	22.9
Male	6.9	5.2	4.9	23.8	25.8	24.5
Female	8.4	9.4	10.9	20.3	22.8	21.6

Source: Digest of Education Statistics, editions of 1979, 1980 and 1981.  
National Center for Education Statistics. Table 62, 60 and 60,  
respectively.

Figure 1.1. Employment/Population Ratios by  
Demographic Characteristics, 1955-80  
(Annual Averages)



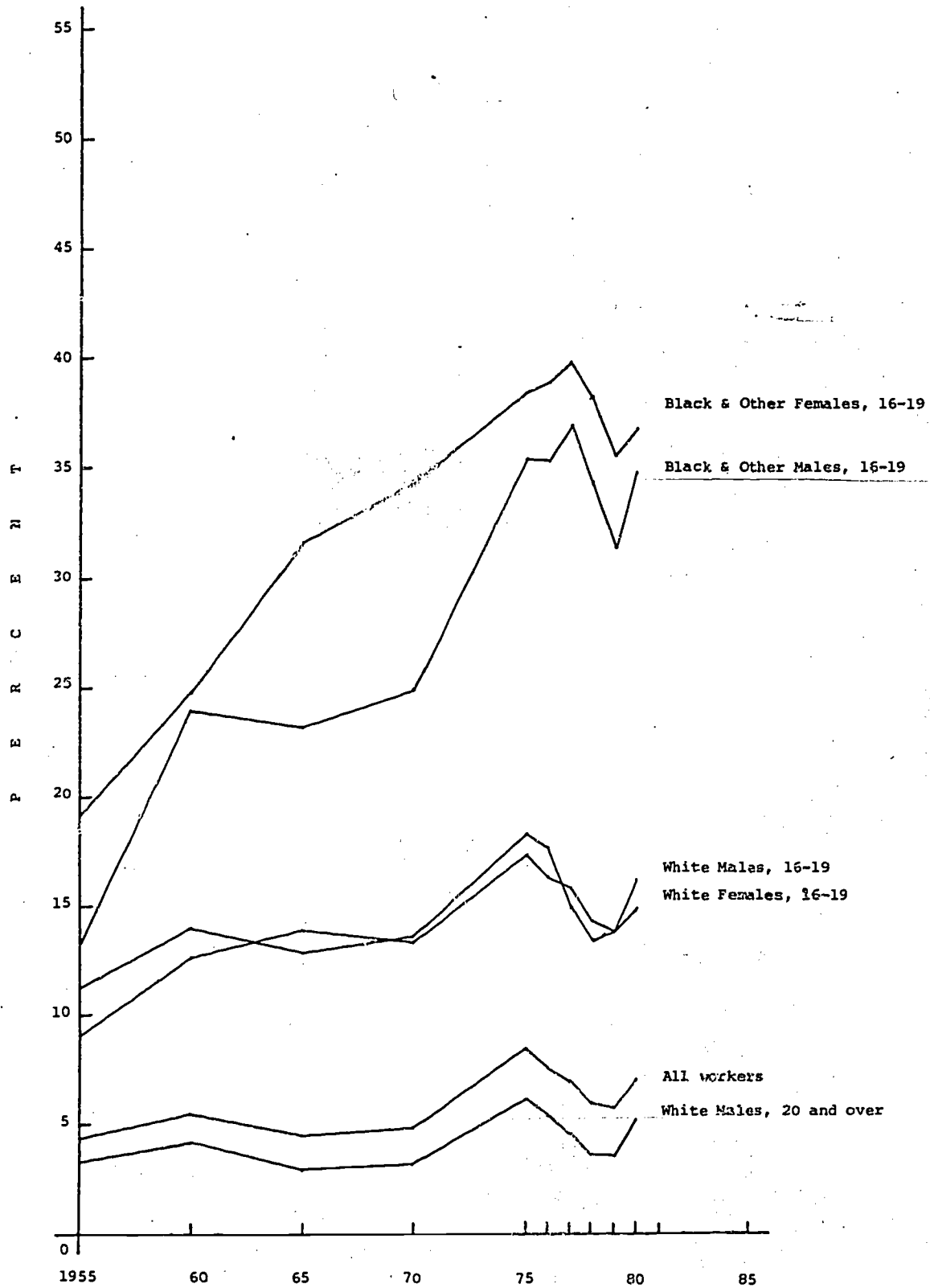
Source: U.S. Department of Labor (1981: Selected Tables).



Source: Economic Report of the President, January 1981, Table B-30.



Figure 1.3. Unemployment Rates by Demographic Characteristics, 1955-80  
(Percent: Monthly Data Seasonally Adjusted)



Source: Economic Report of the President, January 1981, Table E-31.

are severe, protracted and of apparently worsening dimensions, and focus sharply on black teenagers.<sup>1</sup>

The problems of school dropout rates and discouraging labor market experience take on a larger meaning as the youths age over their life cycle. National evidence suggests that teenage youths who are neither in the labor force nor attending school suffer lower employment and earnings over their life cycle compared to all other youths. The losses are proportionately and absolutely worse for blacks than for whites, and especially severe for black males.<sup>2</sup> In consequence, these individuals are more likely to be members of single parent households and are disproportionately represented on welfare and other transfer programs. They also have higher rates of criminal activity. Finally, these negative consequences, which contribute to the perpetuation of a cycle of poverty and correlated social ills, are magnified when they are concentrated in particular neighborhoods in poverty.

Many possible explanations have been advanced for this increasingly serious problem, but understanding the causes and designing effective policy solutions have so far remained elusive.<sup>3</sup>

#### The Features and Goals of the Youth Incentive Entitlement Project

In a new effort to understand the problem and find policy solutions, the Youth Employment and Demonstration Projects Act of 1977 authorized three programs: the Youth Employment and Training Program (YETP), the Youth Community Conservation and Improvement Projects (YCCIP), and the Youth Incentive Entitlement Pilot Projects (YIEPP).

---

<sup>1</sup> The situation for Hispanic youths is much less well documented at this time. The Congressional Budget Office notes that the unemployment rate for Hispanic youths tends to be only slightly higher than that for all youths and much lower than for black youths. Substantial differences in unemployment exist among Hispanic youths. The unemployment rate of Puerto Rican youths is similar to black youths. Mexican-American youths have an unemployment rate similar to all youths, while the unemployment rate for all other Spanish origin youths is lower than the average for all youths. See Congressional Budget Office (1978).

<sup>2</sup> See Stevenson (1978); Elwood (1982); and Corcoran (1982).

<sup>3</sup> See, for example, the papers in Anderson and Sawhill (1980); and Freeman and Wise (1982).

The Youth Incentive Entitlement Pilot Projects demonstration, the subject of this report, was the most focused of the three, narrowly targeted as it was on low-income youths aged 16 to 19 who had not yet graduated from high school. Its primary feature was the offer of a guaranteed, federal minimum wage job--part-time (up to 20 hours a week) during the school year and full-time (up to 40 hours a week) during the summer--on the condition that youths remain in or return to school, or pursue a General Education Degree (GED) through an alternative educational program. Youths were also to maintain certain school and job performance standards.

Two key features of the YIEPP demonstration differentiate it from any previous youth program. First, the YIEPP program was available to any eligible youth in the catchment area. It was thus designed to virtually eliminate demand-side constraints on youth employment at the federal minimum wage, helping to answer a crucial question in the policy debate about the causes of youth unemployment: To what extent is youth unemployment high because too few jobs are available? That is, to what extent is youth unemployment a demand-side problem?

Calculations of the employment increment created by YIEPP measure, for the first time, the "employment gap" caused by insufficient demand for target population youths at the federal minimum wage.<sup>1</sup> This "gap" must be considered a lower-bound estimate, however, since it does not count the potential labor supply of youths who are unemployed but do not wish to return to school. Nevertheless, with this caveat, and used in conjunction with program participation rates and program operation costs, YIEPP employment effects can help to compute the cost of certain policy strategies for reducing or eliminating major youth unemployment.

---

<sup>1</sup> See Chapter 5 below. Such a calculation can also be based simply on national statistics of the number of youths who report themselves to be unemployed. However, youth self-reports that they are "looking for work" are notoriously unreliable and fail to account for discouraged workers who enter the labor force only when jobs are available. Thus, the best test of the minimum number of target population youths who would work at the federal minimum wage if sufficient jobs were available is provided by the only instance in which sufficient jobs have been available, that is, under YIEPP. See for instance, Freeman and Medoff (1982).

YIEPP's second unique feature was the requirement that program participants be enrolled in school and make satisfactory progress toward a high school degree or its equivalent. Never before had a school enrollment requirement been used to minimize the potentially adverse impacts of an employment program, which could in some cases cause youths to drop out of school to obtain jobs. Although the stringency with which the ongoing school performance and attendance standards were enforced varied by site and over time, the school enrollment requirement appears to have been a meaningful operational component of YIEPP.<sup>1</sup>

The short-run goals of YIEPP, as reflected in the 1978 amendments to the Comprehensive Employment and Training Act. (Public Law 95-524, Title IV, Part A, Section 411), were to:

- Reduce school dropout rates,
- Increase high school graduation rates,
- Provide work experience and on-the-job training, and
- Provide income during the program participation period;

The long-run goal was to increase labor productivity and thereby increase earnings potential and improve life cycle employability.

This report, which encompasses the entire program period of full-scale operations from March, 1978 through August, 1980 focuses on the program's short-run goals. Measurement of YIEPP's effect on high school graduation rates and the scholastic performance of participating youths is an analysis that will be provided in the final impact report.

Since 1977, the policy climate has changed dramatically. Programs established by the Comprehensive Employment and Training Act have come under severe criticism, and legislative proposals currently being considered eliminate all earlier youth programs except the Job Corps. They focus on youth training; the provision of subsidized public service jobs in an entitlement context is certainly not part of the current policy agenda.<sup>2</sup>

---

<sup>1</sup> For further discussion of the administration of the schooling requirement see Diaz et al. (1982).

<sup>2</sup> New England Council of GSEA Prime Sponsors, Inc. (1982); also Congressional Budget Office (1982).

Analyses of previous youth employment and training programs suggest the following lessons for policy and program design<sup>1</sup>:

- Work experience alone does not appear to improve the long run employability or school attendance of youth, especially if the jobs are ill-defined, with low quality supervision.<sup>2</sup>
- Work experience may be more effective when combined with other services, such as job placement, skills training, or basic education.
- Though poorly evaluated, services aimed at changing personality traits and personal values have not yet been shown to be successful. Of all the services offered to youths other than skills training, job placement services appear to be most effective.
- Success in the work place is directly related to basic writing, communication, and computation skills.
- Development and maintenance of minimum behavioral and program performance standards is a must. Effective management is, thus, a necessary condition for an effective program.

In response to these lessons, YIEPP had the following operational features:

- A job at the federal minimum wage was provided to all eligible youths who demanded one.
- The program involved work experience combined with schooling.
- Both work and schooling performance and attendance standards were established and enforced.
- The emphasis on return to, and completion of, schooling implied the acquisition of basic language and computational skills.
- Services were mainly directed at the successful completion of work and schooling.

---

<sup>1</sup> See Stromsdorfer (1980).

<sup>2</sup> There may be a causal relationship between work experience in one period and the probability of working and receiving higher earnings in future periods. This relationship is not well understood. See Elwood (1982).

- The quality of program management was relatively high, due in part to careful selection of prime sponsor sites through a competitive bid process plus extensive third party, nongovernmental, monitoring.

The YIEPP demonstration included seven large-scale (Tier I) projects, four of which form the basis of the evaluation reported here, and ten smaller (Tier II) projects. The Tier I project sites variously encompassed entire central cities, large poverty neighborhoods, or sets of counties. As a group they averaged 3,000 working participants per month and enrolled 72,000 youths overall. The Tier II projects covered smaller cities or school district areas. As a group they averaged 240 working participants per month and cumulatively enrolled 9,000 youths overall.

Four of the larger sites were selected as the forum for a large-scale study of program impacts:<sup>1</sup>

- Baltimore, Maryland, a partial city site
- Denver, Colorado, a full city site
- Cincinnati, Ohio, a full city site
- Mississippi, a rural site composed of 19 counties that encompassed 28 separate school districts (only eight of which are included in the impact analysis: Adams, Claiborne, Covington, Franklin, Jefferson, Jones, Wayne and Wilkinson).

The experiences of program-eligible youths who lived in these sites were to be compared in this impact study, as is explained in detail in Chapter 2, with technically eligible youths from other areas where the program was not available. These comparison sites were matched to the evaluation sites as closely as possible on a number of different characteristics, as is also described in Chapter 2. The four comparison sites were, respectively:

- Cleveland (for Baltimore)
- Phoenix (for Denver)

---

<sup>1</sup>The Tier I sites not chosen for study were Boston, Detroit, and King-Snohomish counties in Washington State. The Tier II sites, at which smaller YIEPP programs were conducted, were located in Alachua County, Florida; Albuquerque, New Mexico; Berkeley, California; Dayton, Ohio; Monterey County, California; Nashua County, New Hampshire; New York, New York; Philadelphia, Pennsylvania; Steuben County, New York; and Syracuse, New York.

- Louisville (for Cincinnati)
- Mississippi (the six rural counties of Clarke, Humphreys, Lauderdale, Sharkey, Smith and Washington)

### Implementation Factors

Five key site characteristics could be expected to affect the interpretation of the impact analysis and the relative success of the program: the timing and scale of program operations, program management, participant recruitment, job development, and the enforcement of standards. Because of their importance, each is discussed briefly in turn below, but these and other operational features are covered in detail in a series of implementation and special reports issued by MDRC.<sup>1</sup>

Timing and Scale of Operation. The program began enrolling youths during the spring of 1978. After an initial recruitment drive, almost 30,000 youths had enrolled in YIEPP by June, 1978, over one-half of them at the four evaluation sites selected for the impact study. Cumulative enrollment had increased to over 59,000 (over 31,000 in the four evaluation sites) by September, 1979, and to almost 82,000 by the end of August, 1980, when full operations ended. Youths actively participating, or working, however, numbered 76,000 over the entire demonstration period. Table 1.2, showing the total of working participants by month, suggests that

Table 1.2. Number of Youths Assigned in YIEPP Projects

	Evaluation Study Sites	Total YIEPP Demonstration
March 1978	2,562	3,541
May 1978	9,076	13,654
June 1978	12,559	21,204
July 1978	14,371	25,099
September 1978	11,954	19,877
December 1978	12,371	21,038
June 1979	11,247	21,443
September 1979	11,142	20,485
December 1979	11,582	22,080
June 1980	12,001	24,595
August 1980	7,450	17,787

Source: Manpower Demonstration Research Corporation, Entitlement Information System data.

<sup>1</sup> See Diaz et al. (1982).

YIEPP had reached a roughly steady state participation level by June, 1978, with the exception of several summer or spring months when active participation exceeded 20,000.

The four evaluation sites accounted for close to 60 percent of active participants in 1978, a proportion that declined to less than 53 percent by the end of 1979.

The overall level of program operations, however, masks some major site distinctions. Of particular importance to this evaluation was a series of management difficulties encountered in YIEPP operations in Denver. For a number of reasons--including organizational problems, negative publicity, and a breakdown of relationships with the public schools<sup>1</sup>--the program was never fully implemented in Denver. Program intake was closed down in June, 1979 and by the end of the summer, on-board enrollment was less than 1,400 (and active participants below 700). Thereafter, new enrollment was frozen and the number of active participants remained low.

As a result, Denver cannot be considered an entitlement program in the same context as the other sites because while participants in Denver did receive program treatments that may have resulted in impacts, the program, as implemented there, was basically a limited slot program in the last 14 months of operation. When aggregations of impacts across study sites are shown later in this report, we show them, when it makes a difference, with and without the Denver-Phoenix pair.<sup>2</sup>

Management. Baltimore was the most effectively managed of the projects, with strong central control and mayoral support. Denver, as indicated above, was least effectively managed, with the management problems there resulting in a truncated intake period and an abridgement of the project. While Mississippi was a rural site, with a large number of

---

<sup>1</sup>See Diaz et al. (1980).

<sup>2</sup>Combined cross-site impact measures, whether including or excluding the Denver-Phoenix pair, must be regarded with great care. For reasons explained later in this chapter, such measures represent neither the average impact of an entitlement program for youths nor the impact that would be expected if the program were implemented nationally. They are a shorthand way of summarizing the average impact of the program at the designated evaluation sites.



separate political jurisdictions, management was relatively effective, despite some initial conflict between the State Employment Service and the Governor's Office of Job Development and Training, the CETA prime sponsor. Here, too, however, there were some problems in obtaining sufficient jobs for youths and delays in job assignments. The Cincinnati situation reflected a prime sponsor that had difficulty managing various aspects of the program. However, even with management functions spread among six subcontractors and mixed implementation results, some nine-tenths of its enrolled youths were placed in jobs.

Recruitment. Recruitment efforts were generally successful in reaching a high proportion of program eligibles. By the end of the demonstration in August, 1980, 94.2 percent of in-school eligibles and 75.3 percent of the dropouts had heard of the program. Interest in joining it was high. Of the in-school youths who knew of the program, some 85 percent applied; of the out-of-school youths, 61 percent. This difference between in-school and out-of-school eligibles is generally attributable to a combination of prime sponsor recruitment emphasis on the easier to reach in-school population, and the relatively lower interest among dropouts, especially older dropouts, in returning to school.

Of the four analysis sites, the dropout participation rate was highest in Baltimore, where it reached 36 percent and lowest in Denver, at 11 percent. It is also worth noting that recruitment efforts generally tapered off after the first year of program operations, and word-of-mouth thereafter generally accounted for new enrollments.

Job Development. For the most part, job developers successfully found adequate numbers of jobs for the youths enrolling in YIEPP. About 93 percent of all enrollees received work positions. Over the course of the demonstration, the 17 YIEPP prime sponsors assigned some 76,000 youths to subsidized work experience with 10,816 work sponsors.

While the large proportion of jobs developed were in the public or nonprofit sectors, prime sponsors were allowed to offer private employers 100 percent wage subsidies if they employed YIEPP enrollees. Many agreed to do so, and as time passed and available job slots in the public sector were increasingly absorbed, emphasis on private sector placement increased at most sites.

Enforcement of School and Job Standards. One major operational issue facing YIEPP was an inherent conflict between the program operators and school administrators. For their part, program operators were charged with the obligation of setting up and enforcing school standards which, if not met, could result in a youth's dismissal from YIEPP. The consequence of such standards, somewhat ironically, could be a reduced incentive to the youths' staying in school, even though the conditional offer of a YIEPP job was intended to spur a youth's school performance. Any such discouragement effect would, of course, be antithetical to the philosophy of educators who see schooling as a right and are generally opposed to any institutional device that denies that right or otherwise discourages school attendance.

In practice, this potential conflict was muted, perhaps in part because the school performance and attendance standards were not set high. Further, once the schooling standards were established, they were haphazardly enforced, especially at the large Tier I sites, primarily because of a variety of coordination problems between the schools and prime sponsors. Enforcement tended to increase over the demonstration period, but was never satisfactory. The basic school enrollment condition, however, appears to have been effectively enforced.

The work experience standards for job performance and attendance were also satisfactorily enforced, primarily because of the self-interest of employers in seeing that poorly performing or attending youths were removed from their worksites. While employers were provided with some guidance by prime sponsors, they were generally left to define standards of attendance and performance for themselves. If these standards were violated, employers usually turned to the program, which enforced the appropriate sanctions, either suspension or termination.

Plan of the Study: Expected Effects of YIEPP During the Program Period

As already noted, this report focusses on the program effects of YIEPP for youths aged 16 to 19 during the period while they were in the program. Postprogram effects on employment, earnings, and postsecondary school attendance will be the subject of the final impact report.

Chapter 2 discusses the structure of the analysis sample--those study participants for whom there exists a full set of local field survey interviews--and sets forth the key analytic issues and research strategy. Chapter 3 is concerned with program participation rates and patterns. These are not, strictly speaking, effects of the program but, rather, prerequisites to a program effect. Chapter 4 reports on the effect of YIEPP on dropout and return-to-school rates, as well as on school enrollment by type of program and advancement through the grades of regular school. Chapter 5 presents estimates of the short-term program effects on employment, labor force participation, and unemployment, as well as a brief look at the effect of YIEPP participation on wage rates. Chapter 6 completes the report with an analysis of the effects on schooling and labor force experience combined.

## CHAPTER 2

### RESEARCH DESIGN AND SAMPLE ISSUES

This chapter presents the design and sample dimensions that are important to an understanding of the analysis and findings discussed in later chapters. The first section discusses four critical issues in the research design: the focus upon eligibles, the choice of a comparison group, cohort effects, and time effects. The next section describes the longitudinal survey that collected the data on which this evaluation is based. The characteristics of the sample on which the analysis for this report is based are then presented and compared with relevant portions of the national probability sample being followed by the National Longitudinal Survey of Young Americans. This is followed by a discussion of the match between pilot and comparison sites, considering both site and sample characteristics. The effects of attrition on both the sample and impact estimates are then examined. Finally, we take a preliminary look at the way the program-eligible population changed over time, in preparation for the analysis of participation in Chapter 3.

#### Research Design

Focus on eligibles. Very early in the development of the research design, a decision was made to focus the analysis upon program eligibles, not simply program participants. There were two reasons for this decision. The first was a policy reason. The Congressional mandate indicated a strong interest in how well the program would attract eligible youths, what portions of the eligible population would participate, and what factors would influence participation. The interest was particularly appropriate, because YIEPP was the first employment program both designed and funded to be an entitlement program, meaning that all eligible youths were entitled to participate and that the program was obligated to serve all eligibles who applied. This feature contrasts with all prior employment policy initiatives which, in one way or another, were limited slot programs.

A second reason to concentrate upon eligibles (as discussed in more detail in the next section) was methodological--to avoid the possible selection bias problems that are inevitable if the focus is on participants.

alone. Those who choose to participate can be expected to differ from those who choose not to, and in ways that cause the observed effects of a program to be distorted measures of the true effects.

The YIEPP treatment group being evaluated, therefore, consists of the youths who were eligible for YIEPP at some point during the demonstration period.<sup>1</sup>

The Comparison Group. The choice of a comparison group is very important to any program evaluation design, because observation of the comparison group provides estimates of what would have happened to the individuals eligible to participate (i.e., the treatment group) if there had been no program. Program impacts can then be measured by subtracting the values of variables observed among the comparison group from those observed among the treatment group. For example, if a program were found to increase employment among the treatment group by 15 percent, this finding could not necessarily serve as a valid measure of impact. If, however, one found that the comparison group also increased employment, say by 10 percent, the true employment impact of the program, other things being equal, would be 15 percent minus 10 percent, or 5 percent.

The best comparison group is one that, on average, is similar to the treatment group in all respects except for not having received the treatment. In most cases, the preferred method of achieving this similarity is random assignment. If eligible youths in a program site are randomly assigned to two groups--those participating in YIEPP and those not allowed to--we could be pretty confident that, in the absence of the program, these groups would be similar both in terms of measured and unmeasured factors. The Congressional mandate creating YIEPP, however, effectively prevented the use of random assignment by requiring that all eligible youths in a pilot site be given the opportunity to participate.

---

<sup>1</sup> Although youths only became eligible for YIEPP after turning 16, the baseline sample included 15-year-olds whose 16th birthday was prior to January 1, 1979. This provided a cohort of youths in the sample who, although too young to be eligible at the start of the program, would become eligible during the demonstration period. This group as well as the 16-year-olds could then be observed as they "aged" through the program. Longitudinal observations of this type increase the resemblance of a demonstration's target population to that of an ongoing national program.

In the absence of random assignment, there were two other possible options for a comparison group: (a) eligible youths within the pilot sites who did not choose to participate in the program, and (b) technically eligible youths from other areas where the program was not available. The first choice, commonly called a participant/nonparticipant design, suffers from the problem of self-selection bias. Participants may differ from nonparticipants in unmeasurable ways that affect the observed treatment effect. For example, eligibles who choose to participate in the program may be more motivated or more interested in employment than nonparticipants. In a participant/nonparticipant comparison, the effects of differences of this sort, if indeed they can ever be measured, will be confounded with the impact of the program itself.<sup>1</sup>

The second strategy for choosing a comparison group, and the one used in the YIEPP evaluation, is to select a group of technically eligible youths who are similar to the eligible youths in the pilot sites but who reside in nonprogram areas. This approach is not vulnerable to the selection bias of a participant/nonparticipant design. Moreover, it has an advantage over all other strategies, including random assignment within program. If both pilot and comparison groups face the same labor market, for instance, the job development efforts by program operators for participants could make it harder for nonprogram youths in the comparison group to find employment. As a result, the employment effects of the program would be overestimated because the program would have reduced the employment

---

<sup>1</sup> Although it is conceptually possible to correct for the effects of selection bias through the use of a variety of statistical procedures, the success of these adjustments depends critically upon assumptions about the appropriate form of the statistical models. To the extent that selection bias is related to observable characteristics, it can be reduced by using simple regression methods. However, the unobservable differences, as in the text example about employment, are often the problem. Models that correct for these differences require assumptions about the distribution of unobserved variables, and these assumptions cannot be tested. If the assumptions are wrong, these models will not make the appropriate correction. For more information on selection bias, see Stromsdorfer and Farkas (1980).

opportunities for the comparison group youths. However, since youths in the YIEPP pilot and comparison sites were separated geographically, there was no danger that the comparison group could be affected in any way by the program.

When the pilot-comparison site differences are used to measure program effects, it is important to make sure that they do not reflect site differences (such as the local unemployment rate or the distribution of occupational employment) rather than effects that are the result of the program. In the YIEPP evaluation, the danger of site differences confounding the results was reduced by choosing comparison sites that matched the evaluation sites as closely as possible on a number of different characteristics, as described later in this chapter. In addition, all the program effects quoted in this report are regression-adjusted to take account of remaining site differences that are not program-related.

Comparison sites were selected during the period from December, 1977, through January, 1978, for each of four evaluation sites. As noted before, the pairs of sites on which the evaluation is based are:

Pilot Site

Denver, Colorado  
Cincinnati, Ohio  
Baltimore, Maryland  
Mississippi  
(eight rural counties)

Comparison Site

Phoenix, Arizona  
Louisville, Kentucky  
Cleveland, Ohio  
Mississippi  
(six rural counties)

Table 2.1 displays the relative sizes of each of the four pilot sites as well as their average rate of assignment to jobs.

---

<sup>1</sup> The eight rural pilot site counties for the evaluation are Adams, Claiborne, Covington, Franklin, Jefferson, Jones, Wayne and Wilkinson. These eight counties were part of a 19-county program area spanning the southern portion of the state from the Alabama border to the Mississippi River. The comparison counties for the evaluation include Clarke, Humphreys, Lauderdale, Sharkey, Smith and Washington, located north of the target area but still in the southern half of the state. Because there are pronounced demographic differences between eastern and western Mississippi, both pilot and comparison sites are composed of separate clusters of southeastern and southwestern counties.

Table 2.1. Number of Youths Working in YIEPP Jobs

Pilot Sites	Number of youths enrolled	Percent assigned to jobs
Baltimore	17,764	93.3
Cincinnati	5,632	90.3
Denver	4,301	84.0
Mississippi Pilot	13,291	95.2
Total	40,988	91.8

Source: Diaz et al. (1982: Table IV-1).

This ratio is the number of individuals who participated in jobs divided by the number of individuals enrolled. These data are derived from the Local Field Survey.



Cohort Effects. A principal goal of this analysis is to use data from the YIEPP projects in the four pilot sites between 1978 and 1980 to estimate the effects of a potential national program. This national program can be imagined in a steady state (having passed beyond start-up difficulties), which youths below age 16 can count on as being available to them as they pass through ages 16 to 19 until they graduate from high school. Ideally, one would like to predict various outcome measures--program participation, school enrollment, high school graduation, employment and unemployment--on the age profiles for youths as they age into and through program eligibility. This is a difficult undertaking, however. The sample was constructed in the spring of 1978 and included youths aged 15 to 19 at that time. Since program operations were also beginning at that point, much of the sample was beyond the age of initial eligibility when the youths first heard of it. Thus, they may already have made decisions and undertaken actions that would have been different if YIEPP were available or if they had known it would at least be available to them when they turned 16. For this reason, the cohorts aged 15 and 16 at baseline provide the best indicators of the effects of a continuing national program. Particular attention is paid to these cohorts in the chapters that follow.

#### The Longitudinal Survey

Samples of youths who were eligible for YIEPP, or would have been eligible had a program been operating in their area, were selected at each of the four pilot and comparison sites. The evaluation sample was drawn during February and March, 1978, at which time a stratified random sample of over 130,000 households was screened to identify eligible youths. Subsequent baseline interviews were completed during the period from March through August, 1978, with 7,510 eligible youths at the eight sites. Interviews were also completed with the parents of these youths.

After the baseline wave of interviews had been completed, there was further change in the composition of the longitudinal sample because Congress extended the YIEPP demonstration beyond its original 18 months. A fourth wave was added to the originally planned three-wave survey, allowing

the sample to be followed for a longer period of time and permitting a substantial postprogram period of observation. In order to add the additional wave, however, without a corresponding increase in budget, the original sample was reduced in size. Youths who had already become ineligible for YIEPP by June, 1978--either by aging out of eligibility or by graduating from high school--were eliminated from the follow-up survey wave. This brought the size of the baseline longitudinal sample to 6,501, which was not a serious curtailment from a design point of view. The youths eliminated had had only three months to join YIEPP and, even if they had joined, there was too brief a program experience for any effects to be expected.

The first follow-up survey (Wave II) was conducted in the fall of 1979, with the second follow-up wave of interviews (Wave III) taking place in the fall of 1980. A final interview wave (Wave IV) was conducted during the fall of 1981.

By the end of Wave III, the total completed sample of youths was 4,749 (73.1 percent of the original baseline), with most of the attrition occurring at the time of the Wave II survey. The completed Wave III sample was, in fact, three subsets of the original longitudinal sample. By far the largest group, numbering 4,033 youths, had remained in the target areas either of the YIEPP pilot sites or comparison sites throughout the research period. These youths maintained their program eligibility during the entire demonstration period, at least on the geographic criterion. In each follow-up year, they completed an extensive local field survey instrument, creating the continuous longitudinal history from January, 1977, to September, 1980, on which this report is based.

The second group consisted of 388 youths in the sample at baseline who had moved out of one of the evaluation sites at some time during the demonstration. These youths had completed the regular questionnaire as long as they lived in the site. Although their move caused them to lose their eligibility for YIEPP, these youths were administered a telephone follow-up questionnaire (the Remote Movers Survey) which, though somewhat briefer than the field instrument, also provided a continuous longitudinal history of the critical dimensions of employment, schooling, and other experiences.

The third group was a subsample of nonrespondents to Wave II, who were reinterviewed in Wave III. A total of 1,674 youths failed to respond to Wave II, but 378 of them completed the Wave III questionnaire focusing upon the key dimensions of experience over the two-and-a-half-year period. Thus, a continuous history has also been constructed of a nonrespondent sample, which is particularly important to a consideration of nonresponse bias issues. Since resource constraints made it impossible to reinterview all the nonrespondents to the Wave II survey, the subsample chosen for reinterview focused upon the principal sample target groups eligible for YIEPP. It includes (a) black youths from Baltimore (the largest study site with the largest number and concentration of black youths) and its comparison site (Cleveland); and (b) Hispanic youths from Denver and its comparison site (Phoenix), that together were the sites where the overwhelming majority of sample Hispanics resided at baseline.

In addition to the longitudinal survey data, school records were collected on the analysis sample at two points during the demonstration: summer through fall of 1979, and summer through fall of 1980. The information was assembled for a four year period beginning with the 1976-1977 school year and ending with the 1979-1980 school year. These data included attendance and tardiness information, courses pursued, grades and standardized test score results.

#### Analysis Sample

The analysis sample for this report is the group of 4,033 youths who completed the first three successive interview waves and remained in the sites. The analysis is restricted to this group in order to provide a study sample that has an invariant composition among the extensive inter-related analyses presented below. Comparisons can thus be made with less ambiguity. The effect of this strategy is to reduce the sample size on any given subgroup or sample period as well as contribute to the possibility of attrition bias. However, the reduction in sample size is generally too small to affect statistical precision. Tests for attrition bias are also performed throughout the study.

The basic demographic characteristics of this sample at baseline are presented in Table 2.2. As shown in the table, minority representation

Table 2.2. Characteristics of the Analysis Sample at Baseline

Race:		Highest grade attained:	
White	13.7%	< 8th	24.3%
Black	76.2%	9th	22.1%
Hispanic	10.1%	10th	22.5%
		11th	30.8%
		12th	0.3%
Sex:		Mean grade attained, June 1978:	
Male	46.3%		9.44
Female	53.7%		
Age as of June 1978:		Worked at all, January 1977 - March 1978:	
15	19.3%	Yes	49.2%
16	32.0%	No	50.8%
17	24.8%		
18	13.7%		
19	10.2%		
School status as of March 1978:		Percent of time working, January 1977 - March 1978:	
In-school	76.8%		14.4%
Out-of-school	23.2%	Marital status, March 1978:	
		Married	1.5%
Type of school:		Separated or divorced	0.5%
Regular public	90.1%	Never married	98.0%
Alternative public	4.0%		
Private or parochial	1.6%	Number of children March 1978:	
Other	4.3%	0	85.9%
Type of program:		1	11.8%
General	80.2%	2	2.0%
College preparatory	4.6%	>2	0.3%
Vocational, commercial or business	11.4%		
Other	3.9%	Living with neither natural parent, March 1978:	
Degree sought:			11.7%
High school degree	90.7%	1977 family income	
GED	4.0%		\$5,305
None	5.3%		

All statistics in this table are based on the 4,033 observations in the Analysis Sample.

in the sample was very high--86.3 percent--a factor partly caused by the inner city or southern rural location of sample sites, but also a function of the greater representation of minority families among the low income (and thus YIEPP-eligible) population. More than three out of four sample members were black youths. Black youths far outnumbered other groups in all the evaluation sites except Denver and Phoenix. Denver and Phoenix, by contrast, jointly accounted for over 93 percent of the Hispanic youths in the analysis sample.

More of the analysis sample were young women (53.7 percent) than would be suggested by national population data. The reason for this, as discussed later in this chapter, is that sample attrition was somewhat higher among the young men than among the young women.

Over three-quarters of the sample was enrolled in school in March, 1978. The median age was just over 17. School attachment at baseline was strongly and consistently related to age, with almost 92 percent of the 15- and 16-year-olds, but only 46 percent of the 19-year-olds, attending school. Consistent with national trends, school attachment was highest among black youths and lowest for white youths. Most youths who were enrolled in school attended regular public schools in courses leading to a high school diploma. About one in eight was taking a commercial, vocational, or agricultural program. Only 4 percent of the school enrollment periods reported during baseline interviews were leading to a GED degree, and only 1.5 percent of the sample was in private or parochial schools.

Although school attachment in the spring of 1978 was reasonably high, grade attainment was less impressive. Almost half of the analysis sample had completed no more than the ninth grade, while only about three in ten had completed eleventh grade or better by June of 1978. Grade attainment, as one would expect, also varied by age. Fifteen-year-olds, who in the nation as a whole have typically attained at least the ninth grade, had a mean attainment of 8.8 grades, with about one-quarter of the group having less than a ninth grade education. As age increased, relative grade attainment decreased. The mean grade attainment for 16-through 19-year-olds was 9.3, 9.7, 9.8 and 10.1, respectively, with the effects of reduced school attachment increasingly influencing grade

achievement. There were some small differences in grade attainment at baseline by race, with Hispanics (at 9.7 years of schooling) having advanced marginally farther than both blacks (with 9.4 years) and whites (with 9.2 years). Moreover, females had a slightly higher baseline grade attainment of 9.5 years compared to the male baseline grade of 9.2 years, even though female sample members were slightly younger than their male counterparts.

Overall, more than one-half the sample was below expected grade level by June, 1978, including three-quarters of the 18- and 19-year-olds. Over 24 percent of the sample were at least two full grades below normal level, including over 40 percent of the 18- and 19-year-olds. Not surprising, in-school youths had a higher grade attainment than those not in school, with mean grade completed ranging from 1.4 to 1.6 grades higher, depending upon the age cohort. Even among in-school youths, however, 34 percent had not completed the grade level usually expected for their age.

About one-half of the sample had worked at some job during the period prior to baseline (January, 1977 - March, 1978).<sup>1</sup> Work experience during this period was particularly likely for youths in Denver (68.6 percent), Phoenix (63.2 percent), and Cleveland (63.4 percent). It was also unusually frequent among Hispanics (65.1 percent)--most of whom resided in the strong labor markets of Denver and Phoenix--and for males.

If a more comprehensive way of looking at labor force attachment is used--the total number of days worked as a proportion of the total number of days available for work--the picture of preprogram employment is not greatly altered. Overall, the average sample member worked 14.4 percent of the time in 1977, a bit more than one day per calendar week. Labor force attachment was highest in Denver and Phoenix, but was also above average in Cleveland and Cincinnati. Prior work experience during 1977 was a direct function of age, with 15-year-olds working only occasionally (8.6 percent of the time) and 19-year-olds working somewhat more (24.8 percent of the time). Males worked almost twice as much as females.

---

<sup>1</sup> A job was defined as working for pay for at least 10 hours per week for at least two consecutive weeks.

Whites and Hispanics spent substantially more of their time working than blacks--22.3 percent and 21.3 percent, respectively. The Hispanic figure, however, is almost entirely a function of Hispanic concentration in the two strongest labor markets, Denver and Phoenix. At the other sites, Hispanics worked considerably less--only 8.3 percent of the time. Overall, black youths worked only 12.1 percent of the time, a phenomenon that is related in part to the higher degree of school attachment among black youths.

Total family income for the sample was low, averaging \$5,305 per year in 1977. Mean annual family income was highest in Denver and lowest in rural Mississippi. It was also lower for black youths than for whites or Hispanics.

Less than one in eight sample members was living with neither of his or her natural parents. As would be expected, the frequency of this family living condition was also directly related to age. Only 2 percent of the sample had ever been married at baseline, but one-quarter of those who had been married were already separated or divorced. Marriage was particularly rare among blacks. At baseline, only 0.4 percent of the black sample members were married, compared to 3.9 percent of Hispanics and 6 percent of whites. The infrequency of marriage, however, is not unusual in a sample of youths whose median age was only just over 17, and in which over three-quarters were 17 or less. More surprising is the number of parents. Almost one out of seven already had children in the spring of 1978, and one in six of these teenage parents had more than one child. The incidence of children was not strongly related to race, but was strongly related to sex and age. Only 4.3 percent of youths aged 15 or 16 had children, but over one-quarter of those aged 19 were parents. Likewise, females were more than four times as likely to report having had children as males. The rate of reported parenthood was highest among 19-year-old females, at 45 percent.<sup>1</sup>

---

<sup>1</sup>The high incidence of childbearing among female sample members should be kept in mind when considering the findings presented in later chapters. Because of the pilot/comparison group design, the estimated effects of the program will not be affected. However, the high incidence of childbearing may affect the absolute levels of such behavior as school and labor force attachment.

For demographic variables that change over time, it is informative to examine changes over the three survey waves, as shown in Table 2.3. By the fall of 1980 (when the median age of the analysis sample was 19-1/2 years old) more than 90 percent had still never been married, but as the sample aged, more had become married and/or divorced. The ratio of marriage to divorce or separation was about four to one. Childbearing increased more dramatically with age. By Wave III, over one-third of the sample had children. Almost 9 percent of the sample had two or more children. Also, by the fall of 1980, more than one-quarter of the sample was no longer living with either parent.

It is helpful to have a point of comparison in an interpretation of the results of the YIEPP analysis sample in light of these sample characteristics. Comparisons with the National Longitudinal Survey of Young Americans (NLS) national probability sample--both for 15- to 19-year-old poverty youths in their national probability sample and for all youths in that age group--are presented in Table 2.4.<sup>1</sup>

As can be seen, the YIEPP eligibility criteria caused its sample characteristics to be different from those of the general youth population. Two factors stand out. First, the minority proportion of the YIEPP sample was much higher than for youth or poverty youth nationwide. The YIEPP difference reflects the deliberate selection of YIEPP sites in areas with concentrations of minorities as well as residents below the OMB poverty level. Second, the YIEPP sample was noticeably younger than either of its NLS counterparts. Both this and the sharply different distribution by grade attainment were a consequence of YIEPP sample truncation due to ineligibility of high school graduates or possessors of GEDs.

The strong differences in age and race explain several of the other patterns in Table 2.4. The younger and more heavily minority YIEPP sample members were less likely to be married, less frequently living separately from parents, and more likely to be in school. This is consistent with the relationships already observed in the sample between age and race, on

---

<sup>1</sup> We are indebted to Dr. Michael Borus, Director of the Center for Human Resource Research at Ohio State University, for providing these data and for interpreting them to our research staff.



Table 2.3. Marital and Parental Status of the Analysis Sample over Time

	Wave I Spring 1978	Wave II Fall 1979	Wave III Fall 1980
Marital status:			
Married	1.5%	4.4%	7.7%
Separated or divorced	0.5%	0.1%	1.9%
Never married	98.0%	94.9%	90.4%
Parental status:			
No children	85.9%	76.6%	66.3%
1 child	11.9%	18.1%	24.9%
2 children	2.0%	4.1%	6.8%
> 2 children	0.2%	1.2%	2.0%
Living with neither natural parent	11.7%	19.4%	27.2%
Median age of sample	17 yrs, 1 month	18 yrs, 6 months	19 yrs, 6 months

Table 2.4. The YIEPP Sample Compared with the  
National Longitudinal Survey of Young American Samples

	YIEPP analysis sample	1978 NLS Sample <sup>a</sup>	
		Poverty youths	All youths
Race:			
White	13.7%	48.2%	80.0%
Black	76.2%	38.3%	13.7%
Hispanic	10.1%	13.5%	6.3%
Age:			
15	19.3%	20.2%	20.3%
16	32.0%	21.0%	20.7%
17	24.8%	21.0%	19.9%
18	13.7%	17.8%	19.5%
19	10.2%	20.0%	19.6%
Sex:			
Male	46.3%	49.4%	51.3%
Female	53.7%	50.6%	48.7%
School status March 1978:			
In school	76.8%	71.3%	77.7%
Not in school	23.2%	28.7%	22.3%
Highest grade attained, June 1978:			
≤ 8	24.3%	12.8%	4.7%
9	22.1%	16.0%	11.5%
10	22.5%	24.3%	23.7%
11	30.8%	15.8%	20.9%
≥12 or GED	0.3%	31.1%	39.2%
Mean grade attained, June 1978			
	9.44	9.45	9.96
Marital status, Spring 1978:			
Married	1.5%	5.2%	4.5%
Not married	98.5%	94.8%	95.5%
Children:			
Yes	14.1%	12.6%	4.3%
No	85.9%	87.4%	95.7%
Living with neither natural parent			
	11.7%	31.7% <sup>d</sup>	20.4% <sup>b</sup>
Mean family income <sup>c</sup>			
	\$5,305	\$4,228	\$20,975

<sup>a</sup> Special run of data from Wave I of the National Longitudinal Survey of Young Americans by the Center for Human Resource Research at Ohio State University.

<sup>b</sup> Includes youths in college, which are 4.4 percent and 7.2 percent, respectively, of the two NLS samples.

<sup>c</sup> Mean family income figures are for calendar year 1977 for the YIEPP sample, calendar year 1978 for the NLS sample.

<sup>d</sup> The "poverty" sample of the NLS was derived by applying the 1978 OMB poverty standard to the sample. This is also the standard used in the YIEPP sample. However, it was only possible in this run to apply the OMB standard for urban families. Thus, rural members of NLS Youth samples are somewhat overrepresented in the poverty sample, since OMB poverty standards for rural areas are lower than for urban areas.

the one hand, and school attachment and marriage on the other. Despite their youth, YIEPP sample members were parents more frequently than either of the NLS samples. The concentration of the YIEPP sample in poor inner city areas may explain this difference, as well as the fact that the incidence of childbirth increases rapidly over time.

Total family income for the YIEPP sample was 25 percent higher than for the NLS poverty youth sample, although it was about four times lower than the mean for youths nationally. The difference is, in fact, greater than that shown in Table 2.4, because the NLS data are for the calendar year 1978, while YIEPP data are for the calendar year 1977, although the overestimate is somewhat muted by the fact that the YIEPP estimate included the value of Food Stamps while the NLS figures do not.<sup>1</sup> The explanation of any remaining difference is not entirely obvious, but it probably rests heavily on the fact that minorities were overrepresented in the YIEPP analysis sample. It may also be, however, that YIEPP sites were not representative of the national poverty population on total family income.

#### Pilot and Comparison Sites

MDRC and the Department of Labor chose the pilot sites for the evaluation in December, 1977, based upon several general criteria. First, since the research focus was upon broad-scale implementation to test an entitlement model, the sites had to be chosen from the larger-sized Tier I group. Second, at least one rural site was considered important, a criterion leading to the choice of the rural Mississippi program. Third, geographic diversity was desired, increasing the likelihood that one east coast site (Baltimore or Boston), one central site (Cincinnati or Detroit) or one western site (Denver or King-Snohomish) would be included. Fourth, the projected costs of data collection were important, playing a part in screening out sites where family income made it likely that eligibility rates would be relatively low, thus increasing the screening costs of sample selection. Denver's strong labor market was therefore a negative factor on that point, but the fact that Denver had the only Hispanic population concentration among Tier I sites and was a site with a strong

---

<sup>1</sup> Food Stamps accounted for \$784 of total annual family income of the YIEPP analysis sample at baseline.

labor market made it desirable for purposes of representativeness and brought Denver into the sample. Boston was eventually excluded from final consideration because, at the time sites were selected, there was still major uncertainty on how long the Boston program could be funded. The exclusion of Boston helped screen in Baltimore, which was also attractive because it was a partial city site (it was desired that one study site be a partial city) and was thought to have dynamic leadership. The choice of Cincinnati over Detroit as the geographically central site was influenced by the fact that Detroit was a partial city site and the partial city site of Baltimore had already been selected.

The four YIEPP pilot sites chosen for the evaluation were not, therefore, chosen to be closely representative, either of the YIEPP demonstration as a whole or of the nation. How they, in fact, compared on the dimensions of unemployment rate and racial composition is shown in Table 2.5. The four-site average is similar in unemployment rate to the national average in 1977. However, the racial composition of the sites varies to a significant degree both within the four evaluation sites and in comparison to the national average.

Generalizing from the results reported in subsequent chapters to either the demonstration or the nation as a whole, therefore, should be done cautiously, especially as these results will be shown to vary both with local labor market conditions and for different racial groups. With this in mind, the impact evaluation considers each pilot site (or pilot/comparison pair) on its own terms as revealing a great deal about what happens when a program is introduced into a particular environment. Three-site or four-site aggregations are used mainly as the most straightforward way of expressing the average program impacts at the designated evaluation sites.

The selection of comparison sites was systematically aimed at obtaining the closest possible match for each of the YIEPP sites chosen for the evaluation. Pairs were matched on the following dimensions:

- Population
- Size of labor market
- Population growth, 1970-75

**Table 2.5 YIEPP Evaluation Sites Compared to YIEPP Total and the Nation**

Site	Unemployment rate	Racial composition of population
Baltimore	10.3% (1976) <sup>a</sup>	15% white, 85% nonwhite (1977)
Cincinnati	7.0% (1977) <sup>b</sup>	72% white, 28% nonwhite (1970)
Denver	6.9% (1976) <sup>b</sup>	91% white, 9% nonwhite 17% Hispanic (1978)
Mississippi	4.2% (1977) <sup>c</sup>	60% white, 40% nonwhite (1975)
YIEPP evaluation sites (unweighted average)	7.1%	--- <sup>d</sup>
Boston	9.8% (1977) <sup>b</sup>	77% white, 22% nonwhite 1% other (1970)
Detroit	13.1% (1977) <sup>b</sup>	30% white, 70% nonwhite (1977)
King-Snohomish	6.7% (1977) <sup>b</sup>	90% white, 10% nonwhite (1979)
Total non-study Tier I sites (unweighted average)	8.8%	--- <sup>d</sup>
Tier II sites (unweighted average)	9.9%	--- <sup>d</sup>
Total program (unweighted average)	8.6%	--- <sup>d</sup>
Nation	7.0% (1977)	89% white, 11% nonwhite (1970) 5% Hispanic

Sources: Manpower Demonstration Research Corporation (1977, Table 1); U.S. Department of Commerce (1978); and U.S. Department of Labor (1971).

<sup>a</sup> Rates shown are for the city.

<sup>b</sup> Rates shown are for the prime sponsor area.

<sup>c</sup> Rates shown are for the state.

<sup>d</sup> Not estimated.

- Unemployment rate
- Labor market distribution of jobs
- High school dropout rate
- Ethnic distribution of population, particularly the youth population
- Characteristics of the poverty population

In Table 2.6, a number of these characteristics that are arrayed for the pilot and comparison sites are relatively close. In Mississippi, for example, the pilot and comparison sites hardly differed along any measure except size. The size difference should not be surprising, given that more weight was attached to the match on ethnic mix, percent of families below poverty, and unemployment rate, than on size of population and labor force. Particular attention was paid to the institutional and procedural similarities of the match, particularly as these applied to school systems.

The Cincinnati-Louisville match was a good one on population change, percent of families in poverty, ethnic mix, percent of 16- to 17-year-olds in school, unemployment rate, and labor market distribution--although there were differences in the proportion of older youths in school (in 1970) and in size. The Baltimore-Cleveland match was somewhat less close, though still good. Both are declining industrial cities in the eastern portion of the country with substantial black populations and about the same size labor forces, proportion of families in poverty, and percent of youths in school. Baltimore, however, had a larger central city, a slower rate of population decline and a higher black population, especially in the YIEPP target area. The only alternative as a comparison site, however, was Washington, D.C., which was ruled out because the government sector so heavily dominates the labor force. There were also differences between Washington D.C. and Baltimore in percent in poverty, school enrollment, and the unemployment rate.

The Denver-Phoenix pair was an unsatisfactory match in terms of both size of population and rate of growth. However, they are both young sunbelt areas with very similar proportions of Hispanics (at least in 1970). The match was also not entirely satisfactory on the unemployment

Table 2.6. Selected Characteristics of the Pilot and Comparison Sites

	Population July 1, 1975	Population change 1970-1975	Families with money income below poverty level, 1969	Percent black 1970	Percent Spanish surname 1970	Percent enrolled in school, 1970		Unemployment rate, 1977 SMSA	Employment <sup>c</sup>			
						16-17	18-19		Total	Manufacturing	Wholesale & retail	Government
Denver	484,500	- 5.9%	9.4	11.0	16.8	89.4	52.8	5.9	670,200	15.7%	25.2%	18.2%
Phoenix	664,700	12.9%	8.8	7.0	14.0	86.0	52.3	7.4	490,300	17.1%	26.2%	18.3%
Cincinnati	412,600	- 9.0%	12.8	27.6	0.6	83.6	60.0	5.6	562,100	28.7%	23.1%	14.1%
Louisville	336,000	- 7.1%	13.0	23.8	0.4	83.3	46.2	5.2	372,400	28.7%	22.3%	14.2%
Baltimore	851,700	- 6.0%	14.0	46.4	0.9	84.4	49.6	6.7	864,900	18.6%	22.8%	22.3%
Cleveland	638,800	-14.9%	13.5	38.3	1.9	87.6	46.8	5.9	880,900	30.7%	22.9%	13.5%
Mississippi Pilot <sup>b</sup>	167,200	2.3%	38.5	49.4	<0.1	na	na	7.0 <sup>a</sup>	32,300	45.3%	23.9%	20.2%
Mississippi Comparison <sup>b</sup>	195,900	2.0%	37.3	45.3	<0.1	na	na	7.1 <sup>a</sup>	43,500	37.9%	25.9%	18.2%
United States	213,030,000	4.8%	10.7	11.1	5.1 <sup>d</sup>	90.0	47.7	8.2	90,546,000 <sup>e</sup>	22.8%	20.7%	17.2%

Note: Unless otherwise noted, statistics in the above table are for the central city or, for Mississippi, the cluster of counties.

<sup>a</sup> 1976 data.

<sup>b</sup> The Mississippi pilot counties are: Adams, Claiborne, Covington, Franklin, Jefferson, Jones, Wayne and Wilkinson. The Mississippi control counties are: Clarke, Humphreys, Lauderdale, Sharkey, Smith and Washington.

<sup>c</sup> For the six cities, reported employment is for the SMSA for 1977; for the Mississippi counties, employment is measured as those workers covered by Social Security, by industry sector, as of March 12, 1975.

<sup>d</sup> Data are for calendar year 1976.

<sup>e</sup> Data are for calendar year 1977.

Source: U.S. Department of Commerce (1978); U.S. Department of Labor (1981); and U.S. Department of Labor (1981).

rate. The school enrollment data were very similar. In any case, San Jose, the closest alternative to Phoenix, was a much worse match. San Jose was smaller, faster growing, located in a different region, more heavily Hispanic, and with a different school enrollment profile.

In addition to area matching, it is also important to match characteristics of the sample members. Table 2.7 below shows basic demographic information on the analysis sample.

The two rural Mississippi site samples matched extremely well, particularly on ethnic mix, age, school status in March, 1978, mean grade attainment, marital status, and parenthood. Mean family income in 1977 was higher in the comparison site, but both samples had lower incomes than their urban counterparts (except for Louisville). Both Mississippi samples were also slightly younger, more school attached, and had less recent work experience than sample youths at other sites. The one difference between the two sites in Mississippi was that the comparison sample was strongly dominated by female eligibles.

The Denver and Phoenix samples were quite similar in sex composition, age, percent of time working, mean grade attainment and parenthood. They were also reasonably similar in March, 1978 school status and income. The racial compositions of the two were not very similar, but they both had a majority of Hispanics and together accounted for almost 95 percent of the Hispanic eligibles in the analysis sample. The two site samples were also similar in having more work experience, a higher rate of marriage, and higher income than the eligibles at the other study sites.

The samples in Baltimore and Cincinnati were both dominated by black eligibles whose age, school status, marital status, and 1977 total family income profiles were very similar. Both sites had more school attachment and a higher proportion of blacks than samples at the other urban sites. The Baltimore sample, however, was heavily female, and, as a consequence, had less preprogram work experience and was more likely to have children than the Cleveland sample.

The analysis sample match was least close in Cincinnati and Louisville. Family income was reasonably similar, but in comparison to Louisville, the analysis sample in Cincinnati had a higher proportion of blacks,



Table 2.7. Analysis Sample Characteristics of Pilot and Comparison Sites<sup>a</sup>

	Denver	Phoenix	Cincinnati	Louisville	Baltimore	Cleveland	Mississippi Pilot	Mississippi Comparison	8-site		6-site <sup>b</sup>	
									Total Pilot	Total Comparison	Total Pilot	Total Comparison
Race:												
White	14.2%	20.5%	16.2%	31.4%	4.7%	12.0%	13.4%	10.4%	11.0%	19.9%	10.2%	19.8%
Black	30.8%	18.4%	82.9%	68.2%	94.3%	86.1%	86.6%	89.2%	78.8%	70.4%	89.0%	79.3%
Hispanic	55.0%	61.1%	0.9%	0.4%	1.0%	1.9%	0.0%	0.4%	10.2%	9.3%	0.8%	0.9%
Sex:												
Male	48.3%	46.0%	43.5%	46.7%	44.8%	49.2%	51.8%	41.4%	46.4%	46.0%	46.0%	46.0%
Female	51.7%	54.0%	56.5%	53.3%	55.2%	50.8%	48.2%	58.6%	53.6%	54.0%	54.0%	54.0%
Age, June 1978:												
15	17.0%	23.9%	20.9%	14.7%	20.3%	19.7%	20.9%	16.3%	20.0%	17.7%	20.6%	16.6%
16	32.9%	28.8%	31.3%	33.7%	29.2%	32.1%	34.2%	38.5%	31.3%	33.7%	31.0%	34.5%
17	25.1%	26.1%	24.6%	21.3%	23.9%	26.3%	27.1%	26.5%	24.9%	24.5%	24.9%	24.3%
18	14.2%	10.3%	13.1%	15.8%	15.9%	11.1%	11.4%	11.9%	14.0%	12.9%	14.0%	13.3%
19	10.8%	10.9%	10.1%	14.5%	10.7%	10.8%	6.4%	6.8%	9.8%	11.2%	9.5%	11.3%
School status, March 1978:												
In school	71.3%	65.4%	76.9%	62.5%	80.7%	83.6%	83.5%	81.8%	78.6%	72.8%	80.0%	74.1%
Not in school	28.7%	34.6%	23.1%	37.5%	19.3%	16.4%	16.5%	18.2%	21.4%	27.2%	20.0%	25.9%
Worked at all, January 1977- March 1978:												
Worked	68.6%	63.2%	51.9%	40.8%	47.5%	63.4%	30.1%	41.4%	48.9%	50.0%	44.7%	47.7%
Not worked	31.4%	36.8%	48.1%	59.2%	52.5%	36.6%	69.9%	58.6%	51.1%	50.0%	55.3%	52.3%
Percent time working, January 1977- March 1978:												
March 1978:	21.8%	22.0%	17.8%	13.0%	10.7%	17.9%	9.0%	11.3%	14.1%	15.2%	12.4%	14.0%
Mean grade attained:												
	9.8	9.7	9.2	10.2	9.3	9.7	9.9	9.8	9.5	9.5	9.4	9.4
Marital status, March 1978:												
Married	2.3%	5.4%	0.9%	3.5%	0.3%	0.3%	1.7%	1.3%	1.0%	2.5%	0.8%	2.0%
Separated or divorced	1.0%	0.0%	0.9%	0.9%	0.1%	0.0%	1.1%	0.0%	0.6%	0.3%	0.6%	0.4%
Never married	96.7%	94.6%	98.2%	95.6%	99.6%	99.7%	97.2%	98.7%	98.4%	97.2%	98.6%	97.6%
Number of children, March 1978:												
0	88.7%	89.7%	85.6%	79.4%	83.5%	90.2%	89.2%	86.5%	86.1%	85.4%	85.5%	84.7%
1	10.1%	9.2%	11.4%	18.0%	14.3%	7.9%	8.2%	10.1%	11.6%	12.3%	12.0%	12.8%
2	1.2%	1.1%	2.5%	2.4%	1.8%	1.6%	2.6%	2.7%	2.0%	2.1%	2.2%	2.2%
>2	0.0%	0.0%	0.5%	0.2%	0.4%	0.3%	0.0%	0.7%	0.3%	0.2%	0.3%	0.3%
Mean family income for 1977												
	\$5,796	\$5,365	\$5,379	\$5,170	\$5,402	\$5,349	\$4,696	\$5,212	\$5,318	\$5,274	\$5,159	\$5,244
N	487	185	692	456	1060	317	539	297	2,778	1,255	2,291	1,070

<sup>a</sup>The variables in this table reflect baseline characteristics of the analysis sample.

was slightly younger and more attached to school in March, 1978. These youths also had more prior work experience, the lowest mean grade attainment of the sites (Louisville had the highest), and were less likely to be married.

The four-site pairs were, thus, reasonably similar along several, though not always the same, dimensions. They were not, however, identical, and the inevitable differences that remain have to be adjusted for in the analysis so that the results do, in fact, reflect differences attributable to the YIEPP treatment. The results reported in the rest of this report are thus regression-adjusted estimates.

In Chapters 4 and 5, for example, all the results labeled "program effects" were obtained in the following manner: A regression model was estimated using the sample of youths from both pilot and comparison sites who were eligible for participation in YIEPP (or, in the case of comparison sites, would have been eligible if a program had been operating there). The outcome measure--for example, the employment/population ratio--was specified as a function of three sets of variables. The first set included such demographic variables as age, race, and sex. The second set contained person-specific variables related to the outcome measure. For example, in the case of the employment/population ratio, a person's preprogram employment/population ratio would be used. The third set included a constant and a site variable that equalled one if the youth lived in a pilot site and zero otherwise. Program effects were estimated by the coefficient on the 0-1 pilot site variable. This method controls for differences in the other variables (e.g. age, race, sex, preprogram employment/population ratio etc.). Results of such analyses are presented in this report as "regression adjusted" findings.<sup>1</sup>

---

<sup>1</sup> In the example of the employment/population ratio in the fall of 1979, the estimated program effect is adjusted for differences between the sites in 1977 in the demographic variables and employment/population ratios. The coefficient on the pilot site variable measures the average difference in the outcome measure between youths in the pilot and comparison sites, controlling for differences in the other variables in the regression equation. Using lagged values of the outcome variable is particularly important to the goal of reducing site effects that can be con-

### Attrition from the Baseline Longitudinal Sample

The analysis sample of 4,033 youths, on which this report is based, is 38 percent smaller than the baseline longitudinal sample of 6,501. As noted above, this attrition is principally due to nonresponse in the Wave II and Wave III surveys (32.8 percent), some of which was caused by the elimination of some interviewed sample members from the analysis frame because they had moved out of the evaluation areas (5.2 percent). While this attrition caused some changes in the composition of the sample, tests for attrition bias generally indicated that there either was no bias or that the bias may have resulted in some (small) understatement of program effect.

As illustrated in Table 2.8, the sample became somewhat younger, blacker, and more female over time. This is a consequence of the fact that the longitudinal response was poorest in Denver and Phoenix (heavily Hispanic, with more than an average proportion of white youths). Longitudinal response has been best in Mississippi and Baltimore (where blacks were most heavily represented and where samples were slightly younger and more female than the average). The different longitudinal response rates by site also caused the distribution of the sample to alter across sites. Baltimore, Louisville, and the two Mississippi sites gained, while Denver, Phoenix, Cincinnati, and Cleveland lost. The pilot-comparison ratio of the sample, however, did not change noticeably. In the longitudinal baseline sample, 68.4 percent of the youths were at pilot sites; the comparable percentage of the analysis sample was 68.9 percent.<sup>1</sup>

The analysis sample was somewhat more attached to school in March, 1978, than the baseline longitudinal sample and had slightly less prior work experience. The difference in each case, however, was modest. Grade attainment (both its mean and distribution) and childbearing behavior were virtually identical for the two samples.

---

founded with program effects. To the extent, for example, that unemployment rates are consistently different between pilot and comparison sites, these differences in aggregate demand would be reflected in pre-program employment/population ratios and, therefore, adjusted for in the estimates of program effects.

<sup>1</sup>See Barclay et al. (1979: Chapter 3).

**Table 2.8. Characteristics of Baseline Longitudinal  
and Analysis Samples**

Characteristic	Baseline longitudinal sample <sup>a</sup>	Analysis sample
Race:		
White	17.2%	13.7%
Black	69.9%	76.2%
Hispanic	12.8%	10.1%
Sex:		
Male	49.2%	46.3%
Female	50.8%	53.7%
Age as of June 1978:		
15	14.7%	19.3%
16	30.6%	33.0%
17	26.9%	24.8%
18	15.7%	13.7%
19	12.1%	10.2%
Site:		
Denver	16.0%	12.1%
Phoenix	6.8%	4.6%
Cincinnati	18.8%	17.2%
Louisville	9.9%	11.3%
Baltimore	22.9%	26.3%
Cleveland	8.3%	7.9%
Mississippi Pilot	10.9%	13.3%
Mississippi Comparison	6.4%	7.3%
School status as of March 1978:		
In school	72.6%	76.8%
Out of school	27.4%	23.2%
Highest grade attained, June 1978:		
≤ 8	24.0%	24.3%
9	23.0%	22.1%
10	22.5%	22.5%
11	30.2%	30.8%
≥ 12 or GED	0.3%	0.3%
Percent time working, January 1977-March, 1978:	15.8%	14.4%
Mean grade attained, June 1978:	9.49	9.44
Children:		
Yes	14.4%	14.1%
No	85.6%	85.9%
N	6,501	4,033

<sup>a</sup>For more detailed statistics on this original sample, see  
Barclay, et al. (1979: Chapter 3).

Whether changes in the sample composition may have affected impact estimates is a testable hypothesis. Attrition bias may be estimated, as mentioned, by using data from the sample of Wave II nonrespondents who were interviewed in Wave III. The effects of this attrition have been noted above. The specific analysis of attrition bias as it affects estimates of participation, school enrollment, employment and labor force participation is presented in Appendix C to this volume.

### Program Eligibles

The dynamics of eligibility, and how this report deals with them are complex and worthy of attention. Indeed, fundamental to an understanding of this evaluation is a clear comprehension of what is meant by the term "eligible" youth and an awareness of the difference between eligibles and longitudinal sample members.

A stratified random sample of eligibles was selected early in 1978. This encompassed youths from low income or welfare families, 15- to 19-years old, residing in a program target area or defined comparison area, who had not yet graduated from high school. Sample members were followed over time with successive survey waves, even though their eligibility status may have changed. For example, sample members who were less than 16 years old at baseline were not yet eligible for YIEPP, but aged into eligibility. As they did so, the size of the program eligible population in the sample increased. Also, some youths, over time, moved out of program sites or designated comparison areas, becoming ineligible for that reason, although the Remote Movers Survey continued to collect data on them. This kind of geographic movement, however, reduced the size of the sample eligible population. Finally, since high school graduation or becoming 20 years old made a youth ineligible for YIEPP, both graduation and aging further reduced the size of the eligible population in the sample.<sup>1</sup> The number of eligibles in the sample, thus, changed constantly over time.

---

<sup>1</sup> There are three limitations to a literal application of the program definition of eligibility to the evaluation. First, one of the study sites--Baltimore--had a target area that did not encompass the entire city. Movement of residency of sample members between the target area and the nontarget area in Baltimore is not detected in the survey. It

The data base used in this report encompasses all sample members who completed local field interviews in each of the first three survey waves.<sup>1</sup> Different proportions of these youths were eligible for YIEPP at different points in time, depending upon age and high school graduation. For example, Table 2.9 shows the size and basic characteristics of the eligible sample members at several points since the spring of 1978. The numbers presented in this table adjust for aging in, aging out, graduating, and moving out of YIEPP program eligibility.

The first observation of interest in Table 2.9 is the fluctuation in the number of eligibles in the sample. Eligibles increased in number through the fall of 1978, with very little drop-off in the spring of 1979. During this period, sample members who were less than 16 at baseline aged into the sample. There was little aging or graduating out, since youths who had graduated or turned 20 by June, 1978, had already been eliminated from the sample after baseline. At the peak, in the fall of 1978, over 95 percent of the Wave III analysis sample was eligible. After the spring of 1979, however, the number of eligibles declined regularly, as a function

---

is, therefore, possible that some youths in the Baltimore sample became ineligible by dint of residence, but are not considered such in the evaluation. Available evidence suggests that movement of this sort was trivial. Second, since the sample was selected at one point in time, it missed youths who may have become eligible later. This could happen in two ways. First youths who were 14 and under in the spring of 1978 were not sampled. Some became eligible for YIEPP late during the period of program operations. Second, youths who may have moved into a designated sample area after the sample was drawn are not included. Finally, family income was only gathered during the baseline. Thus, it is possible that youths who were eligible at baseline became ineligible because of family income changed sometime after the spring of 1978. To the degree that this occurred, it is not detected in the evaluation. Equally undetected is income movement in the opposite direction. Youths who were ineligible on income grounds at baseline, but may have later become eligible because of income, were not sampled. While the magnitude of these movements cannot be quantified, we believe that none of them could substantially affect the results contained herein.

<sup>1</sup>The analysis sample thus encompasses 85 percent of the sample of 4,749 who completed Wave III. It does not include 338 remote movers, who will be examined as part of post-program impact analysis. It also does not include 378 Wave II nonrespondents with whom interviews were completed in Wave III. These two groups, are, however, included in the analysis of attrition bias presented in this volume.

Table 2.9. Program Eligibles, Spring 1978 - Summer 1980

	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
Number of eligibles	3,118	3,428	3,840	3,759	3,377	3,037	2,890	2,403
Percent of Wave III analysis sample (4033)	77.3%	85.0%	95.2%	93.2%	83.7%	75.3%	71.7%	59.6%
Pilot sites	68.4%	68.6%	69.1%	69.3%	69.9%	69.4%	69.2%	70.1%
Comparison sites	31.6%	31.4%	30.9%	30.7%	30.1%	30.6%	30.8%	29.9%
Sex:								
Male	45.9%	46.6%	46.3%	46.4%	47.3%	48.2%	48.1%	48.8%
Female	54.1%	53.4%	53.7%	53.6%	52.7%	51.8%	51.9%	51.2%
Race:								
White	14.3%	14.0%	13.7%	13.5%	13.0%	13.4%	13.1%	12.9%
Black	75.7%	76.0%	76.0%	76.4%	76.6%	76.2%	76.4%	76.1%
Hispanic	10.0%	10.0%	10.3%	10.1%	10.4%	10.4%	10.5%	11.0%
Age at the time:								
16	43.6%	37.9%	38.4%	26.5%	16.2%	6.8%	1.1%	0.7%
17	29.6%	31.0%	30.5%	33.1%	36.9%	42.7%	33.7%	20.0%
18	16.2%	17.7%	18.3%	24.2%	27.0%	28.9%	36.0%	43.1%
19	10.6%	13.4%	12.8%	16.2%	19.9%	21.6%	29.2%	36.2%

of aging, graduating, or moving out of eligibility, and the fact that the sample no longer contained many youths who were aging into eligibility. Thus, by the summer of 1980, less than 60 percent of the analysis sample was still eligible, and by the summer of 1981, it is unlikely that much more than 20 to 25 percent of the analysis sample was still eligible. Since the final analysis of YIEPP focuses on postprogram impacts, however, most of the sample can be included in that analysis.

The eligible sample size pattern is mirrored by the changing age profile of eligibles. Through the fall of 1978, a majority of the eligibles (between 68.9 and 73.2 percent, depending on the time) were 16 or 17. As time passed, the age of the eligible sample population increased such that, by the summer of 1980, almost 80 percent of the remaining eligibles were at least 18.

In other key respects, the composition of the eligibles has changed only slightly. In the spring of 1978, 68.4 percent of the eligibles were at pilot sites. Two and one-third years later, pilot sites contained 70.1 percent of the remaining eligibles, a negligible change. The eligible sample became slightly more male over time, but again the change is marginal. The racial composition of the eligible sample was very stable over time, though the white proportion dropped a bit. Overall, the eligible population remained remarkably stable since the spring of 1978 on the basic demographic characteristics of sex, race, and site.

#### Summary

The design for this evaluation is based upon a comparison of eligibles at the four YIEPP pilot sites and four comparison sites, relying on longitudinal data from those sample members (4,033) who completed local field questionnaires (LFS) in three successive waves of interviews: the spring of 1978 (Baseline), the fall of 1979 (Wave II) and the fall of 1980 (Wave III). The pilot and comparison sites and samples match, on the whole, relatively well, increasing confidence that estimates based upon pilot-comparison differences are not confounded by other effects. The models that produce these estimates further control for, and thus net out, differences in demographic and key site variables. While there has been attrition in the sample since baseline, bias due to attrition does not



alter significantly the estimates presented in this report. Characteristics of the sample of youths for this evaluation show that YIEPP was well targeted on those likely to experience the problems it was designed to address. Almost seven-eighths of the sample was composed of minority youths, a much higher proportion than the national probability sample of youths and of low income youths reflected in the NLS. As such, the YIEPP target group is extremely vulnerable to the complex problems of high unemployment rates, smaller earnings, and underachievement in education discussed in Chapter 1.

While school attachment (as of March, 1978) was not below national norms, this is probably a result of the fact that the YIEPP sample was younger than average, due to the YIEPP eligibility criteria. Grade attainment, however, was behind national norms, falling further behind as age of the youths increased. Last, there was an unusually high incidence of childbearing among sample members, a phenomenon which undoubtedly exacerbates the difficulty of educational progress and employment for this group.

## CHAPTER 3

### PROGRAM PARTICIPATION

#### Introduction

In programs where sufficient funds are available to serve all eligibles, as was in principle true for YIEPP, the extent and composition of program participation takes on more than usual importance. Which youths are employed in YIEPP jobs and the pattern of their subsequent program experiences are key determinants of program impacts. Participation patterns also determine program costs. In our previous analysis (Farkas et al. (1980: Chapter 2)) we found that YIEPP participation varied across sites, over time, and by individual characteristics. In particular, in-school youths were more likely than school dropouts, and not employed youths were more likely than employed youths, to participate in YIEPP. These and related findings are an important aid in comprehending the mechanisms underlying the program impacts on school and work reported in Chapters 4 through 6 below. In this chapter we extend the analysis of participation to the two and one-half years of full-scale YIEPP operations. The discussion here complements the discussion in the MDRC Implementation Reports (Diaz et al. (1982)), and definitively summarizes our participation results for the period of YIEPP operations from the spring of 1978 to the summer of 1980.

In this evaluation we are studying data from four of the seven Tier I YIEPP sites. Of course, both local conditions and program implementation success varied across these sites. As summarized in Chapter 1, the MDRC implementation studies suggest that Denver ran a relatively poor YIEPP program, Baltimore ran an effective program, and Cincinnati and Mississippi fell between these extremes. As we shall see, participation and other site-specific findings strongly support this ranking.

#### Measuring Program Participation

YIEPP had four eligibility rules--the participating youth must reside in a program area, must be between 16 and 19 years of age, and must not have graduated from high school or completed the GED, and family income

must be below the poverty level. (See Chapters 1 and 2 above.) In this report we restrict attention to youths who completed all three waves of the local field survey in order to maintain a complete and consistent longitudinal data set for the analysis sample. While this results in differential attrition for each time period analyzed and somewhat smaller sample sizes, we conducted tests for attrition bias<sup>1</sup>, which indicated that sample size reduction was too small to affect the statistical precision of our estimates. We then further restricted attention to program-eligible youths on a period-by-period basis, separately for each season, from the spring of 1978 through the summer of 1980. Only youths who were income- and location-eligible at the time of the screening interview in the spring of 1978 and who had not graduated from high school by the summer of 1978 were included in the survey sample. In the analyses for this report we also eliminated youths who subsequently moved out of the program (or comparison site) area,<sup>2</sup> plus those who were ineligible due to age or high school graduation on a period-by-period basis. That is, we "aged" youths into and out of eligibility separately by period,<sup>3</sup> and youths "graduated" out of eligibility in the period following the one in which they received a high school diploma or its equivalent. This restriction of the study sample to program eligibles is more elaborate than the effort undertaken in our previous report, so that the results reported here supercede previous findings.

Program participants are defined as youths holding a YIEPP job for at least two weeks.<sup>4</sup> We do not count as participants youths who enrolled

---

<sup>1</sup>In order to test for potential bias due to sample attrition, we also analyze data from an "attrition sample" of youths who failed to respond to Wave II of the local field survey, and were then found and administered Waves II and III at a later date. These results are discussed as appropriate in the text; the underlying calculations are reported in Appendix C.

<sup>2</sup>That is, youths who moved sufficiently far from their city or town of residence to receive a "remote movers" questionnaire.

<sup>3</sup>Youths aged 15 or less in the spring of 1978 became eligible in the period during which they reached age 16; older youths became ineligible in the period following the one in which they turned 20.

<sup>4</sup>For a description of the survey methodology used to identify YIEPP jobs, see Farkas et al. (1980: p. 12 and Appendix A2).

but for some reason never worked at a program job for the minimum period. These individuals never received the basic YIEPP treatment, a program job. Therefore, the program is unlikely to have had any impact on their behavior.

#### Program Participation Rates

This section reports program participation rates, defined as the percent of program eligibles ever holding a program job for at least two weeks during a particular analysis period. This measure is identical to that employed in our previous report (Farkas et al. 1980: Chapter 2), and where time periods overlap, our results are generally close to the findings reported there.<sup>1</sup> In addition, these methods yield program participation levels which are consistent with data from the YIEPP management information system (EIS).<sup>2</sup>

Program Participation, Separately by Period. Table 3.1 displays estimates of program participation rates for youths in the study sample during each of the periods of full-scale program operations. Of course, the age distribution and other characteristics of these youths change over time, but the sample was fully representative of the eligible population at the time it was selected in the spring of 1978, as well as during the remainder of 1978 and the beginning of 1979, when 15-year-old sample members were aging into eligibility. Further, by restricting attention to youths aged 15 to 16 in the spring of 1978, and following their behavior for the two and one half year period, subsequent analysis (Table 3.2) will permit examination of the participation pattern exhibited by a cohort of youths as it aged through the program. This, then, will yield estimates of participation that most closely represent what one would observe in an ongoing national program.

---

<sup>1</sup>Small remaining differences are due to data cleaning and changes in the study sample. In this report we restrict attention to youths who completed three waves of the local field survey, and focus more elaborately than in previous work on those youths who were eligible for YIEPP during each analysis period.

<sup>2</sup>See Appendix A, Table A3.1 and Farkas et al. (1980: Appendix A2, pp. 131-132). Note that the EIS comparison is a test of the reliability of local field survey self-reports, rather than a methodology for determining participation.

Table 3.1. Program Participation Rates by Site and Period

	Cumulative: Spring 1978 through Summer 1980	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
All sites	56.2 (2,778) <sup>a</sup>	24.8 (2,132)	33.4 (2,353)	34.4 (2,652)	37.8 (2,605)	38.8 (2,362)	30.0 (2,107)	32.1 (2,000)	28.4 (1,685)
Denver	38.8 (487)	16.9 (384)	24.7 (433)	23.2 (475)	25.0 (452)	25.2 (425)	15.1 (372)	14.1 (357)	12.5 (319)
Cincinnati	49.3 (692)	14.0 (521)	22.4 (577)	28.1 (658)	30.4 (649)	31.7 (600)	23.1 (541)	26.1 (509)	26.3 (461)
Baltimore	68.8 (1,060)	41.8 (815)	45.3 (894)	45.5 (1,002)	50.1 (988)	50.0 (926)	42.1 (794)	43.2 (759)	39.0 (664)
Mississippi	56.2 (539)	12.1 (412)	32.3 (449)	31.1 (517)	34.7 (516)	38.2 (411)	29.0 (400)	34.7 (375)	24.5 (241)

Note: Throughout this chapter, the sample includes youths who have completed all three waves of the Local Field Survey in all four pilot sites. See Chapter 2 for further details. The participation rate is the number of youths ever holding a program job for at least two weeks divided by the number ever eligible in each period. Youths are defined as being program-eligible in a particular period if (1) they are age 16 through 19 and (2) they have not graduated from high school or received the GED. All youths in the sample met the family income and residential eligibility requirements as of the spring of 1978.

<sup>a</sup> Number of eligible youths.

First, however, we focus on Table 3.1, which indicates participation levels at different points in time, as well as intersite differences in these levels. The first column of the table shows cumulative participation rates--the percent of (ever eligible) sample members who held a YIEPP job for at least two weeks. Among 2,778 sample members responding to three waves of the local field survey, 56.2 percent participated in YIEPP at some time. This is a weighted (by site sample size) average of 68.8 percent in Baltimore, 56.2 percent in Mississippi, 49.3 percent in Cincinnati, and 38.8 percent in Denver. These are high participation rates, and suggest that the program achieved significant visibility and some importance for a large percentage of target population youths. They also lend support to a key premise of the program, that many target population youths wish to work but in the absence of YIEPP are unable to find jobs at the minimum wage.

Also important in this table is the low participation in Denver. This is at least partly due to poor program implementation in this site and the fact that intake ceased June, 1979 (see Chapter 1). These factors are important determinants of the low or nonexistent program effects on schooling and employment reported for this site in Chapters 4 and 5 below. Thus, discussion of the special circumstances surrounding Denver will recur throughout the analysis.

Reading across the first row of Table 3.1, we find period-specific rates rising from 24.8 percent in the spring of 1978 to a high of 38.8 percent in the summer of 1979, and falling thereafter to 28.4 percent in the summer of 1980. This pattern is largely due to the aging of the sample, although variations in program administration over time also play some role. The pattern over time is similar across sites, with period-specific rates rising to a peak in the summer of 1979, and declining thereafter in each site. Relative site participation rates are generally stable over time, with Baltimore showing the highest rates, usually followed in order by Mississippi, Cincinnati, and Denver.

The Effect of Sample Attrition. It is useful to assess the effect of sample attrition on these results. This can be done through study of the attrition sample data. As described in Chapter 2, these data were

collected by restricting attention to Hispanics in Denver/Phoenix and blacks in Baltimore/Cleveland, and undertaking special efforts to locate youths who dropped from Wave II of the survey. The resulting attrition sample was administered both Wave II and Wave III interviews at a later date. Program participation rates for these and matching youths who completed all three survey waves are reported in Appendix C, Table C2.1.

In all cases, program participation rates are estimated to be lower for the attrition sample than for youths who completed all three waves of the local field survey. Among Hispanic youths in Denver, 36.9 percent of local field survey sample members participated in YIEPP at some time, whereas for the matched attrition sample, the rate was 18.7 percent. Since sample attrition was high in Denver, the estimated participation rate in the absence of attrition (a weighted average of these two rates) is 27.8 percent for Denver Hispanics, a significant decline from the local field survey rate. However, the participation pattern over time is the same for the two samples.

Black youths from the Baltimore attrition sample also show lower rates than those for the comparable analysis sample, but here the discrepancy is smaller. Cumulative program participation rates are 70.5 percent for the local field survey, and 61.7 percent for the attrition sample. When these are combined with the lower Baltimore sample attrition rate, the estimated participation rate in the absence of attrition is 68.4 percent, a decline of only 2.1 percentage points from the local field survey rate. Again, the time pattern is similar in the two samples. Since it is the Baltimore rather than the Denver experience which was typical of data collection as a whole (see Jerrett et al. 1982), we are confident that although correction for attrition somewhat lowers estimated participation, it does not disturb the overall finding of high YIEPP participation.

Program Participation by Cohort. Table 3.2 displays participation rates separately for sample members aged 15 to 16 and those aged 17 to 20 on June 1, 1978. This is useful because the behavior of the 15- to 16-year-old cohort suggests the pattern that would be observed as successive

**Table 3.2. Program Participation Rates by Cohort and Period**

	Cumulative: Spring 1978 through Summer 1980	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
<b>Age in June 1978:</b>									
15-16	65.8 (1,435) <sup>a</sup>	28.4 (789)	36.0 (1,032)	35.6 (1,377)	41.0 (1,413)	44.1 (1,368)	36.5 (1,322)	38.8 (1,318)	33.0 (1,191)
17-20	46.0 (1,343)	22.7 (1,343)	31.4 (1,321)	33.1 (1,275)	34.0 (1,192)	31.6 (994)	18.9 (785)	19.1 (682)	17.4 (494)

See note to Table 3.1.

<sup>a</sup> Number of eligible youths.



cohorts aged through an ongoing national program.<sup>1</sup> For this group, the cumulative participation rate is 65.8 percent, 9.6 percentage points higher than the cumulative rate for the total analysis sample shown in Table 3.1. This higher value is a better estimate of the true "longitudinal" rate experienced by target population youths in an on-going national program. Each period-specific rate for this group also reflects these elevated participation levels, but the time pattern is as before, rising to a peak during Summer, 1979, and declining thereafter. The peak occurs when these youths are 16 to 17 years of age, supporting previous findings and program MIS results suggesting that YIEPP is most attractive to younger individuals.

Not surprisingly, participation is lower for the 17- to 20-year-old cohort, a significant percentage of whom have dropped out of school and/or found non-YIEPP employment. The much higher rates for the 15- to 16-year-old cohort are most appropriate for generalizing to a potential national program. These rates leave the qualitative impressions of Table 3.1 unchanged--demand for and participation in YIEPP was very high among target population youths.

Program Participation by Sex, Race, and Cohort. The first column of Table 3.3 shows cumulative participation rates for sex and race groups.<sup>2</sup> Females were slightly more likely than males to participate in the program (57.1 percent versus 55.3 percent), and blacks (63.4 percent) were much more likely to participate than Hispanics (38.3 percent) or whites (21.5 percent). However, since almost all Hispanics were in Denver, participation rates for this group are confounded with the Denver site effect.

In the full race/sex breakout, black females show the highest participation rate (64.8 percent) followed by black males (61.7 percent), Hispanic females (39.3 percent), Hispanic males (37.0 percent), white males (24.1 percent) and white females (19.4 percent). These results are consistent with the observation that in the absence of federal assistance, minority and female youths experience the greatest difficulty finding employment.

---

<sup>1</sup> In Appendix A, Table A3.3 these data are used to estimate annual program participation in an ongoing program, thereby providing results which can be used to estimate the costs of a potential national steady state program.

<sup>2</sup> For period-specific rates for these groups, see Appendix A, Table A3.2.

**Table 3.3. Program Participation Rates**  
**(Spring 1978 - Summer 1980) by Cohort,**  
**Race and Sex**

	All youths	Youths age 15 to 16 in June 1978	Youths age 17 to 20 in June 1978
Male	55.3 (1,290) <sup>a</sup>	65.9 (656)	44.3 (634)
Female	57.1 (1,488)	65.7 (779)	47.5 (709)
White	21.5 (303)	31.8 (151)	11.2 (152)
Black	63.4 (2,190)	72.5 (1,147)	53.4 (1,043)
Hispanic	38.3 (285)	47.5 (137)	29.7 (148)
White male	24.1 (133)	37.7 (69)	9.4 (64)
White female	19.4 (170)	26.8 (82)	12.5 (88)
Black male	61.7 (1,022)	71.3 (530)	51.4 (492)
Black female	64.8 (1,168)	73.4 (617)	55.2 (551)
Hispanic male	37.0 (135)	49.1 (57)	28.2 (78)
Hispanic female	39.3 (150)	46.3 (80)	31.4 (70)

See note to Table 3.1.

<sup>a</sup> Number of eligible youths.

The second column of this table shows similar participation patterns across sex/race groups for the 15- to 16-year-old cohort. The principal difference is that rates for the younger cohort are shifted upward by 9 to 10 percentage points. Rates for the older cohort are shifted downward, typically by a like amount.

Table 3.4 presents regression-adjusted estimates of the net effects of site, cohort, sex, and race; for each of these variables the effects of the others are (statistically) removed, and fitted participation rates are shown as the variable in question changes value and the remaining variables are held constant at their sample means. The key point here is that the 15- to 16-year-old cohort shows almost no change in its participation rate after statistical adjustment, which gives further emphasis to the representativeness of its behavior in an ongoing national program.

The remaining results of Table 3.4 simply reinforce findings from the unadjusted rates of Table 2.3. Females are more likely to participate than males (56.7 percent versus 55.5 percent), blacks are more likely than Hispanics, Hispanics are more likely than whites (61.5 percent versus 48.5 percent versus 24.4 percent), and the sex/race categories show rates similar to their unadjusted values.

Program Participation by Sex and Family Status. Table 3.5 shows the effect of family status on YIEPP participation. This table is constructed as follows. First, for the period of the spring of 1978 to the summer of 1979, we identify those females who were (a) living with neither natural parent, (b) married, or (c) had their own children at the beginning of the period. (These categories are not mutually exclusive.) Then, restricting attention to program eligible youths, we calculate program participation rates for all females, and for females in each of these categories. These calculations are repeated for males. Finally, the entire set of calculations (including recalculation of family status at the beginning of the period) is repeated for the period of the fall of 1979 to the summer of 1980.

We find that each of the statuses--living with neither natural parent, married, or having children--depresses YIEPP participation. The strongest depressive effect is associated with marriage, which reduces YIEPP participation rates from the 35 to 50 percentage point range down to

Table 3.4. Adjusted Program Participation Rates

	Cumulative: Spring 1978 through Summer 1980
Denver	46.3**
Cincinnati	49.6**
Baltimore (reference group)	65.5
Mississippi	55.1**
Age in June 1978:	
15-16	65.6**
17-20 (reference group)	46.1
Male (reference group)	55.5
Female	56.7
White	24.4**
Black (reference group)	61.5
Hispanic	48.5**
White male	26.9**
White female	22.5**
Black male (reference group)	60.2
Black female	62.8
Hispanic male	48.3**
Hispanic female	48.7**

Note: The probability of ever participating from Spring 1978 through Summer 1980 was estimated as a function of site, cohort, sex, and race. Predicted participation rates for each characteristic are calculated at the overall sample mean values of the other characteristics. See Appendix B for the parameter estimates and sample means.

\*\* Participation rates for these groups are significantly different from the rate for the reference group at the 5 percent significance level.

Table 3.5. Program Participation Rates by  
Sex, Family Status and Period

Sex and family status at the start of the period <sup>a</sup>	Spring 1978 through Summer 1979	Fall 1979 through Summer 1980
Female:	51.9 (1,481) <sup>b</sup>	38.8 (1,090)
Living with neither natural parent	40.5 (190)	24.3 (214)
Married	12.5 (40)	9.5 (42)
Has own children	36.6 (328)	27.2 (361)
Male:	49.1 (1,284)	35.1 (1,017)
Living with neither natural parent	45.1 (122)	22.8 (123)
Married	0 (7)	7.4 (14)
Has own children	50.0 (8)	21.6 (74)

See note to Table 3.1.

<sup>a</sup> Family status is determined as of the spring of 1978 for the Spring 1978 - Summer 1979 period and as of the fall of 1979 for the Fall 1979 - Summer 1980 period.

<sup>b</sup> Number of eligible youths.

zero to 12 percentage points. These results occur for both males and females, which supports the credibility of the finding despite the small sample sizes involved.

Living with neither natural parent and having one's own children depress participation by similar amounts. For females, they each decrease participation by approximately 13 percentage points in both periods. For males, neither decrease participation much in the earlier period, but both decrease it approximately 13 percentage points in the later period. Of course, these results are based on simple tabulations and are, therefore suggestive rather than definitive. In conjunction with previous findings, they portray YIEPP as most attractive to younger individuals, still living as minors prior to their transition to adulthood. This is consistent with the YIEPP offer of entry level employment, paying no more than the minimum wage.

Program Participation by School and Work Status in the Previous Period. Table 3.6 displays period-specific program participation rates according to whether the youth was enrolled in school and not employed, employed at a nonprogram job, or employed at a program job in the previous period. The counts for the cells of this table follow a pattern explained by the observation that youths are very unlikely to be in school, and more than usually likely to be employed during the summer. Thus, during each fall most observations are in the "not enrolled in school" rows of the table (because these refer to the previous summer period), whereas during spring and summer the majority of observations are in the "enrolled in school" rows. It is encouraging to observe that the "not enrolled in school/employed at a program job" row exhibits large counts only during each fall, which is consistent with YIEPP regulations.

Not surprisingly, the highest participation rates--often as high as 80 to 90 percent--are found in the first and fourth rows of this table. These individuals were employed by the program in the previous period, so that persistence of such employment is not surprising. This persistence also is generally higher for youths enrolled in school in the previous period, and declines over time whether enrolled or not. Perhaps the most

Table 3.6. Program Participation Rates by School and Work Status in the Previous Period

School and work status in the previous period <sup>a</sup>	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
Enrolled in school:								
Employed at a program job	---	93.3 (551)	84.2 (57)	89.2 (854)	86.5 (836)	55.0 (60)	90.3 (587)	78.1 (517)
Employed at a nonprogram job	28.2 (209) <sup>b</sup>	10.5 (332)	21.4 (14)	11.9 (177)	5.3 (169)	6.7 (15)	3.8 (133)	5.1 (118)
Not employed	29.3 (1,484)	20.7 (1,004)	13.8 (58)	15.6 (911)	20.1 (710)	10.0 (50)	11.5 (522)	12.5 (345)
Not enrolled in school:								
Employed at a program job	---	92.9 (14)	83.2 (778)	70.8 (48)	60.5 (43)	61.2 (756)	64.0 (25)	62.1 (29)
Employed at a nonprogram job	3.7 (107)	0.7 (152)	8.3 (386)	1.2 (168)	0.5 (190)	9.3 (334)	1.9 (211)	0.0 (227)
Not employed	9.3 (332)	5.0 (300)	12.8 (1,359)	5.1 (447)	3.6 (414)	11.0 (892)	5.0 (522)	1.8 (449)

Note to Table 3.1.

"previous period" for Spring 1978 is Fall 1977; for Summer 1978, it is Spring 1978; and so on. Youths were classified as enrolled if they were ever enrolled in school during the period, as employed at a program job if so employed, and as employed at a nonprogram job if ever employed during the period but never a program participant.

Number of eligible youths.

striking example of this decline can be seen by comparing the fall of 1978 with the fall of 1979 for youths who were not enrolled in school and were employed at a program job (the fourth row of the table). Between these two periods, participation declined from 83.2 percent to 61.2 percent. That is, many youths left the program after the summer of 1979, many of them as a result of high school graduation.

The next highest set of participation rates is observed for youths who were in school and not employed at a program job in the previous period (rows two and three). These are in the 5 to 29 percentage point range, and decline over time, with participation rates typically higher for the not employed than for those who have found a nonprogram job.

The lowest rates--zero to 13 percent--are for youths who were out-of-school and either employed at a nonprogram job or not employed in the previous period (rows five and six). As in the previous cases, each of these participation series tends to decline over time, and at any point in time, not employed youths are more likely to participate in YIEPP than are youths holding a nonprogram job.

#### Participant Program Experiences and the Duration of Program Participation

This section focuses on YIEPP participants, examining their program experiences and durations of participation. For related material and a more extensive treatment of program experiences and program operations, see Diaz and Ball (1982).

Participant Program Experiences. Table 3.7 reports participant program experiences. With all sites combined, 45.3 percent of participants held only one program job, 39.3 percent held two program jobs, and 15.4 percent held more than two jobs. Thus, program job hopping appears to have been relatively minimal. These distributions are similar across sites. Baltimore shows the smallest percentage of participants holding more than two jobs, a finding which is consistent with other evidence regarding successful program implementation in that site.

Overall, 29 percent of sample program jobs were in the private sector; 45.7 percent in Denver, 39.1 percent in Cincinnati, 27.5 percent in Baltimore, and 10.6 percent in Mississippi.



Table 3.7. Participant Program Experiences by Site

	All sites (N = 1,562)	Denver (N = 189)	Cincinnati (N = 341)	Baltimore (N = 729)	Mississippi (N = 303)
Percentage of participants holding a total of:					
One program job	45.3	49.2	43.7	45.0	45.2
Two program jobs	39.3	35.4	34.0	42.8	39.2
Three or more program jobs	15.4	15.4	22.3	12.2	15.6
Percentage of program jobs in:					
Private sector	29.0	45.7	39.1	27.5	10.6
Public sector <sup>a</sup>	71.0	54.3	60.9	72.5	89.4
Average number of meetings with program counselor per month <sup>b</sup>	1.8	2.3	3.1	0.9	1.4
Percent of participants receiving special services: <sup>c</sup>					
Orientation meeting	66.5	43.4	65.9	73.1	66.4
Educational or aptitude testing	25.3	28.8	37.4	21.2	19.0
Employment counseling	53.9	57.1	65.3	47.2	56.3
Reimbursement of transportation expenses	14.8	8.5	17.4	12.4	18.7

Table 3.7. (Continued)

	All sites (N = 1,562)	Denver (N = 189)	Cincinnati (N = 341)	Baltimore (N = 729)	Mississippi (N = 303)
Tutoring	11.8	17.0	10.3	10.4	13.8
Child care	5.0	4.2	3.8	3.6	11.2

Note: These figures include all youths who were program participants from the spring of 1978 through the summer of 1980.

Includes not-for-profit organizations.

Approximately 30 percent of the participants did not report the number of meetings held with a program counselor. These youths are deleted from the calculations.

Participants can receive more than one service.

A variety of services was provided to the YIEPP participants across the sites, though no particular set of services was required. Differences in services thus reflect individual program operator choice. On average, youths met with a program counselor 1.8 times per month; this varied from a high of 3.1 times per month in Cincinnati to a low of 0.9 times per month in Baltimore, which ran a very large program. The special program service most often reported was an orientation meeting, mentioned by 66.5 percent of the sample. The next most common service was employment counseling, mentioned by 53.9 percent of the sample. The remaining services, from the most to the least frequently reported, were educational or aptitude testing (25.3 percent), reimbursement of transportation expenses (14.0 percent), tutoring (11.8 percent), and child care (5.0 percent). Site profiles show Denver concentrating on employment counseling, but also providing the greatest amount of tutoring. Cincinnati offered the most employment counseling, and also a relatively large amount of educational or aptitude testing and transportation reimbursement. Baltimore offered fewer special services (beyond orientation) than the other sites; Mississippi offered transportation and child care services.

The Duration of Program Participation. Table 3.8 shows mean weeks of program eligibility, mean weeks participating, and the percentage of eligible time participating by youths who were ever program participants. These youths were eligible for an average of 114.4 weeks, and participated for 56.1 weeks, or 51.2 percent of this time. This (reasonably high) percentage varied from 58.6 percent in Baltimore, to approximately 46 percent in Cincinnati and Mississippi, down to 40.6 percent in Denver. These results further confirm our impression of the relative efficacy of YIEPP implementation across these sites.

Table 3.9 decomposes these results by cohort, sex, and race. Reading down the third column of this table we find the 15- to 16-year-old cohort participated for a somewhat higher number of weeks but in proportional terms it participated slightly less than the older cohort. Males participated slightly less than females. Across race groups, blacks participated the most, followed by Hispanics and whites. For joint race/sex categories, black females showed the greatest, and white males the

Table 3.8. Duration of Program Participation by Site, for Program Participants

	Mean weeks program- eligible <sup>a</sup>	Means weeks participating <sup>b</sup>	Percentage of eligible time participating
All sites (N = 1,562)	114.4	56.1	51.2
Denver (N = 189)	121.1	47.8	40.6
Cincinnati (N = 341)	116.7	50.4	46.3
Baltimore (N = 729)	114.4	64.6	58.6
Mississippi (N = 303)	107.5	47.0	45.3

Note: These figures include all youths who were ever program participants, from the spring of 1978 through the summer of 1984.

<sup>a</sup>Weeks program-eligible equals total number of weeks in all seasons for which a youth was eligible to participate.

<sup>b</sup>Weeks participating equals total number of weeks employed in program jobs.

**Table 3.9. Duration of Program Participation by Cohort, Race and Sex,  
for Program Participants**

	Mean weeks program- eligible <sup>a</sup>	Mean weeks participating <sup>b</sup>	Percentage of eligible time participating
<b>Age in June 1978:</b>			
15-16 (N = 944)	117.8	57.3	50.0
17-20 (N = 618)	109.2	54.2	52.9
<hr/>			
Male (N = 713)	116.3	54.9	49.1
Female (N = 849)	112.8	57.1	52.9
<hr/>			
White (N = 65)	110.5	46.3	45.4
Black (N = 1,398)	114.2	56.7	51.8
Hispanic (N = 109)	119.6	54.2	47.0
<hr/>			
White male (N = 32)	113.4	43.8	40.7
White female (N = 33)	107.7	48.7	49.9
Black male (N = 631)	115.9	55.3	49.6
Black female (N = 757)	112.7	57.8	53.6
Hispanic male (N = 50)	123.1	56.3	47.6
Hispanic female (N = 59)	116.6	52.4	46.6

Note: These figures include youths from all four sites who were ever program participants, from the spring of 1978 through the summer of 1980.

<sup>a</sup>Weeks program-eligible equals total number of weeks in all seasons for which a youth was eligible to participate.

<sup>b</sup>Weeks participating equals total number of weeks employed in program jobs.

least, YIEPP attachment. This is consistent with the relative ability of these groups to find non-YIEPP employment. Of further interest is the relatively strong program attachment of those white females who participated at all. The low total participation rates for white females reported in Tables 3.3 and 3.4 were due to low rates of initial participation. White females who did join the program showed strong attachment to it.

These findings are refined by the regression-adjusted rates of Table 3.10. With these adjustments, the site, cohort, and sex results are essentially unchanged. However, the race and sex/race rates are considerably altered when adjustment is made for differential site effects, particularly the low overall participation rate in Denver, where almost all sample Hispanics reside, and the high overall participation rate in Baltimore, that contains a plurality of the sample observations and is heavily black. After adjustment Hispanics showed the strongest program attachment, with blacks only slightly more attached than whites. The highest rates were for male as well as female Hispanics, with the next highest rates for black and white females. Next in order were black males, and finally white males showed the least program attachment. These results differed from the cumulative (ever joined) results of Table 3.4; after regression adjustment, blacks were more likely to join YIEPP, but Hispanics who joined remained more attached to the program. Whites were particularly unlikely to join, but once they did join, their attachment behavior was relatively similar to that of the other groups.

#### Summary

YIEPP participation was quite high, varying from 68.8 percent of eligibles in Baltimore, down to 38.8 percent of eligibles in Denver, for a sample average of 56.2 percent. Intersite variation was consistent with reports of the relative success of program implementation in these sites. Rates for the 15- to 16-year-old-cohort (youths who aged through the program) were higher, averaging 65.8 percent of eligibles. These higher rates are an indication of what might be expected in an ongoing national program. The experience over time of this young cohort also suggests that participation peaked at ages 16 to 17 and dropped off thereafter. This is consistent with the relative earnings opportunities of the entry level, minimum wage jobs offered by the program.

Table 3.10. Adjusted Duration of Program Participation  
by Site, Cohort, Race and Sex, for Program Participants

	Percentage of eligible time participating
Denver	36.5**
Cincinnati	46.9**
Baltimore (reference group)	59.0
Mississippi	46.3**
Age in June 1978:	
15-16	50.5
17-20 (reference group)	52.2
Male (reference group)	49.4
Female	52.7
White	49.0
Black (reference group)	50.6
Hispanic	59.8
White male	45.7
White female	52.2
Black male (reference group)	48.7
Black female	52.2**
Hispanic male	59.7**
Hispanic female	59.9

Note: The percentage of eligible time participating, for youths who were ever participants from the spring of 1978 through the summer of 1980, was estimated as a function of site, cohort, sex and race. Predicted percentages for each characteristic are calculated at the overall sample mean values of the other characteristics. See Appendix B for parameter estimates and sample means.

\*\* Percentages for these groups are significantly different from the percentage for the reference group at the 5 percent significance level.

Females were slightly more likely than males to participate in YIEPP. Blacks had the highest participation rates by a wide margin, followed by Hispanics and then whites. The highest rates were for black females, and the lowest were for white females. Race/sex participation differentials can be explained largely by recourse to group differences in the ability to find non-YIEPP employment.

Youths who were living with neither natural parent, married, or had their own children were less likely to participate in YIEPP than the rest of the sample. The effect was strongest for married youths. This reinforces the finding that the entry level, minimum wage nature of program employment made YIEPP most attractive to youths who were living at home, and had not yet made the transition to adulthood.

In-school youths were more likely than dropouts to participate in the program. Within each group, youths previously employed in the program were very much more likely to participate in the current period. Also within each group, not employed youths were more likely to participate than were youths employed at a nonprogram job. These results are consistent with the YIEPP school enrollment requirement, and the relative attractiveness of the program to youths who cannot otherwise find employment.

When the focus shifts to YIEPP participants, we find reasonable stability of employment--only 15.4 percent of participants held more than two YIEPP jobs. Fully 71 percent of these jobs were in the public sector, with strongest private sector representation in Denver and the weakest in Mississippi. Overall, participants spent 51.2 percent of their program-eligible time employed on a YIEPP job.

Among participants, program attachment was strongest for black females and weakest for white males. Combined with previous results, this finding means blacks were the most likely to join YIEPP, but Hispanics who joined remained more attached to the program than any other group. Whites were particularly unlikely to join the program, but once they did join, their attachment behavior was relatively similar to that of the other groups.



## CHAPTER 4

### PROGRAM EFFECTS ON SCHOOL ENROLLMENT

These results suggest, however, that a successful policy to reduce unemployment among dropouts might well have the side effect of encouraging boys to drop out of school before high school graduation.

Duncan (1965, p.134)

This quotation identifies a problem which has too often been neglected by policies directed at the youth unemployment problem. Recent studies support the notion that labor market interventions designed to increase youth employment may have the undesirable side effect of decreasing school enrollment among youths from low income households.<sup>1</sup> In the context of a subsidized employment program, a potential solution is to permit program participation only among youths who are enrolled in school. This school enrollment requirement was one of the major innovations of YIEPP.<sup>2</sup>

#### Measurement Issues

The potential school enrollment effects of YIEPP can be looked at in two ways. First, the program can be regarded as an opportunity to increase school enrollment within the target population, using program jobs as the inducement. From this perspective, the program is successful only if it exerts a significantly positive effect on school enrollment. Second, the program can be regarded as one more subsidized youth employment program, this time with an attempt to avoid negative school enrollment effects. From the second perspective, the absence of such negative effects is a significant accomplishment. In this chapter we report on YIEPP's success from each of the two perspectives.

---

<sup>1</sup> See Ehrenberg and Marcus (1982), Gustman and Steinmeier (1981), and Chapter 6 below.

<sup>2</sup> Such a requirement is, however, an operational part of the residential component of Job Corps.

Implementation Issues with Respect to Schooling. The YIEPP schooling requirement is usually described as "enrollment and satisfactory performance in a program leading to a high school diploma or GED" without reference to the implementation issues associated with local standards and their enforcement. In this section we briefly review some of these issues to provide a more realistic backdrop for the school enrollment effects analysis of this chapter.<sup>1</sup>

Enforcement of schooling standards was a new task for the CETA prime sponsors administering YIEPP. This task called for a good working relationship with the local school administration and required much effort. The demand for monthly school performance information was felt to be particularly burdensome, even though, for their part, the schools were asked only to monitor enrollment and performance; enforcement of standards was the responsibility of YIEPP prime sponsor managers. While local standards varied across sites, relatively uniform standards for the purpose of program eligibility were negotiated by the fall of 1978. These typically called for a D grade average, and for a maximum number of unexcused absences which varied from 4 to 5 to 20 or 25 days per semester. For YIEPP participants enrolled in a GED program, the school requirement was typically the teacher's assessment of "satisfactory performance."<sup>2</sup>

As for actual, as opposed to desired, reporting of school attendance and performance--data collection procedures began only after the fall of 1978, and in some sites lagged until the fall of 1979. School attendance data were, in general, collected monthly, but data on grades were collected on the basis of the school's reporting period. Since there were delays in acting on negative individual school performance reports, attendance problems were more often the cause of terminations than grade performance problems. An even larger reason for termination was the relatively large number of youths dropping out of school; 17 percent of all program

---

<sup>1</sup>The implementation information that follows is summarized from various chapters in Diaz et al. (1982).

<sup>2</sup>The availability of GED programs varied significantly across sites; for example, Baltimore had a strong GED program, whereas Mississippi initially did not have one at all.

terminations were due to this factor. Participants were, however, generally terminated only after several intermediate steps--warning letters, temporary suspension from YIEPP employment, and so forth.

Despite these difficulties, enforcement of the school enrollment requirement appears to have been good, although, as suggested, school enrollment requirements were more characteristically enforced than were attendance and grade requirements. In a study conducted by MDRC, 21 percent of participants were found to be ineligible for YIEPP, but 85 percent of these case of ineligibility were due to the youths' failure to meet the income tests. In addition, analysis of local field survey data showed very few eligibles reporting YIEPP employment while not enrolled in school. (See Chapter 3, Table 3.6.)

Finally, it must be kept in mind that the schools played important roles in both recruitment and job placement under YIEPP. Outreach efforts were strong in the schools, recruiting large numbers of youths who were already in school. Furthermore, public schools provided the greatest number of jobs for the demonstration, a situation which tended to help create ties between prime sponsors and local school administrators. In sum, reasonable working relationships were usually developed with local school systems, and these aided the reasonably careful enforcement of the YIEPP enrollment requirement. At the implementation level, the program model of a school-enrollment-constrained, guaranteed minimum wage job, appears to have had a fair test.

Estimating Program Effects on School Enrollment. The main outcome measures in this chapter are "enrolled in school or not" for the fall of 1978 and the fall of 1979. A youth was considered to be in school in a particular fall if he or she reported in response to survey questions that he or she was enrolled at any time from September through December.<sup>1</sup> We

---

<sup>1</sup> Because school enrollment is the social norm for youths in this age bracket, self-reported enrollment data could overstate the true enrollment rates. In the previous impact report, enrollment data from the survey were compared with enrollment information obtained from the school records search (Farkas et al. (1980)). Self-reported enrollment rates were four to five percentage points higher than rates calculated from school records, but this is not all response error. The school records did not reflect enrollment in alternative educational programs. More important to the estimation of program effects, both pilot and comparison sites showed approximately the same amount of disagreement between the two measures of school enrollment. Consequently, we discount the fact of self-reported enrollment data as a source of bias in program effect estimates.

summarize these outcome measures as enrollment rates, i.e., the percentage of the sample of youths who were enrolled.

The central methodological problem in measuring program effects on school enrollment rates is to estimate what the school enrollment rate in the pilot sites would have been in the absence of YIEPP. In particular, if the comparison site school enrollment rates are to represent the pilot site rates in the absence of YIEPP, the actual comparison site rates must be adjusted to reflect the demographic characteristics and preprogram schooling experiences of pilot site youths. With this adjusted estimate in hand, the program effect is simply the difference between the pilot site enrollment rate actually observed and the estimated rate in the absence of the program.

The following procedure was used to adjust the comparison site enrollment rates. For each fall a multivariate model of enrollment was estimated using a sample of youths eligible for the program in that period from the pilot and comparison sites.<sup>1</sup> Program eligibility was defined by age and graduation status, exactly as in Chapter 3. Included in the model as right hand side variables were a dichotomous variable indicating whether a youth was from a pilot or comparison site, dichotomous variables representing race and sex groups, age in months, school enrollment status in the fall of 1977, and highest grade completed as of the summer of 1977. The coefficients in this model estimate the independent effect of the right hand side variables on the probability that a youth is enrolled in school.

Using the estimated coefficients, an enrollment rate was predicted, assuming that youths were not in a pilot site but had the average demographic characteristics and preprogram schooling experiences of the pilot site sample.<sup>2</sup> This adjusted comparison site enrollment rate is the estimate of what enrollment rates in the pilot sites would have been in the absence of the program.

---

<sup>1</sup> Because the dependent variable in the model, enrolled or not, is dichotomous, probit models were estimated.

<sup>2</sup> Coefficient estimates from the enrollment models and the pilot site means for the demographic and preprogram variables can be found in Appendix B4.

The remainder of this chapter is organized as follows. The next section reports program effects on total school enrollment and enrollment by type of program (programs leading to a regular high school diploma or the GED). The third section presents the estimated program effects on school enrollment for the 15- to 16-year-old cohort. This is followed by an examination of program effects by site and by race and sex subgroups of the population. The final section summarizes the key findings of the chapter.

#### Program Effects on School Enrollment by Type of Degree Program

As a guide to understanding the educational context in which YIEPP operated, Table 4.1 displays unadjusted school enrollment rates, separately for pilot and control sites, for the preprogram and during-program periods. In the fall of 1977, over 80 percent of the youths in the sample were enrolled in school, and almost all of the enrolled youths were in a program leading to a regular high school diploma rather than the GED.<sup>1</sup> As the youths age, enrollment rates drop. Two years later, in the fall of 1979, enrollment rates for program-eligible youths had fallen to the 50 to 60 percent range. Also as the youths age, GED enrollment becomes a significantly higher fraction of total enrollment.

How do these enrollment rates for the YIEPP sample compare with national enrollment rates for 16- to 19-year-old youths in the United States? As described in Chapter 2, youths in the YIEPP sample are not typical of high school age youths in general. To remove the gross incomparabilities, school enrollment rates during October, 1978, for YIEPP sample youths and for all United States youths were calculated separately for age, race and sex groups. These rates are shown in Appendix A, Table A4.1. Holding age, race, and sex constant, youths in the YIEPP sample had substantially lower enrollment rates than the averages for all youths in the United States. The differences are greatest for white males and white females and smallest for Hispanic youths.

---

<sup>1</sup> Enrollment rates in GED and regular high school programs may not sum to the total enrollment rate because youths can be enrolled in both types of programs during the same fall.

Table 4.1. School Enrollment Rates by Type of Degree Program  
and Pilot or Control Sites

	<u>Preprogram</u>	<u>During-program</u>	
	<u>Fall 1977</u>	<u>Fall 1978</u>	<u>Fall 1979</u>
<hr/>			
Total school enrollment:			
Pilot sites	84.2	73.8	61.3
Control sites	80.9	66.0	56.7
<hr/>			
Regular school enrollment: <sup>a</sup>			
Pilot sites	80.9	68.3	55.2
Control sites	77.5	62.9	52.5
<hr/>			
GED enrollment: <sup>b</sup>			
Pilot sites	3.3	5.7	6.2
Control sites	3.3	3.2	4.2
<hr/>			
Sample sizes: <sup>c</sup>			
Pilot sites	2,778	2,652	2,107
Control sites	1,255	1,188	930
<hr/>			

<sup>a</sup> Enrolled at all in a program leading to a regular high school diploma.

<sup>b</sup> Enrolled at all in a program preparing students for the GED examination.

<sup>c</sup> The sample includes youths who have completed three waves of the local field survey and are eligible for the program during the period in question. See Chapter 2 for further details.

Estimates of YIEPP's effect on the school enrollment rates of program-eligible youths are shown in Table 4.2.

In the fall of 1978 YIEPP is estimated to have increased total school enrollment by 4.8 percentage points from an enrollment rate of 69 percent in the absence of the program. This finding is statistically significant at the 1 percent level. It is also very similar to the estimated program effect reported in the previous volume on program impacts.<sup>1</sup> The effect on total enrollment was due to almost equal increases in enrollment among youths in regular high school and GED programs. In the fall of 1979, the estimated program effect drops from 4.8 to 2.5 percentage points. This drop is primarily composed of a decline in the program effect on regular school enrollment, which goes from 2.9 percentage points in 1978 to 0.9 percentage points in 1979. The program effect on GED enrollment in the fall of 1979 drops less dramatically from the 1978 result. (The reasons for this decline in the estimated regular school enrollment effects (and its components--the dropout and return-to-school rates) are discussed on pages 81-82 below.)

Tests for Attrition Bias. An additional potential source of error in measuring program effects from panel data is sample attrition bias. In the pilot/comparison site research design used in this study, the loss of original sample members to follow-up surveys introduces bias into the measurement of schooling effects when the average enrollment rates of these individuals differ between the pilot and comparison sites. In the previous impact report, statistical tests for sample selection bias in the school enrollment effects were performed. These tests found that attrition bias was not a problem.<sup>2</sup> In this report program effects on total school enrollment rates have been estimated for a special attrition sample of

---

<sup>1</sup> The previous finding was a program effect of 4.8 percentage points added to the enrollment rate of 70.4 percent in the absence of the program (Farkas et al. 1980). The small differences between the findings are due to differences in the samples and statistical methodology used.

<sup>2</sup> The results are reported in Farkas et al. (1980). The discussion there also includes a more detailed discussion of the relationship between sample attrition and the bias it can introduce into the measurement of program effects.

Table 4.2. Program Effects on School Enrollment Rates  
by Type of Degree Program

	Sample size <sup>a</sup>	Pilot site rate	Estimated pilot site rate in the absence of the program <sup>b</sup>	Program effect <sup>c</sup>	Program effect as percent of rate in the absence of the program
<hr/>					
Total school enrollment:					
Fall 1978	3,840	73.8	69.0	4.8***	7.0
Fall 1979	3,037	61.3	58.8	2.5*	4.3
<hr/>					
Regular school enrollment:					
Fall 1978	3,840	68.3	65.4	2.9**	4.4
Fall 1979	3,037	55.2	54.3	0.9	1.7
<hr/>					
GED enrollment:					
Fall 1978	3,840	5.7	3.3	2.4***	72.7
Fall 1979	3,037	6.2	4.5	1.7**	37.8
<hr/>					

<sup>a</sup> The sample includes youths who have completed three waves of the local field survey and are eligible for the program during the period in question. See Chapter 2 for further details.

<sup>b</sup> This is a regression-adjusted comparison site mean, fit at pilot site average personal characteristics and preprogram school enrollment. Means of the right hand side variables and probit coefficient estimates are reported in Appendix B.

<sup>c</sup> This is the difference between columns 2 and 3, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.



Hispanic youths in Denver/Phoenix and black youths in Baltimore/Cleveland who did not respond to the Wave II survey but who were reinterviewed at a later date. School enrollment effect estimates for these and matching youths who completed all three survey waves are reported in Appendix C, Table C2.2.

For Hispanic youths in Denver, the program effects in the attrition sample are lower than the effects estimated for the analysis sample in the fall of 1978 and higher than those in the fall of 1979. But the differences are small in magnitude, and insignificantly different from zero. In Baltimore, the program effects on the school enrollment rates of black youths in the attrition sample are much larger than the program effects estimated for the analysis sample. But, because of the small size of the attrition sample, the difference between the program effects is not statistically significant. When the program effects for the two samples are combined in a weighted average based upon the attrition rates, this summary measure of program impacts is twice as large as the estimates from the analysis sample alone--suggesting that, in Baltimore at least, estimated program effects based upon the analysis sample may underestimate the true program effect.

Effects on Dropout and Return-to-School Rates. The discussion above focuses on a key reason as to why the program effect declined in the second year. To answer this question further and understand more about the way YIEPP acts to increase the schooling activity of eligible youths, we now ask how the program affected the probability of school enrollment for youths who were and were not previously enrolled in school. Participation in YIEPP was an option for all eligible youths, regardless of their previous school enrollment status. For youths who were previously in school, the program can increase school enrollment rates by reducing the number of dropouts. For youths who were previously out of school, the program can increase school enrollment rates by increasing the probability that these youths return to school.

Table 4.3 displays estimated program effects on dropout and return-to-school rates. The dropout rate is defined as the percentage of youths enrolled in the previous fall who were not enrolled in school in the fall a

Table 4.3. Program Effects on Dropout and Return-to-School Rates

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
Dropout rates: <sup>a</sup>					
Fall 1978	3228	16.8	21.2	-4.4***	-20.8
Fall 1979	2215	23.6	23.3	0.3	1.3
Return-to-school rates: <sup>b</sup>					
Fall 1978	612	18.7	12.1	6.6**	54.5
Fall 1979	822	15.3	13.9	1.4	10.1

See notes a, b, and c to Table 4.2 for definitions of the sample, the estimated pilot site rate in the absence of the program, and the program effect as percent of rate in the absence of the program.

Of youths who were enrolled in the preceding fall, the percentage currently not enrolled.

Of youths who were not enrolled in the preceding fall, the percentage currently enrolled.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.

year later. For example, a dropout in the fall of 1979 is a youth who was enrolled in the fall of 1978 but not enrolled in 1979. The return-to-school rate is defined as the percentage of youths not enrolled in the previous fall who were enrolled in school the next fall.

Looking first at the fall of 1978, the average dropout rate in the pilot sites was 16.8 percent. This rate is estimated to have been decreased by 4.4 percentage points as a result of the operation of YIEPP. Also in the fall of 1978, the program increased the return-to-school rate in the pilot sites by 6.6 percentage points from the 12.1 percent expected in the absence of the program. Both effects are statistically significant. Thus, YIEPP had a positive influence on the enrollment rates both by keeping in school youths who were previously enrolled (that is, by reducing the dropout rate) and by inducing youths who were previously out of school to return to an educational program. Note that, although the program effects on dropout and return-to-school behavior are of similar magnitudes, the largest contribution to increased enrollment in the fall of 1978 comes from the reduction in the dropout rate. This follows from the fact that most of the youths in the sample were enrolled in the fall of 1977 and therefore subject only to program effects on the dropout rate.<sup>1</sup>

Program effects on dropout and return-to-school behavior disappear in the fall of 1979. YIEPP is estimated to increase, rather than reduce, dropout rates in 1979, although this estimate is not significantly different from zero. And, although the program is still estimated to increase the rate of return-to-school activity, this finding, also, is not statistically significant.

How can YIEPP have essentially no effect on dropout and return-to-school behavior in the fall of 1979 and still show a positive effect on total school enrollment? The answer lies in the conceptual differences between the enrollment, dropout, and return-to-school rates and the age composition of the sample as it changes over time. The dropout and return-

---

<sup>1</sup> A similar finding was reported in the previous impact report (Farkas et al. 1980).

to-school measures for the fall of 1979 take as given the observed enrollment rates in the fall of 1978. For example, the dropout rate in the fall of 1979 is calculated from the sample of all youths enrolled in the fall of 1978, regardless of whether their enrollment was due to the program or not. This means that the program effects on the dropout and return-to-school rates in the fall of 1979 represent the incremental change in school enrollment from 1978 to 1979. As reported in Table 4.3, this change was small. But enrollment in the fall of 1979 is also affected by what the program did to enrollment in the previous fall. This is because, on average, youths enrolled in one period are more likely than youths not enrolled to be in school in the following period. Therefore, the program effect on total school enrollment in the fall of 1979 is less than that in the fall of 1978 because of a decline in the effect on dropout and return-to-school behavior, but it is greater than zero because of the lagged effects produced by YIEPP-induced increases in enrollment in the fall of 1978.

Why do the estimated program effects on the dropout and return-to-school rates decline from 1978 to 1979? As noted above, part of the answer lies in the nature of the YIEPP analysis sample. To produce incremental enrollment gains in the fall of 1979 the program must have enlisted new program participants during the preceding year. This is particularly clear in the case of return-to-school rates. By definition, the program effect on return-to-school rates is generated by increasing the school enrollment of previously out-of-school youths, or by drawing new participants from this population. But the potential for obtaining new participants in 1979 is more limited among the youths in the analysis sample than among the actual youth population eligible for YIEPP. This is because the analysis sample contains proportionately fewer youths who could age into program eligibility from the fall of 1978 to the fall of 1979 than were in the eligible population. In other words, the analysis sample contains proportionately fewer youths who were 16 years old in 1979 than the actual eligible population in the pilot sites. It is these youths, as shown in Chapter 3, who were most likely to participate in YIEPP.

This argument about the relationship between the estimated school enrollment effects and the age composition of the analysis sample is confirmed by the findings on dropout and return-to-school rates for the 15- to 16-year-old cohort to be presented in the next section. This cohort includes all the youths in the sample who are not initially eligible, but who can age into the program sometime after its start-up. Program effects on enrollment rates for this cohort are only slightly smaller in the fall of 1979 than in the fall of 1978, and there is a significant effect on return-to-school rates in 1979. These results suggest that at least part of the explanation for the estimated decline in program effects on school enrollment is the age structure of the analysis sample.

Enrollment by Type of School and Curriculum. Table 4.4 shows the type of school and curriculum chosen by enrolled youths in the pilot and control sites during the program. Over 90 percent of students were enrolled in public schools in both the pilot and control sites. The remainder attended private or special-purpose schools with either private or public support. In both the fall of 1978 and the fall of 1979, the major difference in enrollment patterns between the pilot and comparison sites is in the percent of students in alternative education either operated by the public schools or by community-based organizations. Most of these programs prepare students for the GED exam. This difference is consistent with the previous finding that YIEPP effects on enrollment in GED programs contribute a significant proportion of the overall program effect on school enrollment. In terms of the type of education program, 70 percent of the students in the sample were enrolled in general studies programs with another 15 to 17 percent participating in vocational or technical training programs. Pilot site youths favor commercial and vocational programs over the general studies or college preparatory programs, but those pilot/comparison site differences are relatively small.

#### Program Effects on School Enrollment for the 15- to 16-year-old Cohort

The 15- to 16-year-old cohort is of special interest in the assessment of program effects. It consists of youths who age into program eligibility when they turn 16, the earliest age at which youths can participate in YIEPP. These youths provide the best estimates of what would

Table 4.4. Enrollment Characteristics by Pilot or Control Site

	Fall 1978		Fall 1979	
	Pilot sites (N=1,739)	Control sites (N=592)	Pilot sites (N=872)	Control sites (N=406)
<hr/>				
Type of school (%):				
Public school--regular curriculum	84.1	89.2	80.4	86.9
Public school--alternative curriculum	11.2	8.6	13.6	9.7
Private/parochial school	1.7	1.2	1.8	1.2
Special school for handicapped	1.2	0.5	0.3	0.7
Community-based school or street academy	1.8	0.5	3.9	1.5
<hr/>				
Type of program (%):				
General studies	70.2	70.3	70.5	72.0
College preparatory	5.8	9.3	4.9	7.1
Commerical or business	5.7	4.8	5.6	3.9
Vocational or technical	17.0	14.5	14.6	14.4
Agricultural	0.1	0.3	0.3	0.2
Other <sup>a</sup>	1.2	0.8	4.1	2.4

Note: The sample includes enrolled program-eligible youths who responded to the survey questions.

<sup>a</sup>This category includes all other programs.

have happened to cohorts of youths as they aged through the period of eligibility for the program and the best indication of what would happen in an on-going national program. In contrast, the full analysis sample includes youths who could only begin their program participation at age 17 or later because the program had just started. In an ongoing program, the older cohort would have had the opportunity to participate at an earlier age; therefore, the program effect on school enrollment at ages 17 through 19 could be different from that observed here. While one or two years of difference in age may not be important in an older population, the rapid changes youths experience in school and work activities as they move from 16 to 19 years make the distinction important for this age group.

Table 4.5 reports the estimated program effects on enrollment, dropout and return-to-school rates for the 15- to 16-year-old cohort. In the fall of 1978 about 38 percent of the younger youths in the pilot sites were enrolled in a regular degree or GED program. Out of this 88 percent, about 4 percentage points are estimated to have resulted from the operation of YIEPP in the pilot sites, a program effect that is similar to the effect estimated for all youths in the analysis sample. This increase in total school enrollment consists of both an estimated reduction in the dropout rate and an increase in return-to-school rates. In comparison to the total sample, the program has about the same proportionate effect on dropout rates for the 15- to 16-year-old cohort in the fall of 1978. But YIEPP has a much larger effect on return-to-school behavior, again in proportion to the estimated rates in the absence of the program, for the younger cohort than for the full sample. Fewer members of the 15- to 16-year-old cohort were already out of school in the fall of 1977; and, because they were 14 to 15 years of age at the time, these youths had probably only recently just dropped out of school. The larger return-to-school effects for the 15- to 16-year-old cohort is consistent with the hypothesis that participation in YIEPP, and re-enrollment, is more attractive to younger persons who have only recently left school.

As noted in the previous section, the estimated program effect on total school enrollment for the 15- to 16-year-old cohort does not decline as rapidly from the fall of 1978 to the fall of 1979 as it does for the

Table 4.5. Program Effects on Enrollment, Dropout and  
Return-to-School Rates for the 15- to 16-year-old Cohort

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
Total school enrollment rates:					
Fall 1978	2,005	88.2	84.1	4.1***	4.9
Fall 1979	1,920	75.7	72.4	3.3*	4.6
Dropout rates:					
Fall 1978	1,924	9.6	12.9	-3.3**	-25.6
Fall 1979	1,644	17.3	16.8	0.5	3.0
Return-to-school rates:					
Fall 1978	81	34.4	8.6	25.8***	300.0
Fall 1979	276	27.3	16.1	11.2**	69.6
Cumulative dropout rate:					
Fall 1979	1,920	24.3	27.6	-3.3*	-12.0

Notes to Tables 4.2 and 4.3. The sample is restricted to youths who were 15 or 16 in June, 1978.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.



sample as a whole. Unlike estimates for the full sample, there is a positive and significant effect on this younger cohort's return-to-school rate in 1979.<sup>1</sup> Additionally, while the program effect on the dropout rate in the fall of 1979 is about zero, which is similar to the finding for the full sample, YIEPP had, by the fall of 1979, reduced the cumulative dropout rate of this younger group. As seen in the bottom panel of Table 4.5, the cumulative drop-out rate decreased from an estimated 27.6 percent in the absence of the program to 24.3 percent: a 12 percent reduction.

In summary, the major difference between program effects on the schooling behavior of the 15- to 16-year-old cohort and on the behavior of the full analysis sample is the larger effects on the return-to-school rates of the young cohort. Thus, YIEPP, for this cohort, has an important impact on drawing younger teenagers back into school, a major objective of YIEPP.

Cumulative Effects: A Longitudinal Perspective. Because the 15- to 16-year-old cohort most closely represents the experiences of a typical cohort aging through an on-going national program, examining program effects on school enrollment in a longitudinal perspective is particularly appropriate. In Table 4.6 program effects on total school enrollment in the fall of 1978 and the fall of 1979 are considered jointly.<sup>2</sup>

The first panel of the table presents estimated program effects for youths who were enrolled in the preprogram period, Fall 1977. This group comprises over 95 percent of the 15- to 16-year-old cohort. Let us first

---

<sup>1</sup> A program effect on return-to-school rates in the fall of 1979 depends on the recruitment of new program participants in the preceding year. But, due to operational difficulties, the Denver program was not allowed to enroll new participants after March, 1979. To check the impact this might have on estimated school enrollment effects, Table 4.5 was re-estimated excluding youths in the Denver and Phoenix sites. (The results are presented in Appendix A, Table A4.4.) The estimated program effect on return-to-school rates in the fall of 1979 rises to 12.5 percentage points.

<sup>2</sup> The sample used in estimating the results for this table includes youths in the 15- to 16-year-old cohort who were eligible for YIEPP in both the fall of 1978 and the fall of 1979. Program effects on enrollment rates in the fall of 1978 and the fall of 1979 are estimated jointly in a bivariate probit model in which the covariance parameter is allowed to vary between pilot and comparison sites.

**Table 4.6. Cumulative Program Effects on School Enrollment Rates  
for the 15- to 16-year-old Cohort**

Enrollment status in Fall 1978 and Fall 1979	Pilot site rate <sup>a</sup>	Estimated pilot site rate in the absence <sup>b</sup> of the program	Program <sup>c</sup> effect	Program effect as percent of rate in the absence of the program
For youths enrolled in school, Fall 1977 (N=1,766):				
Enrolled Fall 1978 and not enrolled Fall 1979	15.2	13.9	1.3**	9.4
Not enrolled Fall 1978 and enrolled Fall 1979	3.3	2.4	0.9*	37.5
Enrolled Fall 1978 and enrolled Fall 1979	74.2	71.6	2.6**	3.6
For youths not enrolled in school, Fall 1977 (N=79):				
Enrolled Fall 1978 and not enrolled Fall 1979	15.2	3.3	11.9**	360.6
Not enrolled Fall 1978 and enrolled Fall 1979	3.2	11.7	-8.5	-72.6
Enrolled Fall 1978 and enrolled Fall 1979	18.4	1.7	16.7	982.3
Cumulative return-to- school rate, Fall 1979 (N=79):	23.2	14.2	9.0	63.4

Note: The sample is restricted to youths who were 15 or 16 in June, 1978 and who were program-eligible in both Fall 1978 and Fall 1979.

<sup>a</sup> Taken from the cross-tabulation of enrolled Fall 1978 by enrolled Fall 1979 for the pilot sites. See Table A4.5 of Appendix A for the full set of results.

<sup>b</sup> Taken from the adjusted comparison site cross-tabulation, fit at pilot site average personal characteristics (also found in, Table A4.5 of Appendix A).

<sup>c</sup> Difference between columns 1 and 2. Statistical significance has been approximately determined from the t-statistics of the parameters in the adjustment model measuring pilot-comparison site differences.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.

consider estimated pilot site rates in the absence of the program. Without YIEPP, an estimated 14 percent of these youths would have stayed enrolled in school for one more year and then dropped out by the fall of 1979. An additional 2 percent would have been out of school in the fall of 1978 but would return to school in the fall of 1979. By far the largest percentage of the youths would have continued to be enrolled through the two year period. Finally, the remainder of the group, less than 10 percent, would have dropped out of school in the fall of 1978 and remained out in the following year. (This residual category is not listed in Table 4.6.)

The program is estimated to have had positive and statistically significant effects on all three enrollment patterns shown in the table. It increased the percentage of youths who were enrolled in both falls by 2.6 percentage points, while it increased the percentage of the group enrolled in just one of the falls by 2.2 percentage points ( $1.3 + 0.9 = 2.2$ ). These longitudinal results can also be summarized in a different way: For the two complete school years during the operation of YIEPP, pilot site youths in the 15- to 16-year-old cohort were enrolled an average of 1.7 years, as measured by enrollment status in the fall.<sup>1</sup> It is estimated that, in the absence of the program, these youths would have been enrolled an average of 1.6 years. The cumulative program effect over the two years is 0.1 years, then, or an additional year of school enrollment for every 10 program-eligible youths.

Turning to the small group of youths who were not enrolled in the fall of 1977, note that enrollment rates in the absence of the program were much lower for these youths. Most of the youths were not enrolled in either the fall of 1978 or the fall of 1979. The only statistically significant finding is a positive program effect on the percentage of youths who returned to school in the fall of 1978 and then dropped out again by the fall of 1979. In terms of program effects on the cumulative number of years enrolled, pilot site youths in this group were observed to be enrolled an average of 0.6 years over the two year period. In the

---

<sup>1</sup> This average is calculated as follows. There were 7.3 percent youths who were never enrolled, 18.5 percent who were enrolled in one fall, and 74.2 percent who were enrolled in both 1978 and 1979, for a weighted average of 1.7 falls of enrollment.

absence of the program, the average number of years enrolled was estimated to be 0.2 years, implying a program-induced increase of 0.4 years. This larger effect for youths who were out of school in the preprogram period is probably not statistically significant, but it does agree with the proportionately large return-to-school effects already reported.

Finally, the bottom panel of Table 4.6 presents the cumulative program effect on the return-to-school rate of youths who were dropouts in the fall of 1977. In the absence of the program, over the two-year period only 9 percent of these youths would have returned to school. YIEPP raised this rate to 14.2 percent, an increase of about 63 percent. This difference, however, is not significant.

#### Program Effects on School Enrollment by Site, Race and Sex

Average program effects can mask considerable diversity. In this section, program effect estimates are presented for the key subgroups of the eligible population. The methods for measuring program effects remain the same, but attention is restricted to subsamples defined by site, race, or sex.

Effects by Site. Even with a relatively uniform program model, differences across the sites in program operations and in the general educational climate suggest that YIEPP's effects on school enrollment will vary among the four sites studied. Table 4.7 presents the estimated program effects on total school enrollment separately by site. In Denver, positive program effects are observed, but they are small in magnitude and insignificantly different from zero. Small program effects on school enrollment in Denver are consistent with the lower program participation rates in this site, as described in Chapter 3.

The largest program effects are those estimated for Cincinnati, but these estimates must be interpreted with caution, because corollary evidence suggests that the reported findings for the Cincinnati site are probably overestimates of the true program effect. First, program participation rates in Cincinnati were average compared to the other sites. While the correspondence is not likely to be exact, one would expect higher school enrollment effects to be associated with higher program participation rates. Second, the Cincinnati school enrollment effect is at least

Table 4.7. Program Effects on Total School Enrollment Rates by Site

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
Denver:					
Fall 1978	654	67.4	67.0	0.4	0.6
Fall 1979	506	52.4	50.7	1.7	3.4
Cincinnati:					
Fall 1978	1,085	72.6	64.5	8.1***	12.6
Fall 1979	881	62.9	56.0	6.9***	12.3
Baltimore:					
Fall 1978	1,299	74.8	70.9	3.9*	5.5
Fall 1979	1,037	64.2	61.8	2.4	3.9
Mississippi:					
Fall 1978	802	79.3	75.5	3.8*	5.0
Fall 1979	613	62.0	64.7	-2.7	-4.2
All sites but Denver:					
Fall 1978	3,186	75.2	69.6	5.6***	8.0
Fall 1979	2,531	63.3	60.6	2.7*	4.5

See notes to Table 4.2.

\* = significant at the 10 percent level.

\*\*\* = significant at the 1 percent level.

partly due to an inexplicably rapid decline in the school enrollment rates for Cincinnati's comparison site, Louisville. From the preprogram period in the fall of 1977 to the fall of 1978, school enrollment rates for eligible youths in Cincinnati declined by less than 10 percentage points while the rates in Louisville declined by almost 20 percentage points. The size of the enrollment decline in Louisville is larger than in any of the other comparison sites, and it may be related to changing educational conditions in the Louisville public schools, particularly the implementation of busing for racial integration. Over the period from 1977 to 1981, total enrollments in the Louisville public schools fell by 16.4 percent, while enrollments fell only 9.3 percent in the Cincinnati public schools.<sup>1</sup>

The estimated school enrollment effects in Baltimore and Mississippi are similar to each other and to the summary findings presented in the last section. In the fall of 1978 the school enrollment rates were about four percentage points higher as a result of the operation of YIEPP in these sites, but they were lower for the second year of the program.

Effects by Race and Sex. Table 4.8 displays program effects on enrollment, dropout and return-to-school rates separately by the race of eligible youths. Black youths have estimated program effects that are similar to the summary effects for the whole sample, which is not surprising--they constitute over three-quarters of the analysis sample. On the other hand, white youths are estimated to experience relatively large, positive effects on school enrollment, and the reported school enrollment effects for Hispanic youths are estimated as essentially zero. Both of these sets of findings have to be interpreted carefully. Most of the white youths in the comparison sites sample, for instance, live in Louisville. Whatever is depressing the school enrollment rates in Louisville, therefore, disproportionately affects the estimates of school enrollment effects for white youths. Analogously, almost all of the Hispanic youths in the

---

<sup>1</sup> These enrollment numbers are taken from an unpublished MDRC report on the conditions in the public school environments of the urban sites in the YIEPP analysis sample.

Table 4.8. Program Effects on Enrollment, Dropout and  
Return-to-school Rates by Race

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
Total school enrollment rates:					
White:					
Fall 1978	525	56.9	46.9	10.0***	21.3
Fall 1979	407	43.1	28.4	14.7***	51.8
Black:					
Fall 1978	2,917	78.1	73.9	4.2***	5.7
Fall 1979	2,313	66.2	65.7	0.5	0.8
Hispanic:					
Fall 1978	230	59.8	57.8	2.0	3.5
Fall 1979	317	44.0	45.9	-1.9	-4.1
Dropout rates:					
White:					
Fall 1978	362	23.2	38.5	-15.3***	-39.7
Fall 1979	211	32.9	42.7	-9.8*	-23.0
Black:					
Fall 1978	2,564	14.7	18.2	-3.5**	-19.2
Fall 1979	1,814	21.1	20.4	0.7	3.4
Hispanic:					
Fall 1978	302	28.1	26.2	1.8	6.9
Fall 1979	190	38.0	29.8	7.8	26.2

ble 4.8. (Continued)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
turn-to-school rates:					
White:					
Fall 1978	163	8.9	10.3	-1.4	-13.6
Fall 1979	196	8.7	2.7	6.0**	222.2
Black:					
Fall 1978	353	22.2	12.8	9.4**	73.4
Fall 1979	499	17.0	19.1	-2.1	11.0
Hispanic:					
Fall 1978	96	18.6	6.7	11.9**	177.6
Fall 1979	127	15.0	11.6	3.4	29.3

See notes to Tables 4.2 and 4.3.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.



sample live in Denver and Phoenix. It is therefore difficult to disentangle a purely Hispanic difference in program effects from the operational problems of the Denver site.

The bottom two panels of Table 4.8 show that the positive program effect on the school enrollment of blacks in the fall of 1978 occurs as a result of both a program-induced reduction in the dropout rate and an increase in the propensity to return to school. In proportionate terms, the return-to-school effect is larger, but it operates on just over 10 percent of the sample. Therefore, the largest contribution to the school enrollment effect comes from the program's success in keeping eligible youths in school. As with the summary findings, the incremental effects on school enrollment, represented by the impacts on dropout and return-to-school behavior in the fall of 1979, are insignificantly different from zero.

Table 4.9 presents separate program effects on enrollment, dropout and return-to-school rates for males and females. In the fall of 1978, total school enrollment in the pilot sites was approximately the same for both sexes, with the program contributing between four and five percentage points to the enrollment levels for both males and females. These effects on school enrollment rates were the result of program effects on both dropout and return-to-school behavior; however, the return-to-school effect for males is not significantly different from zero.

While program effects on males and females were similar in the fall of 1978, there were important differences for 1979. The most striking difference is that the estimated program effect for females in this period is both relatively large and statistically significant, while the effect for males is essentially not different from zero. Thus, the overall program effect on total school enrollment in the fall of 1979--2.5 percentage points (Table 4.2)--is the weighted average of a small negative effect for males and a large positive effect for females. The higher school enrollment effect for female youths in the fall of 1979 is, in part, due to the fact that YIEPP is estimated to have significantly decreased the dropout rates of females in this period while increasing the dropout rates of males.<sup>1</sup> Unlike some of the other differences in estimated program

---

<sup>1</sup> It seems unlikely that the program actually induced male youths to drop out of school in the fall of 1979. With reasonably careful enforcement

Table 4.9. Program Effects on Enrollment, Dropout and  
Return-to-School Rates by Sex

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
Total school enrollment rates:					
Male:					
Fall 1978	1,776	73.1	68.7	4.4**	6.4
Fall 1979	1,463	59.0	60.4	-1.4	-2.3
Female:					
Fall 1978	2,064	74.5	69.2	5.3***	7.7
Fall 1979	1,574	63.6	57.3	6.3***	11.0
Dropout rates:					
Male:					
Fall 1978	1,534	18.7	23.2	-4.5**	-19.4
Fall 1979	1,068	25.6	20.9	4.7**	22.5
Female:					
Fall 1978	1,694	15.0	19.3	-4.3**	-22.3
Fall 1979	1,147	21.7	25.7	-4.0*	-15.6

ble 4.9. (Continued)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
turn-to-school rates:					
Male:					
Fall 1978	242	16.0	12.6	3.4	27.0
Fall 1979	395	13.1	13.9	-0.8	-5.8
Female:					
Fall 1978	370	20.5	11.7	8.8**	75.2
Fall 1979	427	17.4	14.1	3.3	23.4

e notes to Tables 4.2 and 4.3.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\* = significant at the 1 percent level.

effects across subgroups of the eligible youth population, this difference in program effects on dropout rates for males and females cannot be explained by the composition of the sample. The male and female subgroups are similarly distributed across the sites and age groups. This difference, therefore, must be related to sex differences in the attachment to school and work activity.

### Summary

The schooling aspects of YIEPP may be judged minimally successful if the school requirement simply prevented negative school enrollment resulting from the increased employment of eligibles. A more socially valuable program achievement would be a significant positive effect on school enrollment and performance. We find that, overall, both of these objectives were met on a modest scale.

Effects on Total Enrollment. With respect to total enrollment for the sample as a whole, YIEPP produced modest but statistically significant program effects. YIEPP increased school enrollment by 4.8 percentage points in the fall of 1978, and by 2.5 percentage points in the fall of 1979. These effects are, respectively, 7.0 and 4.3 percent of the school enrollment rates expected in the absence of the program.

Regular school enrollment increased by 2.9 percentage points during the fall of 1978, and by 0.9 percentage points during the fall of 1979. GED enrollment increased by 2.4 percentage points during the fall of 1978, and by 1.7 percentage points during the fall of 1979. These findings suggest that alternative educational programs (programs leading to a GED) played an important role in the overall YIEPP school enrollment effect.

The school enrollment effects can be decomposed into separate effects on the dropout rate of in-school youths and on the return-to-school rate of out-of-school youths. During the fall of 1978, YIEPP is estimated to have decreased the dropout rate by 4.4 percentage points. This represents a 20.8 percent decrease of the rate expected in the absence of the

---

of the school enrollment requirement, the program, at worst, might have been expected to have no effect on school enrollment. But dropout rates could be higher in the pilot sites because youths who were marginally attached to school were brought back or kept in school in the fall of 1978 but have left both the program and school one year later, thus increasing the pilot site dropout rates.

program. The program exerted no significant effect on this rate during the fall of 1979.

YIEPP increased the return-to-school rates by 6.6 percentage points during the fall of 1978. This represents an increment of 54.5 percent over the rate expected in the absence of the program. However, as with the dropout rate, the YIEPP effect on return-to-school during the fall of 1979 is not statistically significant. Thus, YIEPP exerted a much stronger percentage effect on return-to-school than on dropout rates, although since at any point in time most youths are in-school, the total enrollment effect is primarily determined by the effect on the dropout rate.

Finally, we find no statistically significant effect on either dropout or return-to-school behavior during the fall of 1979.

The estimated program effects on the dropout and return-to-school rates decline from 1978 to 1979 partly due to the nature of the YIEPP analysis sample. To produce incremental enrollment gains in the fall of 1979, the program would have had to enlist new program participants during the preceding year. But the potential for obtaining new participants in 1979 was more limited among the youths in the analysis sample than among the actual youth population eligible for YIEPP. This is because the analysis sample contained proportionately fewer youths who were 16 years old in 1979 than the actual eligible population in the pilot sites. It is these youths who are most likely to participate in YIEPP. Accordingly, program effect estimates for the 15- to 16-year-old cohort are a better estimate of program effects in an ongoing national program. To these we now turn.

Effects for the 15- to 16-year-old Cohort. Program effects on total school enrollment rates are approximately as large as those estimated for the total sample in the fall of 1978, and do not decline as rapidly in the fall of 1979. This difference can be traced, in part, to the finding that program effects on return-to-school rates for the 15- to 16-year-old cohort in the fall of 1979 are much larger than those estimated for the full sample. This difference in program effects on return-to-school behavior, along with a similar result for the fall of 1978, is probably related to the fact that members of the 15- to 16-year-old cohort are influenced by the program at an earlier point in their educational careers.

That is, dropouts in the 15- to 16-year-old cohort have, for the most part, just left school and may be more easily induced to return, a most desirable outcome that conforms to the intended program design. Similarly, while the program had no effect on the dropout rate of the full sample in the second year, for the 15- to 16-year-old cohort the cumulative dropout rate had been reduced by the fall of 1979 by 3.3 percentage points: a 12 percent reduction.

Cumulative Program Effects. By restricting attention to youths eligible for YIEPP during both the fall of 1978 and the fall of 1979, we find the following longitudinal program effects: YIEPP increased the percentage of youths who were enrolled in both falls by 2.6 percentage points, while it increased the percentage of the group enrolled in just one of the falls by 2.2 percentage points. The cumulative program effect over the two years is 0.1 years, or an additional year of school enrollment for every 10 program-eligible youths. Finally, among the 15- to 16-year-old cohort youths who were out of school in the fall of 1977, YIEPP increased the return-to-school rate by 9 percentage points: from an estimated 14.2 percent in the absence of the program to 23.2 percent.

## CHAPTER 5

### PROGRAM EFFECTS ON EMPLOYMENT AND LABOR FORCE PARTICIPATION

The principal YIEPP treatment is a guaranteed, federal minimum wage job. It constitutes the most direct response to the youth unemployment problem. Here we report the effect of this guarantee on increasing the employment and decreasing the unemployment (job search) of target population youth.

#### The Context of the Analysis

Before we present our estimates of the effects of YIEPP on employment and labor force participation, it is useful to discuss certain aspects of the environment within which the YIEPP demonstration took place, and certain definitions that are important for our analysis.

Labor Market Conditions in the Study Sites. Our findings are bound by location and time. They apply to youth labor market conditions as they existed in eight sites during the period from January, 1977 to August, 1980. Several factors must be considered when generalizing beyond these findings to infer changes in national youth employment and training policy.

On the supply side of the labor market, the behavior of our sample members is likely to be broadly generalizable across areas and over time. Tastes and demographic composition change slowly. Along these dimensions our sample has representation from Southwest and Far West central cities with a significant Hispanic presence (Denver and Phoenix), older Midwestern and Eastern central cities (Baltimore, Cleveland, Cincinnati, Louisville), and Southern rural areas (Mississippi Pilot and Comparison). There is good reason to believe that the labor supply schedules (the willingness of individuals to work at each potential wage rate) of our sample members are similar to those that existed for target population members earlier in the 1970s, and which will exist for such youths during the 1980s.<sup>1</sup> The personal characteristics accounted for by our regression equations further increase the generalizability of our results.

---

<sup>1</sup> Of course, comparisons of labor supply schedules over time presume adjustment for wage rate changes necessary to maintain purchasing power during inflation.

We are not so sanguine about the stability over time of conditions on the demand side of youth labor markets. First of all, demand is inherently volatile. The demand for youth labor is particularly sensitive to business cycle fluctuations. Employer demand schedules for target population youths (the number of such youths the employer would like to hire at each potential wage rate) may have a shape that is relatively constant, or only slowly changing over time, but these demand schedules shift up and down as business conditions change. Table 5.1 shows the effects of the business cycle on total unemployment rates (individuals of all ages) in the study sites. We see that unemployment uniformly increased during the recession of 1974-75 and uniformly fell during 1978-79, only to rise again with the recession of 1980. During 1978-79, the Denver/Phoenix and Cincinnati/ Louisville pairs appear to have been well matched, although the Baltimore labor market was consistently worse off than that of Cleveland. Our regression analysis strategy uses individual preprogram (1977) employment histories as well as other personal characteristics to adjust these site differences, but there is still some possibility that the Baltimore program employment effects will be underestimated as a result of this mismatch. Published data for the Mississippi pilot and control counties are not available separately, but our knowledge of the counties involved suggests that they were reasonably well matched.

Another potential problem arises from non-YIEPP public sector employment in pilot and comparison sites during the evaluation period. At this time, publicly funded youth employment and training programs were at an all time high. These programs existed both in the comparison sites and pilot sites, in competition with YIEPP. Many of these programs were funded by the same Youth Employment and Demonstration Projects Act as YIEPP itself and enrolled youths who were also eligible for YIEPP. Thus, we seek to extrapolate from a period of large scale support for publicly subsidized employment to a period in which such programs have been scaled down or eliminated.

The danger is that we will underestimate YIEPP employment effects. That is, pilot/comparison site employment differences attributed to YIEPP may underestimate those that would have occurred in the current world with



Table 5.1. Total Unemployment Rates (Individuals of All Ages)  
in Pilot and Control Sites: Annual Averages, 1975-1980

	1975	1976	1977	1978	1979	1980
Denver	6.9	5.7	5.9	5.1	4.4	5.1
Phoenix	13.2	9.9	7.4	5.3	4.4	5.9
Cincinnati	7.3	6.3	5.6	5.0	5.3	7.0
Louisville	7.7	6.8	5.2	5.2	5.2	8.0
Baltimore	7.3	7.4	6.7	6.3	6.5	7.4
Cleveland	7.9	7.1	5.9	4.7	5.0	7.2
Mississippi <sup>a</sup>	8.3	6.6	7.4	7.1	5.8	7.5

Source: Employment and Training Report of the President, 1981, Table D-8, pp. 243-246. The 1979 estimates for the cities are revised estimates. The 1980 estimates for the cities are preliminary estimates.

<sup>a</sup>State-wide rates from Employment and Training Report of the President, 1981, Table D-4, p. 232.

lower levels of comparison site public employment. However, to the extent that competing programs in pilot and comparison sites balance each other out, the pilot/control comparison will accurately estimate the employment increment attributable to YIEPP. Since this analysis is based on before/during-program comparisons of (total) pilot and control site employment, there is reason to believe that such balancing out does indeed occur.

YIEPP Employment as a Labor Market Intervention. The timeliness and nature of the jobs provided under YIEPP significantly affect the employment increment due to the program. The following information on these matters is provided by the MDRC final implementation report (Diaz and Ball (1982)).

First, adequate numbers of jobs were in general provided in a timely manner. Next, job assignments were generally typical of the employment opportunities available to target population youths. Third, there was significant private sector involvement. Fourth, almost all YIEPP slots involved employment at the minimum wage, and were fully reimbursed (100 percent subsidy) to the employer. And, finally, work sites were generally of good quality.

Thus, as implemented in the sites, YIEPP appears to have approximated the goal of providing an appropriate minimum wage job to all target population youths who desired one. (A major exception occurred in Denver, where program intake was halted in June, 1979. See Chapters 2 and 3 of this report and Diaz and Ball (1982).) If none of these jobs were available in the absence of the program, the YIEPP participation rate would have been identical to the program effect on employment. This effect, however, can fall short of the YIEPP participation rate, an issue to which we now turn.

YIEPP Employment, the YIEPP Employment Effect, and Displacement. Where did the jobs to provide 76,051 youths with 45 million hours of work experience come from? If these were all "new" jobs that would not have been available in the absence of the program, then employment in these jobs represented a net addition to previous employment, and the site-wide YIEPP employment effect would be equal to total YIEPP employment. Unfortunately, this is unlikely to be the case. For YIEPP administrators, the need to

find a large number of good quality jobs in a short span of time provided a strong incentive to permit the shifting of pre-existing jobs onto the YIEPP payroll. This might occur for previously unsubsidized jobs or for jobs that would have been paid for by a non-YIEPP subsidy program. It could occur in either the public or private sector. From the employer's perspective, such displacement of a portion of one's wage bill by YIEPP funds is desirable, with particularly strong incentives for such displacement in the private sector, in spite of the fact that legislation authorizing subsidized employment expressly forbids such displacement.

The conceptual relationship among YIEPP employment, the YIEPP effect on employment in the pilot site as a whole, and the magnitude of displacement is displayed in Figure 5.1. This figure portrays the labor market for target population youths, who may be thought of as relatively homogeneous, entry-level workers, whose total labor supply exceeds the pre-YIEPP demand at the federal minimum wage.<sup>1</sup> This diagram also sets forth the basis for the estimation of the displacement rate (and net job creation rate) presented later in this chapter.

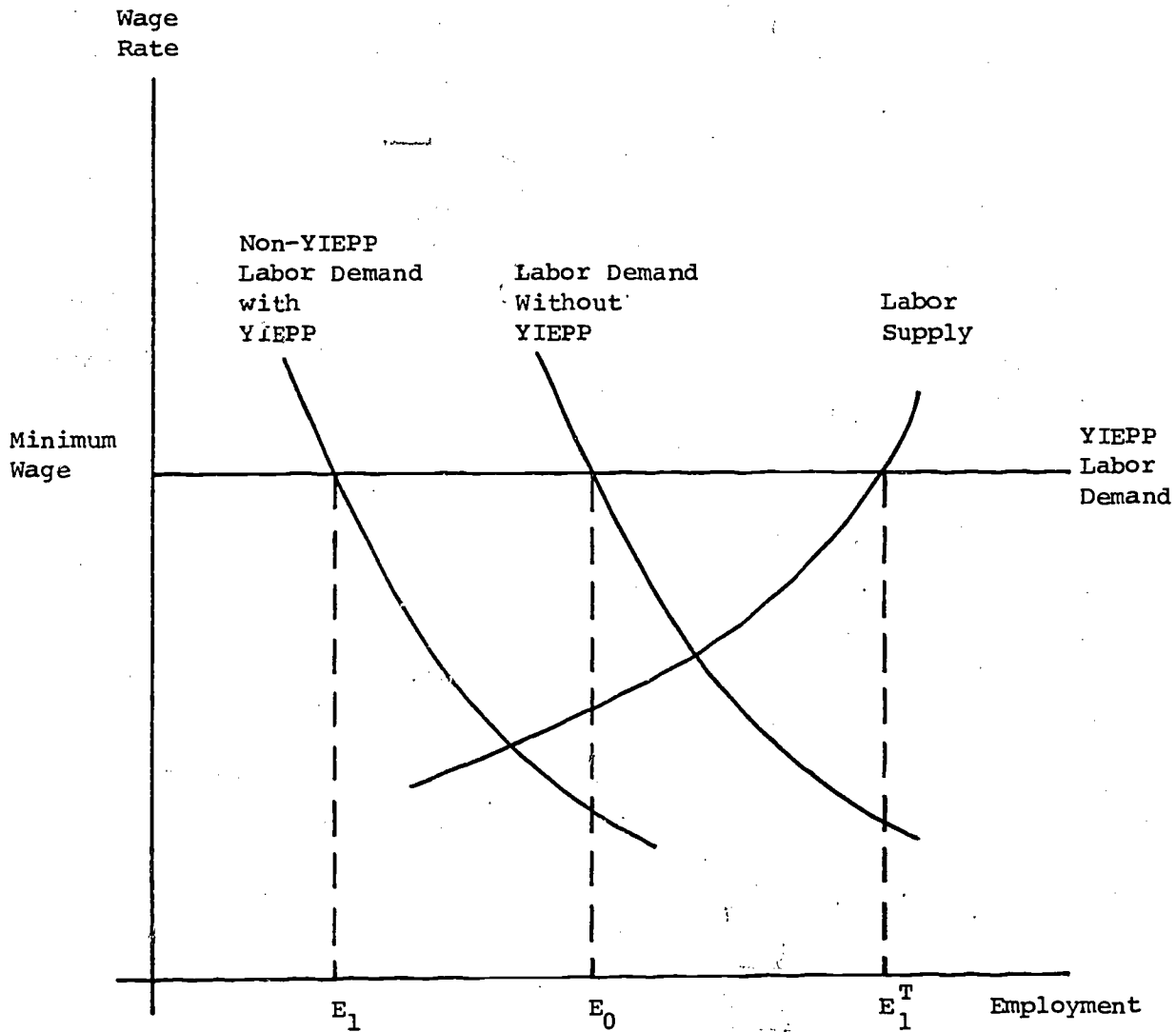
In this diagram, the effect of YIEPP is to provide a horizontal (infinitely elastic) demand curve at the minimum wage, permitting all target population youths who wish to work at this wage to do so. As a consequence, total employment shifts from its preprogram level of  $E_0$  to its during-program level of  $E_1^T$ . The YIEPP effect on total site employment is thus  $E_1^T - E_0$ . The magnitude of the YIEPP effect on total site employment is independent of any displacement that may occur.

The effect of displacement is to shift the non-YIEPP labor demand curve to the left. That is, fewer non-YIEPP jobs are now available in the pilot site, the number of such jobs at the federal minimum wage now being  $E_1$ . Since  $E_1^T$  youths still wish to work at the federal minimum wage, YIEPP employment equals  $E_1^T - E_1$ . Displacement, the number of non-YIEPP jobs transferred to the YIEPP payroll, is given by  $E_0 - E_1$ .

---

<sup>1</sup> Evidence for supply in excess of demand is high unemployment rates for the target population, and the high YIEPP participation rates reported in Chapter 3.

Figure 5.1. The Mechanism of Program Effect on  
Total Employment for the Target Population



Interpretation:

$$\text{YIEPP Effect on Total Employment} = E_1^T - E_0$$

$$\text{YIEPP Employment} = E_1^T - E_1$$

$$\text{Displacement} = E_0 - E_1$$

$$\text{So, YIEPP Effect} = \text{YIEPP Employment} - \text{Displacement}$$

To repeat, the total increase in site-wide employment due to YIEPP is  $(E_1^T - E_0)$ . If there is no displacement, this is also total YIEPP employment. If there is displacement, with non-YIEPP labor demand shifting back to  $E_1$ , displacement is  $(E_0 - E_1)$  and total YIEPP employment is  $(E_1^T - E_1)$ . When a program such as YIEPP is put in place, total employment shifts out to  $E_1^T$ , youth labor supply at the minimum wage, regardless of whether displacement is present. However, the extent of displacement determines the number of program jobs that must be funded in order to achieve this effect. In this chapter we estimate both quantities: the total YIEPP effect on the employment/population ratio (the percent of target population hours spent in employment) and net job creation rates (the ratio of the total YIEPP effect on the employment/population ratio to the total YIEPP employment/population ratio, that is,  $(E_1^T - E_0)/(E_1^T - E_1)$ ). The former is the program effect. The latter measures the efficiency with which this effect was created.

Definitions of Measures Used to Estimate Program Effects. For each of the seasonal periods between the summers of 1978 and 1980, we define a youth's employment/population ratio as the percent of days employed relative to the total number of days available for employment. The principal outcome variable in this chapter is the site-wide mean of this employment/population ratio, calculated separately for those target population youths who were eligible for YIEPP during each of the periods in question.

Later in this chapter we also estimate program effects on labor force participation, employment, and unemployment rates. Following standard conventions, a youth is in the labor force if he or she is either employed or looking for work. We define the period-specific labor force participation rate as the percent of days a youth spends in either activity. Employment and unemployment rates are then, respectively, the percent of a youth's labor force days spent employed, and the percent of those days spent unemployed. These measures for YIEPP are then compared with those reported by the Bureau of Labor Statistics, U.S. Department of Labor.

As in the previous chapter, program effects are estimated by comparing pilot site ratios or rates with those to be expected in the absence of the program. Where appropriate, we also test for and discuss

the possible alteration in these estimates due to sample attrition. Program effect estimates are reported in the principal tables of this chapter. Supporting tables are provided in Appendix A, Tables A5.1-A5.11, means and regression coefficients for the program effect estimates are reported in Appendix B5, and the attrition calculations are reported in Appendix C.

#### Program Effects on the Employment/Population Ratio

Table 5.2 displays employment/population ratios for each of the preprogram and during-program periods, separately for pilot and control sites. That is, for those sample youths who were eligible for YIEPP during the period in question (youths aged 16 to 19 who had not as yet graduated from high school), we compute the percent of days employed during this period. These pilot and control site employment/population ratios were relatively close to each other in the preprogram period, but the pilot site ratios significantly exceeded those in the control sites during the program, indicating a positive YIEPP employment effect. In addition, summer employment/ population ratios were generally higher than those during the school year, suggesting that the ratios from these two periods be treated in two distinct groups.

Program Effects, Separately by Period. Chapter 3 revealed relatively high YIEPP participation rates. As discussed already, if displacement is low, these translate into large employment effects--as shown in Table 5.3.

This table shows program effects of 21.1, 23.0, 15.5, and 15.7 percentage points during the school-year periods, for an overall school-year average of 18.9 percentage points. That is, during the two school years of program operations, YIEPP is estimated to have raised employment on average from 21.5 to 40.4 percent, an increase of 87.9 percent over the level in the absence of the program. These effects are statistically significant at better than the 1 percent level.

Program effects during the summers of 1978, 1979, and 1980 are also large, positive, and statistically significant at better than a 1 percent level, but are smaller than those observed for the school year. Across three summers, the YIEPP employment effect averages 11.8 percentage points,

Table 5.2. Average Employment/Population Ratios, by  
Pilot or Control Site, and Period

	<u>Total</u>		<u>Sample Size</u>	
	<u>Pilot</u>	<u>Control</u>	<u>Pilot</u>	<u>Control</u>
<u>Preprogram</u>				
Spring 1977	7.0	7.6	2,778	1,255
Summer 1977	22.7	26.2	2,778	1,255
Fall 1977	10.6	12.7	2,778	1,255
<u>During-program</u>				
Summer 1978	40.6	26.4	2,353	1,075
Fall 1978	38.2	17.7	2,652	1,188
Spring 1979	42.2	19.8	2,605	1,154
Summer 1979	45.2	34.5	2,362	1,015
Fall 1979	39.1	24.0	2,107	930
Spring 1980	41.3	26.2	2,000	890
Summer 1980	42.3	32.8	1,685	718
<u>Summary<sup>a</sup></u>				
<u>Preprogram</u>				
School-year average	8.4	9.8	---	---
Summer average	22.7	26.2	---	---
Total preprogram average	12.1	13.9	---	---
<u>During-program</u>				
School-year average	40.4	22.0	---	---
Summer average	42.7	31.2	---	---
Total during-program average	41.2	25.1	---	---

Note: The sample includes youths who have completed all three waves of the local field survey and are eligible for the program during the period in question. See Chapter 2 for further details. The employment/population ratio is the number of weeks employed during a particular period, divided by the total number of weeks in that period. This provides an estimate of the "steady state" employment/population ratio for the period. Unadjusted pilot and control site averages are reported in this table.

<sup>a</sup> These are averages of the period-specific ratios reported above, weighted by the length of each period.

Table 5.3. Program Effects on Employment/Population Ratios

	Sample size	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	P e
<u>School year</u>				
Fall 1978	3,840	38.2	17.1	
Spring 1979	3,759	42.2	19.2	
Fall 1979	3,037	39.1	23.6	
Spring 1980	2,890	41.3	25.6	
School-year average <sup>c</sup>	---	40.4	21.5	
<u>Summer</u>				
Summer 1978	3,428	40.6	26.0	
Summer 1979	3,377	45.2	34.4	
Summer 1980	2,403	42.3	32.2	
Summer average <sup>c</sup>	---	42.7	30.9	
Total during-program average <sup>c</sup>	---	41.2	24.6	

<sup>a</sup>This is a regression-adjusted, comparison site mean, fit at pilot site characteristics and preprogram employment. Means of the right-hand-side variable coefficient estimates are reported in Appendix B.

<sup>b</sup>This is the difference between columns 2 and 3, with statistical significance t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup>These are averages of the period-specific ratios reported above, weighted each period.

\*\*\* = significant at the 1 percent level.



raising the employment/population ratio from 30.9 percent in the absence of YIEPP to 42.7 percent--a 38.2 percent increase. Since YIEPP program participation is relatively constant between the school year and summer, the lower summer employment effect is likely to be due to increased displacement during this season. This and related issues are discussed further in the next section.

With school-year and summer periods combined, we find an overall YIEPP employment effect of 16.6 percentage points, increasing employment from 24.6 percent to 41.2 percent. This 67.5 percent increase over the employment/population ratio expected in the absence of the program is a very strong result and indicates that YIEPP met its goal of significantly reducing youth unemployment. (Explicit estimates of program effect on labor force participation, unemployment, and employment rates are presented later in the chapter.)

At this point it is useful to assess the effects of sample attrition on our estimates, using the attrition sample data. As noted in Chapter 2, these data were collected by restricting attention to Hispanics in Denver/Phoenix and blacks in Baltimore/Cleveland, and undertaking special efforts to locate youths who dropped from Wave II of the survey. The resulting attrition sample was subsequently administered both Wave II and Wave III interviews. Program effect estimates for these and matching youths who completed all three survey waves are reported in Appendix C, Table C2.4.

In almost every case, program effects are estimated to be smaller for the attrition than for the local field survey sample, a result consistent with the observation that attrition sample members exhibited lower program participation rates than youths who completed all three local field survey interviews. In the case of Denver, this reduces already low program effect estimates even closer to zero. (See Table 5.5 and the associated discussion.) However, the result is not terribly striking in view of the previously noted strong labor market and poor program implementation in Denver.

The Baltimore/Cleveland attrition sample also shows a reduced YIEPP employment effect. When this is averaged together with the local field survey effect estimates for this site, using the attrition rate of 24.4

percent, the result is to reduce program effects estimates by two to four percentage points. Since this does not significantly alter the overall finding of strong program effects--in the 10 to 20 percentage point range--we feel confident in discounting sample attrition as a significant source of error in these employment results.

Program Effects for the 15- to 16-year-old Cohort: Evidence for an Ongoing National Program. Recall that our study sample was constructed in the spring of 1978, by choosing youths aged 15 to 19 at that time who had not yet graduated from high school. Thus far, we have focused on those youths who continued to meet these eligibility criteria, separately for each of the during-program periods, from the summer of 1978 to the summer of 1980. However, this procedure averages together the effects experienced by youths who aged through the program (those who were 15 to 16 years of age at program start-up) and the effects experienced by youths who were beyond age 16 at program start-up. Since effects may differ across these two groups, and since, if they do, the responses of the former group alone are most relevant to an ongoing national program, Table 5.4 shows the employment effects for the 15- to 16-year-old cohort.

Comparison of Tables 5.3 and 5.4 shows that restriction to the 15- to 16-year-old cohort raises YIEPP employment effects from 18.9 to 21.2 percentage points during the school year, and from 11.8 to 13.5 percentage points during the summer. Over the full program period, the average employment effect increases from 16.6 to 18.6 percentage points, a rise of 12 percent.

As a final step, we have computed effects for the 15- to 16-year-old cohort, with Denver and Phoenix deleted from the sample. This yields a measure of program effect for an ongoing national program, fully implemented in distressed labor markets. As reported in Appendix A, Table A5.4, these effects are larger still, averaging 24.6 percentage points during the school year and 14.4 percentage points during the summer, for an overall average of 21.3 percentage points during the program period. This is an increment of 109.2 percent over the employment/population ratio expected in the absence of YIEPP.

Table 5.4. Program Effects on Employment/Population Ratios  
for the 15- to 16-Year-old Cohort, Separately by Period

	Sample size	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program <sup>b</sup> effect	Program effect as a percent of ratio in the absence of the program
<u>School year</u>					
Fall 1978	2,005	34.7	11.3	23.4***	207.1
Spring 1979	2,053	39.4	15.9	23.5***	147.8
Fall 1979	1,920	40.5	21.5	19.0***	88.4
Spring 1980	1,914	43.0	24.2	18.8***	77.7
School-year average <sup>c</sup>	---	39.6	18.4	21.2***	115.2
<u>Summer</u>					
Summer 1978	1,515	39.5	22.5	17.0***	75.6
Summer 1979	1,980	45.4	34.3	11.1***	32.4
Summer 1980	1,685	43.6	31.1	12.5***	40.2
Summer average <sup>c</sup>	---	42.8	29.3	13.5***	46.1
<u>Total during-program average<sup>c</sup></u>	---	40.7	22.1	18.6***	84.2

<sup>a</sup>This is a regression-adjusted, comparison site mean, fit at pilot site average personal characteristics and preprogram employment. Means of the right-hand-side variable and regression coefficient estimates are reported in Appendix B.

<sup>b</sup>This is the difference between columns 2 and 3, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup>These are averages of the period-specific rates reported above, weighted by the length of each period.

\*\*\* = significant at the 1 percent level.

Program Effects, Separately by Site. As previously noted, the pilot/comparison site pairs differ significantly in labor market conditions and program implementation, so that it is useful to disaggregate the program effect estimates by site. These results are displayed in Table 5.5, which shows school-year, summer, and total program effects, calculated from regression-adjusted, period-specific mean differences for each of the during-program periods, from the summer of 1978 to the summer of 1980. These are then averaged, following the procedure employed in Table 5.3. (The sample sizes underlying these calculations are reported in Appendix A, Table A5.1. The regression calculations are reported in Appendix B.)

The most obvious finding in this table is that the Denver YIEPP employment effects are very much smaller than those for the other sites. This is probably due to two factors. First, as noted in previous chapters, total labor demand was considerably stronger in Denver/Phoenix than in the other sites.<sup>1</sup> Where demand is close to meeting supply at the federal minimum wage, the program effect will be small. (Recall Figure 5.1.) Second, as also noted in previous chapters, program implementation in Denver was relatively poor, leading to a freeze on intake of new participants in June, 1979. To the extent that the program was never properly implemented in Denver, results from this site do not accurately estimate program effects. Of course, it may be that poor implementation was at least partly due to a lower level of enthusiasm for the program, in turn, perhaps because of the strong local labor market that made the program appear to be less necessary. In any case, the results suggest that future YIEPP-like programs should be concentrated in areas with relatively distressed local labor markets.

The three remaining sites in Table 5.5 show very strong and similar effects. In each case the school-year effect is significantly larger than the summer effect, and all are statistically significant at better than

---

<sup>1</sup> Evidence on the relative strength of labor demand in Denver/Phoenix includes the unemployment rates of Table 5.1, estimated target population pilot site employment/population ratios in the absence of the program (column 2 of Table 5.5), and the relatively high target population wage rates in Denver/Phoenix during the pre-program summer (Barclay et al. (1979); Farkas, Olsen and Stromsdorfer (1981)).

Table 5.5. Program Effects on Employment/Population Ratios, Separately by Site

	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program <sup>b</sup> effect	Program effect as a percent of ratio in the absence of the program
<u>Denver</u>				
School-year average <sup>c</sup>	39.6	37.3	2.3	6.2
Summer average	45.3	38.6	6.7*	17.4
Total during-program average <sup>c</sup>	41.5	37.7	3.8	10.1
<u>Cincinnati</u>				
School-year average	35.5	18.6	16.9***	90.9
Summer average	36.4	26.1	10.3***	39.5
Total during-program average	35.8	21.1	14.7***	69.7
<u>Baltimore</u>				
School-year average	47.2	22.6	24.6***	108.8
Summer average	47.6	36.3	11.3***	31.1
Total during-program average	47.3	27.2	20.1***	73.9
<u>Mississippi</u>				
School-year average	34.2	16.4	17.8***	108.5
Summer average	38.5	27.2	11.3***	41.5
Total during-program average	35.6	20.0	15.6***	78.0

<sup>a</sup> This is a regression-adjusted, comparison site mean, fit at pilot site average personal characteristics and preprogram employment. Means of the right-hand-side variables and regression coefficient estimates are reported in Appendix B.

<sup>b</sup> This is the difference between columns 1 and 2, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup> These are averages of the period-specific ratios weighted by the length of each period.

\* = significant at the 10 percent level.

\*\*\* = significant at the 1 percent level.

a 1 percent level. The three summer effects are at the 10 to 11 percentage point level; the school-year effect is 16.9 percentage points in Cincinnati, 24.6 percentage points in Baltimore, and 17.8 percentage points in Mississippi. These results are consistent with our previous finding of a stronger school-year than summer employment effect (Farkas et al. 1980). This finding may be due to the narrowed gap between summer minimum wage supply and demand in the absence of YIEPP, resulting from subsidized employment provided by the federal Summer Youth Employment Program (SYEP) during the summer periods in question. Thus, it is possible that if YIEPP were to be implemented in the years ahead, with the reduced funding for other subsidized employment programs that current legislative proposals suggest, summer YIEPP employment effects would more closely approximate the school-year effects of Table 5.5.

In sum, with the exception of Denver, YIEPP employment effects are uniformly large and significant. As a result of the program, summer employment for target population youths increased by 31 to 42 percent, while school-year employment for these youths increased by 91 to 109 percent.

Program Effects by Economic Sector. A potentially important YIEPP innovation was the placement of some youths in subsidized private sector jobs. The extent of such placement varied by site and over time, with greater use of private sector positions occurring toward the end of the demonstration. However, since the long run goal of the demonstration was to increase postprogram employment and earnings, and since during-program private sector employment may be more efficacious than similar public sector employment, the during-program sectoral employment impacts of YIEPP are of some interest.

These impacts are reported in Table 5.6.<sup>1</sup> It is immediately clear that private sector employment effects are significantly smaller than

---

<sup>1</sup>Youths are coded as employed in the private sector if they described themselves as "an employee of a company or business for wages, salary, or commission," or as "an employee of an individual or family for wages or salary." Youths are coded as employed in the public sector if they described themselves as "a federal, state, or local government employee," or as "an employee of a church or charitable organization."

Table 5.6. Program Effects on Employment/Population Ratios, Separately by Sector

	Sample size	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect as a percent of ratio in the absence of the program
<u>A. Private Sector Employment</u>					
<u>School year</u>					
Fall 1978	3,840	16.3	12.6	3.7***	29.4
Spring 1979	3,759	18.5	14.0	4.5***	32.1
Fall 1979	3,037	21.5	18.3	3.2**	17.5
Spring 1980	2,890	22.8	19.2	3.6***	18.8
School-year average <sup>c</sup>	---	19.9	16.1	3.8***	23.6
<u>Summer</u>					
Summer 1978	3,428	16.3	15.4	0.9	5.8
Summer 1979	3,377	21.3	21.4	- 0.1	- 0.5
Summer 1980	2,403	26.1	21.8	4.3***	19.7
Summer average <sup>c</sup>	---	21.2	19.5	1.7	8.7
Total during-program average <sup>c</sup>	---	20.3	17.2	3.1***	18.0
<u>B. Public Sector Employment</u>					
<u>School year</u>					
Fall 1978	3,840	22.0	4.5	17.5***	388.9
Spring 1979	3,759	23.7	5.4	18.3***	338.9
Fall 1979	3,037	17.6	5.3	12.3***	232.1
Spring 1980	2,890	18.5	6.4	12.1***	189.1
School-year average	---	20.5	5.5	15.0***	272.7

Table 5.6. (Continued)

	Sample size	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program <sup>b</sup> effect	Program effect a a percent of rat in the absence o the program
<u>Summer</u>					
Summer 1978	3,428	24.3	10.9	13.4***	122.9
Summer 1979	3,377	23.9	13.2	10.7***	81.1
Summer 1980	2,403	16.2	10.3	5.9***	57.3
Summer average	---	21.5	11.5	10.0***	87.0
Total during-program average	---	20.8	7.5	13.3***	177.3

<sup>a</sup>This is a regression-adjusted, comparison site mean, fit at pilot site average personal characteristics and preprogram employment. Means of the right-hand-side variables and regression coefficient estimates are reported in Appendix B.

<sup>b</sup>This is the difference between columns 2 and 3, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup>These are averages of the period-specific ratios reported above, weighted by the length of each period.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.



those in the public sector. During the school year, private sector effects range between 3.2 and 4.5 percentage points, with an overall average of 3.8 percentage points. This effect is statistically significant, and increases private employment by 23.6 percent over the level expected in the absence of the program--a respectable, but not overwhelming effect, especially in comparison to the public sector effect of about 273 percent.

The private sector effect is smaller still during the summer, averaging 1.7 percentage points, an increase of 8.7 percent over the level expected in the absence of the program. However, this effect is not statistically significant. With school year and summer combined, the total private sector employment effect is a statistically significant 3.1 percentage points, an increase of 18 percent over the level of 17.2 percentage points expected in the absence of YIEPP.

Public sector employment effects are very much larger, averaging 15 percentage points during the school year, and 10 percentage points during the summer--increases respectively of about 273 and 87 percent over the levels expected in the absence of YIEPP. With school year and summer combined, the public sector employment effect is 13.1 percentage points--an increase of about 177 percent over the level expected in the absence of the program.

The disparity between the magnitude of the public and private sector employment effects has two likely causes. First, YIEPP job hours were predominantly in the public rather than the private sector. Second, private sector displacement appears to be higher than public sector displacement. These findings are examined in the next section.

Program Effects, Separately by Race and Sex. YIEPP enrolled black youths most heavily. The consequences of this for program employment effects are shown in Table 5.7.

All effects are positive, but not all are statistically significant and they vary widely across race/sex groups. The largest effects are for black females--24.7 percentage points during the school year, and 15.7 percentage points during the summer. Overall, the black female employment effect is 21.7 percentage points--an increase of 128 percent over the level expected in the absence of the program.

**Table 5.7. Program Effects on Employment/Population Ratios Separately by  
Period, Sex, and Race**

	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect as a percent of ratio in the absence of the program
<u>White male</u>				
School-year average <sup>c</sup>	46.6	34.5	12.1**	35.1
Summer average <sup>c</sup>	47.0	42.6	4.4	10.3
Total during-program average <sup>c</sup>	46.7	37.2	9.5*	25.5
<u>Black male</u>				
School-year average	43.0	21.2	21.8***	102.8
Summer average	46.5	34.4	12.1***	35.2
Total during-program average	44.1	35.6	18.5***	72.3
<u>Hispanic male</u>				
School-year average	51.3	47.9	3.4	7.1
Summer average	55.1	50.0	5.1	10.2
Total during-program average	52.6	58.6	4.0	8.2
<u>White female</u>				
School-year average	29.1	25.3	3.8	15.0
Summer average	30.8	29.5	1.3	4.4
Total during-program average	29.6	26.7	2.9	10.9
<u>Black female</u>				
School-year average	38.5	13.8	24.7***	179.0
Summer average	39.0	23.3	15.7***	67.4
Total during-program average	38.7	17.0	21.7***	127.6

Table 5.7. (Continued)

	Pilot site ratio	Estimated pilot site ratio in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect as a percent of ratio in the absence of the program
<u>Hispanic female</u>				
School-year average	33.3	30.3	3.0	9.9
Summer average	41.8	27.3	14.5**	53.1
Total during-program average	36.2	29.3	6.9*	23.5
<u>White</u>				
School-year average	37.0	29.4	7.6**	25.9
Summer average	38.1	34.9	3.2	9.2
Total during-program average	37.4	31.2	6.2*	19.9
<u>Black</u>				
School-year average	40.7	17.3	23.4***	135.3
Summer average	42.6	28.7	13.9***	48.4
Total during-program average	41.3	21.1	20.2***	95.7
<u>Hispanic</u>				
School-year average	41.8	38.3	3.5	9.1
Summer average	48.0	38.1	9.9*	26.0
Total during-program average	43.8	38.2	5.6	14.7

Table 5.7. (Continued)

	Pilot site ratio	Estimated pilot site ratio in the absence <sup>a</sup> of the program	Program <sup>b</sup> effect	Program effect as a percent of ratio in the absence of the program
<u>Male</u>				
School-year average	44.2	26.7	17.5***	65.5
Summer average	47.4	37.6	9.8***	26.1
Total during-program average	45.3	30.3	15.0***	49.5
<u>Female</u>				
School-year average	36.9	17.3	19.6***	113.3
Summer average	38.4	24.7	13.7***	55.5
Total during-program average	37.4	19.8	17.6***	88.9

<sup>a</sup> This is a regression-adjusted, comparison site mean, fit at pilot site average personal characteristics and preprogram employment. Means of the right-hand-side variables and regression coefficient estimates are reported in Appendix B.

<sup>b</sup> This is the difference between columns 1 and 2, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup> These are averages of the period-specific ratios weighted by the length of each period.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.

Next in magnitude are the effects for black males, 21.8 percentage points during the school year and 12.1 percentage points during the summer, for an overall average of 18.5 percentage points, an increase of 72.3 percent over the rate expected in the absence of the program. It appears that both black males and females were strongly attracted to the program, with black females experiencing the larger employment effect because of the larger gap between minimum wage supply and demand in the absence of the program for this group. This result also suggests, but does not confirm, the possibility of racial discrimination in the absence of the YIEPP program. (See columns 1 and 2 of Table 5.7, and recall Figure 5.1.)

The other statistically significant effects are for white males during the school year and for Hispanic females during the summer. White males are present in our study sample in all eight sites, and we therefore have no reason to doubt these findings. Some white males did join YIEPP, probably because employment in the absence of the program was more difficult to find during the school year than during the summer. The absence of a statistically significant effect for white females is also understandable--these youths were the least likely to join the program.

The effects for Hispanics are less trustworthy, since almost all Hispanics were in Denver/Phoenix, and Denver's project was imperfectly implemented. However, the significant effect for Hispanic females can be understood in light of two general observations. First, Hispanics of both sexes were reasonably attracted to YIEPP. Second, female Hispanics, like females of all races in our sample, experienced particular difficulty finding employment in the absence of the program.

#### Net Job Creation

As discussed at the beginning of the chapter and portrayed in Figure 5.1, the difference between YIEPP program employment and its effect in increasing site-wide employment is the extent of displacement, that is, YIEPP funding of jobs that would have been available even in the absence of the program. The complement of the displacement rate is the net job creation rate, which is defined as the ratio of the YIEPP employment effect to YIEPP program employment. The net job creation rate measures the efficiency with which the YIEPP employment effect was achieved. If this

rate were equal to its maximum attainable value, 1.0, every YIEPP job hour would have led to a full one-hour increment for site-wide employment over the regular employment level in the absence of the program. If this rate were equal to its minimum, 0.0, there would have been no net job creation. YIEPP would have simply subsidized jobs available in any event. Between these two extremes, the net job creation rate measures the percent of each YIEPP employment hour that provided employment that would not have been otherwise available. This is a straightforward measure of program job creation efficiency.

Table 5.8 reports these net job creation rates for total and sectoral employment. For total employment, the school-year net job creation rate was 66.8 percent, and the summer net job creation rate was 43.5 percent, leading to an overall during-program average of 59.5 percent. Although the programs are not strictly comparable, it is instructive to note that the resulting displacement rate of 40.5 percent is higher than that of previous field-monitoring estimates of CETA Public Service Employment (PSE) (Nathan et al. (1981)). It is also lower than previous aggregate data econometric estimates of CETA (PSE) displacement (Johnson and Tomola (1977)). Of course, our estimates only measure YIEPP displacement for the target population, and so provide a lower bound on total YIEPP displacement. In addition, our estimates cover a different time period and, as noted, a different program. In particular, YIEPP, unlike CETA PSE during the 1970s, involved significant private sector job placement. As shown in Table 5.8, such private sector subsidized employment is apparently accompanied by higher displacement than is subsidized public sector employment.

The second panel of this table shows school-year private sector employment with a net job creation rate of 52.8 percent, 14 points below the overall school-year average. During the summer, net private sector job creation fell to 26.6 percent, leading to an overall private sector average of 44.9 percent. By contrast, net public sector job creation was 80.2 percent during the school year and 54.6 percent during the summer, for a public sector average of 71.5 percent.

Put in different terms, only 1.40 jobs had to be created or identified in the public sector in order to employ one YIEPP participant, while

Table 5.8. Net Job Creation, by Season and Period

	Program Effect on Employment/ Population Ratio <sup>a</sup>	Program Employment/ Population Ratio <sup>b</sup>	Net Job Creation Rate <sup>c</sup>
<u>A. Total Employment</u>			
<u>School year</u>			
Fall 1978	21.1	28.9	73.0
Spring 1979	23.0	31.7	72.6
Fall 1979	15.5	26.1	59.4
Spring 1980	15.7	26.1	60.2
School-year average <sup>d</sup>	18.9	28.3	66.8
<u>Summer</u>			
Summer 1978	14.6	28.4	51.4
Summer 1979	10.8	31.8	34.0
Summer 1980	10.1	21.1	47.9
Summer average <sup>d</sup>	11.8	27.1	43.5
<u>Total during-program average<sup>d</sup></u>	16.6	27.9	59.5
<u>B. Private Sector Employment</u>			
<u>School year</u>			
Fall 1978	3.7	6.0	61.7
Spring 1979	4.5	7.6	59.2
Fall 1979	3.2	7.5	42.7
Spring 1980	3.6	7.5	48.0
School-year average <sup>d</sup>	3.8	7.2	52.8
<u>Summer</u>			
Summer 1978	0.9	4.6	19.6
Summer 1979	- 0.1	7.7	- 1.3
Summer 1980	4.3	7.0	61.4
Summer average <sup>d</sup>	1.7	6.4	26.6
<u>Total during-program average<sup>d</sup></u>	3.1	6.9	44.9

Table 5.8. (Continued)

	Program Effect on Employment/ Population Ratio <sup>a</sup>	Program Employment/ Population Ratio <sup>b</sup>	Net Job Creation Rate <sup>c</sup>
<u>C. Public Sector Employment</u>			
<u>School year</u>			
Fall 1978	17.5	20.1	87.1
Spring 1979	18.3	21.8	83.9
Fall 1979	12.3	16.2	75.9
Spring 1980	12.1	16.4	73.8
School-year average <sup>d</sup>	15.0	18.7	80.2
<u>Summer</u>			
Summer 1978	13.4	20.5	65.4
Summer 1979	10.7	21.8	49.1
Summer 1980	5.9	12.8	46.1
Summer Average <sup>d</sup>	10.0	18.3	54.6
<u>Total during-program average</u>	13.3	18.6	71.5

<sup>a</sup> Reported in Tables 5.3 and 5.6.

<sup>b</sup> This is the employment/population ratio in program jobs; the average number of weeks spent by eligible youths in program jobs during each period divided by the number of weeks in that period. These ratios have been calculated from the data also used for the analyses reported in Chapter 3.

<sup>c</sup> Column 1 divided by column 2.

<sup>d</sup> These are averages of the period-specific ratios reported above, weighted by the length of each period.



2.23 such jobs had to be created in the private sector to employ one YIEPP participant.<sup>1</sup>

The message for policy seems clear. Private sector placements may lead to better postprogram outcomes than public sector placements, but private sector placements are achieved at a higher cost to the program budget because of displacement. There is a tradeoff between higher quality jobs (closer to "real" jobs rather than "make-work") and net job creation. (See also Ball and Wolfhagen (1981); Diaz and Ball (1982); and Welch et al. forthcoming.)

#### Program Effects on Labor Force Participation, Employment, and Unemployment Rates

Table 5.9 displays labor force participation, employment, and unemployment rates for pilot and control sites in the pre-program and during-program periods. The labor force participation rate is the percent of days employed or looking for work, and the employment and unemployment rates are, respectively, the share of these days spent at each activity. The general impression is one of increasing labor force participation and employment and decreasing unemployment for our sample over time, accompanied by a positive program effect on the former two rates, and a negative program effect on the latter rate. These effects are shown in Table 5.10.

Program Effects, Separately by Period. Table 5.10 shows a positive YIEPP labor force participation effect of 17.5 percentage points during the school year and 12.1 percentage points during the summer, for an overall effect of 15.7 percentage points, an effect statistically significant at better than the 1 percent level. This represents an increment of 44 percent over the labor force participation rate expected in the absence of the program.

As the table also shows, employment rate effects are large and positive, averaging 19.7 percentage points during the school year and 11.7 percentage points during the summer, for an overall average of 16.9 percentage points, an increment of 53 percent over the level expected in the absence of YIEPP.

---

<sup>1</sup>The 2.23 figure, for example, is calculated as follows:  $100.0/44.9 = 2.23$ .

Table 5.9. Average Labor Force Participation, Employment, and Unemployment Rates, by Pilot or Control Site and Period

	Labor force participation rate <sup>a</sup>		Employment rate <sup>b</sup>		Unemployment rate <sup>c</sup>		Sample Size	
	Pilot	Control	Pilot	Control	Pilot	Control	Pilot	Control
<u>Preprogram<sup>d</sup></u>								
Spring 1977	9.5	11.3	9.8	12.4	90.2	87.6	2,778	1,255
Summer 1977	35.7	39.8	29.7	35.4	70.3	64.6	2,778	1,255
Fall 1977	14.0	16.0	18.6	20.6	81.4	79.4	2,778	1,255
<u>During-program<sup>d</sup></u>								
Summer 1978	49.2	34.9	50.1	35.5	49.9	64.5	2,353	1,075
Fall 1978	46.7	27.2	45.2	24.1	54.8	75.9	2,652	1,188
Spring 1979	50.9	29.8	50.0	27.3	50.0	72.7	2,605	1,154
Summer 1979	54.6	43.3	53.7	45.0	46.3	55.0	2,362	1,015
Fall 1979	50.7	38.0	44.4	28.5	55.6	71.5	2,107	930
Spring 1980	52.8	38.8	48.5	32.9	51.5	67.1	2,000	890
Summer 1980	55.2	45.9	50.4	40.2	49.6	59.8	1,685	718
<u>Summary<sup>e</sup></u>								
<u>Preprogram</u>								
School-year average	11.5	13.4	20.7	25.0	79.3	75.0	---	---
Summer average	35.7	39.8	29.7	35.4	70.3	64.6	---	---
Total preprogram average	17.6	20.1	32.9	39.3	67.1	60.7	---	---
<u>During-program</u>								
School-year average	50.5	33.6	47.3	28.4	52.7	71.6	---	---
Summer average	52.9	41.3	51.3	40.2	48.6	59.7	---	---
Total during-program average	51.3	36.2	48.6	32.3	51.4	67.6	---	---

<sup>a</sup>The labor force participation rate is the number of weeks either employed or looking for work during a particular period, divided by the total number of weeks in that period. Unadjusted pilot and control site averages are reported in this table.

<sup>b</sup>The employment rate is the number of weeks employed during a particular period, divided by the number of weeks in the labor force (employed or looking for work) during that period.

<sup>c</sup>The unemployment rate is the number of weeks looking for work during a particular period, divided by the number of weeks in the labor force during that period.

<sup>d</sup>Preprogram unemployment (and, consequently, labor force participation) rates were measured differently from during-program rates. In the latter period each youth was questioned about job search for each of his nonemployment periods. In the earlier period, not employed youths who were enrolled in school were assumed to be not looking for work. As a result, when other things are equal, our during-program unemployment will be measured as higher than preprogram unemployment. However, since this will be true in both pilot and control sites in the preprogram period, it introduces no bias into program effect estimates.

<sup>e</sup>These are averages of the period-specific rates reported above, weighted by the length of each period.

**Table 5.10. Program Effects on Labor Force Participation,  
Employment, and Unemployment Rates**

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect a percent of rate in the absence the program
<b>A. Labor force participation rate<sup>c</sup></b>					
<u>School year</u>					
Fall 1978	3,840	46.7	26.5	20.2***	76.2
Spring 1979	3,759	50.9	29.1	21.8***	74.9
Fall 1979	3,037	50.7	37.7	13.0***	34.5
Spring 1980	2,890	52.8	38.2	14.6***	38.2
School-year average <sup>d</sup>	---	50.5	33.0	17.5***	53.0
<u>Summer</u>					
Summer 1978	3,428	49.2	34.4	14.8***	43.0
Summer 1979	3,377	54.6	43.0	11.6***	27.0
Summer 1980	2,403	55.2	45.2	10.0***	22.1
Summer average <sup>d</sup>	---	53.0	40.9	12.1***	29.6
Total during-program average <sup>d</sup>	---	51.3	35.6	15.7***	44.1
<b>B. Employment rate<sup>c</sup></b>					
<u>School year</u>					
Fall 1978	3,840	45.2	23.4	21.8***	93.2
Spring 1979	3,759	50.0	26.2	23.8***	90.8
Fall 1979	3,037	44.4	27.9	16.5***	59.1
Spring 1980	2,890	48.5	32.2	16.3***	50.6
School-year average <sup>d</sup>	---	47.3	27.6	19.7***	71.4

Table 5.10. (Continued)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect as a percent of ratio in the absence of the program
<u>Summer</u>					
Summer 1978	3,428	50.1	34.7	15.4***	44.4
Summer 1979	3,377	53.7	44.9	8.8***	19.6
Summer 1980	2,403	50.4	39.6	10.8***	27.3
Summer average <sup>d</sup>	---	51.4	39.7	11.7***	29.5
Total during-program average <sup>d</sup>	---	48.6	31.7	16.9***	53.3
<u>C. Unemployment rate<sup>c</sup></u>					
<u>School year</u>					
Fall 1978	3,840	54.8	76.6	-21.8***	-28.5
Spring 1979	3,759	50.0	73.8	-23.8***	-32.2
Fall 1979	3,037	55.6	72.1	-16.5***	-22.9
Spring 1980	2,890	51.5	67.8	-16.3***	-24.0
School-year average <sup>d</sup>	---	52.7	72.4	-19.7***	-27.2
<u>Summer</u>					
Summer 1978	3,428	49.9	65.3	-15.4***	-23.6
Summer 1979	3,377	46.3	55.1	- 8.8***	-16.0
Summer 1980	2,403	49.6	60.4	-10.8***	-17.9
Summer average <sup>d</sup>	---	48.6	60.3	-11.7***	-19.4
Total during-program average <sup>d</sup>	---	51.4	68.3	-16.9***	-24.7

<sup>a, b</sup> See notes to Table 5.2.

<sup>c</sup> See notes 1-4 of Table 5.9.

<sup>d</sup> These are averages of the period-specific rates reported above, weighted by the length of each period.

Unemployment.<sup>1</sup> Since the employment and unemployment rates must always sum to 1.0, any program effect on one of these quantities is necessarily accompanied by an equal and opposite program effect on the other. Accordingly, we find that YIEPP decreased school-year unemployment by 19.7 percentage points, and decreased summer unemployment by 11.7 percentage points, for an overall unemployment rate decrease of 16.9 percentage points. This lowered target population unemployment by 24.7 percent below the level expected in the absence of the program.

#### Program Effects for the 15- to 16-year-old Cohort

Table 5.11 shows that restricting the sample to the 15- to 16-year-old cohort increases labor force participation rate effects from 17.5 to 19.6 percentage points during the school year and from 12.1 to 13.7 percentage points during the summer. Employment rate effects increase from 19.7 to 22.5 percentage points during the school year, and from 11.7 to 12.5 percentage points during the summer. (Of course, unemployment rate effects change by equal and opposite amounts.)

When Denver and Phoenix are excluded, school-year labor force participation rate effects increase to 22.7 percentage points, and summer labor force participation rate effects increase to 17.7 percentage points, while school-year employment rate effects increase to 26.2 percentage points, and summer employment rate effects remain at 12.5 percentage points. (See Appendix A, Table A5.9.) Once again, we find a small but noticeable increase in the effect for the younger cohorts, which suggests that the program effect for an ongoing national program will have a large and significant effect on the target population of disadvantaged youth.

---

<sup>1</sup>Note again that the unemployment rate is the total weeks looking for work during a period divided by the total weeks in the labor force for that period. The measured unemployment rate is somewhat higher than that officially calculated by the Bureau of Labor Statistics, U.S. Department of Labor since job search is, in effect, smoothed over the entire period of labor force participation. The relative levels and absolute differences in the unemployment rate between pilot and the comparison sites should, however, be free of bias.

Table 5.11. Program Effects on Labor Force Participation, Employment, and Unemployment Rates for the 15- to 16-Year-old Cohort, Separately by Period

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program <sup>a</sup>	Program effect	Program effect as a percent of rate in the absence of the program
<u>A. Labor force participation rate</u>					
<u>School year</u>					
Fall 1978	2,005	43.0	20.3	22.7***	111.8
Spring 1979	2,053	47.8	25.0	22.8***	91.2
Fall 1979	1,920	51.0	35.0	16.0***	45.7
Spring 1980	1,914	53.4	36.7	16.7***	45.5
School-year average <sup>c</sup>	---	49.0	29.4	19.6***	66.7
<u>Summer</u>					
Summer 1978	1,515	47.5	30.2	17.3***	57.3
Summer 1979	1,980	53.9	41.5	12.4***	29.9
Summer 1980	1,685	55.7	44.5	11.2***	25.2
Summer average <sup>c</sup>	---	52.4	38.7	13.7***	35.4
Total during-program average <sup>c</sup>	---	50.1	32.5	17.6***	54.2
<u>B. Employment rate</u>					
<u>School year</u>					
Fall 1978	2,005	42.0	17.4	24.6***	141.4
Spring 1979	2,053	47.2	22.2	25.0***	112.6
Fall 1979	1,920	46.0	26.0	20.0***	76.9
Spring 1980	1,914	51.0	30.6	20.4***	66.7
School-year average <sup>4</sup>	---	46.8	24.3	22.5***	92.6

Table 5.11. (Continued)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program <sup>a</sup>	Program effect <sup>b</sup>	Program effect as a percent of rate in the absence of the program
<u>Summer</u>					
Summer 1978	1,515	48.6	31.8	16.8***	52.8
Summer 1979	1,980	54.2	46.6	7.6***	16.3
Summer 1980	1,685	52.3	39.2	13.1***	33.4
Summer average <sup>d</sup>	---	51.7	39.2	12.5***	31.9
Total during-program average <sup>d</sup>	---	48.5	29.3	19.2***	65.5
<u>Unemployment rate</u>					
<u>School year</u>					
Fall 1978	2,005	58.0	82.6	-24.6***	-29.8
Spring 1979	2,053	52.8	77.8	-25.0***	-32.1
Fall 1979	1,920	54.0	74.0	-20.0***	-27.0
Spring 1980	1,914	49.0	69.4	-20.4***	-29.4
School-year average <sup>d</sup>	---	53.2	75.7	-22.5***	-29.7
<u>Summer</u>					
Summer 1978	1,515	51.4	68.2	-16.8***	-24.6
Summer 1979	1,980	45.8	53.4	-7.6***	-14.2
Summer 1980	1,685	47.7	60.8	-13.1***	-21.5
Summer average <sup>d</sup>	---	48.3	60.8	-12.5***	-20.6
Total during-program average <sup>d</sup>	---	51.5	70.7	-19.2***	-27.2

<sup>a,b,c</sup> See notes to Table 5.3.

<sup>d</sup> These are averages of the period-specific rates reported above, weighted by the length of each period.

\*\*\* = significant at the 1 percent level.

Program Effects, Separately by Site. The total program labor force participation, unemployment, and employment rate results reported above generally replicate those for employment/population ratios. These are strong positive effects, with larger magnitudes during the school year than during the summer. Similarly, when these effects are examined separately by site, they generally replicate the site-specific results for the employment/population ratio. Thus, as shown in Appendix A, Table A5.5, labor force participation, employment, and unemployment rate effects are small, and not statistically significant for Denver. The other three sites show strong, positive and similar effects, the only departure from the pattern of previous results reported on the employment/population ratio being a somewhat smaller YIEPP labor force<sup>9</sup> participation effect in Cincinnati.

Program Effects, Separately by Race and Sex. Effects for race/sex subgroups also generally replicate those reported above. As shown in Appendix A, Tables A5.6, A5.7, and A5.8, very large and positive effects are found for black females and black males, with strong effects also for Hispanic females during the summer. Smaller effects are found for white and Hispanic males, and no significant effects are found for white females.

#### Employment/Population Ratios and Wage Rates for Employed Youths

Having found strong, positive, labor force and employment effects of the YIEPP program on the sample as a whole, it is useful to examine briefly the employment and wage characteristics of employed youths. As shown in Appendix A, Table A5.10, even in the absence of YIEPP (in the preprogram period and in control sites), period-specific employment/population ratios for youths employed at all during a particular period are quite high--in the 60 to 70 percent range. In the pilot sites during the program these ratios increase by an additional 5 to 10 percentage points. This suggests that the principal YIEPP employment effect acts through increasing the rate of transition from the "not employed" to the "employed" state, but that there is also an additional, though smaller, YIEPP effect in increasing the percent of time employed by working youths.

As for wage rate effects of the program, Table A5.11 in Appendix A suggests that these are minimal or nonexistent. During the program period, in both pilot and control sites, during the school year and the



summer, median wage rates are close to the minimum wage, with little evidence of an effect due to YIEPP. However, these wages are much more tightly clustered around the median for in-school than for out-of-school youths, suggesting that as target population youths age into their post-program period, greater wage variation will be evidenced. This will be explored in the Final Report to be completed in 1983.

#### Comparison with United States Average Employment and Unemployment Statistics

As is well known, employment and labor force activity rates often differ significantly across surveys, particularly for youths. (See Freeman and Medoff (1982).) In the interests of comparing our survey results with the Current Population Survey results used to report United States averages by the Bureau of Labor Statistics (BLS), we attempted to approximate BLS methodology with our data. That is, for all sample youths aged 16 to 19 (not just the program-eligible subgroup), we counted as employed those youths who reported working at all during the week that included the 12th day of October, 1978. From this we computed pilot and control site employment/population ratios for race/sex groups. Then, among youths not employed according to this measure, we counted as unemployed all those who reported looking for work during this or any of the preceding four weeks. From this we computed pilot and control site unemployment/population ratios for race/sex groups. (For a description of this methodology as applied by the Bureau of Labor Statistics, see the Appendix to any issue of Employment and Earnings.) Our results, along with those of the BLS, are reported in Table 5.12.

Comparing our control site results with BLS calculations of United States averages, we find generally the same race/sex pattern but different overall levels in the two sets of results. That is, both we and the BLS find the highest employment/population ratios for white males, followed in order by white females, black males, and black females. For unemployment/population ratios the order is reversed; the highest rates are for black females, followed by black males, white females, and white males. (We find higher unemployment for white females than for white males, however, whereas the BLS finds the reverse.)

Table 5.12. Employment/Population and Unemployment/Population  
Ratios for 16- to 19-year-old Youths by Race and Sex:  
YIEPP Sample and United States Averages for  
October 1978

	White males	Black males	White females	Black females
<u>Employment ratio<sup>a</sup></u>				
Pilot sites	47.4	41.9	29.2	38.7
Control sites	31.4	18.6	20.9	10.6
United States	54.9	28.1	48.7	22.1
<u>Unemployment ratio<sup>a</sup></u>				
Pilot sites	29.3	31.6	27.3	29.7
Control sites	18.6	41.4	28.7	45.6
United States	8.5	12.4	7.4	13.4

Note: To increase comparability with United States averages calculated from the Current Population Survey, employment/population and unemployment/population ratios were calculated for this table as follows. Attention is restricted to youths 16 to 19 years of age during the relevant period, who completed all three waves of the local field survey; this includes youths who were program ineligible due to high school graduation. A youth is considered to be employed if he worked at all during the week which included the 12th day of October 1978. Of not employed youths, those who looked for work during this or any of the preceding four weeks are considered to be unemployed. United States averages were calculated for the civilian population from statistics reported in the November, 1978 issue of Employment and Earnings. For blacks we use the statistics for "black and other."

<sup>a</sup>Because these employment/population and unemployment/population ratios have been specially calculated using a methodology designed to maximize comparability with national (CPS) statistics, they are not directly comparable with the other measures in this chapter. However, they could be used to calculate labor force participation, employment, and unemployment rates based on CPS methodology; e.g., labor force participation rate = employment/population ratio + unemployment/population ratio; employment rate = (employment/population ratio)/labor force participation rate; unemployment rate = (unemployment/population ratio)/labor force participation rate.

Our control site employment/population ratios are from 10 to 28 percentage points lower than those reported by the BLS, whereas our control site unemployment/population ratios are from 10 to 30 percentage points higher. Since our study sample was drawn from disadvantaged youths in weaker than average labor markets, these differences in level are in the direction expected. No doubt, however, they also contain at least some residual differences associated with different survey and measurement methodologies.

### Summary

The results of this chapter confirm that YIEPP exerted a very strong positive effect on the employment of target population youths in the sites where it was implemented. On average, the percent of time employed (employment/population ratio) by these youths during the school year increased from 21.5 to 40.4 percent, an 18.9 percentage point increase that represents an increment of 87.9 percent over the ratio expected in the absence of the program. During the summer, YIEPP increased the percent of time employed from 30.9 to 42.7 percent, an 11.8 percentage point increase representing an increment of 38.2 percent over the ratio expected in the absence of the program. Overall, YIEPP increased employment from 24.6 to 41.2 percentage points, an increment of 67.5 percent. Youths who aged through the program (the 15- to 16-year-old cohort) show somewhat stronger effects. Overall, these effects on 15- to 16-year-old youths suggest that an ongoing national program will have large and significant employment effects on disadvantaged youth.

YIEPP significantly increased private as well as public sector employment, although the public sector effects are very much the larger.

Employment effects are strongest for black females and black males, and are not statistically significant for white females.

Net job creation rates (the percent of YIEPP program employment hours that translated into net additions to the stock of employment opportunities) averaged 66.8 percent during the school year and 43.5 percent during the summer, for an overall average of 59.5 percent. That is, 1.68 jobs had to be identified or created in order to employ one YIEPP participant. This measure of program job creation efficiency results

as a weighted average of significantly higher efficiency in the creation of public sector jobs, and significantly lower efficiency in the creation of private sector jobs. Average net job creation rates were 44.9 percent in the private sector, and 71.5 percent in the public sector. Of course, these results may be particular to the time period and policy environment (program regulations and competing programs) of the demonstration.

YIEPP strongly increased pilot site labor force participation and employment rates, and strongly decreased pilot site unemployment rates. Overall, the provision of a guaranteed federal minimum wage job for youths meeting program requirements decreased job search by target population youths in the labor force from 70.7 to 51.5 percent, a 19.2 percentage point decrease that represents 27.2 percent of the rate in the absence of the program.

Finally, YIEPP exerted little discernible effect on wage rates during the program period.

In sum, YIEPP succeeded in dramatically increasing the employment experience of target population youths. The extent to which this experience translated into positive postprogram effects on employment and earnings will be investigated in the Final Report.

PROGRAM EFFECTS ON SCHOOL ENROLLMENT AND EMPLOYMENT,  
JOINTLY CONSIDERED

At the national policy-making level, two principal strategies have been considered to increase youth employment. The first, subsidized youth employment programs, typically at the federal minimum wage, have been implemented under many rubrics relatively continuously since the 1960s. Such programs have occasionally involved employment during the school year, but rarely with explicit attention to the potentially negative school enrollment effects of such employment.<sup>1</sup> The second, a youth subminimum wage, has been much discussed, but rarely with attention to the potentially negative school enrollment effects of such a policy.<sup>2</sup> A general youth subminimum wage has never been successfully passed into law.

Recently analysis has found evidence of school enrollment disincentive effects in response to increased employment demand for youths (Gustman and Steinmeyer (1981)). While this analysis does not directly measure the school enrollment disincentive effects of specific programs designed to increase the demand for youth labor, the implication of the analysis is clear--increased employment demand for youth in the absence of any institutional or program constraint to the contrary, will most likely result in reduced school enrollment.<sup>3</sup> In direct contrast, as will be seen below, YIEPP reverses this effect--inducing youths to remain in or return to school even while saturating the demand for jobs by these youths.<sup>4</sup>

<sup>1</sup> Programs that provided subsidized employment to youths during the school year include the Neighborhood Youth Corps, the Youth Conservation Corps, and the Youth Employment and Training Program.

<sup>2</sup> Exceptions include Welch (1974) and Mincer (1978).

<sup>3</sup> In particular, for youths aged 17 to 18 who are both in school and not in the labor force, a significant--more than 4.2 percentage point--reduction in the youth unemployment rate (used as a proxy for youth labor demand) decreased the school enrollment rate of nonwhite males about 1 percentage point and about 5 percentage points for nonwhite females. White males and females reduced their school enrollment rate between 3 and 4 percentage points. See Gustman and Steinmeyer (1981: p. 556).

<sup>4</sup> A study of the Job Corps, a residential subsidized employment program for disadvantaged youths, in which training and schooling is an integral part of the program, also found strong positive effects on both employment and high school graduation (Mallar et al. (1982)).

Against this background, the YIEPP success in linking school and work, inducing youths to be involved in both activities during the school year, takes on added importance. As mentioned above, the results of Chapters 4 and 5 suggest that the YIEPP program effect is similar to that of the Job Corps, acting positively on both school enrollment and employment. In this chapter, by analyzing school and work behavior jointly, we clarify that on a net basis, school enrollment is not sacrificed for the added benefit of working.

This is done by defining for each youth the time period in which he or she is eligible to participate in YIEPP according to the eligibility determinations employed in previous chapters. For each period, we then compute the percent of days the youth spent in each of the following school and work states: enrolled and employed, enrolled and not employed, not enrolled and employed, not enrolled and not employed. These variables for the during-program eligibility period form the outcome measures for the analysis.

#### Total Program Effects

Table 6.1 reports the total YIEPP effect on the percent of days spent by target population youths in each of the four school/work states. As in the analyses of Chapters 4 and 5, these are regression-adjusted mean differences; in this case the regression adjustment also accounts for the percent of preprogram days spent in each of the school/work states.

In the absence of the program, approximately equal shares of time during the program were spent enrolled and not employed, or not enrolled and not employed--38 percent in each case. (See column 2 of Table 6.1.) Fourteen percent of sample youths were not enrolled and not employed, and 10 percent of sample youths were both enrolled and employed. That is, without the program, slightly less in-school than out-of-school time is spent working. The YIEPP program changed this behavior significantly.

The largest program effect was to increase the percent of time spent both enrolled in school and employed. This rate increased by 13.2 percentage points, which was more than 100 percent of the 10.0 percent rate expected in the absence of the program. This effect was statistically significant at better than the 1 percent level and was, of course, exactly what was desired from YIEPP.

Table 6.1. Program Effects on the Percentage of Program-Eligible  
Time Spent in Different School and Employment States

Percentage of program-eligible time spent: <sup>a</sup>	Pilot site percentage	Estimated pilot site percentage in the absence of the program <sup>b</sup>	Program effect <sup>c</sup>	Program effect as a percent of the percentage in the absence of the program
Controlled, employed	23.2	10.0	13.2***	132.0
Controlled, not employed	28.2	38.0	- 9.8***	- 25.8
Treatment enrolled, employed	16.3	14.2	2.1	14.8
Treatment enrolled, not employed	32.3	37.8	- 5.5***	- 14.6

Note: The sample includes youths who have completed all three waves of the Local Field Survey. N=4033.

a. Youth's program-eligible period begins with January 1978 or the date he turns 16, whichever comes later, and ends with his graduation date, the date he turns 20, or the date of the Wave III interview, whichever comes first.

b. This is a regression-adjusted comparison site mean, fit at pilot site average personal characteristics and preprogram percentages of time spent in the school/employment states. For a discussion of this methodology see the text of Chapter 2. Means of the right hand side variables and the coefficient estimates are reported in Appendix A.

c. This is the difference between columns 1 and 2 with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

\*\*\* = significant at the 1 percent level.



Note that the increased time spent both enrolled and employed is subtracted from two other states: time spent enrolled and not employed decreased by 9.8 percentage points; and time spent not enrolled and not employed decreased by 5.5 percentage points. Both of these effects are statistically significant at better than the 1 percent level. They indicate that the program exerted a larger absolute effect in adding employment activity to time already occupied with schooling than in adding both schooling and employment to time previously unoccupied. However, in the current form, these changes in activity should not be taken as measuring effects for in-school youths and dropouts, since time spent not enrolled and not employed is at least partly accounted for by the summers of in-school youths. When the effects in Table 6.1 are added together so as to provide summary effect measures for either schooling or work, the results closely approximate those already reported in Chapters 4 and 5. Finally, the third row of this table shows no statistically significant program effect on the percent of time not enrolled but employed. The small (2.1 percentage point) increase in this state is due primarily to the increased summer employment of in-school youths.

#### Program Effects by Primary School and Work Status in the PreProgram Period

Table 6.2 presents these effects separately for subgroups defined by the school/work category in which the youth spent the greatest amount of his or her time during the preprogram period. This results in four subgroups:

- Panel A: Youths primarily enrolled and employed in the preprogram period; youths already involved in the desired program activity (joint school and work) prior to the program.
- Panel B: Youths primarily in school but not employed in the preprogram period--the great majority of youths.
- Panel C: Youths primarily not enrolled but employed in the preprogram period; out-of-school youths who have successfully found employment prior to the program.
- Panel D: Youths passing most of their time neither in school nor employed prior to the program--the "hard core" cases at which the program is particularly targeted.

For each of these groups, we estimate the program impact on the percent of time spent in each of the school/work states during the program.



**Table 6.2. Program Effects on the Percentage of Program-Eligible  
Time Spent in Different School and Employment States,  
by Primary State in the Preprogram Period**

percentage of program- eligible time spent:	Pilot site percentage	Estimated pilot site percentage in the absence of the program	Program effect	Program effect as a percent of the percentage in the absence of the program
<u>Youths primarily enrolled and employed in the preprogram period (N=194)</u>				
Enrolled, employed	36.9	25.2	10.7**	40.8
Enrolled, not employed	24.6	27.7	- 3.1	- 11.2
Not enrolled, employed	19.3	20.8	- 1.5	7.2
Not enrolled, not employed	19.2	25.3	- 6.1*	- 24.1
<u>Youths primarily enrolled and not employed in the preprogram period (N=2,995)</u>				
Enrolled, employed	26.5	9.9	16.6***	167.7
Enrolled, not employed	33.6	46.8	-13.2***	- 28.2
Not enrolled, employed	14.2	11.8	2.4***	20.3
Not enrolled, not employed	25.7	31.5	- 5.8***	- 18.4

Table 6.2. (Continued)

percentage of program-eligible time spent:	Pilot site percentage	Estimated pilot site percentage in the absence of the program	Program effect	Program effect as a percent of the percentage in the absence of the program
<u>Youths primarily not enrolled and employed in the preprogram period (N=147)</u>				
Enrolled, employed	4.8	4.4	0.4	9.1
Enrolled, not employed	6.3	5.9	0.4	6.8
Not enrolled, employed	48.1	51.8	- 3.7	- 7.1
Not enrolled, not employed	40.8	37.9	2.9	7.7
<u>Youths primarily not enrolled and not employed in the pre-program period (N=697)</u>				
Enrolled, employed	8.3	4.6	3.7***	80.4
Enrolled, not employed	9.4	9.9	- 0.5	- 5.1
Not enrolled, employed	18.7	15.4	3.3*	21.4
Not enrolled, not employed	63.6	70.1	- 6.5***	- 9.3

See notes to Table 6.1. A youth's preprogram period begins with January, 1977 and ends with December, 1977 or the date the youth turns 16, whichever comes later. The primary school/employment state in the preprogram period is the state in which the youth spent most of his or her time.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.

Reading the first row of panels (A) through (D) we find a positive YIEPP effect of 10.7 percentage points for group (A), 16.6 percentage points for group (B), 0.4 percentage points for group (C), and 3.7 percentage points for group (D). The first, second, and fourth of these are statistically significant, and indicate effects that are largest in absolute value for previously in-school youths.

Expressing these effects as a percent of the rate expected in the absence of the program, the strongest effects are for youths enrolled and not employed in the preprogram period (group B) and for youths not enrolled and not employed in the preprogram period (group D). The effect on this hard core group is noteworthy as an indication of the program's ability to reach the most critical group in the target population. Also noteworthy is the lack of any statistically significant program effect on group C--youths not enrolled but employed in the preprogram period. It is exactly these individuals who have the least to gain from YIEPP.

The second row of these panels--enrolled, not employed--generally shows a negative program effect, but this is statistically significant only in panel B and represents appropriate behavior relative to the YIEPP design. Not surprisingly, among youths primarily enrolled and employed in the preprogram period, the percent of time spent in this status is strongly decreased by the availability of the YIEPP job offer.

The third row of these panels shows a statistically significant increase in panels B and D. This is largely due to increased summer employment under YIEPP.

Finally, the fourth row of these panels--not enrolled, not employed--shows a relatively large and statistically significant negative effect in panels A, B, and D. That is, the program decreased the percentage of time spent neither enrolled nor employed by approximately 6 percentage points.<sup>1</sup> In conjunction with the increase in the first row of these panels, this finding provides an important summary of the YIEPP effect. That is, as a consequence of the program, target population youths spent more time engaged in both school and work, and less time engaged in neither of these activities. These effects are generally true of all

---

<sup>1</sup>This is estimated as the effect for each youth subgroup, weighted by the relative size of that subgroup.

youths, with the exception of youths primarily out-of-school and employed in the preprogram period. In short, there was no net trade-off between school and work due to YIEPP.

#### Summary

These findings suggest that YIEPP exerted positive effects on school enrollment and employment, jointly considered. The program, thus, generally resembles the Job Corps in acting positively on both schooling and employment, and resembles less closely simple demand side policies (such as a youth subminimum wage), which may exert some negative effects on school enrollment.

Overall, YIEPP increased the percent of time enrolled and employed by 13.2 percentage points--and decreased the percent of time enrolled and not employed, as well as not enrolled and not employed, by 9.8 and 5.5 percentage points, respectively. Relatively large and statistically significant effects in increasing the percent of time both enrolled and employed and decreasing the time engaged in neither of these activities occurred across all preprogram school/work statuses, with the exception of youths primarily not enrolled but employed in the preprogram period. For this latter group, there were no statistically significant program effects of any kind.

## References

- Ball, Joseph, David M. Gerould and Paul Burstein. The Quality of Work in the Youth Entitlement Demonstration. New York, NY: Manpower Demonstration Research Corporation. 1980.
- Barclay, Suzanne, et al. Schooling and Work among Youths from Low-Income Households: A Baseline Report from the Entitlement Demonstration. New York, NY: Manpower Demonstration Research Corporation. 1979.
- Brown, George H., et al. The Condition of Education for Hispanic Americans. Washington, D.C.: The National Center for Education Statistics. February 1980.
- Congressional Budget Office. Youth Unemployment: The Outlook and Some Policy Strategies. Washington, D.C.: U.S. Government Printing Office. April 1978.
- Congressional Budget Office. Improving Youth Employment Prospects: Issues and Options. Washington, D.C.: U.S. Government Printing Office. February 1982.
- Cook, Robert F. Implications of Alternative Designs of Programs of Public Service Employment. Princeton, NJ: Princeton University. Princeton Urban and Regional Research Center. mimeo. December 1981.
- Corcoran, Mary. "The Employment and Wage Consequences of Teenage Women's Nonemployment" in Freeman and Wise (1982).
- Diaz, William A., et al. The Youth Entitlement Demonstration, Second Interim Report on Program Implementation. New York, NY: Manpower Demonstration Research Corporation. March 1980.
- . Finding School and Work for Disadvantaged Youths. The YIEPP Demonstration: Final Implementation Report. New York, NY: Manpower Demonstration Research Corporation. 1982.
- Economic Report of the President, January 1981. Washington, D.C.: U.S. Government Printing Office. 1981.
- Ehrenberg, Ronald G. and Alan J. Marcus. "Minimum Wages and Teenagers' Enrollment-Employment Outcomes: A Multinomial Logit Model." The Journal of Human Resources. Vol. XVII. No. 1. Winter 1982.
- Elwood, David T. "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" in Freeman and Wise (1982).
- Farkas, George, et al. Early Impacts from the Youth Entitlement Demonstration. Participation, Work and Schooling. New York, NY: Manpower Demonstration Research Corporation. November 1980.
- Farkas, George, Randall J. Olsen and Ernst W. Stromsdorfer. "Youth Labor Supply during the Summer: Evidence for Youths from Low-Income Households" in Ronald G. Ehrenberg, editor. Research in Labor Economics. Volume 4. Greenwich, CT: JAI Press Inc. 1981.

~~Farkas, George and Ernst W. Stromsdorfer, editors. Evaluation Studies Review Annual. Volume 5. Beverly Hills, CA: SAGE Publications. 1980.~~

Farkas, George and Ernst W. Stromsdorfer. Comment on Albert Rees and Wayne Grey. "Family Effects in Youth Employment," in Freeman and Wise (1982).

Freeman, Richard B. and James L. Medoff. "Why Does the Rate of Youth Labor Force Activity Differ across Surveys?" in Freeman and Wise (1982).

Freeman, Richard B. and David A. Wise, editors. The Youth Labor Market Problem: Its Nature, Causes, and Consequences. Chicago, IL: University of Chicago Press. 1982.

Grant, W. Vance and Leo J. Eiden. Digest of Education Statistics, 1979, 1980 and 1981. National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office. 1980, 1981, and 1982, respectively.

Gustman, Alan L. and Thomas L. Steinmeier. "The Impact of Wages and Unemployment on Youth Enrollment and Labor Supply." The Review of Economics and Statistics. Vol. 63. No. 4. November 1981.

Jerrett, Robert, III et al. The Youth Entitlement Survey. New York, NY: The Manpower Demonstration Research Corporation. Draft Final Report. June 24, 1982.

Johnson, George E. and James D. Tomola. "The Fiscal Substitution Effect of Alternative Approaches to Public Service Employment Policy." The Journal of Human Resources. Vol. XII. No. 1. Winter 1977.

Mallar, Charles, Stuart Kerachsky and Craig V.D. Thornton. Evaluation of the Economic Impact of the Job Corps Program. Third Follow-up Report. Princeton, NJ: Mathematica Policy Research, Inc. May 1982.

Manpower Demonstration Research Corporation. The Youth Entitlement Demonstration: An Interim Report on Program Administration. New York, NY: MDRC. April 1979.

Mincer, Jacob. "Effects of Minimum Wages on Employment, Unemployment, and the Skill Formation of Youths." Department of Economics. Columbia University. New York, NY: mimeo. September 1978.

Nathan, Richard P., et al. Public Service Employment: A Field Evaluation. Washington, D.C.: The Brookings Institution. 1981.

New England Council of CETA Prime Sponsors. "Comparative Analysis of Proposed Legislation." Hartford, CT: Training and Employment OVERVIEW. Vol. IV. No. 1. February 1982.

Stevenson, Wayne. "The Relationship between Youth Employment and Future Employability and Earnings," in Naomi Berger Davidson, editor. Supplementary Papers from the Conference on Youth Employment: Its Measure and Meaning. Washington, D.C.: U.S. Department of Labor. Employment and Training Administration. Office of Youth Programs. October 1978.

~~Stromsdorfer, Ernst W.~~ "The Effectiveness of Youth Programs: An Analysis of the Historical Antecedents of Current Youth Initiatives," in Bernard E. Anderson and Isabel V. Sawhill, editors. Youth Employment and Public Policy. Englewood Cliffs, NJ: Prentice Hall, Inc. 1980.

U.S. Congress. Comprehensive Employment and Training Act. Amendments of 1978. Public Law 95-524. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Commerce. Bureau of the Census. City and County Data Book. 1977. Washington, D.C.: U.S. Government Printing office. May 1978.

U.S. Department of Commerce. Bureau of the Census. School Enrollment-- Social and Economic Characteristics of Students: October 1978. Current Population Reports. Series P-20. Nos. 333, 346 and 365. 1978, 1979, and 1980, respectively.

U.S. Department of Labor. Employment and Training Report of the President, 1981. Washington, D.C.: U.S. Government Printing office. 1981.

~~U.S. Department of Labor.~~ Bureau of Labor Statistics. Supplement to Employment and Earnings, Data for 1977-80. BLS Bulletin 1370-15. Washington, D.C.: U.S. Government Printing Office. September 1981.

U.S. General Accounting Office. Labor Market Problems of Teenagers Result Largely from Doing Poorly in School. B-163922. PAD-82-06. Gaithersburg, MD: U.S. General Accounting Office. Document Handling and Information Services Facility. March 29, 1982.

Welch, Finis. "Minimum Wage Legislation in the United States." Economic Inquiry. Vol. 12. September 1974.

APPENDIX A

Supplementary Impact Tables



Table A3.1. Correspondence of Entitlement Information System (EIS)  
and Local Field Survey (LFS) Measures of Program Participation

Ever a participant in YIEPP, Spring 1978 through Summer 1979:<sup>a</sup>

		According to LFS: <sup>c</sup>		
		No	Yes	
According to program (EIS): <sup>b</sup>	No	43.7	4.9	
	Yes	6.9	44.5	51.4
		49.4		100.0

<sup>a</sup>The sample includes pilot site youths who were ever program-eligible, Spring 1978 through Summer 1979, and who completed the first two waves of the local field survey (N = 3,219).

<sup>b</sup>Sample members were considered participants if they were enrolled in the YIEPP management information system (EIS) and worked at a program job.

<sup>c</sup>Participants are youths reporting that a job they held (for at least two weeks) was sponsored by YIEPP or had school performance requirements such as those imposed by the program.

Table A3.2. Program Participation Rates by Race, Sex and Period

	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
Male	23.7 (980)	32.8 (1,092)	31.9 (1,234)	35.5 (1,219)	37.2 (1,117)	28.1 (1,017)	30.1 (964)	28.3 (819)
Female	25.8 (1,152)	33.9 (1,261)	36.5 (1,418)	39.8 (1,386)	40.3 (1,245)	31.7 (1,090)	33.9 (1,036)	28.5 (866)
White	7.9 (241)	9.5 (262)	12.5 (289)	13.9 (281)	10.5 (247)	9.3 (227)	10.6 (208)	10.1 (168)
Black	28.0 (1,670)	37.9 (1,847)	39.0 (2,084)	42.4 (2,059)	44.0 (1,865)	34.3 (1,657)	37.1 (1,579)	32.8 (1,324)
Hispanic	19.0 (221)	25.0 (244)	22.9 (279)	27.2 (265)	28.0 (250)	18.4 (223)	16.0 (213)	14.5 (193)
White male	7.8 (102)	12.3 (114)	15.8 (127)	14.3 (126)	11.5 (113)	9.3 (107)	10.4 (96)	10.1 (79)
White female	7.9 (139)	7.4 (148)	9.9 (162)	13.6 (155)	9.7 (134)	9.2 (120)	10.7 (112)	10.1 (89)
Black male	26.9 (771)	37.1 (858)	35.4 (975)	39.1 (967)	41.5 (887)	31.5 (807)	34.0 (768)	32.0 (653)
Black female	29.0 (899)	38.6 (989)	42.1 (1,109)	45.3 (1,092)	46.3 (978)	37.1 (850)	40.0 (811)	33.5 (671)
Hispanic male	15.9 (107)	21.7 (120)	22.0 (132)	29.4 (126)	29.1 (117)	21.4 (103)	19.0 (100)	17.2 (87)
Hispanic female	21.9 (114)	28.2 (124)	23.8 (147)	25.2 (139)	27.1 (133)	15.8 (120)	13.3 (113)	12.3 (106)

e: These figures include youths from all four pilot sites. The program participation rate is number of youths ever holding a program job in a particular period divided by the number program-eligible. See note to Table 3.1 for definitions. Numbers of eligible youths are shown in parentheses.

**Table A3.3. Estimates of Annual Program Participation  
in an Ongoing Program**

**A. Estimated experiences of a cohort of 1,000 youths aging through the program<sup>a</sup>**

<u>For the year starting at age</u>	<u>Number of eligibles<sup>b</sup></u>	<u>Number of participants<sup>c</sup></u>	<u>Number of full-time equivalent participants</u>
16	1,000	573	369
17	992	534	361
18	732	272	178
19	568	103	58

**B. With cohorts of equal size, a population of 1,000 youths age 16 through 19 would have an estimated<sup>d</sup>**

number of eligibles per year	823
number of participants per year	371
number of full-time equivalent participants per year	242

**C. Estimated from actual participation rates for eligible youths, by cohort, for the two years beginning in Fall 1978, as follows**

<u>Age of youth in Fall 1978</u>	<u>Fall 1978 - Summer 1979</u>	<u>Fall 1979 - Summer 1980</u>
<u>Participants/eligibles</u>		
16	57.3	51.5
17	56.0	34.6
18	39.6	18.1
<u>Full time equivalent participants/eligibles:</u>		
16	36.9	34.1
17	38.7	22.1
18	26.5	10.2

<sup>a</sup> All estimates are based upon three site averages, excluding Denver, using the sample of youths completing all three waves of the local field survey.

<sup>b</sup> Estimated from the cohort of youths turning 16 in Fall 1977, using the proportions of youths who had not graduated from high school or completed the GED in Fall 1978, Fall 1979 and Fall 1980.

<sup>c</sup> To simulate the number of participants for a cohort aging through the program (column 3 in panel A), the following participants/eligibles rates were multiplied times the number of eligibles in column 2: 16 year olds - 57.3, 17 year olds - 53.8 (average of 51.5 and 56.0), 18 year olds - 37.1 (average of 34.6 and 39.6) and 19 year olds - 18.1. The following full-time equivalent participants/eligibles rates were multiplied by the number of eligibles to form column 4: 16 year olds - 36.9, 17 year olds - 36.4 (average of 34.1 and 38.7), 18 year olds - 24.3 (average of 22.1 and 26.5), and 19 year olds - 10.2.

<sup>d</sup> If the cohorts are of equal size, the numbers of eligibles and participants are the sum of the columns in panel A divided by 4.

Table A4.1. School Enrollment Rates for the 16- to 19-year-old  
Youths by Race and Sex: YIEPP Sample and  
United States Averages for October 1978

	Pilot sites <sup>a</sup>	Control sites	United States <sup>b</sup>
White male	46.0 (115)	34.8 (104)	65.0
Black male	67.4 (896)	59.4 (344)	73.1
Hispanic male	51.9 (120)	49.8 (56)	56.9
White female	45.6 (154)	33.4 (115)	58.8
Black female	68.2 (1024)	57.3 (418)	65.0
Hispanic female	51.3 (131)	50.5 (54)	53.8

Note: The school enrollment rate is defined as the percentage of youths without a high school diploma or GED certificate who are enrolled in school. To adjust for differences in the age distribution between the YIEPP sample and the United States population, school enrollment rates were calculated separately by year of age (by the 16 to 17 and 18 to 19 age groups for the U.S. data) and averaged.

<sup>a</sup>The sample includes youths who have completed all three waves of the local field survey. Sample sizes are in parentheses.

<sup>b</sup>United States rates were calculated from the data in the Current Population Reports (U.S. Department of Commerce, Bureau of the Census), Series P-20, Nos. 333, 346, and 365.

**Table A4.2. Total School Enrollment Rates  
by Site, Race and Sex**

	Preprogram		During-program			
	Fall 1977		Fall 1978		Fall 1979	
	Pilot	Control	Pilot	Control	Pilot	Control
All youths	84.2 (2,778)	80.9 (1,255)	73.6 (2,652)	66.0 (1,188)	61.2 (2,107)	56.7 (930)
Denver/Phoenix	79.1 (487)	76.2 (185)	67.0 (475)	63.7 (179)	52.2 (372)	47.8 (134)
Cincinnati/Louisville	83.1 (692)	73.9 (456)	72.5 (658)	55.5 (427)	62.7 (541)	50.6 (340)
Baltimore/Cleveland	86.2 (1,060)	89.3 (317)	74.7 (1,002)	73.4 (297)	64.1 (794)	63.4 (243)
Mississippi	86.1 (539)	85.5 (297)	78.9 (517)	75.4 (285)	62.0 (400)	64.3 (213)
Male	86.0 (1,290)	83.2 (577)	72.7 (1,234)	66.1 (542)	58.9 (1,017)	59.0 (446)
Female	82.6 (1,488)	78.9 (678)	74.3 (1,418)	65.9 (646)	63.3 (1,090)	54.6 (484)
White	69.0 (303)	66.4 (250)	56.8 (289)	44.5 (236)	42.7 (227)	27.8 (180)
Black	87.4 (2,190)	85.8 (883)	77.8 (2,084)	73.4 (833)	66.1 (1,657)	66.2 (656)
Hispanic	75.4 (285)	74.6 (122)	59.1 (279)	57.1 (119)	44.0 (223)	45.7 (94)

Note: Percent of youths enrolled at all in a program leading to a regular high school diploma or GED certificate. The sample includes youths who have completed three waves of the local field survey and were eligible for the program during the period in question. Number of eligible youths in parentheses.

Table A4.3. Total School Enrollment Rates  
for the 15- to 16-year-old Cohort by Site, Race and Sex

	Preprogram		During-program			
	Fall 1977		Fall 1978		Fall 1979	
	Pilot	Control	Pilot	Control	Pilot	Control
All youths	96.3 (1,435)	95.7 (648)	88.2 (1,377)	82.3 (628)	75.7 (1,322)	69.4 (598)
Denver/Phoenix	95.5 (243)	91.8 (98)	88.0 (241)	79.2 (96)	69.9 (229)	63.6 (88)
Cincinnati/Louisville	95.6 (364)	95.5 (221)	88.6 (351)	73.2 (216)	78.8 (339)	61.0 (213)
Baltimore/Cleveland	97.5 (529)	98.8 (165)	86.2 (500)	92.3 (156)	76.4 (491)	78.6 (154)
Mississippi	95.7 (299)	95.1 (164)	91.6 (285)	86.9 (160)	75.7 (263)	75.5 (143)
Male	97.1 (656)	97.4 (302)	87.0 (632)	81.4 (290)	73.5 (627)	69.8 (285)
Female	95.6 (779)	94.2 (346)	89.3 (745)	83.1 (338)	77.7 (695)	69.0 (313)
White	89.4 (151)	90.2 (123)	81.0 (147)	62.5 (120)	60.4 (139)	40.0 (110)
Black	97.5 (1,147)	98.1 (464)	90.2 (1,095)	89.3 (448)	79.5 (1,051)	78.3 (429)
Hispanic	94.2 (137)	88.5 (61)	80.0 (135)	70.0 (60)	61.4 (132)	59.3 (59)

Note: Percent of youths enrolled at all in a program leading to a regular high school diploma or GED certificate. The sample includes youths who have completed three waves of the local field survey, who were 15 or 16 in June 1978, and who were eligible for the program during the period in question. Number of eligible youths in parentheses.

Table A4.4. Program Effects on Enrollment, Dropout, and  
Return-to-School Rates for the 15- to 16-year-old Cohort  
(Excluding the Denver and Phoenix Sites)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as percent of rate in the absence of the program
School enrollment rates:					
Fall 1978	1655	88.3	84.6	3.7**	4.4
Fall 1979	1591	76.8	73.6	3.2*	4.3
Dropout rates:					
Fall 1978	1593	9.3	12.5	- 3.2**	-25.6
Fall 1979	1365	16.0	15.6	0.4	2.6
Return-to-school rates:					
Fall 1978	62	26.7	6.5	20.2*	310.7
Fall 1979	226	26.8	14.3	12.5**	87.4

notes to Table 4.2 and 4.3. The sample is restricted to white and black youths from all sites but Denver and Phoenix who were 15 or 16 in June, 1978.

\* = significant at the 10 percent level.  
 \*\* = significant at the 5 percent level.

**Table A4.5. Program Effects on Total School Enrollment in Fall 1978 and Fall 1979 for the 15- to 16-Year-old Cohort**

**A. Pilot site total school enrollment rates**

<u>Enrolled Fall 1977</u>		no		yes	
<u>Enrolled Fall 1978</u>		no	yes	no	yes
<u>Enrolled Fall 1979</u>	no	63.2	15.2	7.3	15.2
	yes	3.2	18.4	3.3	74.2
		33.6		89.4	
		100.0		100.0	

**B. Estimated pilot site school enrollment rates in the absence of the program<sup>a</sup>**

<u>Enrolled Fall 1977</u>		no		yes	
<u>Enrolled Fall 1978</u>		no	yes	no	yes
<u>Enrolled Fall 1979</u>	no	83.3	3.3	12.1	13.9
	yes	11.7	1.7	2.4	71.6
		5.0		85.5	
		100.0		100.0	

**C. Program effects on total school enrollment rates<sup>b</sup>**

<u>Enrolled Fall 1977</u>		no		yes	
<u>Enrolled Fall 1978</u>		no	yes	no	yes
<u>Enrolled Fall 1979</u>	no	-20.1	11.9	-4.8	1.3
	yes	-8.5	16.7	0.9	2.6
		28.6		3.9	
		0.0		0.0	
		(N=79)		(N=1,766)	

Note: The sample is restricted to youths who were 15 or 16 in June, 1978 and who were program-eligible in both the fall of 1978 and the fall of 1979.

<sup>a</sup> A bivariate probit model of enrollment in the two periods was estimated separately for youths enrolled and not enrolled in the fall of 1977. Right hand side variables included a pilot site dummy variable, age in months, dichotomous variables for race/sex groups, and highest grade completed as of Summer 1977. In addition, the correlation parameter was allowed to differ for pilot and control sites. The rates reported in panel B are fitted values from this model, using the pilot site mean personal characteristics. Means and coefficients are reported in Appendix B4.

<sup>b</sup> Program effects are the difference between the enrollment rates in panel A and panel B.



Table A5.1. Sample Sizes (Number of Program Eligible Youths)  
for the Program Effect Estimates of Table 5.4

	Denver/ Phoenix	Cincinnati/ Louisville	Baltimore/ Cleveland	Mississippi Pilot/Control
Fall 1978	654	1,085	1,299	804
Spring 1979	626	1,054	1,279	802
Fall 1979	506	881	1,037	615
Spring 1980	485	833	992	582
Summer 1978	578	976	1,170	706
Summer 1979	571	957	1,204	647
Summer 1980	418	711	884	392

Table A5.2. Average Employment/Population Ratios, by Sector,  
Pilot or Control Site, and Period

	Private Sector		Public Sector		Sample Size	
	Pilot	Control	Pilot	Control	Pilot	Control
<u>Preprogram</u>						
Spring 1977	5.6	5.9	1.4	1.7	2,778	1,255
Summer 1977	10.7	15.8	12.0	10.4	2,778	1,255
Fall 1977	7.9	10.4	2.8	2.3	2,778	1,255
<u>During-program</u>						
Summer 1978	16.3	17.3	24.3	9.2	2,353	1,075
Fall 1978	16.3	14.1	22.0	3.5	2,652	1,188
Spring 1979	18.6	15.4	23.7	4.4	2,605	1,154
Summer 1979	21.3	22.7	23.9	11.8	2,362	1,015
Fall 1979	21.5	19.4	17.6	4.6	2,107	930
Spring 1980	22.8	20.6	18.5	5.6	2,000	890
Summer 1980	26.1	23.7	16.2	9.1	1,685	718

Summary<sup>a</sup>

Preprogram

School-year average	6.6	7.9	2.0	1.9	---	---
Summer average	10.7	15.8	12.0	10.4	---	---
Total preprogram average	7.6	9.9	4.5	4.0	---	---

During-program

School-year average	19.9	17.4	20.5	4.6	---	---
Summer average	21.2	21.2	21.5	10.0	---	---
Total during-program average	20.3	18.7	20.8	6.4	---	---

Note: The sample includes youths who have completed all three waves of the local field survey and are eligible for the program during the period in question. See Chapter 2 for further details. The employment/population ratio is the number of weeks employed during a particular period, divided by the total number of weeks in that period. This provides an estimate of the "steady state" employment/population ratio for the period. Unadjusted pilot and control site averages are reported in this table.

<sup>a</sup>These are averages of the period-specific ratios reported above, weighted by the length of each period.

Table A5.3. Sample Sizes (Number of Program Eligible Youths)  
for the Program Effect Estimates of Table 5.6

	Males			Females		
	White	Black	Hispanic	White	Black	Hispanic
Fall 1978	239	1,349	188	286	1,568	210
Spring 1979	232	1,331	180	274	1,542	200
Fall 1979	194	1,121	148	213	1,192	169
Spring 1980	178	1,067	144	201	1,140	160
Summer 1978	217	1,208	169	263	1,396	175
Summer 1979	206	1,226	166	233	1,362	184
Summer 1980	149	903	121	160	925	145

230

Table A5.4. Program Effects on Employment/Population Ratios for the 15-to 16-year-old Cohort,  
Excluding Denver and Phoenix, Separately by Period

	Sample size	Pilot site ratio	Estimated pilot site ratio in the absence <sup>a</sup> of the program	Program effect <sup>b</sup>	Program effect as a percent of ratio in the absence of the program
<u>School-year</u>					
Fall 1978	1,668	34.0	9.1	24.9***	273.6
Spring 1979	1,714	39.1	12.1	27.0***	223.1
Fall 1979	1,603	41.7	18.6	23.1***	124.2
Spring 1980	1,600	44.4	21.1	23.3***	110.4
School-year average <sup>c</sup>	---	40.0	15.4	24.6***	159.7
<u>Summer</u>					
Summer 1978	1,264	37.6	21.2	16.4***	77.4
Summer 1979	1,652	45.5	31.8	13.7***	43.1
Summer 1980	1,402	43.8	30.6	13.2***	43.1
Summer average <sup>c</sup>	---	42.3	27.9	14.4***	51.6
Total during-program average <sup>c</sup>	---	40.8	19.5	21.3***	109.2

<sup>a</sup>This is a regression-adjusted, comparison site mean, fit at pilot site average personal characteristics and preprogram employment. Means of the right-hand-side variables and regression coefficient estimates are reported in Appendix B.

<sup>b</sup>This is the difference between columns 2 and 3, with statistical significance computed from the t-statistic on the pilot site dummy variable regression coefficient.

<sup>c</sup>These are averages of the period-specific ratios reported above, weighted by the length of each period.

\*\*\* = significant at the 1 percent level.

**Table A5.5. Program Effects on Labor Force Participation, Employment, and Unemployment Rates during the Total Program Period, Separately by Site**

	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<u>Denver</u>				
Labor force participation rate	48.8	44.0	4.8	10.9
Employment rate	52.1	47.7	4.4	9.2
Unemployment rate	47.9	52.3	-4.4	-8.4
<u>Cincinnati</u>				
Labor force participation rate	42.8	33.9	8.9***	26.3
Employment rate	43.3	26.9	16.4***	61.0
Unemployment rate	56.7	73.1	-16.4***	-22.4
<u>Baltimore</u>				
Labor force participation rate	57.8	41.0	16.8***	41.0
Employment rate	53.6	35.5	18.1***	51.0
Unemployment rate	46.4	64.5	-18.1***	-28.1
<u>Mississippi</u>				
Labor force participation rate	45.6	27.0	18.6***	68.9
Employment rate	42.6	25.4	17.2***	67.7
Unemployment rate	57.4	74.6	-17.2	-23.1

See notes a and b to Table 5.3.

\*\*\* = significant at the 1 percent level.

**Table A5.6. Program Effects on Labor Force Participation Rates,  
Separately by Period, Sex, and Race**

	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<b>White male</b>				
School-year average <sup>a</sup>	57.8	48.1	9.7*	20.2
Summer average <sup>a</sup>	59.3	54.5	4.8	8.8
Total during-program average <sup>a</sup>	58.6	50.2	8.4*	16.7
<b>Black male</b>				
School-year average	54.3	33.9	20.4***	60.2
Summer average	58.0	44.2	13.8***	31.2
Total during-program average	55.5	37.4	18.1***	48.4
<b>Hispanic male</b>				
School-year average	59.2	55.6	3.6	6.5
Summer average	62.9	60.1	2.8	4.7
Total during-program average	60.4	57.1	3.3	5.8
<b>White female</b>				
School-year average	36.9	32.5	4.4	13.5
Summer average	39.2	36.6	2.6	7.1
Total during-program average	37.7	33.8	3.9	11.5
<b>Black female</b>				
School-year average	48.7	25.9	22.8***	88.0
Summer average	49.4	34.3	15.1***	44.0
Total during-program average	48.9	28.7	20.2***	70.4
<b>Hispanic female</b>				
School-year average	37.8	33.5	4.3	12.8
Summer average	46.1	32.4	13.7**	42.3
Total during-program average	40.5	33.2	7.3*	22.0
<b>White</b>				
School-year average	46.4	39.5	6.9*	17.5
Summer average	48.3	44.1	4.2	9.5
Total during-program average	47.0	41.0	6.0*	14.6
<b>Black</b>				
School-year average	51.4	29.8	21.6***	72.5
Summer average	53.5	39.2	14.3***	36.5
Total during-program average	52.1	32.9	19.2***	58.4
<b>Hispanic</b>				
School-year average	47.8	43.2	4.6*	10.6
Summer average	53.9	45.1	8.8*	19.5
Total during-program average	49.8	43.8	6.0*	13.7
<b>Male</b>				
School-year average	55.2	38.4	16.8***	43.8
Summer average	58.6	47.4	11.2***	23.6
Total during-program average	56.3	41.4	14.9***	36.0
<b>Female</b>				
School-year average	46.2	28.1	18.1***	64.4
Summer average	47.9	34.8	13.1***	37.6
Total during-program average	46.7	30.3	16.4***	54.1

See notes a and b to Table 5.3.

<sup>a</sup> These are averages of the period-specific rates, weighted by the length of each period.

\* = significant at the 10 percent level.  
 \*\* = significant at the 5 percent level.  
 \*\*\* = significant at the 1 percent level.

Table A5.7. Program Effects on Employment Rates, Separately by Period, Sex, and Race

	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<b>White male</b>				
School-year average <sup>a</sup>	54.8	41.2	13.6**	33.0
Summer average <sup>a</sup>	56.4	50.7	5.7*	11.2
Total during-program average <sup>a</sup>	55.3	44.3	11.0**	24.8
<b>Black male</b>				
School-year average	49.7	28.3	21.4***	75.6
Summer average	55.0	44.7	10.3***	23.0
Total during-program average	51.5	33.8	17.7***	52.4
<b>Hispanic male</b>				
School-year average	62.0	55.1	6.9*	12.5
Summer average	68.6	60.5	8.1*	13.4
Total during-program average	64.2	56.9	7.3*	12.8
<b>White female</b>				
School-year average	36.2	34.1	2.1	6.2
Summer average	37.8	36.6	1.2	3.3
Total during-program average	36.7	34.9	1.8	5.2
<b>Black female</b>				
School-year average	44.7	17.9	26.8***	149.7
Summer average	46.9	31.7	15.2***	47.9
Total during-program average	45.4	22.5	22.9***	101.8
<b>Hispanic female</b>				
School-year average	42.0	39.9	2.1	5.3
Summer average	54.2	33.9	20.3***	59.9
Total during-program average	46.0	37.9	8.1*	21.4
<b>White</b>				
School-year average	44.7	37.3	7.4**	19.8
Summer average	46.2	42.3	3.9	9.2
Total during-program average	45.2	38.9	6.3*	16.2
<b>Black</b>				
School-year average	47.1	22.9	24.2***	105.7
Summer average	50.8	38.0	12.8***	33.7
Total during-program average	48.3	27.9	20.4***	73.1
<b>Hispanic</b>				
School-year average	51.4	46.4	5.0*	10.8
Summer average	60.9	46.1	14.8***	32.1
Total during-program average	54.6	46.3	8.3***	17.9
<b>Male</b>				
School-year average	51.5	33.2	18.3***	55.1
Summer average	56.6	47.4	9.2***	19.4
Total during-program average	53.2	37.9	15.3***	40.4
<b>Female</b>				
School-year average	43.5	22.7	20.8***	91.6
Summer average	46.6	32.7	13.9***	42.5
Total during-program average	44.5	26.0	18.5***	71.2

See notes a and b to Table 5.3.

<sup>a</sup> These are averages of the period-specific rates, weighted by the length of each period.

\* = significant at the 10 percent level.

\*\* = significant at the 5 percent level.

\*\*\* = significant at the 1 percent level.

**Table A5.8. Program Effects on Unemployment Rates, Separately by Period, Sex, and Race**

	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<b>White male</b>				
School-year average <sup>a</sup>	45.2	58.8	-13.6**	-23.1
Summer average <sup>a</sup>	43.6	49.3	- 5.7*	-11.6
Total during-program average <sup>a</sup>	44.7	55.7	-11.0**	-19.7
<b>Black male</b>				
School-year average	50.3	71.7	-21.4***	-29.9
Summer average	45.0	55.3	-10.3***	-18.6
Total during-program average	48.5	66.2	-17.7***	-26.7
<b>Hispanic male</b>				
School-year average	38.0	44.9	- 6.9*	-15.4
Summer average	31.4	39.5	- 8.1*	-20.5
Total during-program average	35.8	43.1	- 7.3*	-16.9
<b>White female</b>				
School-year average	63.8	65.9	- 2.1	- 3.2
Summer average	62.2	63.4	- 1.2	- 1.9
Total during-program average	63.3	65.1	- 1.8	- 2.8
<b>Black female</b>				
School-year average	55.3	82.1	-26.8***	-32.6
Summer average	53.1	68.3	-15.2***	-22.3
Total during-program average	54.6	77.5	-22.9***	-29.5
<b>Hispanic female</b>				
School-year average	58.0	60.1	- 2.1	- 3.5
Summer average	45.8	66.1	-20.3***	-30.7
Total during-program average	54.0	62.1	- 8.1*	-13.0
<b>White</b>				
School-year average	55.3	62.7	- 7.4**	-11.8
Summer average	53.8	57.7	- 3.9	- 6.8
Total during-program average	54.8	61.1	- 6.3*	-10.3
<b>Black</b>				
School-year average	52.9	77.1	-24.2***	-31.4
Summer average	49.2	62.0	-12.8***	-20.6
Total during-program average	51.7	72.1	-20.4***	-28.3
<b>Hispanic</b>				
School-year average	48.6	53.6	- 5.0*	- 9.3
Summer average	39.1	53.9	-14.8***	-27.5
Total during-program average	45.4	53.7	- 8.3**	-15.5
<b>Male</b>				
School-year average	48.5	66.8	-18.3***	-27.4
Summer average	43.4	52.6	- 9.2***	-17.5
Total during-program average	46.8	62.1	-15.3***	-24.6
<b>Female</b>				
School-year average	56.5	77.3	-20.8***	-26.9
Summer average	53.4	67.3	-13.9***	-20.7
Total during-program average	55.5	74.0	-18.5***	-25.0

See notes a and b to Table 5.3.

<sup>a</sup> These are averages of the period-specific rates, weighted by the length of each period.

- \* = significant at the 10 percent level.
- \*\* = significant at the 5 percent level.
- \*\*\* = significant at the 1 percent level.



Table A5.9. Program Effects on Labor Force Participation, Employment, and Unemployment Rates for the 15- to 16-year-old Cohort, Excluding Denver and Phoenix, Separately by Period

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<u>A. Labor Force Participation Rates</u>					
<u>School year</u>					
Fall 1978	1,668	43.0	18.4	24.6***	133.7
Spring 1979	1,714	47.8	21.9	25.9***	118.3
Fall 1979	1,603	52.5	32.8	19.7***	60.1
Spring 1980	1,600	54.8	34.4	20.4***	59.3
School-year average <sup>a</sup>	---	49.7	27.0	22.7***	84.1
<u>Summer</u>					
Summer 1978	1,264	46.5	29.0	17.5***	60.3
Summer 1979	1,652	54.3	38.9	15.4***	39.6
Summer 1980	1,401	56.3	44.8	11.5***	25.7
Summer average <sup>a</sup>	---	55.3	37.6	17.7***	47.1
Total during-program average <sup>a</sup>	---	51.6	30.5	21.1***	69.2
<u>B. Employment Rates</u>					
<u>School year</u>					
Fall 1978	1,668	40.3	14.3	26.0***	181.8
Spring 1979	1,714	46.0	17.2	28.8***	167.4
Fall 1979	1,603	46.6	22.5	24.1***	107.1
Spring 1980	1,600	52.1	26.6	25.5***	95.9
School-year average <sup>a</sup>	---	46.6	20.4	26.2***	128.4

Table A5.9. (Continued)

	Sample size	Pilot site rate	Estimated pilot site rate in the absence of the program	Program effect	Program effect as a percent of rate in the absence of the program
<u>Summer</u>					
Summer 1978	1,264	45.2	30.4	14.8***	48.7
Summer 1979	1,652	53.4	43.8	9.6***	21.9
Summer 1980	1,401	52.0	38.8	13.2***	34.0
Summer average <sup>a</sup>	---	50.2	37.7	12.5***	33.2
Total during-program average <sup>a</sup>	---	47.8	26.1	21.7***	83.1

C. Unemployment RatesSchool year

Fall 1978	1,668	59.7	33.7	-26.0***	- 77.2
Spring 1979	1,714	54.0	25.2	-28.8***	-114.3
Fall 1979	1,603	53.4	29.3	-24.1***	- 82.3
Spring 1980	1,600	47.9	22.4	-25.5***	-113.8
School-year average <sup>a</sup>	---	53.4	27.2	-26.2***	- 96.3

Summer

Summer 1978	1,264	54.8	40.0	-14.8***	- 37.0
Summer 1979	1,652	46.6	37.0	- 9.6***	- 25.9
Summer 1980	1,401	48.0	34.8	-13.2***	- 37.9
Summer average <sup>a</sup>	---	49.8	37.3	-12.5***	- 33.5
Total during-program average <sup>a</sup>	---	52.2	30.5	-21.7***	- 71.1

See notes a and b to Table 5.3.

<sup>a</sup>These are averages of the period-specific rates reported above, weighted by the length of each period.

\*\*\* = significant at the 1 percent level.

Table A5.10. Average Employment/Population Ratios for Employed Youths,  
by Pilot or Control Site and Period

	Total Employment/ Population Ratio <sup>a</sup>		Percent employed at all		Average weeks worked by employed youths		Employment/ Population ratio for employed youths	
	Pilot	Control	Pilot	Control	Pilot	Control	Pilot	Control
<u>Preprogram</u>								
Spring 1977	7.0	7.6	10.3	13.5	14.6	12.1	68.0	56.3
Summer 1977	22.7	26.2	31.3	38.2	9.4	8.9	72.5	68.6
Fall 1977	10.6	12.7	19.7	21.5	9.3	10.2	53.8	59.1
<u>During-program</u>								
Summer 1978	40.6	26.4	53.0	37.2	10.0	9.2	76.6	71.0
Fall 1978	38.2	17.7	48.0	27.1	13.8	11.3	79.6	68.3
Spring 1979	42.2	19.8	53.6	30.2	17.0	14.2	78.7	65.6
Summer 1979	45.2	34.5	57.9	48.8	10.1	9.2	78.1	70.7
Fall 1979	39.1	24.0	47.3	31.5	14.3	13.2	82.7	76.2
Spring 1980	41.3	26.2	53.0	36.9	16.9	15.4	77.9	71.0
Summer 1980	42.3	32.8	56.5	46.2	9.7	9.2	74.9	71.0
<u>Summary<sup>b</sup></u>								
<u>Preprogram</u>								
School-year average	8.4	9.8	14.5	17.1	12.2	11.3	57.9	57.3
Summer average	22.7	26.2	31.3	38.2	9.4	8.9	72.5	68.6
Total preprogram average	12.1	13.9	18.9	22.3	11.5	10.7	64.0	62.3
<u>During-program</u>								
School-year average	40.4	22.0	50.8	31.7	15.7	13.7	79.5	69.4
Summer average	42.7	31.2	55.8	44.1	9.9	9.2	76.5	70.7
Total during-program average	41.2	25.1	52.5	35.8	13.8	12.2	78.5	70.1

Reported in Table 5.2.

These are averages of the period-specific ratios reported above, weighted by the length of each period.

Table A5.11. Wage Rates of Employed Youths, Spring and Summer 1979,  
By Pilot/Control and School Enrollment Status

Out-of-School Youths <sup>a</sup>				In-School Youths <sup>a</sup>			
Wage Rate, Spring 1979		Wage Rate, Summer 1979		Wage Rate, Spring 1979		Wage Rate, Summer 1979	
Pilot	Control	Pilot	Control	Pilot	Control	Pilot	Control
11.4	12.1	13.3	9.8	11.7	11.9	20.5	11.4
2.59	1.2	4.3	1.5	5.3	1.8	1.7	1.3
2.69	7.3	5.7	3.4	6.1	20.6	16.4	8.9
2.79	2.4	4.3	2.5	3.0	2.3	0.6	2.5
2.89	2.8	4.3	1.5	3.8	5.5	0.6	1.8
2.99	26.0	24.3	29.1	31.1	46.4	43.5	50.6
3.09	11.0	7.1	10.8	3.0	2.4	9.6	2.4
3.19	4.5	6.4	4.4	4.5	1.0	2.8	0.9
3.29	6.1	5.7	7.4	5.3	1.0	1.1	1.4
3.39	1.2	1.4	1.5	2.3	0.9	2.8	0.7
3.49	1.6	1.4	1.5	0.8	1.0	1.1	0.3
3.59	4.5	5.0	4.4	6.1	0.9	1.1	1.2
3.69	2.0	2.1	1.0	3.0	0.3	2.3	0.5
3.79	2.0	2.9	1.5	3.0	0.3	1.1	0.3
3.89	0.0	0.7	0.5	0.0	0.3	0.6	0.5
3.99	2.0	1.4	1.0	0.8	0.0	0.6	0.5
13.8	10.7	14.8	12.1	4.4	2.3	4.8	4.6
\$3.18	\$3.08	\$3.18	\$3.11	\$2.83	\$2.83	\$2.81	\$2.88
\$2.95	\$2.90	\$2.95	\$2.90	\$2.90	\$2.90	\$2.90	\$2.95
246	140	203	132	1,053	177	996	306

Enrollment status as of Spring 1979.

er to reduce the importance of outliers and miscodings on mean wage estimates, wage rates above \$7.50/hour  
eliminated from the sample.

APPENDIX 4

Regression Models for Basic Program Impacts

	Sample mean	Coerricient (t-statistic)
Constant	1.00	.253 (4.53)
Denver	.175	-.537 (5.56)
Cincinnati	.249	-.449 (6.82)
Baltimore	.382	0.0 (-)
Mississippi Pilot	.194	-.298 (4.30)
Age in June 1978:		
15-16	.517	.548 (10.9)
17-20	.483	0.0 (-)
White male	.048	-.926 (6.93)
Black male	.368	0.0 (-)
Hispanic male	.049	-.320 (2.24)
White female	.061	-1.07 (8.65)
Black female	.420	.072 (1.29)
Hispanic female	.054	-.308 (2.25)
N	2,778	---

Note: The sample includes youths who completed three waves of the Local Field Survey and were ever program eligible, from the spring of 1978 through the summer of 1980. The dependent variable is ever holding a program job (for at least two weeks) or not.

Table B3.2. Duration of Program Participation (Table 3.10):  
OLS Coefficients and Sample Means

	Sample mean	Coefficient (t-statistic)
Constant	1.00	.576 (30.3)
Denver	.121	-.225 (6.20)
Cincinnati	.218	-.121 (5.44)
Baltimore	.467	0.0 (-)
Mississippi Pilot	.194	-.126 (5.42)
Age in June 1978:		
15-16	.604	-.017 (.984)
17-20	.396	0.0 (-)
White male	.021	-.030 (.481)
Black male	.403	0.0 (-)
Hispanic male	.032	.110 (1.92)
White female	.021	.035 (.576)
Black female	.485	.034 (1.89)
Hispanic female	.038	.112 (.686)
N	1,562	---

Note: The sample includes youths who completed three waves of the Local Field Survey and were ever program participants, from the spring of 1978 through the summer of 1980. The dependent variable is the total number of weeks employed in a program job divided by the total number of weeks in all seasons for which a youth was eligible to participate.

Table B4.1. Program Effects on School Enrollment Rates by Types of Degree Program (Table 4.2):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):						Pilot site means:	
	Total enrollment		Regular enrollment		GFD enrollment		Fall 1978	Fall 1979
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979		
Constant	5.493 (12.21)	8.680 (16.12)	5.983 (13.40)	9.097 (16.39)	-3.907 (5.961)	-3.591 (4.460)	1.000	1.000
Pilot sites	.211 (3.777)	.086 (1.521)	.127 (2.217)	.032 (.545)	.262 (3.038)	.155 (1.710)	1.000	1.000
Age in June 1978 (months/100)	-3.952 (17.86)	-5.200 (19.48)	-4.623 (20.54)	-5.921 (21.63)	1.581 (4.973)	1.490 (3.721)	2.050	2.010
White male	-.566 (5.351)	-.739 (6.560)	-.512 (4.709)	-.662 (5.708)	-.164 (1.954)	-.362 (1.910)	.048	.051
Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	.368	.383
Hispanic male	-.490 (4.480)	-.549 (4.693)	-.533 (4.754)	-.572 (4.841)	.112 (.721)	.094 (.556)	.050	.049
White female	-.489 (4.620)	-.668 (6.294)	-.423 (3.825)	-.583 (5.181)	-.231 (1.466)	-.530 (2.420)	.061	.057
Black female	.076 (1.244)	.068 (1.136)	.075 (1.240)	.076 (1.265)	.003 (.031)	-.019 (.214)	.418	.403
Hispanic female	-.486 (4.807)	-.625 (5.249)	-.459 (4.292)	-.643 (5.273)	-.043 (.257)	.072 (.447)	.055	.057
Enrolled, Fall 1977	1.186 (15.94)	.812 (8.460)	1.506 (16.80)	1.298 (10.05)	-.086 (.932)	-.095 (.867)	.851	.884
Highest grade completed, Summer 1977	.268 (9.278)	.171 (5.587)	.323 (11.11)	.221 (7.154)	-.140 (3.255)	-.125 (2.590)	6.520	6.480
Grade missing, Summer 1977	1.920 (7.451)	1.113 (4.201)	2.263 (8.717)	1.413 (5.285)	-.959 (2.491)	-.853 (2.066)	.258	.236
N	3840	3037	3940	3037	3840	3037	2652	2107



Table B4.2. Program Effects on Dropout and Return-to-School Rates (Table 4.3):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):				Pilot site means:			
	Total enrollment for youths enrolled in previous fall		Total enrollment for youths not enrolled in previous fall		Youths enrolled in previous fall		Youths not enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
Constant	7.168 (15.735)	8.731 (11.091)	2.643 (2.121)	4.279 (3.967)	1.000	1.000	1.000	1.000
Pilot sites	.195 (3.190)	-.009 (.122)	.302 (2.038)	.065 (.529)	1.000	1.000	1.000	1.000
Age in June 1978 (months/100)	-4.349 (17.968)	-4.552 (13.485)	-1.894 (3.396)	-2.471 (4.476)	2.02	1.98	2.19	2.09
White male	-.630 (5.366)	-.567 (4.108)	-.153 (.562)	-.745 (2.920)	.042	.040	.084	.082
Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	.393	.399	.249	.336
Hispanic male	-.537 (4.328)	-.445 (3.087)	-.197 (.748)	-.316 (1.231)	.046	.040	.071	.074
White female	-.512 (4.288)	-.581 (4.082)	-.316 (1.340)	-.485 (2.281)	.049	.044	.132	.097
Black female	.058 (.878)	.027 (.389)	.184 (1.122)	.120 (.881)	.427	.431	.368	.321
Hispanic female	-.541 (4.799)	-.632 (4.279)	-.142 (.568)	-.053 (.245)	.043	.046	.096	.090
Highest grade completed, Summer 1977	.309 (9.786)	.144 (3.997)	.058 (.730)	-.019 (.272)	.709	.704	.321	.480
Grade missing, Summer 1977	2.264 (8.000)	.917 (2.934)	.139 (.198)	-.253 (.423)	.193	.173	.629	.427
N	3228	2215	612	822	2258	1503	394	524

<sup>1</sup>This model predicts the school retention rate which equals one minus the dropout rate.

**Table B4.3. Program Effects on School Enrollment Rates by Site (Table 4.7):**  
**Probit Coefficients and Pilot Site Means**

Variable	Coefficients (t-statistics):		Pilot site means:							
	Total Enrollment		Denver youths		Cincinnati youths		Baltimore youths		Mississippi youths	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
Denver/Phoenix	5.758 (11.889)	8.760 (15.811)	1.000	1.000	.000	.000	.000	.000	.000	.000
Cincinnati/ Louisville	5.332 (11.685)	8.649 (15.859)	.000	.000	1.000	1.000	.000	.000	.000	.000
Baltimore/ Cleveland	5.492 (11.619)	8.708 (15.802)	.000	.000	.000	.000	1.000	1.000	.000	.000
Mississippi pilot/ comparison	5.584 (12.081)	8.793 (16.071)	.000	.000	.000	.000	.000	.000	1.000	1.000
Denver	.015 (.109)	.054 (.391)	1.000	1.000	.000	.000	.000	.000	.000	.000
Cincinnati	.332 (3.513)	.238 (2.388)	.000	.000	1.000	1.000	.000	.000	.000	.000
Baltimore	.170 (1.461)	.083 (.756)	.000	.000	.000	.000	1.000	1.000	.000	.000
Mississippi pilot	.191 (1.506)	-.095 (.750)	.000	.000	.000	.000	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-3.876 (17.411)	-5.213 (19.368)	2.05	2.01	2.05	2.01	2.05	2.01	2.04	2.00
White male	-.569 (5.229)	-.729 (6.328)	.063	.069	.063	.063	.019	.023	.069	.073
Black male	0.000 (-)	0.000 (-)	.162	.170	.370	.390	.422	.433	.449	.471
Hispanic male	-.611 (4.285)	-.525 (3.802)	.261	.261	.003	.004	.006	.005	.000	.000
White female	-.484 (4.488)	-.668 (6.200)	.076	.065	.099	.092	.028	.029	.064	.058
Black female	.079 (1.298)	.061 (1.027)	.145	.129	.460	.447	.520	.505	.418	.398
Hispanic female	-.610 (4.358)	-.603 (4.223)	.293	.306	.005	.004	.005	.005	.000	.000
Enrolled, Fall 1977	1.189 (15.877)	.812 (8.426)	.802	.858	.847	.880	.872	.901	.863	.880
Highest grade com- plete, Summer 1977	.251 (8.438)	.171 (5.418)	7.000	7.440	5.590	5.430	6.600	6.530	7.210	6.920
Grade missing, Summer 1977	1.778 (6.692)	1.101 (4.006)	.229	.164	.369	.357	.234	.212	.190	.190
N	3840	3037	475	372	658	541	1002	794	517	400

**Table B4.4. Program Effects on School Enrollment by Race (Table 4.8, first panel):**  
**Probit Coefficients and Pilot Site Means**

Variable	Coefficients (t-statistics):		Pilot site means:					
	Total Enrollment		White youths		Black youths		Hispanic youths	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	4.826 (10.796)	7.731 (14.187)	.439	.471	.000	.000	.000	.000
Black male	5.498 (12.151)	8.760 (16.146)	.000	.000	.468	.487	.000	.000
Hispanic male	5.095 (10.870)	8.264 (14.857)	.000	.000	.000	.000	.473	.462
White female	4.901 (10.929)	7.790 (14.404)	.561	.529	.000	.000	.000	.000
Black female	5.573 (12.372)	8.828 (16.306)	.000	.000	.532	.513	.000	.000
Hispanic female	5.103 (11.052)	8.191 (14.961)	.000	.000	.000	.000	.527	.538
Pilot site white youth	.388 (2.894)	.523 (3.656)	1.000	1.000	.000	.000	.000	.000
Pilot site black youth	.192 (2.844)	.019 (.286)	.000	.000	1.000	1.000	.000	.000
Pilot site Hispanic youth	.073 (.484)	-.061 (.351)	.000	.000	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-3.934 (17.735)	-5.208 (19.465)	2.060	2.020	2.050	2.000	2.060	2.010
Enrolled, Fall 1977	1.183 (15.877)	.817 (8.488)	.706	.758	.883	.910	.763	.816
Highest grade com- pleted, Summer 1977	.265 (9.167)	.169 (5.517)	5.510	5.440	6.630	6.530	6.720	7.230
Grade missing, Summer 1977	1.893 (7.326)	1.092 (4.121)	.370	.352	.243	.228	.251	.179
N	3840	3037	289	227	2084	1657	279	223

Table B4.5. Program Effects on Dropout Rates by Race (Table 4.8, second panel):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):		Pilot site means:					
	Total enrollment for yrs. enrolled in previous fall		White youths enrolled in previous fall		Black youths enrolled in previous fall		Hispanic youths enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	6.402 (13.941)	8.022 (12.768)	.461	.481	.000	.000	.000	.000
Black male	7.210 (15.658)	8.781 (14.103)	.000	.000	.476	.481	.000	.000
Hispanic male	6.833 (14.255)	8.496 (13.050)	.000	.000	.000	.000	.488	.467
White female	6.50 (14.204)	8.008 (12.810)	.539	.519	.000	.000	.000	.000
Black female	7.265 (15.794)	8.811 (14.154)	.000	.000	.524	.519	.000	.000
Hispanic female	6.838 (14.426)	8.309 (13.040)	.000	.000	.000	.000	.512	.533
Pilot site white youth	.509 (3.325)	.283 (1.480)	1.000	1.000	.000	.000	.000	.000
Pilot site black youth	.165 (2.263)	-.029 (.363)	.000	.000	1.000	1.000	.000	.000
Pilot site Hispanic youth	-.065 (.389)	-.246 (1.119)	.000	.000	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-4.344 (17.836)	-4.563 (13.498)	2.010	1.960	2.030	1.980	2.020	1.980
Highest grade com- pleted, Summer 1977	.306 (9.668)	.142 (3.960)	6.980	6.640	7.070	7.010	7.400	7.740
Grade missing, Summer 1977	2.234 (7.862)	.896 (2.864)	.201	.211	.195	.175	.169	.117
N	3228	2215	204	133	184	1313	213	137

<sup>1</sup> This model predicts the school retention rate which equals one minus the dropout rate.

Table B4.6. Program Effects on Return-to-School Rates by Race (Table 4.8, third panel):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):		Pilot site means:					
	Total enrollment for youths not enrolled in previous fall		White youths not enrolled in previous fall		Black youths not enrolled in previous fall		Hispanic youths not enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	2.839 (2.334)	3.407 (3.005)	.388	.457	.000	.000	.000	.000
Black male	2.700 (2.116)	4.573 (4.145)	.000	.000	.403	.512	.000	.000
Hispanic male	2.310 (1.729)	4.081 (3.746)	.000	.000	.000	.000	.424	.453
White female	2.624 (2.066)	3.671 (3.217)	.612	.543	.000	.000	.000	.000
Black female	2.884 (2.303)	4.689 (4.239)	.000	.000	.597	.488	.000	.000
Hispanic female	2.360 (1.834)	4.344 (4.029)	.000	.000	.000	.000	.576	.547
Pilot site white youth	-.092 (.282)	.607 (1.995)	1.000	1.000	.000	.000	.000	.000
Pilot site black youth	.392 (2.155)	-.084 (.564)	.000	.000	1.000	1.000	.000	.000
Pilot site Hispanic youth	.639 (1.677)	.173 (.536)	.000	.000	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-1.969 (3.471)	-2.517 (4.435)	2.190	2.100	2.190	2.090	2.190	2.070
Highest grade completed, Summer 1977	.061 (.771)	-.030 (.431)	2.000	3.740	3.280	4.680	4.530	6.420
Grade missing, Summer 1977	.186 (.266)	-.343 (.565)	.776	.553	.609	.430	.515	.279
N	612	822	85	94	243	344	66	86

Table B4.7. Program Effects on School Enrollment by Sex (Table 4.9, first panel):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):		Pilot site means:			
	Total enrollment		Males		Females	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	4.927 (11.605)	8.049 (14.802)	.103	.105	.000	.000
Black male	5.499 (12.179)	8.811 (16.239)	.790	.794	.000	.000
Hispanic male	5.013 (10.941)	8.257 (14.981)	.107	.101	.000	.000
White female	4.973 (11.094)	7.971 (14.832)	.000	.000	.114	.110
Black female	5.532 (12.276)	8.690 (16.110)	.000	.000	.782	.780
Hispanic female	4.977 (11.030)	7.992 (14.786)	.000	.000	.104	.110
Pilot site male youth	.179 (2.240)	-.048 (.593)	1.000	1.000	.000	.000
Pilot site female youth	.241 (3.102)	.216 (2.730)	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-3.938 (17.780)	-5.217 (19.530)	2.950	2.010	2.050	2.000
Enrolled, Fall 1977	1.184 (15.896)	.815 (8.459)	.871	.902	.834	.867
Highest grade com- pleted, Summer 1977	.266 (9.227)	.170 (5.576)	6.430	6.370	6.590	6.590
Grade missing, Summer 1977	1.911 (7.407)	1.115 (4.203)	.258	.242	.258	.231
N	3840	3037	1234	1017	1418	1090

Table B4.8. Program Effects on Dropout Rates by Sex (Table 4.9, second panel):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):		Pilot site means:			
	Total enrollment for youths enrolled in previous fall		Male youths enrolled in previous fall		Female youths enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	6.531 (14.296)	8.350 (13.326)	.087	.084	.000	.000
Black male	7.162 (15.686)	8.933 (14.266)	.816	.831	.000	.000
Hispanic male	6.625 (14.281)	8.488 (13.319)	.097	.084	.000	.000
White female	6.641 (14.566)	8.137 (13.154)	.000	.000	.093	.084
Black female	7.210 (15.714)	8.731 (14.079)	.000	.000	.815	.828
Hispanic female	6.621 (14.361)	8.064 (12.954)	.000	.000	.092	.089
Pilot site male youth	.187 (2.128)	.172 (1.716)	1.000	1.000	.000	.000
Pilot site female youth	.202 (2.395)	.146 (1.492)	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-4.340 (17.920)	-4.583 (13.584)	2.030	1.980	2.020	1.980
Highest grade completed, Summer 1977	.308 (9.762)	.141 (3.926)	6.880	6.850	7.290	7.220
Grade missing, Summer 1977	2.258 (7.976)	.900 (2.879)	.206	.187	.182	.160
N	3228	2215	1075	759	1183	824

<sup>1</sup> This model predicts the school retention rate which equals one minus the dropout rate.

Table B4.9. Program Effects on Return-to-School Rates by Sex (Table 4.9, third panel):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):		Pilot site means:			
	Total enrollment for youths not enrolled in previous fall		Male youths not enrolled in previous fall		Female youths not enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
White male	2.639 (2.210)	3.582 (3.241)	.208	.167	.000	.000
Black male	2.814 (2.239)	4.358 (4.012)	.616	.682	.000	.000
Hispanic male	2.613 (2.017)	4.402 (3.684)	.176	.151	.000	.000
White female	2.341 (1.885)	3.756 (3.389)	.000	.000	.221	.192
Black female	2.825 (2.303)	4.349 (4.018)	.000	.000	.617	.632
Hispanic female	2.495 (2.028)	4.174 (3.878)	.000	.000	.162	.177
Pilot site male youth	.159 (.751)	-.040 (.217)	1.000	1.000	.000	.000
Pilot site female youth	.394 (1.878)	.145 (.895)	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-1.936 (3.451)	-2.479 (4.472)	2.190	2.090	2.190	2.080
Highest grade completed, Summer 1977	.060 (.763)	-.017 (.252)	3.400	4.970	3.090	4.630
Grade missing, Summer 1977	.162 (.230)	-.238 (.396)	.610	.403	.643	.451
N	612	822	159	258	235	266



Table B4.10. Program Effects on Enrollment, Dropout and Return-to-School Rates  
for the 15-16 Year Old Cohort (Table 4.5):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):						Pilot site means:					
	Total enrollment		Total enrollment for youths enrolled in previous fall		Total enrollment for youths not enrolled in previous fall		All youths		Youths enrolled in previous fall		Youths not enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979
Constant	6.958 (4.584)	8.951 (8.196)	8.083 (5.268)	8.640 (6.888)	18.06 (2.473)	8.664 (2.665)	1.000	1.000	1.000	1.000	1.000	1.000
Pilot site	.240 (2.760)	.119 (1.631)	.200 (2.238)	-.023 (.279)	1.343 (2.553)	.434 (1.936)	1.000	1.000	1.000	1.000	1.000	1.000
Age in June 1978 (months/100)	-5.556 (6.931)	-6.088 (10.77)	-5.371 (6.509)	-5.067 (7.378)	-12.40 (2.982)	-4.991 (3.053)	1.940	1.930	1.940	1.930	1.980	1.950
White male	-.498 (3.339)	-.666 (4.889)	-.591 (3.716)	-.540 (3.483)			.049	.049	.045	.046		
Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)			.370	.383	.376	.384		
Hispanic male	-.551 (3.080)	-.573 (3.924)	-.529 (2.941)	-.483 (2.796)			.041	.042	.042	.040		
White female	-.477 (3.129)	-.668 (4.912)	-.496 (3.164)	-.497 (3.026)			.057	.056	.054	.049		
Black female	-.102 (.994)	.063 (.800)	.082 (.795)	-.001 (.015)			.426	.412	.429	.430		
Hispanic female	-.689 (4.417)	-.607 (4.343)	-.760 (4.625)	-.610 (3.697)			.057	.058	.054	.051		
Male					0.000 (-)	0.000 (-)					.358	.506
Female					.632 (1.323)	.243 (1.263)					.642	.494
White					.403 (.804)	-.941 (3.263)					.302	.175
Black					0.000 (-)	0.000 (-)					.547	.662
Hispanic					-.421 (.713)	-.324 (1.241)					.151	.163
Enrolled, Fall 1977	1.425 (8.108)	1.044 (5.765)					.962	.961				
Highest grade completed, Summer 1977	.451 (9.009)	.323 (8.099)	.449 (8.722)	.280 (6.144)	.575 (1.668)	.025 (.231)	6.990	6.780	7.110	7.060	4.000	4.830
Grade missing, Summer 1977	3.178 (7.739)	2.141 (6.399)	3.172 (7.497)	1.891 (4.911)	3.771 (1.415)	-.203 (.231)	.173	.182	.160	.156	.491	.367
N	2005	1920	1924	1644	81	276	1377	1322	1324	1156	53	166

<sup>1</sup> This model predicts the school retention rate which equals one minus the dropout rate.

<sup>2</sup> An additive race/sex specification was required for convergence of the maximum likelihood estimator.

**Table B4.11. Cumulative Program Effects on School Enrollment Rates  
for the 15-16 Year Old Cohort (Tables 4.6 and A4.5):  
Bivariate Probit Coefficients and Pilot Site Means**

Variable	Coefficients (t-statistics):						Pilot site means:	
	Youths enrolled Fall 1977 (N=1766)			Youths not enrolled Fall 1977 (N=79) <sup>1</sup>			Youths enrolled Fall 1977 (N=1214)	Youths not enrolled Fall 1977 (N=52)
	Total enrollment Fall 1970	Fall 1979	Correlation of errors	Total enrollment Fall 1978	Fall 1979	Correlation of errors		
Constant	9.232 (6.028)	11.35 (8.629)	3.014 (3.594)	23.03 (2.950)	14.00 (1.219)	-.130 (.078)	1.000	1.000
Pilot site	.184 (2.042)	.128 (1.622)	-1.729 (2.004)	2.000 (1.744)	.409 (.658)	14.34 (.120)	1.000	1.000
Age in June 1978 (months/100)	-5.832 (7.102)	-6.960 (9.754)		-15.47 (3.478)	-8.01 (1.332)		1.935	1.977
White male	-.590 (3.537)	-.680 (4.787)					.046	
Black male	0.000 (-)	0.000 (-)					.390	
Hispanic male	-.531 (2.825)	-.633 (4.142)					.044	
White female	-.489 (3.021)	-.676 (4.449)					.052	
Black female	.061 (.593)	.036 (.426)					.411	
Hispanic female	-.780 (4.717)	-.654 (4.234)					.056	
Male				0.000 (-)	0.000 (-)			.365
Female				.234 (.404)	.896 (.970)			.635
White				.120 (.181)	-.766 (.783)			.308
Black				0.000 (-)	0.000 (-)			.539
Hispanic				-.352 (.444)	-.359 (.579)			.154
Highest grade completed, Summer 1977	.417 (7.762)	.367 (8.259)		.689 (1.503)	.054 (.242)		6.931	3.923
Grade missing, Summer 1977	2.907 (6.632)	2.481 (6.641)		4.308 (1.286)	-.138 (.069)		.168	.500

<sup>1</sup> Because of the small sample size, a simpler race/sex specification was required for convergence of the maximum likelihood estimator.

**Table B4.12. Program Effects on Enrollment, Dropout and Return-to-School Rates for the  
15-16 Year Old Cohort, Excluding the Denver and Phoenix Sites (Table A4.4):  
Probit Coefficients and Pilot Site Means**

Variable	Coefficients (t-statistics):						Pilot site means:					
	Total enrollment		Total enrollment for youths enrolled in previous fall		Total enrollment for youths not enrolled in previous fall		All youths		Youths enrolled in previous fall		Youths not enrolled in previous fall	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979	1978	1979
Constant	8.589 (5.104)	8.796 (7.190)	10.165 (6.031)	8.697 (6.300)	11.418 (13.442)	6.502 (1.836)	1.000	1.000	1.000	1.000	1.000	1.000
Pilot site	.223 (2.308)	.123 (1.481)	.195 (1.964)	-.016 (.172)	1.160 (1.634)	.481 (1.828)	1.000	1.000	1.000	1.000	1.000	1.000
Age in June 1978 (months/100)	-6.262 (7.123)	-6.106 (9.930)	-6.294 (6.990)	-5.192 (6.928)	-8.775 (1.896)	-4.062 (2.293)	1.940	1.930	1.940	1.930	1.980	1.960
White male	-.529 (3.273)	-.762 (4.947)	-.637 (3.654)	-.602 (3.371)			.045	.045	.041	.041		
Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)			.411	.427	.417	.424		
White female	-.536 (3.353)	-.720 (4.910)	-.580 (3.514)	-.529 (2.900)			.055	.054	.050	.044		
Black female	.123 (1.179)	.054 (.663)	.103 (.975)	-.023 (.246)			.489	.474	.492	.491		
Male					0.000 (-)	0.000 (-)					.405	.522
Female					.560 (.904)	.220 (1.031)					.595	.478
White					.420 (.669)	-1.046 (3.159)					.357	.199
Black					0.000 (-)	0.000 (-)					.643	.801
Enrolled, Fall 1977	1.497 (7.342)	1.190 (5.462)					.963	.962				
Highest grade completed, Summer 1977	.411 (7.749)	.330 (7.759)	.414 (7.622)	.305 (6.298)	.516 (1.384)	.070 (.578)	6.820	6.590	6.950	6.910	3.430	4.350
Grade missing, Summer 1977	2.756 (6.377)	2.147 (6.053)	2.783 (6.272)	2.070 (5.083)	3.368 (1.177)	.102 (.106)	.188	.199	.174	.168	.548	.419
N	1655	1591	1593	1365	62	226	1127	1085	1085	949	42	136

<sup>1</sup> This model predicts the school retention rate which equals one minus the dropout rate.

<sup>2</sup> An additive race/sex specification was required for convergence of the maximum likelihood estimator.

Table B5.1. Program Effects on Employment Ratios, Separately by Period (Table 5.3):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1225.36 (-7.99)	-1056.00 (-5.98)	-75.69 (-0.30)	-392.25 (-1.32)	-627.69 (-3.47)	-631.82 (-2.83)	-370.47 (-0.95)
Pilot dummy	21.13 (14.63)	23.05 (15.52)	15.43 (6.93)	15.73 (9.00)	14.60 (9.44)	10.79 (6.67)	10.09 (5.32)
White male	6.74 (2.31)	8.45 (2.81)	4.98 (1.48)	6.95 (1.97)	3.46 (1.11)	2.06 (0.61)	5.16 (1.37)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	7.82 (2.44)	13.95 (4.20)	12.84 (3.42)	11.42 (2.98)	8.94 (2.60)	8.07 (2.27)	9.11 (2.23)
White female	- 4.68 (-1.74)	- 6.40 (-2.30)	- 6.77 (-2.10)	- 5.86 (-1.76)	- 10.18 (-3.57)	- 15.97 (-5.19)	-4.22 (-1.16)
Black female	- 2.46 (-1.60)	- 1.49 (-0.95)	- 6.22 (-3.47)	- 5.81 (-3.15)	- 4.11 (-2.48)	- 7.04 (-4.14)	-9.46 (-4.76)
Hispanic female	- 3.40 (-1.12)	- 1.71 (-0.54)	- 8.87 (-2.51)	- 7.69 (-2.11)	- 1.23 (-0.36)	- 7.95 (-2.35)	-10.25 (-2.72)
Age (months)	11.66 (7.91)	10.25 (5.98)	1.08 (0.44)	4.34 (1.47)	6.16 (3.60)	6.61 (3.02)	4.23 (1.08)
Age squared	- 0.03 (-7.71)	- 0.02 (-5.89)	- 0.00 (-0.48)	- 0.01 (-1.53)	- 0.01 (-3.60)	- 0.02 (-3.04)	-0.01 (-1.12)
Employment ratio, Spring 1977	0.04 (1.09)	0.03 (0.89)	- 0.04 (-0.87)	- 0.01 (-0.30)	- 0.04 (-1.06)	- 0.05 (-1.09)	0.03 (0.67)
Employment ratio, Summer 1977	0.08 (3.87)	0.10 (4.52)	0.06 (2.46)	0.08 (3.10)	0.18 (7.90)	0.09 (4.00)	0.07 (2.60)
Employment ratio, Fall 1977	0.05 (1.83)	0.10 (3.40)	0.11 (2.98)	0.08 (2.11)	0.05 (1.58)	0.07 (2.10)	0.06 (1.51)
R <sup>2</sup>	.094	.100	.050	.050	.067	.043	.041
N	3840	3759	3037	2890	3428	3377	2403
<u>Pilot Site Means:</u>							
White male	.048	.048	.051	.048	.048	.048	.047
Black male	.368	.372	.383	.383	.365	.375	.387
Hispanic male	.050	.048	.049	.050	.051	.050	.052
White female	.061	.061	.057	.056	.063	.057	.053
Black female	.418	.414	.403	.406	.420	.414	.398
Hispanic female	.055	.053	.057	.057	.053	.056	.063
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.99
Age squared	42154.15	41624.92	40362.37	39901.23	43429.01	41001.52	39282.71
Employment ratio, Spring 1977	5.84	6.42	5.64	5.31	7.78	6.03	5.44
Employment ratio, Summer 1977	22.78	22.69	21.07	20.60	23.91	22.40	21.46
Employment ratio, Fall 1977	10.53	9.94	9.00	8.36	11.92	9.67	8.33
N	2652	1605	2107	2000	2353	2362	1685

Table B5.2. Program Effects on Employment Ratios, Separately by Period for Denver/Phoenix (Table 5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-466.82 (-1.28)	-294.04 (-0.68)	116.19 (-0.17)	-727.64 (-0.88)	-149.90 (-0.33)	-438.49 (-0.79)	723.31 (-0.66)
Pilot dummy	9.01 (2.43)	5.71 (1.53)	-2.00 (-0.47)	3.10 (-0.69)	11.74 (2.08)	-0.39 (-0.10)	8.68 (1.76)
White male	13.92 (1.82)	18.72 (2.46)	18.91 (2.28)	20.76 (2.32)	11.98 (1.48)	5.13 (0.64)	15.18 (1.57)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	9.85 (1.81)	20.02 (3.68)	22.88 (3.82)	21.09 (3.40)	10.73 (1.84)	11.95 (2.08)	19.86 (3.03)
White female	3.11 (0.43)	10.31 (1.42)	6.36 (0.74)	9.83 (1.12)	-1.64 (-0.22)	2.62 (0.33)	1.92 (0.20)
Black female	-3.42 (-0.54)	0.38 (0.06)	3.33 (0.46)	3.69 (0.49)	-2.58 (-0.38)	-4.01 (-0.59)	0.69 (0.09)
Hispanic female	-1.80 (-0.34)	4.45 (0.83)	2.50 (0.42)	2.27 (0.37)	-0.66 (-0.11)	-4.97 (-0.88)	0.60 (0.09)
Age (months)	4.46 (1.27)	3.02 (0.72)	-1.00 (-0.15)	7.32 (0.89)	1.81 (0.42)	4.72 (0.87)	-7.00 (-0.64)
Age squared	-0.01 (-1.20)	-0.01 (-0.71)	0.00 (0.16)	-0.02 (-0.87)	-0.00 (-0.46)	-0.01 (-0.88)	0.02 (0.63)
Employment ratio, Spring 1977	0.13 (1.94)	0.05 (0.78)	0.01 (0.16)	-0.02 (-0.20)	0.02 (0.22)	0.00 (0.03)	0.08 (0.88)
Employment ratio, Summer 1977	0.11 (2.16)	0.17 (3.57)	0.20 (3.72)	0.20 (3.59)	0.16 (3.21)	0.11 (2.12)	0.15 (2.49)
Employment ratio, Fall 1977	-0.02 (-0.30)	0.14 (2.35)	0.10 (1.39)	0.02 (0.28)	0.03 (0.51)	0.13 (2.00)	0.06 (0.81)
R <sup>2</sup>	.070	.110	.103	.082	.071	.059	.086
N	654	626	506	485	578	571	418
<u>Pilot Site Means:</u>							
White male	.063	.066	.070	.061	.069	.068	.053
Black male	.162	.167	.169	.175	.160	.163	.178
Hispanic male	.261	.261	.261	.263	.259	.259	.257
White female	.076	.075	.065	.067	.085	.075	.060
Black female	.145	.139	.129	.134	.150	.139	.135
Hispanic female	.293	.292	.306	.300	.277	.296	.317
Age (months)	205.45	203.89	201.13	200.36	207.99	202.59	198.72
Age squared	42398.93	41729.53	40565.17	40242.79	43438.89	41172.81	39566.57
Employment ratio, Spring 1977	12.42	11.62	10.60	9.86	13.76	11.07	9.36
Employment ratio, Summer 1977	35.50	35.53	35.13	34.82	36.64	35.33	34.65
Employment ratio, Fall 1977	19.20	18.10	17.00	16.41	20.74	17.41	16.21
N	475	462	372	357	433	425	319

Table B5.3. Program Effects on Employment Ratios, Separately by Period, for Cincinnati/Louisville (Table 5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1979	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-841.38 (-3.13)	-1114.02 (-3.50)	-318.26 (-0.74)	-508.66 (-0.96)	-223.27 (-0.73)	-862.60 (-2.12)	367.64 (0.51)
Pilot dummy	15.87 (6.49)	18.00 (6.99)	17.13 (6.06)	16.55 (5.56)	10.70 (4.13)	9.08 (3.17)	11.05 (3.28)
White male	1.60 (0.37)	0.77 (0.17)	3.76 (0.74)	1.65 (0.30)	4.78 (1.05)	- 2.16 (-0.42)	1.43 (0.24)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 29.98 (-1.34)	- 8.91 (-0.39)	0.88 (0.04)	- 18.69 (-0.78)	- 26.90 (-1.20)	7.13 (0.29)	- 31.66 (-1.07)
White female	- 5.94 (-1.52)	- 8.72 (-2.11)	- 2.89 (-0.65)	- 4.94 (-1.04)	- 10.82 (-2.64)	- 14.45 (-3.17)	- 1.72 (-0.33)
Black female	- 4.89 (-1.80)	- 6.84 (-2.41)	- 12.37 (-3.99)	- 11.34 (-3.47)	- 6.68 (-2.32)	- 12.01 (-3.84)	- 7.58 (-2.11)
Hispanic female	- 1.49 (-0.08)	0.74 (0.04)	- 3.11 (-0.13)	0.08 (0.00)	22.60 (0.82)	11.39 (0.54)	- 5.06 (-0.21)
Age (months)	8.10 (3.14)	10.84 (3.51)	3.32 (0.78)	5.47 (1.04)	2.25 (0.78)	8.69 (2.18)	- 3.08 (-0.42)
Age squared	- 0.02 (-3.09)	- 0.03 (-3.46)	- 0.01 (-0.77)	- 0.01 (-1.07)	- 0.01 (-0.77)	- 0.02 (-2.16)	0.01 (0.38)
Employment ratio, Spring 1977	0.11 (1.92)	0.03 (0.44)	- 0.01 (-0.10)	0.01 (0.10)	0.01 (0.24)	- 0.07 (-0.91)	0.03 (0.31)
Employment ratio, Summer 1977	0.12 (3.10)	0.15 (3.83)	- 0.00 (-0.08)	0.04 (0.84)	0.15 (3.86)	0.08 (1.81)	- 0.01 (-0.14)
Employment ratio, Fall 1977	0.06 (1.24)	0.11 (2.05)	0.16 (2.58)	0.14 (2.04)	0.05 (0.94)	0.11 (1.75)	0.18 (2.32)
R <sup>2</sup>	.100	.116	.075	.072	.075	.053	.046
N	1085	1054	881	833	976	957	711

Pilot Site Means:

White male	.064	.065	.063	.059	.062	.062	.056
Black male	.369	.372	.390	.393	.370	.385	.400
Hispanic male	.003	.003	.004	.004	.003	.003	.002
White female	.099	.094	.092	.092	.099	.093	.089
Black female	.460	.461	.467	.448	.464	.452	.449
Hispanic female	.005	.005	.004	.004	.002	.005	.004
Age (months)	204.60	203.77	200.84	199.51	201.18	202.33	198.10
Age squared	42038.94	41681.76	40468.90	39913.66	43507.46	41077.84	39331.57
Employment ratio, Spring 1977	9.08	8.93	7.92	7.88	10.80	8.18	7.10
Employment ratio, Summer 1977	26.38	26.77	24.66	24.08	28.45	25.35	24.53
Employment ratio, Fall 1977	12.42	12.17	10.85	10.19	14.70	11.28	9.71
N	658	649	541	509	577	600	461

Table B5.4. Program Effects on Employment Ratios, Separately by Period, for Baltimore/Cleveland (Table 5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-2047.82 (-7.42)	-1442.51 (-4.65)	70.09 (0.16)	-627.12 (-1.25)	-1699.10 (-5.32)	-385.31 (-1.02)	-1167.86 (-1.86)
Pilot dummy	27.17 (9.27)	32.44 (10.85)	19.07 (5.64)	19.11 (5.54)	13.80 (4.45)	12.23 (3.99)	7.97 (2.29)
White male	0.10 (0.01)	7.58 (1.03)	11.68 (1.47)	13.22 (1.64)	- 6.08 (-0.79)	8.81 (1.16)	4.14 (0.51)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 4.10 (-0.28)	- 0.71 (-0.05)	4.01 (0.24)	2.26 (0.13)	- 3.76 (-0.26)	- 20.91 (-1.35)	5.66 (0.34)
White female	- 5.65 (-0.84)	- 11.48 (-1.66)	- 9.99 (-1.29)	- 6.25 (-0.78)	- 9.67 (-1.35)	- 27.64 (-3.77)	3.51 (0.43)
Black female	0.45 (0.18)	3.54 (1.38)	- 2.75 (-0.94)	- 3.24 (-1.09)	- 0.57 (-0.21)	- 2.25 (-0.85)	- 9.77 (-3.20)
Hispanic female	- 7.41 (-0.48)	- 4.66 (-0.28)	- 14.28 (-0.84)	- 23.01 (-1.25)	4.36 (0.24)	- 3.10 (-0.19)	- 20.75 (-1.06)
Age (month)	19.54 (7.37)	14.03 (4.66)	0.03 (0.01)	7.08 (1.42)	16.51 (5.47)	4.55 (1.23)	12.58 (1.99)
Age squared	- 0.05 (-7.24)	- 0.03 (-4.61)	- 0.00 (-0.11)	- 0.02 (-1.53)	- 0.04 (-5.52)	- 0.01 (-1.34)	- 0.03 (-2.05)
Employment ratio, Spring 1977	- 0.09 (-1.28)	0.03 (0.40)	- 0.14 (-1.51)	- 0.09 (-0.59)	- 0.01 (-0.13)	- 0.10 (-1.23)	- 0.03 (-0.30)
Employment ratio, Summer 1977	0.05 (1.33)	0.03 (0.88)	0.05 (1.20)	0.05 (1.01)	0.18 (4.42)	0.09 (2.35)	0.06 (1.25)
Employment ratio, Fall 1977	0.06 (1.12)	0.06 (0.97)	0.11 (1.60)	0.14 (1.88)	0.02 (0.43)	0.06 (0.91)	0.04 (0.44)
R <sup>2</sup>	.114	.110	.048	.053	.063	.043	.032
N	1299	1279	1037	992	1170	1204	884
<u>Pilot Site Means:</u>							
White male	.019	.018	.023	.022	.020	.019	.023
Black male	.002	.421	.433	.436	.421	.422	.430
Hispanic male	.006	.006	.005	.005	.007	.005	.006
White female	.028	.027	.029	.029	.028	.025	.027
Black female	.520	.524	.505	.503	.521	.525	.509
Hispanic female	.005	.004	.005	.005	.003	.004	.005
Age (months)	205.42	203.95	200.53	199.50	208.76	202.61	197.62
Age squared	42387.41	41765.09	40343.86	39912.53	43757.43	41193.20	39138.56
Employment ratio, Spring 1977	4.25	3.82	3.19	2.97	4.72	3.70	2.56
Employment ratio, Summer 1977	19.79	19.68	17.27	17.03	20.60	19.48	16.67
Employment ratio, Fall 1977	7.70	7.18	6.08	5.36	8.76	7.07	4.75
N	1002	988	794	759	894	926	664

Table B5.5. Program Effects on Employment Ratios, Separately by Period, for Mississippi Pilot/Control (Table 5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1172.22 (-3.50)	-953.43 (-2.60)	-526.28 (-1.00)	-110.53 (-0.17)	431.92 (1.03)	-849.57 (-1.68)	-874.65 (-1.00)
Pilot dummy	19.79 (6.95)	20.96 (7.20)	13.61 (3.82)	16.14 (4.42)	11.82 (3.76)	12.31 (3.64)	9.59 (2.24)
White male	21.18 (3.66)	21.87 (3.67)	1.40 (0.19)	9.20 (1.25)	12.36 (1.90)	8.05 (1.14)	15.33 (1.87)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
White female	- 3.80 (-0.66)	- 7.68 (-1.30)	- 13.55 (-1.77)	- 14.39 (-1.77)	- 4.63 (-0.72)	- 23.85 (-3.22)	- 13.42 (-1.32)
Black female	- 6.16 (-2.13)	- 6.52 (-2.20)	- 9.86 (-2.74)	- 8.39 (-2.28)	- 8.85 (-2.77)	- 13.32 (-3.85)	- 17.75 (-4.02)
Age (months)	10.99 (3.40)	9.00 (2.52)	5.21 (1.00)	1.10 (0.17)	- 4.27 (-1.07)	8.32 (1.67)	8.61 (0.98)
Age squared	- 0.03 (-3.25)	- 0.02 (-2.40)	- 0.01 (-0.95)	- 0.00 (-0.13)	0.01 (1.17)	- 0.02 (-1.59)	- 0.02 (-0.91)
Employment ratio, Spring 1977	- 0.09 (-0.93)	- 0.07 (-0.72)	- 0.01 (-0.06)	0.15 (0.98)	- 0.26 (-2.59)	0.02 (0.15)	0.07 (0.39)
Employment ratio, Summer 1977	0.03 (0.54)	0.06 (1.18)	0.01 (0.23)	0.04 (0.56)	0.15 (2.83)	0.06 (1.29)	0.11 (1.55)
Employment ratio, Fall 1977	0.15 (1.99)	0.08 (1.00)	0.05 (0.44)	- 0.01 (-0.06)	0.13 (1.54)	- 0.10 (-1.08)	- 0.08 (-0.68)
R <sup>2</sup>	.129	.120	.050	.064	.080	.079	.110
N	832	800	613	580	704	645	390
<u>Pilot Site Means:</u>							
White male	.070	.070	.072	.072	.067	.071	.087
Black male	.448	.445	.472	.469	.445	.476	.523
White female	.064	.064	.058	.051	.065	.056	.046
Black female	.418	.411	.398	.408	.423	.397	.344
Age (months)	203.63	202.57	199.86	198.58	206.22	200.38	197.80
Age squared	41623.83	41178.28	40066.44	39536.31	42664.78	40281.12	39215.65
Employment ratio, Spring 1977	3.88	3.70	2.79	2.23	4.25	3.34	2.23
Employment ratio, Summer 1977	12.30	12.10	10.70	9.58	12.39	11.27	11.53
Employment ratio, Fall 1977	5.65	5.28	4.85	4.27	6.12	5.16	5.11
N	517	516	400	375	449	411	241



Table b5.6. Program Effects on Employment Ratios of Private Sector Employment Ratios (Table 5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>Coefficients (t-statistics):</b>							
Constant	-389.03 (-3.28)	-143.09 (-1.02)	108.09 (0.51)	-108.95 (-0.43)	-182.48 (-1.31)	-30.69 (-0.16)	-293.19 (-0.83)
Pilot dummy	3.62 (3.22)	4.56 (3.86)	3.22 (2.24)	3.61 (2.41)	0.93 (0.77)	-0.09 (-0.07)	4.32 (2.51)
White male	13.02 (5.73)	15.05 (6.30)	12.41 (4.33)	13.99 (4.63)	13.65 (5.64)	14.68 (5.33)	15.27 (4.46)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	15.63 (6.23)	18.89 (7.18)	20.10 (6.33)	18.83 (5.75)	18.39 (6.92)	20.04 (6.72)	18.57 (5.01)
White female	4.28 (2.06)	2.64 (1.20)	0.42 (0.15)	1.11 (0.39)	1.09 (0.50)	-1.07 (-0.42)	4.13 (1.26)
Black female	-4.33 (-3.65)	-5.08 (-4.09)	-9.05 (-5.98)	-10.07 (-6.40)	-4.39 (-3.45)	-8.95 (-6.29)	-11.91 (-6.63)
Hispanic female	0.88 (0.37)	2.61 (1.04)	-1.57 (-0.52)	-2.78 (-0.89)	1.49 (0.57)	-0.28 (-0.10)	-4.46 (-1.31)
Age (months)	3.60 (3.15)	1.27 (0.94)	-1.05 (-0.50)	1.15 (0.46)	1.68 (1.27)	0.31 (0.17)	3.11 (0.88)
Age squared	-0.01 (-2.93)	-0.00 (-0.76)	0.00 (0.58)	-0.00 (-0.40)	-0.00 (-1.14)	-0.00 (-0.05)	-0.01 (-0.86)
Private sector employment ratio, Spring 1977	0.05 (1.61)	0.07 (2.18)	0.00 (0.06)	0.02 (0.51)	-0.02 (-0.61)	-0.02 (-0.62)	0.00 (1.00)
Private sector employment ratio, Summer 1977	0.05 (2.30)	0.03 (1.42)	0.05 (1.69)	0.08 (2.48)	0.10 (4.25)	0.05 (1.77)	0.09 (2.49)
Private sector employment ratio, Fall 1977	0.16 (6.06)	0.18 (6.44)	0.16 (4.39)	0.14 (3.51)	0.20 (7.32)	0.17 (4.96)	0.09 (1.99)
R <sup>2</sup>	.095	.097	.073	.075	.107	.078	.077
N	3840	3759	3037	2890	3428	3377	2403
<b>Pilot Site Means:</b>							
White male	.048	.048	.051	.048	.048	.048	.047
Black male	.368	.372	.383	.383	.365	.375	.387
Hispanic male	.050	.048	.049	.050	.051	.050	.052
White female	.061	.060	.057	.056	.063	.057	.053
Black female	.418	.419	.403	.406	.420	.414	.398
Hispanic female	.055	.053	.057	.057	.053	.056	.063
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.99
Age squared	42154.15	41621.92	40362.37	39901.23	43429.01	41001.52	39282.71
Private sector employment ratio, Spring 1977	5.48	5.07	4.41	4.20	6.24	4.67	4.01
Private sector employment ratio, Summer 1977	10.62	10.35	9.76	9.26	11.35	9.93	9.67
Private sector employment ratio, Fall 1977	7.72	7.16	6.66	6.18	8.77	6.93	6.11
N	2652	2605	2107	2000	2353	2362	1685

Table B5.7. Program Effects on Employment Ratios of Public Sector Employment Ratios (Table 5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-840.30 (-6.74)	-929.67 (-6.32)	-214.79 (-1.17)	-307.56 (-1.39)	-480.62 (-3.19)	-625.31 (-3.36)	-87.51 (-0.3)
Pilot dummy	17.45 (14.86)	18.26 (14.76)	12.25 (9.79)	12.12 (9.29)	12.40 (10.41)	10.77 (7.98)	5.31 (4.2)
White male	- 7.42 (-3.15)	- 7.55 (-3.03)	- 8.67 (-3.51)	- 8.39 (-3.20)	- 11.92 (-4.62)	- 13.74 (-5.08)	-11.01 (-4.0)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 8.77 (-3.37)	- 5.33 (-1.93)	- 7.60 (-2.75)	- 7.81 (-2.74)	- 10.69 (-3.75)	- 12.42 (-4.21)	- 9.71 (-3.3)
White female	- 9.00 (-4.11)	- 9.54 (-4.11)	- 7.62 (-3.21)	- 7.61 (-3.06)	- 11.70 (-4.91)	- 15.11 (-5.88)	- 8.71 (-3.3)
Black female	2.39 (1.92)	3.63 (2.79)	2.97 (2.26)	4.42 (3.22)	0.72 (0.53)	2.09 (1.48)	2.61 (1.8)
Hispanic female	- 4.66 (-1.88)	- 4.67 (-1.77)	- 7.72 (-2.96)	- 5.29 (-1.94)	- 3.20 (-1.14)	- 8.11 (-2.87)	- 6.01 (-2.2)
Age (months)	8.11 (6.77)	9.15 (6.41)	2.44 (1.34)	3.44 (1.56)	4.84 (3.40)	6.55 (3.59)	1.21 (0.4)
Age squared	- 0.02 (-6.77)	- 0.02 (-6.48)	- 0.01 (-1.49)	- 0.01 (-1.70)	- 0.01 (-3.54)	- 0.02 (-3.76)	- 0.01 (-0.5)
Public sector employment ratio, Spring 1977	- 0.01 (-0.09)	- 0.06 (-1.00)	- 0.15 (-2.31)	- 0.06 (-0.85)	- 0.12 (-1.89)	- 0.12 (-1.66)	0.01 (0.6)
Public sector employment ratio, Summer 1977	0.14 (6.34)	0.11 (4.73)	0.05 (2.37)	0.04 (1.88)	0.22 (9.52)	0.11 (4.64)	0.01 (1.7)
Public sector employment ratio, Fall 1977	0.04 (0.93)	0.12 (2.63)	0.05 (0.98)	0.02 (0.45)	0.04 (0.98)	0.08 (1.53)	0.01 (0.2)
R <sup>2</sup>	.098	.096	.064	.065	.095	.072	.04
N	3840	3759	3037	2890	3428	3377	2401
<u>Pilot Site Means:</u>							
White male	.048	.048	.051	.048	.048	.048	.041
Black male	.368	.372	.383	.383	.365	.375	.381
Hispanic male	.050	.048	.049	.050	.051	.050	.051
White female	.061	.060	.057	.056	.063	.057	.051
Black female	.418	.419	.403	.406	.420	.414	.391
Hispanic female	.055	.053	.057	.057	.053	.056	.061
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.91
Age squared	42154.15	41621.92	40362.37	39901.23	43429.01	41001.52	39282.7
Public sector employment ratio, Spring 1977	1.36	1.35	1.23	1.11	1.54	1.36	1.01
Public sector employment ratio, Summer 1977	12.17	12.35	11.32	11.34	12.56	12.47	11.71
Public sector employment ratio, Fall 1977	2.81	2.78	2.34	2.17	3.15	2.73	2.21
N	2652	2605	2707	2000	2353	2362	1681

Table B5.8. Program Effects on Employment Ratios, Separately by Period, for White Males (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1005.07 (-1.55)	-617.88 (-0.81)	-1783.15 (-1.58)	-261.21 (-0.18)	-168.93 (-0.22)	-299.54 (-0.32)	761.75 (0.37)
Pilot dummy	16.63 (2.99)	12.29 (2.14)	3.62 (0.57)	15.06 (2.33)	9.81 (1.64)	-3.03 (-0.50)	6.45 (0.90)
Age (months)	9.61 (1.54)	5.95 (0.80)	17.31 (1.57)	2.06 (0.14)	2.08 (0.29)	3.08 (0.33)	-7.64 (-0.37)
Age squared	-0.02 (-1.50)	-0.01 (-0.76)	-0.04 (-1.52)	-0.00 (-0.09)	-0.01 (-0.32)	-0.01 (-0.30)	0.02 (0.39)
Employment ratio, Spring 1977	-0.09 (-0.96)	-0.01 (-0.06)	-0.03 (-0.27)	-0.09 (-0.78)	-0.16 (-1.67)	0.04 (0.35)	-0.06 (-0.39)
Employment ratio, Summer 1977	0.11 (1.34)	0.21 (2.33)	0.04 (0.36)	0.28 (2.76)	0.15 (1.66)	0.06 (0.63)	0.19 (1.67)
Employment ratio, Fall 1977	0.23 (2.62)	0.11 (1.22)	0.22 (2.12)	0.10 (0.91)	0.26 (2.88)	0.11 (1.14)	0.17 (1.48)
R <sup>2</sup>	.107	.098	.079	.135	.081	.042	.077
N	239	232	194	178	217	206	149
<u>Pilot Site Means:</u>							
Age (months)	204.90	204.23	201.93	199.77	207.55	202.98	198.37
Age squared	42167.15	41882.69	40921.65	40016.17	43246.03	41363.23	39433.78
Employment ratio, Spring 1977	18.48	17.85	16.40	13.91	22.34	17.28	14.59
Employment ratio, Summer 1977	30.19	29.64	28.53	26.70	32.45	28.69	29.06
Employment ratio, Fall 1977	21.61	20.99	22.39	18.99	24.73	22.52	20.82
N	127	126	107	96	114	113	79

Table B5.9. Program Effects on Employment Ratios, Separately by Period, for Black Males (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1212.70 (-4.51)	-1135.62 (-3.76)	388.65 (0.96)	-195.86 (-0.41)	-415.02 (-1.36)	-587.74 (-1.57)	-605.88 (-0.97)
Pilot dummy	22.60 (8.90)	25.41 (9.84)	18.92 (6.50)	19.72 (6.61)	14.54 (5.37)	11.17 (4.05)	10.45 (3.29)
Age (months)	11.40 (4.40)	10.79 (3.68)	-3.72 (-0.93)	2.26 (0.48)	3.95 (1.37)	5.98 (1.64)	6.43 (1.02)
Age squared	-0.03 (-4.23)	-0.03 (-3.54)	0.01 (0.95)	-0.01 (-0.49)	-0.01 (-1.29)	-0.01 (-1.60)	-0.02 (-1.02)
Employment ratio, Spring 1977	0.06 (1.07)	0.06 (0.99)	-0.07 (-0.94)	-0.12 (-1.55)	-0.00 (-0.04)	-0.12 (-1.74)	-0.10 (-1.27)
Employment ratio, Summer 1977	0.06 (1.67)	0.06 (1.77)	0.03 (0.70)	0.03 (0.77)	0.14 (3.88)	0.09 (2.51)	-0.01 (-0.16)
Employment ratio, Fall 1977	0.03 (0.57)	0.03 (0.53)	0.11 (1.64)	0.14 (2.00)	-0.02 (-0.31)	0.07 (1.26)	0.18 (2.43)
R <sup>2</sup>	.096	.100	.043	.045	.045	.026	.021
N	1349	1331	1121	1067	1208	1226	903
<u>Pilot Site Means:</u>							
Age (months)	204.62	203.67	200.58	199.50	208.07	202.09	197.76
Age squared	42048.72	41645.89	40359.41	39509.77	43460.84	40982.67	39192.77
Employment ratio, Spring 1977	8.19	7.86	6.74	6.56	9.19	7.30	6.24
Employment ratio, Summer 1977	28.02	27.65	24.89	24.17	29.33	26.45	25.21
Employment ratio, Fall 1977	11.81	11.14	9.66	9.04	13.66	10.63	8.58
N	975	967	807	768	858	887	653

OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-279.45 (-0.38)	68.83 (0.09)	70.95 (0.05)	-1032.87 (-0.64)	120.14 (0.14)	-17.61 (-0.02)	-1056.41 (-0.48)
Pilot dummy	- 0.36 (-0.05)	3.08 (0.45)	6.65 (0.82)	4.19 (0.49)	3.15 (0.44)	- 1.60 (-0.22)	13.69 (1.55)
Age (months)	2.50 (0.36)	- 0.67 (-0.09)	- 0.05 (-0.00)	10.88 (0.68)	- 0.95 (-0.12)	0.46 (0.05)	11.69 (0.53)
Age squared	- 0.00 (-0.28)	0.00 (0.14)	- 0.00 (-0.02)	- 0.03 (-0.70)	0.00 (0.14)	- 0.00 (-0.02)	- 0.03 (-0.57)
Employment ratio, Spring 1977	0.09 (0.71)	0.06 (0.53)	- 0.03 (-0.23)	- 0.03 (-0.19)	- 0.06 (-0.42)	- 0.06 (-0.49)	0.08 (0.56)
Employment ratio, Summer 1977	0.06 (0.67)	0.12 (1.32)	0.17 (1.59)	0.16 (1.51)	0.17 (1.80)	0.14 (1.46)	0.13 (1.23)
Employment ratio, Fall 1977	- 0.05 (-0.46)	0.07 (0.65)	0.10 (0.78)	- 0.02 (-0.18)	0.02 (0.19)	0.08 (0.73)	0.00 (0.01)
R <sup>2</sup>	.052	.067	.037	.022	.035	.029	.054
N	188	180	148	144	169	165	121
<u>Pilot Site Means:</u>							
Age (months)	207.77	206.03	202.49	202.14	209.84	204.25	199.76
Age squared	43371.36	42623.95	41124.02	40976.60	44211.43	41859.94	39992.08
Employment ratio, Spring 1977	18.11	16.76	13.41	12.54	19.30	14.65	13.78
Employment ratio, Summer 1977	39.49	38.89	36.70	35.64	42.10	38.17	35.51
Employment ratio, Fall 1977	24.16	21.83	20.46	20.08	26.46	20.87	20.23
N	132	126	103	100	120	117	87

Table B5.11. Program Effects on Employment Ratios, Separately by Period, for White Females (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-41.29 (-0.08)	-506.66 (-0.87)	916.55 (1.13)	-222.08 (-0.24)	-106.84 (-0.18)	-499.96 (-0.67)	-1329.28 (-0.97)
Pilot dummy	6.22 (1.34)	7.08 (1.56)	- 1.01 (-0.18)	2.56 (0.43)	- 0.24 (-0.05)	1.71 (0.33)	2.27 (0.32)
Age (months)	0.50 (0.10)	5.06 (0.91)	- 8.92 (-1.12)	2.75 (0.30)	1.01 (0.18)	5.17 (0.71)	14.24 (1.03)
Age squared	- 0.00 (-0.08)	- 0.01 (-0.91)	0.02 (1.13)	- 0.01 (-0.33)	- 0.00 (-0.15)	- 0.01 (-0.72)	- 0.04 (-1.06)
Employment ratio, Spring 1977	0.13 (1.12)	0.01 (0.10)	- 0.01 (-0.05)	0.43 (2.35)	0.06 (0.56)	0.11 (0.79)	0.52 (2.35)
Employment ratio, Summer 1977	- 0.10 (-1.20)	- 0.05 (-0.55)	0.01 (0.10)	0.14 (1.29)	0.06 (0.71)	- 0.10 (-1.14)	- 0.09 (-0.61)
Employment ratio, Fall 1977	0.27 (2.67)	0.27 (4.75)	0.26 (1.70)	- 0.21 (-1.22)	0.26 (2.59)	0.38 (3.19)	- 0.03 (-0.17)
R <sup>2</sup>	.064	.125	.034	.046	.094	.072	.052
N	286	274	213	201	263	233	160
<u>Pilot Site Means:</u>							
Age (months)	207.73	205.86	201.98	200.52	210.00	203.91	197.64
Age squared	43108.31	42558.03	40940.10	40327.84	44294.19	41728.63	39141.24
Employment ratio, Spring 1977	10.41	9.19	8.31	7.70	12.13	8.13	6.18
Employment ratio, Summer 1977	16.90	15.73	15.92	14.51	18.47	15.96	12.35
Employment ratio, Fall 1977	12.94	11.69	8.93	8.21	14.62	10.39	6.71
N	162	155	120	112	148	134	89

Table B5.12. Program Effects on Employment Ratios, Separately by Period, for Black Females (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>Coefficients (t-statistics):</b>							
Constant	-1551.34 (-6.62)	-1272.28 (-4.67)	-676.42 (-1.73)	-755.22 (-1.61)	-1180.40 (-4.16)	-849.37 (-2.42)	-2.78 (-0.00)
Pilot dummy	27.71 (12.48)	30.04 (12.91)	22.07 (8.31)	19.25 (6.98)	19.76 (8.23)	17.03 (6.62)	10.20 (3.33)
Age (months)	14.84 (6.58)	12.46 (4.71)	7.24 (1.87)	8.13 (1.74)	11.51 (4.29)	8.87 (2.57)	0.59 (0.10)
Age squared	- 0.04 (-6.50)	- 0.03 (-4.71)	- 0.02 (-1.98)	- 0.02 (-1.83)	- 0.03 (-4.36)	- 0.02 (-2.65)	-0.00 (-0.15)
Employment ratio, Spring 1977	0.11 (-1.38)	0.11 (-1.24)	0.14 (-1.39)	0.03 (-0.27)	0.09 (-1.08)	0.17 (-1.71)	-0.01 (-0.06)
Employment ratio, Summer 1977	0.13 (3.71)	0.12 (3.52)	0.07 (1.69)	0.04 (1.03)	0.23 (6.43)	0.12 (3.17)	0.10 (2.12)
Employment ratio, Fall 1977	0.03 (-0.52)	0.06 (1.05)	0.03 (0.52)	0.10 (1.39)	0.03 (-0.52)	0.04 (-0.56)	-0.03 (-0.33)
R <sup>2</sup>	.121	.113	.067	.055	.084	.047	.020
N	1568	1542	1192	1140	1396	1362	925
<b>Pilot Site Means:</b>							
Age (months)	204.48	203.08	200.01	199.01	207.46	201.67	197.90
Age squared	41984.70	41392.54	40125.23	39708.04	43200.34	40803.36	39248.67
Employment ratio, Spring 1977	2.52	2.33	2.07	2.07	2.86	2.25	1.69
Employment ratio, Summer 1977	15.16	15.57	14.13	14.14	15.66	15.73	14.89
Employment ratio, Fall 1977	5.50	5.32	4.80	4.45	6.23	5.17	4.72
N	1109	1092	850	811	989	978	671

Table B5.13. Program Effects on Employment Ratios, Separately by Period, for Hispanic Females (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>Coefficients (t-statistics):</b>							
Constant	-1317.14 (-2.27)	-1101.01 (-1.40)	137.73 (0.11)	-203.14 (-0.13)	-710.32 (-0.86)	-1409.33 (-1.35)	-382.98 (-0.21)
Pilot dummy	14.91 (2.49)	11.97 (1.89)	- 4.96 (-0.70)	- 9.01 (-1.23)	25.47 (3.58)	5.86 (0.81)	12.24 (1.60)
Age (months)	12.48 (2.23)	11.15 (1.45)	- 1.04 (-0.09)	2.52 (0.16)	6.92 (0.89)	14.63 (1.42)	4.28 (0.23)
Age squared	- 0.03 (-2.18)	- 0.03 (-1.49)	0.00 (0.08)	- 0.01 (-0.17)	- 0.02 (-0.90)	- 0.04 (-1.47)	- 0.01 (-0.25)
Employment ratio, Spring 1977	0.31 (2.02)	0.12 (0.77)	0.05 (0.24)	0.09 (0.43)	0.14 (0.66)	0.11 (0.62)	0.39 (1.86)
Employment ratio, Summer 1977	0.17 (1.96)	0.22 (2.40)	0.29 (2.85)	0.38 (3.67)	0.20 (2.06)	0.11 (1.09)	0.33 (3.22)
Employment ratio, Fall 1977	0.02 (-0.20)	0.15 (1.40)	0.03 (0.24)	- 0.06 (-0.46)	- 0.03 (-0.22)	0.09 (0.77)	- 0.09 (-0.65)
R <sup>2</sup>	.145	.129	.069	.102	.128	.056	.145
N	210	200	169	160	175	184	145
<b>Pilot Site Means:</b>							
Age (months)	204.41	202.30	200.53	199.16	207.94	201.64	198.47
Age squared	41976.11	41068.72	40331.85	39757.55	43411.09	40789.38	39476.25
Employment ratio, Spring 1977	6.44	5.71	4.57	4.01	7.64	5.58	3.66
Employment ratio, Summer 1977	30.63	30.95	29.69	30.36	35.29	31.59	30.52
Employment ratio, Fall 1977	15.58	15.07	12.55	12.44	16.12	14.81	11.94
N	147	139	120	113	124	133	106

Table B5.14. Program Effects on Employment Ratios, Separately by Period, for Whites (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-418.67 (-1.01)	-516.45 (-1.09)	-44.29 (-0.07)	-28.75 (-0.04)	27.98 (0.06)	-390.34 (-0.65)	-180.11 (-0.16)
Pilot dummy	11.08 (3.08)	9.62 (2.63)	0.55 (0.13)	8.66 (1.95)	4.40 (1.16)	-0.55 (-0.14)	5.80 (1.15)
Age (months)	4.08 (1.03)	5.10 (1.12)	0.45 (0.07)	0.41 (0.05)	-0.02 (-0.01)	4.09 (0.70)	2.27 (0.20)
Age squared	-0.01 (-1.00)	-0.01 (-1.10)	-0.00 (-0.03)	-0.00 (-0.04)	-0.00 (-0.00)	-0.01 (-0.70)	-0.01 (-0.21)
Employment ratio, Spring 1977	0.02 (0.23)	0.03 (0.45)	0.01 (0.12)	0.09 (0.92)	-0.06 (-0.86)	0.10 (1.22)	0.16 (1.40)
Employment ratio, Summer 1977	0.03 (0.51)	0.12 (1.93)	0.03 (0.48)	0.21 (2.81)	0.12 (1.96)	-0.00 (-0.02)	0.07 (0.80)
Employment ratio, Fall 1977	0.26 (3.90)	0.27 (3.99)	0.25 (2.96)	0.06 (0.67)	0.27 (4.17)	0.25 (3.28)	0.12 (1.22)
R <sup>2</sup>	.080	.108	.056	.068	.087	.063	.044
N	525	506	407	379	480	439	309
<u>Pilot Site Means:</u>							
Age (months)	206.15	205.13	201.96	200.17	208.94	203.49	197.98
Age squared	42694.72	42255.21	40931.41	40183.99	43838.12	41561.46	39278.80
Employment ratio, Spring 1977	13.96	13.07	12.12	10.56	16.57	12.32	10.13
Employment ratio, Summer 1977	22.74	21.96	21.86	20.14	24.55	21.80	20.20
Employment ratio, Fall 1977	16.75	15.86	15.27	13.18	19.02	15.94	13.34
N	289	281	227	208	262	247	168

Table B5.15. Program Effects on Employment Ratios, Separately by Period, for Blacks (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1408.75 (-7.95)	-1202.16 (-5.94)	-91.22 (-0.32)	-436.21 (-1.30)	-786.21 (-3.78)	-668.64 (-2.60)	-301.02 (-0.68)
Pilot dummy	25.34 (15.13)	27.95 (16.16)	20.55 (10.41)	19.59 (9.66)	17.09 (9.48)	14.28 (7.56)	10.24 (4.61)
Age (months)	13.39 (7.85)	11.62 (5.91)	1.23 (0.44)	4.79 (1.44)	7.65 (3.87)	6.93 (2.75)	3.48 (0.79)
Age squared	-0.03 (-7.67)	-0.03 (-5.81)	-0.00 (-0.49)	-0.01 (-1.51)	-0.02 (-3.87)	-0.02 (-2.78)	-0.01 (-0.82)
Employment ratio, Spring 1977	0.02 (0.46)	0.01 (0.25)	-0.07 (-1.16)	-0.08 (-1.23)	-0.02 (-0.47)	-0.10 (-1.77)	-0.03 (-0.37)
Employment ratio, Summer 1977	0.09 (3.91)	0.09 (3.81)	0.06 (2.03)	0.05 (1.63)	0.19 (7.46)	0.12 (4.39)	0.06 (1.90)
Employment ratio, Fall 1977	0.01 (0.30)	0.05 (1.21)	0.03 (1.79)	0.12 (2.44)	-0.02 (-0.42)	0.03 (0.75)	0.08 (1.49)
R <sup>2</sup>	.105	.103	.049	.048	.060	.032	.017
N	2917	2873	2313	2207	2604	2588	1828
<u>Pilot Site Means:</u>							
Age (months)	204.55	203.36	200.28	199.25	207.74	201.87	197.83
Age squared	42014.05	41511.53	40239.29	39806.16	43321.35	40888.64	39221.10
Employment ratio, Spring 1977	5.17	4.93	4.34	4.26	5.80	4.69	3.93
Employment ratio, Summer 1977	21.18	21.24	19.37	19.01	22.01	20.83	19.98
Employment ratio, Fall 1977	8.45	8.06	7.17	6.69	9.68	7.77	6.62
N	2084	2059	1657	1579	1847	1865	1324

Table B5.16. Program Effects on Employment Ratios, Separately by Period, for Hispanics (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1017.38 (-2.23)	-535.37 (-0.95)	-141.85 (-0.16)	-683.59 (-0.61)	-345.31 (-0.59)	-723.09 (-0.99)	-1581.03 (-1.14)
Pilot dummy	8.20 (1.77)	9.07 (1.93)	0.09 (0.02)	- 3.22 (-0.58)	14.72 (2.91)	2.34 (0.45)	12.51 (2.15)
Age (months)	9.64 (2.20)	5.42 (0.99)	1.85 (0.21)	7.29 (0.65)	3.53 (0.64)	7.61 (1.05)	16.56 (1.19)
Age squared	- 0.02 (-2.11)	- 0.01 (-0.98)	- 0.00 (-0.22)	- 0.02 (-0.67)	- 0.01 (-0.64)	- 0.02 (-1.08)	- 0.04 (-1.23)
Employment ratio, Spring 1977	0.18 (1.96)	0.12 (1.32)	0.04 (0.31)	0.03 (0.20)	0.03 (0.34)	0.04 (0.38)	0.20 (1.73)
Employment ratio, Summer 1977	0.13 (2.03)	0.19 (2.90)	0.23 (3.17)	0.27 (3.59)	0.20 (2.89)	0.14 (2.07)	0.23 (3.03)
Employment ratio, - Fall 1977	0.01 (-0.11)	0.12 (1.62)	0.09 (0.93)	- 0.02 (-0.17)	0.03 (0.37)	0.09 (1.14)	- 0.02 (-0.17)
R <sup>2</sup>	.088	.093	.056	.054	.071	.035	.094
N	398	380	317	304	344	350	266
<u>Pilot Site Means:</u>							
Age (months)	206.00	204.08	201.43	200.56	208.88	202.86	199.05
Age squared	42636.23	41808.19	40697.74	40329.87	43804.70	41290.40	39708.77
Employment ratio, Spring 1977	11.96	10.97	8.65	8.02	13.37	9.83	8.22
Employment ratio, Summer 1977	34.82	34.73	32.93	32.84	37.62	34.67	32.77
Employment ratio, Fall 1977	19.64	18.28	16.20	16.03	21.21	17.65	15.68
N	279	265	223	213	244	250	193

Table B5.17. Program Effects on Employment Ratios, Separately by Period, for Males (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1063.49 (-4.53)	-944.83 (-3.55)	96.44 (0.26)	-280.80 (-0.64)	-338.30 (-1.26)	-531.25 (-1.62)	-544.95 (-0.95)
Pilot dummy	18.45 (8.47)	20.09 (9.05)	14.56 (5.82)	16.39 (6.39)	12.12 (5.25)	7.58 (3.22)	9.86 (3.62)
Age (months)	10.02 (4.44)	9.00 (3.49)	- 0.82 (-0.23)	3.04 (0.70)	3.32 (1.31)	5.42 (1.69)	5.83 (1.01)
Age squared	- 0.02 (-4.25)	- 0.02 (-3.34)	0.00 (0.26)	- 0.01 (-0.69)	- 0.01 (-1.25)	- 0.01 (-1.64)	- 0.01 (-1.01)
Employment ratio, Spring 1977	0.05 (1.02)	0.07 (1.19)	- 0.04 (-0.68)	- 0.06 (-1.02)	- 0.05 (-1.04)	- 0.06 (-1.25)	- 0.03 (-0.46)
Employment ratio, Summer 1977	0.06 (2.04)	0.08 (2.70)	0.04 (1.23)	0.08 (2.11)	0.14 (4.43)	0.09 (2.94)	0.03 (0.84)
Employment ratio, Fall 1977	0.08 (1.98)	0.08 (1.85)	0.14 (2.83)	0.12 (2.26)	0.07 (1.64)	0.08 (1.83)	0.15 (2.71)
R <sup>2</sup>	.083	.087	.036	.039	.042	.023	.023
N	1776	1743	1463	1389	1594	1528	1173
<u>Pilot Site Means:</u>							
Age (months)	204.99	203.97	200.91	199.80	208.21	202.41	198.03
Age squared	42202.39	41771.47	40496.01	40031.04	43520.90	41113.06	39300.92
Employment ratio, Spring 1977	10.31	9.81	8.43	7.91	11.67	9.14	7.85
Employment ratio, Summer 1977	29.47	29.02	26.47	25.61	31.06	27.90	26.67
Employment ratio, Fall 1977	14.14	13.27	12.09	11.18	16.22	12.91	11.00
N	1234	1219	1017	964	1092	1117	819



Table B5.18. Program Effects on Employment Ratios, Separately by Period, for Females (Table 5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1346.24 (-6.67)	-1158.93 (-4.91)	-351.80 (-1.04)	-602.42 (-1.49)	-923.89 (-3.78)	-805.60 (-2.64)	-241.16 (-0.36)
Pilot dummy	23.11 (12.17)	25.13 (12.72)	15.95 (7.01)	14.31 (6.08)	17.36 (8.45)	14.19 (6.46)	9.39 (3.62)
Age (months)	12.88 (6.64)	11.40 (4.98)	3.95 (1.18)	6.58 (1.63)	9.01 (3.90)	8.43 (2.81)	3.00 (0.57)
Age squared	- 0.03 (-6.54)	- 0.03 (-4.99)	- 0.01 (-1.27)	- 0.02 (-1.72)	- 0.02 (-3.95)	- 0.02 (-2.91)	- 0.01 (-0.63)
Employment ratio, Spring 1977	0.04 (0.60)	- 0.02 (-0.32)	- 0.04 (-0.49)	0.10 (1.19)	- 0.01 (-0.10)	- 0.03 (-0.44)	0.21 (2.12)
Employment ratio, Summer 1977	0.10 (3.43)	0.11 (3.72)	0.08 (2.23)	0.08 (2.12)	0.22 (6.99)	0.10 (2.86)	0.10 (2.65)
Employment ratio, Fall 1977	0.02 (0.58)	0.15 (3.30)	0.07 (1.35)	0.05 (0.85)	0.02 (0.48)	0.05 (0.98)	- 0.03 (-0.49)
R <sup>2</sup>	.096	.098	.041	.039	.074	.037	.026
N	2064	2016	1574	1501	1834	1779	1230
<u>Pilot Site Means:</u>							
Age (months)	204.78	203.31	200.28	199.19	207.80	201.91	197.94
Age squared	42112.18	41490.40	40237.69	39780.44	43349.44	40901.46	39265.48
Employment ratio, Spring 1977	3.82	3.44	3.03	2.89	4.42	3.24	2.39
Employment ratio, Summer 1977	16.96	17.13	16.04	15.95	17.72	17.45	16.54
Employment ratio, Fall 1977	7.39	7.01	6.11	5.73	8.19	6.76	5.81
N	1418	1386	1090	1036	1261	1245	866



Table B5.19. Program Effects on Employment Ratios, Separately by Period, for the 15-16 Year Old Cohort (Table 5.4):  
OLS Coefficients and Pilot Site Means

	Fall 1973	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-3718.15 (-2.72)	-1555.67 (-1.25)	-1924.38 (-2.19)	-1989.18 (-2.24)	-5705.52 (-2.05)	-1404.11 (-1.19)	-1229.05 (-1.37)
Pilot dummy	23.33 (12.31)	23.41 (11.83)	19.04 (8.97)	18.81 (8.76)	17.01 (7.50)	11.09 (5.32)	12.42 (5.46)
White male	7.52 (1.97)	9.08 (2.27)	1.35 (0.32)	1.79 (0.41)	7.94 (1.76)	0.36 (-0.08)	2.49 (0.55)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	13.35 (2.99)	16.53 (3.53)	13.67 (2.78)	13.00 (2.61)	15.55 (2.91)	8.34 (1.71)	11.50 (2.23)
White female	- 2.32 (-0.64)	- 4.25 (-1.12)	- 8.55 (-2.08)	- 5.54 (-1.33)	- 11.53 (-2.67)	- 17.69 (-4.32)	- 2.91 (-0.67)
Black female	- 0.49 (-0.24)	2.45 (1.18)	- 3.37 (-1.51)	- 4.01 (-1.77)	- 1.10 (-0.46)	- 3.10 (-1.42)	- 8.57 (-3.64)
Hispanic female	- 3.17 (-0.79)	4.24 (1.01)	- 7.53 (-1.69)	- 7.64 (-1.70)	1.41 (0.28)	- 1.92 (-0.44)	- 8.57 (-1.87)
Age (months)	36.88 (2.62)	15.24 (1.19)	20.23 (2.22)	20.96 (2.28)	57.32 (2.02)	14.50 (1.19)	13.17 (1.41)
Age squared	- 0.09 (-2.52)	- 0.04 (-1.12)	- 0.05 (-2.23)	- 0.05 (-2.28)	- 0.14 (-1.99)	- 0.04 (-1.16)	- 0.03 (-1.12)
Employment ratio, Spring 1977	0.07 (1.21)	0.04 (0.67)	- 0.00 (-0.04)	0.06 (0.94)	0.03 (0.50)	0.02 (0.36)	0.05 (0.67)
Employment ratio, Summer 1977	0.09 (3.26)	0.10 (3.51)	0.07 (2.09)	0.07 (2.19)	0.18 (5.39)	0.10 (3.14)	0.07 (2.07)
Employment ratio, Fall 1977	- 0.00 (-0.11)	0.08 (1.59)	0.06 (1.06)	- 0.00 (-0.05)	- 0.00 (-0.05)	- 0.00 (-0.09)	0.03 (0.63)
R <sup>2</sup>	.118	.097	.057	.054	.080	.037	.040
N	2005	2053	1920	1914	1515	1980	1685
<u>Pilot Site Means:</u>							
White male	.049	.049	.049	.049	.051	.048	.047
Black male	.370	.368	.384	.383	.360	.377	.393
Hispanic male	.041	.040	.042	.042	.043	.042	.046
White female	.057	.056	.056	.056	.060	.055	.057
Black female	.426	.430	.412	.412	.433	.421	.396
Hispanic female	.057	.057	.057	.058	.053	.057	.061
Age (months)	194.13	193.85	193.15	193.14	196.34	193.56	193.12
Age squared	37712.86	37608.04	37339.60	37336.91	38564.72	37495.49	37328.65
Employment ratio, Spring 1977	3.78	3.68	3.80	3.75	4.60	3.76	3.72
Employment ratio, Summer 1977	18.69	18.61	18.25	18.24	19.83	18.86	19.03
Employment ratio, Fall 1977	6.73	6.56	6.31	6.26	8.08	6.63	6.44
N	1377	1413	1322	1318	1032	1368	1191

Table B5.20. Program Effects on Labor Force Participation Rates, Separately by Period (Table 5.10):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1979	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-956.01 (-6.32)	-821.64 (-4.77)	-175.27 (-0.73)	-597.67 (-2.09)	-477.93 (-2.73)	-425.88 (-2.43)	-498.51 (-1.36)
Pilot dummy	20.27 (14.26)	21.81 (15.10)	13.06 (8.01)	14.57 (8.71)	14.84 (9.33)	18.85 (7.65)	9.93 (5.57)
White male	8.59 (2.98)	9.81 (3.35)	4.41 (1.36)	6.54 (1.93)	5.91 (1.66)	5.10 (1.65)	5.42 (1.57)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	4.36 (1.38)	10.06 (3.21)	7.79 (2.16)	7.62 (2.08)	5.00 (1.51)	7.71 (2.31)	5.75 (1.49)
White female	- 6.99 (-2.64)	- 9.04 (-3.33)	- 11.53 (-3.73)	- 11.05 (-3.47)	- 12.09 (-4.38)	- 16.89 (-5.61)	- 13.28 (-2.99)
Black female	- 2.87 (-1.89)	- 2.67 (-1.75)	- 7.05 (-4.09)	- 7.13 (-4.04)	- 5.55 (-4.47)	- 7.17 (-4.43)	- 9.78 (-5.22)
Hispanic female	- 9.02 (-3.01)	- 7.09 (-2.31)	- 16.07 (-4.74)	- 14.86 (-4.26)	- 5.77 (-1.77)	- 11.87 (-3.72)	- 19.33 (-4.31)
Age (months)	9.10 (6.25)	8.00 (4.78)	2.07 (0.87)	6.37 (2.24)	4.73 (2.85)	4.51 (2.18)	5.51 (1.49)
Age squared	- 0.02 (-6.02)	- 0.02 (-4.65)	0.01 (-0.86)	- 0.02 (-2.25)	- 0.03 (-2.80)	- 0.01 (-2.13)	- 0.01 (-1.50)
Labor force participation rates, Spring 1977	0.01 (0.41)	0.02 (0.59)	- 0.06 (-1.37)	- 0.02 (-0.55)	- 0.02 (-0.74)	- 0.08 (-2.27)	0.01 (0.19)
Labor force participation rates, Summer 1977	0.13 (0.20)	0.12 (6.00)	0.10 (4.42)	0.13 (4.27)	0.17 (5.01)	0.14 (6.50)	0.09 (3.64)
Labor force participation rates, Fall 1977	0.04 (1.33)	0.08 (2.78)	0.08 (2.27)	0.05 (1.30)	0.04 (1.25)	0.05 (1.53)	0.03 (0.67)
R <sup>2</sup>	.098	.103	.053	.057	.072	.059	.049
N	3840	3759	3037	2890	3428	3377	2403
<u>Pilot Site Means:</u>							
White male	.048	.048	.051	.048	.048	.048	.047
Black male	.368	.372	.383	.383	.365	.375	.387
Hispanic male	.050	.048	.049	.050	.051	.050	.052
White female	.061	.060	.057	.056	.063	.057	.053
Black female	.418	.419	.403	.406	.420	.414	.398
Hispanic female	.055	.053	.057	.057	.053	.056	.063
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.99
Age squared	42154.15	41621.92	40362.37	39901.23	43429.01	41001.52	39282.71
Labor force participation rates, Spring 1977	9.29	8.58	7.64	7.09	10.73	8.02	6.42
Labor force participation rates, Summer 1977	35.91	35.65	34.49	34.01	37.21	35.41	34.82
Labor force participation rates, Fall 1977	13.79	12.91	11.85	10.94	15.67	12.56	10.54
N	2652	2605	2107	2000	2353	2362	1685

Table 35.21. Program Effects on Employment Rates, Separately by Period (Table 5.10):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1202.30 (-7.10)	-1125.66 (-5.81)	-66.82 (-0.25)	-270.98 (-0.84)	-687.16 (-3.41)	-647.69 (-2.63)	-321.51 (-0.76)
Pilot	21.82 (13.66)	23.82 (14.61)	16.54 (9.01)	16.30 (8.64)	15.39 (8.92)	8.81 (4.93)	10.81 (5.21)
White male	7.10 (2.21)	10.11 (3.08)	7.15 (1.97)	7.63 (2.01)	0.98 (0.28)	2.28 (0.63)	5.75 (1.40)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	10.40 (2.93)	17.93 (4.92)	15.63 (3.85)	12.20 (2.95)	17.17 (4.48)	8.40 (2.14)	10.56 (2.36)
White female	- 3.09 (-1.04)	- 2.68 (-0.88)	- 7.43 (-2.14)	- 6.13 (-1.71)	- 11.17 (-3.51)	- 17.72 (-5.21)	- 6.24 (-1.57)
Black female	- 2.79 (-1.64)	- 2.95 (-1.71)	- 7.10 (-3.66)	- 7.70 (-3.87)	- 4.60 (-2.50)	- 8.37 (-4.46)	- 10.05 (-4.63)
Hispanic female	- 2.79 (-0.83)	1.99 (0.58)	- 6.78 (-1.78)	- 6.54 (-1.66)	0.00 (0.00)	- 6.78 (-1.81)	- 8.97 (-2.18)
Age (months)	11.49 (7.06)	10.95 (5.82)	1.04 (0.39)	3.26 (1.02)	6.84 (3.59)	6.94 (2.87)	3.96 (0.93)
Age squared	- 0.03 (-6.88)	- 0.03 (-5.71)	- 0.00 (-0.43)	- 0.01 (-1.10)	- 0.02 (-3.63)	- 0.02 (-2.93)	- 0.01 (-1.00)
Employment rate, Spring 1977	- 0.03 (-0.91)	0.03 (0.94)	- 0.01 (-0.43)	0.00 (0.12)	- 0.02 (-0.73)	- 0.04 (-1.12)	0.06 (1.63)
Employment rate, Summer 1977	0.08 (4.03)	0.08 (4.38)	0.06 (2.62)	0.05 (2.03)	0.20 (9.44)	0.10 (4.85)	0.15 (2.56)
Employment rate, Fall 1977	0.09 (3.93)	0.06 (2.53)	0.07 (2.64)	0.08 (2.83)	0.06 (2.38)	0.01 (0.56)	0.03 (1.09)
R <sup>2</sup>	.087	.092	.052	.051	.088	.038	.043
N	3840	3759	3037	2890	3428	3377	2403
<u>Pilot Site Means:</u>							
White male	.348	.048	.051	.048	.048	.048	.047
Black male	.368	.372	.383	.383	.365	.375	.387
Hispanic male	.050	.048	.049	.050	.051	.050	.052
White female	.061	.060	.057	.056	.063	.057	.053
Black female	.418	.419	.403	.406	.420	.414	.398
Hispanic female	.055	.053	.057	.057	.053	.056	.063
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.99
Age squared	42154.15	41621.92	40362.37	39901.23	43429.01	41001.52	39282.71
Employment rate, Spring 1977	9.60	9.21	8.35	7.77	10.72	8.90	7.40
Employment rate, Summer 1977	29.84	29.87	27.71	27.24	30.92	29.64	28.64
Employment rate, Fall 1977	18.70	17.98	16.51	15.83	20.61	17.77	16.07
N	2652	2605	2107	2000	2353	2362	1685

Table 85.22. Program Effects on Unemployment Rates, Separately by Period (Table 5.10):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	1288.19 (7.60)	1208.66 (6.24)	155.39 (0.58)	357.93 (1.12)	763.85 (3.80)	739.56 (3.00)	405.64 (0.96)
Pilot dummy	- 21.82 (-13.66)	- 23.82 (-14.61)	- 16.54 (-9.01)	- 16.30 (-8.64)	- 15.39 (-8.92)	- 8.81 (-4.93)	- 10.81 (-5.21)
White male	- 7.10 (-2.21)	- 10.11 (-3.08)	- 7.15 (-1.97)	- 7.63 (-2.01)	- 0.98 (-0.28)	- 2.29 (-0.63)	- 5.75 (-1.40)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 10.40 (-2.93)	- 17.93 (-4.92)	- 15.63 (-3.85)	- 12.20 (-2.95)	- 17.17 (-4.48)	- 8.40 (-2.14)	- 10.56 (-2.36)
White female	3.09 (1.04)	2.68 (0.88)	7.43 (2.14)	6.13 (1.71)	11.17 (3.51)	17.72 (5.21)	6.24 (1.57)
Black female	2.79 (1.64)	2.95 (1.71)	7.10 (3.66)	7.70 (3.87)	4.60 (2.50)	8.37 (4.46)	10.05 (4.63)
Hispanic female	2.79 (0.83)	- 1.99 (-0.58)	6.78 (1.78)	6.54 (1.66)	- 0.00 (-0.00)	6.78 (1.81)	8.97 (2.18)
Age (months)	- 11.49 (-7.06)	- 10.95 (-6.82)	- 1.04 (-0.39)	- 3.26 (-1.02)	- 6.84 (-3.59)	- 6.94 (-2.87)	- 3.96 (-0.93)
Age squared	0.03 (6.28)	0.03 (5.71)	0.00 (0.43)	0.01 (1.10)	0.02 (3.63)	0.02 (2.93)	0.01 (1.00)
Unemployment rate, Spring 1977	0.03 (0.91)	0.03 (0.94)	- 0.01 (-0.43)	0.00 (0.12)	- 0.02 (-0.73)	- 0.04 (-1.12)	0.06 (1.63)
Unemployment rate, Summer 1977	0.08 (4.03)	0.08 (4.38)	0.06 (2.62)	0.05 (0.02)	0.20 (9.44)	0.10 (4.85)	0.06 (2.56)
Unemployment rate, Fall 1977	0.09 (3.93)	0.06 (2.53)	0.07 (2.64)	0.08 (2.83)	0.06 (2.38)	0.01 (0.56)	0.03 (1.09)
R <sup>2</sup>	.087	.092	.052	.051	.088	.038	.043
N	3840	3759	3037	2990	3428	3377	2403
<u>Pilot Site Means:</u>							
White male	.048	.048	.051	.048	.048	.048	.047
Black male	.368	.372	.383	.383	.365	.375	.387
Hispanic male	.050	.048	.049	.050	.051	.050	.052
White female	.061	.060	.057	.056	.063	.057	.053
Black female	.418	.419	.403	.406	.420	.414	.398
Hispanic female	.055	.053	.057	.057	.053	.056	.063
Age (months)	204.87	203.62	200.59	199.48	207.99	202.14	197.99
Age squared	42154.15	41621.92	40362.37	39901.23	43429.01	41001.52	39282.71
Unemployment rate, Spring 1977	90.40	90.79	91.65	92.23	89.28	91.10	92.60
Unemployment rate, Summer 1977	70.16	70.13	72.29	72.76	69.08	70.36	71.36
Unemployment rate, Fall 1977	81.30	82.02	83.49	84.17	79.39	82.23	83.93
N	2652	2605	2107	2000	2353	2362	1685

Table B5.23. Program Effects on Labor Force Participation Rates, Separately by Period, for the 15-16 Year Old Cohort (Table 5.11):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-2264.02 (-1.65)	-921.36 (-0.76)	-1433.99 (-1.70)	-1312.34 (-1.55)	-4619.22 (-1.70)	-881.26 (-0.79)	-1002.56 (-1.19)
Pilot dummy	22.63 (11.86)	22.77 (11.69)	16.08 (7.87)	16.69 (8.12)	17.36 (7.88)	12.44 (6.33)	11.16 (5.21)
White male	9.91 (2.58)	9.52 (2.42)	2.08 (0.51)	2.42 (0.58)	7.89 (1.79)	4.63 (1.16)	3.01 (0.71)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	8.66 (1.93)	12.28 (2.67)	10.24 (2.17)	10.02 (2.10)	10.05 (1.94)	7.42 (1.62)	7.37 (1.52)
White female	- 3.81 (-1.04)	- 6.79 (-1.81)	- 10.13 (-2.56)	- 9.23 (-2.32)	- 12.30 (-2.93)	- 17.81 (-4.60)	- 7.22 (-1.76)
Black female	0.30 (0.15)	1.47 (0.72)	- 4.05 (-1.88)	- 4.52 (-2.09)	- 1.54 (-0.66)	- 3.10 (-1.50)	- 8.13 (-3.66)
Hispanic female	- 7.45 (-1.84)	- 0.82 (-0.20)	- 13.30 (-3.10)	- 13.32 (-3.09)	- 1.76 (-0.35)	- 5.42 (-1.31)	- 14.02 (-3.24)
Age (months)	22.15 (1.57)	8.83 (0.70)	15.03 (1.72)	13.78 (1.56)	46.40 (1.68)	9.06 (0.79)	10.72 (1.22)
Age squared	- 0.05 (-1.47)	- 0.02 (-0.63)	- 0.04 (-1.69)	- 0.04 (-1.54)	- 0.12 (-1.65)	- 0.02 (-0.75)	- 0.03 (-1.20)
Labor force participation rate, Spring 1977	0.04 (0.63)	0.00 (0.08)	- 0.04 (-0.70)	0.02 (0.31)	0.02 (0.31)	- 0.07 (-1.19)	- 0.03 (-0.46)
Labor force participation rate, Summer 1977	0.13 (4.59)	0.13 (4.58)	0.10 (3.54)	0.08 (2.79)	0.18 (5.75)	0.15 (5.29)	0.08 (2.64)
Labor force participation rate, Fall 1977	- 0.00 (-0.07)	0.07 (1.56)	0.06 (1.20)	0.02 (1.37)	0.01 (0.16)	0.03 (0.59)	0.04 (0.88)
R <sup>2</sup>	.109	.096	.055	.053	.083	.055	.041
N	2005	2053	1920	1914	1515	1980	1685
<u>Pilot Site Means:</u>							
White male	.049	.049	.049	.049	.051	.048	.047
Black male	.370	.368	.384	.383	.360	.377	.393
Hispanic male	.041	.040	.042	.042	.043	.042	.046
White female	.057	.056	.056	.056	.060	.055	.057
Black female	.426	.430	.412	.412	.433	.421	.396
Hispanic female	.057	.057	.057	.058	.053	.057	.061
Age (months)	194.13	193.85	193.15	193.14	196.34	193.56	193.12
Age squared	37712.86	37608.04	37339.60	37336.91	38564.72	37495.49	37328.65
Labor force participation rate, Spring 1977	4.27	4.17	4.30	4.24	5.16	4.24	4.26
Labor force participation rate, Summer 1977	31.48	31.27	31.17	31.19	32.92	31.61	32.09
Labor force participation rate, Fall 1977	7.99	7.79	7.58	7.53	9.47	7.89	7.82
N	1377	1413	1322	1318	1032	1368	1191

Table B5.24. Program Effects on Employment Rates, Separately by Period, for the 15 Year Old Cohort (Table 5.11):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-4613.67 (-3.23)	-274.89 (-0.14)	-2059.63 (-2.17)	-2374.97 (-2.48)	-5308.99 (-1.99)	-1753.07 (-1.33)	-1354.91 (-1.37)
Pilot dummy	24.52 (11.54)	25.00 (11.45)	20.04 (8.71)	20.42 (8.81)	16.81 (6.49)	7.60 (3.27)	13.00 (5.20)
White male	8.41 (1.97)	11.18 (2.54)	3.23 (0.70)	4.46 (0.96)	4.74 (0.93)	0.43 (0.09)	2.77 (0.56)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	19.48 (3.87)	23.05 (4.46)	16.51 (3.10)	14.07 (2.61)	20.02 (3.29)	8.36 (1.54)	12.34 (2.17)
White female	- 0.84 (-0.21)	- 1.20 (-0.29)	- 9.63 (-2.16)	- 5.26 (-1.17)	- 14.06 (-2.86)	- 21.85 (-4.78)	- 5.37 (-1.13)
Black female	- 1.10 (-0.49)	1.74 (0.76)	- 4.42 (-1.82)	- 5.53 (-2.27)	- 2.11 (-0.77)	- 6.37 (-2.61)	- 8.60 (-3.32)
Hispanic female	- 1.30 (-0.29)	- 10.49 (2.27)	- 5.45 (-1.13)	6.08 (-1.25)	4.85 (0.84)	- 0.18 (-0.04)	- 8.85 (-1.75)
Age (months)	46.09 (2.91)	8.16 (0.58)	21.66 (2.19)	25.13 (2.53)	63.78 (1.97)	18.28 (1.34)	14.76 (1.44)
Age squared	- 0.11 (-2.82)	- 0.02 (-0.50)	- 0.06 (-2.20)	- 0.07 (-2.55)	- 0.16 (-1.95)	- 0.05 (-1.32)	- 0.04 (-1.46)
Employment rate, Spring 1977	- 0.05 (-1.17)	0.01 (0.31)	- 0.03 (-0.72)	0.01 (0.31)	- 0.02 (-0.38)	- 0.04 (-0.80)	0.03 (0.80)
Employment rate, Summer 1977	0.10 (4.03)	0.08 (2.89)	0.04 (1.51)	0.03 (0.99)	0.22 (6.86)	0.11 (4.02)	0.05 (1.67)
Employment rate, Fall 1977	0.04 (1.26)	0.06 (1.64)	0.07 (1.99)	0.06 (1.59)	0.02 (0.58)	- 0.02 (-0.45)	0.04 (0.98)
R <sup>2</sup>	.112	.094	.058	.056	.089	.035	.038
N	2005	2053	1920	1914	1515	1980	1685
<u>Pilot Site Means:</u>							
White male	.049	.049	.049	.049	.051	.048	.047
Black male	.370	.368	.384	.383	.360	.377	.393
Hispanic male	.041	.040	.042	.042	.043	.042	.046
White female	.057	.056	.056	.056	.060	.055	.057
Black female	.426	.430	.412	.412	.433	.427	.396
Hispanic female	.057	.057	.057	.058	.053	.057	.061
Age (months)	194.13	193.85	193.15	193.14	196.34	193.56	193.12
Age squared	37712.86	37608.04	37339.60	37336.91	38564.72	37495.49	37328.65
Employment rate, Spring 1977	5.93	5.85	5.74	5.61	6.91	5.91	5.70
Employment rate, Summer 1977	25.59	25.47	24.89	24.89	26.58	25.79	26.13
Employment rate, Fall 1977	13.69	13.34	13.35	13.32	15.95	13.64	13.90
N	1377	1413	1322	1318	1032	1368	1191



Table B5.15. Program Effects on Employment Ratios. Separately by Period, for the 15-16 Year Old Cohort  
Excluding Denver and Phoenix (Table A5.4):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-3848.97 (-2.56)	-2105.67 (-1.58)	-2092.84 (-2.27)	-2265.45 (-2.44)	-6299.83 (-2.08)	-1580.92 (-1.26)	-1432.54 (-1.51)
Pilot dummy	24.89 (12.07)	27.02 (12.62)	23.19 (10.02)	23.27 (9.97)	16.41 (6.70)	13.67 (6.02)	13.13 (5.31)
White male	4.70 (1.10)	6.52 (1.47)	0.27 (0.06)	0.07 (0.02)	5.60 (1.10)	1.46 (0.31)	0.41 (0.08)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	13.10 (0.58)	- 17.70 (0.75)	- 15.02 (-0.61)	- 40.44 (-1.63)	1.90 (0.08)	- 23.94 (-0.98)	- 31.40 (-1.29)
White female	- 4.90 (-1.24)	- 6.47 (-1.57)	- 8.42 (-1.89)	- 5.14 (-1.15)	- 13.85 (-2.91)	- 22.23 (-4.98)	- 2.02 (-0.43)
Black female	- 0.78 (-0.38)	1.93 (0.90)	- 4.17 (-1.81)	- 5.17 (-2.22)	- 0.96 (-0.39)	- 3.46 (-1.53)	- 9.55 (-3.93)
Hispanic female	4.77 (0.38)	4.67 (0.36)	- 5.48 (-0.38)	- 11.90 (-0.83)	37.59 (2.06)	10.31 (0.76)	- 13.48 (-0.90)
Age (months)	38.13 (2.47)	20.80 (1.51)	21.95 (2.29)	23.86 (2.47)	63.24 (2.05)	16.31 (1.26)	15.26 (1.55)
Age squared	- 0.07 (-2.37)	- 0.05 (-1.44)	- 0.06 (-2.29)	- 0.06 (-2.48)	- 0.16 (-2.01)	- 0.04 (-1.23)	- 0.04 (-1.55)
Employment ratio, Spring 1977	0.05 (0.67)	0.08 (1.02)	0.02 (0.19)	0.10 (1.26)	- 0.01 (-0.14)	0.04 (0.46)	0.06 (0.74)
Employment ratio, Summer 1977	0.09 (2.89)	0.10 (3.09)	0.05 (1.30)	0.05 (1.55)	0.18 (4.93)	0.10 (0.80)	0.05 (1.31)
Employment ratio, Fall 1977	- 0.04 (-0.68)	- 0.01 (-0.12)	0.03 (0.44)	- 0.00 (-0.00)	- 0.03 (-0.42)	0.05 (0.40)	0.02 (0.24)
R <sup>2</sup>	.122	.109	.068		.074	.048	.036
N	1668	1714	1603		1264	1652	1401
<u>Pilot Site Means:</u>							
White male	.045	.044	.045	.045	.044	.043	.044
Black male	.407	.407	.424	.424	.398	.418	.437
Hispanic male	.002	.002	.002	.002	.002	.002	.002
White female	.055	.053	.054	.054	.055	.051	.057
Black female	.485	.488	.470	.469	.497	.480	.455
Hispanic female	.006	.006	.005	.006	.004	.006	.005
Age (months)	194.12	193.80	193.01	193.00	196.41	193.47	192.96
Age squared	37709.28	37590.40	37284.51	37281.71	38545.19	37461.87	37269.44
Employment ratio, Spring 1977	2.59	2.52	2.71	2.71	3.04	2.60	2.62
Employment ratio, Summer 1977	16.41	16.34	15.78	15.80	17.44	16.60	16.44
Employment ratio, Fall 1977	4.82	4.68	4.47	4.48	5.85	4.76	4.52
N	1136	1171	1093	1091	841	1129	970

Table B5.26. Program Effects on Labor Force Participation Rates, Separately by Period, for Denver/Phoenix (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-459.70 (-1.26)	-349.53 (-0.81)	-145.05 (-0.22)	-1324.05 (-1.64)	-239.41 (-0.54)	-540.22 (-1.02)	17.52 (0.02)
Pilot dummy	9.06 (2.46)	6.69 (1.82)	0.24 (0.06)	- 0.94 (-0.22)	12.16 (3.06)	- 1.53 (-0.39)	10.87 (2.35)
White male	18.03 (2.37)	19.73 (2.63)	19.37 (2.40)	19.12 (2.19)	14.85 (1.88)	6.12 (0.80)	18.66 (2.04)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	7.61 (1.41)	16.59 (3.09)	20.66 (3.55)	18.14 (3.01)	9.00 (1.58)	12.81 (2.34)	18.99 (3.07)
White female	- 2.40 (-0.34)	4.36 (0.61)	10.16 (1.22)	8.57 (1.00)	- 6.01 (-0.83)	0.84 (0.11)	2.61 (0.29)
Black female	- 7.30 (-1.16)	- 3.79 (-0.60)	2.72 (0.38)	2.74 (0.37)	- 4.16 (-0.63)	- 5.85 (-0.90)	- 2.19 (-0.29)
Hispanic female	- 7.22 (-1.35)	- 1.29 (-0.24)	- 2.45 (-0.43)	- 4.58 (-0.77)	- 2.65 (-0.47)	- 7.86 (-1.45)	- 4.27 (-0.70)
Age (months)	4.47 (1.28)	3.65 (0.88)	1.69 (0.26)	13.31 (1.67)	2.68 (0.64)	5.76 (1.11)	0.21 (0.02)
Age squared	- 0.01 (-1.21)	- 0.01 (-0.87)	- 0.00 (-0.25)	- 0.03 (-1.65)	- 0.01 (-0.67)	- 0.01 (-1.11)	- 0.00 (-0.03)
Labor force participation rate, Spring 1977	0.10 (1.55)	0.05 (0.72)	- 0.00 (-0.02)	0.02 (0.21)	0.01 (0.09)	- 0.03 (-0.43)	0.05 (0.62)
Labor force participation rate, Summer 1977	0.11 (2.14)	0.16 (3.23)	0.20 (3.75)	0.22 (4.00)	0.14 (3.40)	0.13 (2.46)	0.18 (3.14)
Labor force participation rate, Fall 1977	0.03 (1.56)	0.10 (1.80)	0.05 (0.70)	0.04 (-0.62)	0.05 (0.77)	0.08 (1.31)	0.02 (0.22)
R <sup>2</sup>	.077	.105	.104	.099	.073	.071	.111
N	654	626	506	485	578	571	418
<u>Pilot Site Means:</u>							
White male	.063	.066	.070	.062	.069	.066	.053
Black male	.162	.167	.169	.174	.160	.166	.178
Hispanic male	.261	.261	.261	.263	.259	.259	.257
White female	.076	.075	.065	.067	.085	.075	.060
Black female	.145	.139	.129	.134	.150	.136	.135
Hispanic female	.293	.292	.306	.300	.277	.296	.317
Age (months)	205.45	203.89	201.13	200.36	207.99	202.59	198.72
Age squared	42398.93	41729.53	40565.17	40242.79	43438.69	41172.81	39566.57
Labor force participation rate, Spring 1977	14.21	12.95	11.75	10.95	15.81	12.12	10.10
Labor force participation rate, Summer 1977	43.49	43.47	43.43	43.32	44.78	43.42	43.41
Labor force participation rate, Fall 1977	21.66	20.26	19.23	18.61	23.52	19.50	18.22
N	475	452	372	357	433	425	319



Table A5.27. Program Effects on Employment Rates, Separately by Period, for Denver/Phoenix (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-199.32 (-0.48)	-361.23 (-0.74)	-319.13 (-0.42)	-1005.35 (-1.11)	-170.12 (-0.35)	-260.28 (-0.42)	1026.98 (0.86)
Pilot dummy	8.50 (2.02)	5.32 (1.27)	- 0.37 (-0.08)	- 5.33 (-1.09)	16.48 (3.74)	- 0.02 (-0.00)	11.91 (2.21)
White male	10.46 (1.21)	16.27 (1.91)	19.27 (2.09)	23.10 (2.36)	9.23 (-1.05)	- 0.06 (-0.01)	19.74 (1.87)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	6.01 (0.98)	19.77 (3.23)	20.55 (3.07)	17.87 (2.63)	15.18 (2.40)	8.22 (1.29)	17.96 (2.50)
White female	0.75 (0.09)	10.22 (1.25)	2.84 (0.30)	5.29 (0.55)	- 2.32 (-0.29)	2.51 (0.23)	- 1.73 (-0.16)
Black female	- 6.95 (-0.97)	- 1.81 (-0.25)	- 3.67 (-0.45)	- 4.99 (-0.61)	- 5.94 (-0.81)	- 2.91 (-0.38)	- 2.82 (-0.33)
Hispanic female	- 7.70 (-1.27)	4.25 (0.71)	- 1.08 (-0.17)	- 0.12 (-0.02)	- 3.95 (-0.63)	- 7.89 (-1.25)	- 1.19 (-0.17)
Age (months)	2.04 (0.51)	3.82 (0.81)	3.35 (0.44)	10.20 (1.13)	2.10 (0.45)	3.18 (0.53)	- 9.95 (-0.83)
Age squared	- 0.00 (-0.46)	- 0.01 (-0.81)	- 0.01 (-0.43)	- 0.02 (-1.11)	- 0.01 (-0.50)	- 0.01 (-0.55)	0.02 (0.82)
Employment rate, Spring 1977	- 0.01 (-0.16)	0.07 (1.29)	- 0.01 (-0.17)	- 0.01 (-0.12)	- 0.01 (-0.24)	- 0.03 (-0.57)	0.07 (0.91)
Employment rate, Summer 1977	0.07 (1.46)	0.11 (2.49)	0.15 (2.98)	0.09 (1.77)	0.19 (4.12)	0.08 (1.74)	0.09 (1.72)
Employment rate, Fall 1977	0.10 (2.21)	0.09 (1.97)	0.07 (1.31)	0.07 (1.35)	0.08 (1.79)	0.05 (1.02)	0.09 (1.55)
R <sup>2</sup>	.055	.080	.087	.071	.124	.032	.088
N	654	626	506	485	578	571	418
<u>Pilot Site Means:</u>							
White male	.063	.066	.070	.062	.069	.068	.053
Black male	.162	.167	.169	.174	.160	.166	.178
Hispanic male	.261	.261	.261	.263	.259	.259	.257
White female	.076	.075	.065	.067	.085	.075	.060
Black female	.145	.139	.129	.134	.150	.136	.135
Hispanic female	.293	.292	.306	.300	.277	.296	.317
Age (months)	205.45	203.89	201.13	200.36	207.99	202.59	198.72
Age squared	42398.93	41729.53	40565.17	40242.79	43438.69	41172.81	39566.57
Employment rate, Spring 1977	18.51	17.77	17.18	15.55	20.54	17.49	14.73
Employment rate, Summer 1977	46.90	47.30	47.10	46.76	47.59	47.58	46.85
Employment rate, Fall 1977	32.37	31.26	30.50	30.38	34.59	30.87	29.38
N	475	452	372	357	433	425	319

Table B5.29. Program Effects on Labor Force Participation Rates, Separately by Period, for Cincinnati/Louisville (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-412.76 (-1.51)	-655.63 (-2.06)	-418.24 (-0.97)	-802.18 (-1.55)	28.75 (0.09)	-385.10 (-0.98)	-91.96 (-0.13)
Pilot dummy	14.27 (5.75)	15.93 (6.25)	15.06 (5.39)	16.33 (5.65)	9.68 (3.72)	8.54 (3.11)	11.72 (3.66)
White male	2.80 (0.63)	1.58 (0.34)	3.04 (0.60)	1.72 (0.32)	4.25 (0.92)	1.04 (0.21)	1.25 (0.22)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 29.60 (-1.30)	- 11.34 (-0.50)	- 12.57 (-0.55)	- 35.01 (-1.51)	-27.51 (-1.22)	5.36 (0.23)	-48.30 (-1.72)
White female	- 6.20 (-1.56)	- 11.72 (-2.85)	- 8.88 (-2.00)	- 10.26 (-2.22)	-11.50 (-2.78)	- 14.85 (-3.39)	- 8.90 (-1.77)
Black female	- 4.20 (-1.53)	- 6.35 (-2.26)	- 13.62 (-4.46)	- 13.19 (-4.18)	- 7.20 (-2.49)	- 10.31 (-3.44)	-10.33 (-3.03)
Hispanic female	8.41 (0.43)	6.91 (0.35)	0.99 (0.04)	0.86 (0.04)	24.69 (0.89)	13.27 (0.65)	- 5.49 (-0.24)
Age (months)	3.95 (1.50)	6.37 (2.07)	4.41 (1.04)	8.42 (1.63)	- 0.19 (-0.06)	3.99 (1.64)	1.58 (0.23)
Age squared	- 0.01 (-1.40)	- 0.01 (-1.98)	- 0.01 (-1.02)	- 0.02 (-1.65)	0.00 (0.12)	- 0.01 (-0.99)	- 0.00 (-0.26)
Labor force participation rate, Spring 1977	0.08 (1.45)	0.06 (1.03)	- 0.05 (-0.73)	- 0.05 (-0.72)	0.04 (0.70)	- 0.07 (-1.08)	- 0.04 (-0.42)
Labor force participation rate, Summer 1977	0.15 (4.06)	0.14 (3.63)	0.06 (1.44)	0.06 (1.47)	0.17 (4.23)	0.12 (3.00)	0.03 (0.55)
Labor force participation rate, Fall 1977	0.05 (1.03)	0.08 (1.66)	0.12 (1.95)	0.10 (1.53)	0.05 (1.05)	0.10 (1.73)	0.13 (1.83)
R <sup>2</sup>	.095	.109	.075	.078	.086	.063	.053
N	1085	1054	881	833	976	957	711
<u>Pilot Site Means:</u>							
White male	.064	.065	.063	.059	.062	.062	.056
Black male	.369	.372	.390	.393	.370	.385	.400
Hispanic male	.003	.003	.004	.004	.003	.003	.002
White female	.099	.094	.092	.092	.099	.093	.089
Black female	.460	.461	.447	.448	.464	.452	.449
Hispanic female	.005	.005	.004	.004	.002	.005	.004
Age (months)	204.60	203.77	200.84	199.51	208.18	202.33	198.10
Age squared	42038.94	41681.76	40468.90	39913.66	43507.46	41077.84	39331.57
Labor force participation rate, Spring 1977	11.36	11.09	9.92	9.56	13.71	10.34	8.41
Labor force participation rate, Summer 1977	42.01	42.06	40.78	40.01	43.97	40.98	40.41
Labor force participation rate, Fall 1977	15.95	15.47	14.00	12.91	18.73	14.64	12.13
N	658	649	541	509	577	600	461

Table B5.29. Program Effects on Employment Rates, Separately by Period, for Cincinnati/Louisville (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1124.92 (-3.68)	-1310.29 (-3.65)	-258.96 (-0.54)	-489.67 (-0.85)	-304.77 (-0.87)	-982.87 (-2.17)	302.75 (0.38)
Pilot dummy	19.41 (6.95)	19.19 (6.61)	17.78 (5.72)	19.11 (5.88)	13.30 (4.47)	8.33 (2.60)	12.91 (3.48)
White male	2.56 (0.52)	2.23 (0.43)	5.45 (0.98)	2.35 (0.40)	3.54 (0.68)	2.23 (0.39)	0.94 (0.14)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 37.30 (-1.46)	18.20 (0.70)	- 4.39 (-0.17)	- 2.21 (-0.08)	- 32.39 (-1.26)	23.25 (0.86)	- 36.35 (-1.12)
White female	- 6.15 (-1.43)	- 5.85 (-1.25)	- 3.33 (-0.68)	- 2.90 (-0.56)	- 9.73 (-2.07)	- 19.58 (-3.86)	- 3.89 (-0.67)
Black female	- 5.34 (-1.72)	- 8.34 (-2.60)	- 13.45 (-3.94)	- 10.85 (-3.04)	- 6.85 (-2.07)	- 12.71 (-3.63)	- 6.96 (-1.76)
Hispanic female	- 8.11 (-0.36)	2.34 (0.10)	- 5.97 (-0.23)	- 5.39 (-0.21)	18.48 (0.59)	10.57 (0.45)	- 12.49 (-0.47)
Age (months)	10.91 (3.71)	12.78 (3.67)	2.69 (0.57)	5.32 (0.93)	3.08 (0.94)	10.03 (2.26)	- 2.20 (-0.27)
Age squared	- 0.03 (-3.68)	- 0.03 (-3.62)	- 0.01 (-0.55)	- 0.01 (-0.96)	- 0.01 (-0.94)	- 0.02 (-2.25)	0.00 (0.21)
Employment rate, Spring 1977	0.10 (2.01)	0.09 (1.71)	0.04 (0.76)	0.01 (0.15)	0.07 (1.36)	0.02 (0.42)	0.11 (1.53)
Employment rate, Summer 1977	0.10 (2.82)	0.12 (3.17)	- 0.01 (-0.14)	0.02 (0.41)	0.16 (4.03)	0.07 (1.70)	0.00 (0.03)
Employment rate, Fall 1977	0.04 (1.07)	0.03 (0.64)	0.09 (1.90)	0.11 (2.10)	0.03 (0.77)	- 0.01 (-0.24)	0.06 (0.99)
R <sup>2</sup>	.101	.100	.072	.070	.085	.049	.046
N	1085	1054	881	833	976	957	711
<u>Pilot Site Means:</u>							
White male	.064	.065	.063	.059	.062	.062	.056
Black male	.369	.372	.390	.393	.370	.385	.400
Hispanic male	.003	.003	.004	.004	.003	.003	.002
White female	.099	.094	.092	.092	.099	.093	.089
Black female	.460	.461	.447	.448	.464	.452	.449
Hispanic female	.005	.005	.004	.004	.002	.005	.004
Age (months)	204.66	203.77	206.64	199.51	208.18	202.33	198.10
Age squared	42038.94	41681.76	40468.90	39913.66	43507.46	41077.84	39331.57
Employment rate, Spring 1977	11.98	11.80	10.51	10.34	13.75	10.84	9.16
Employment rate, Summer 1977	33.42	33.99	31.22	30.72	35.62	32.41	31.57
Employment rate, Fall 1977	22.33	22.18	19.73	19.13	25.35	20.87	18.91
N	658	649	541	509	577	600	461

Table B5.30. Program Effects on Labor Force Participation Rates, Separately by Period, for Baltimore/Cleveland (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1787.84 (-6.78)	-1250.42 (-4.22)	-92.14 (-0.23)	-614.97 (-1.32)	-1467.10 (-4.95)	-242.81 (-0.70)	-688.49 (-1.18)
Pilot dummy	25.80 (9.29)	28.52 (10.09)	11.69 (3.78)	13.87 (4.38)	13.63 (4.79)	12.33 (4.42)	
White male	5.38 (0.78)	8.78 (1.25)	12.76 (1.75)	17.00 (2.28)	4.25 (-0.60)	8.22 (1.18)	7.75 (0.98)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 10.19 (-0.74)	- 1.60 (-0.11)	1.50 (0.10)	1.71 (0.11)	- 1.74 (-0.13)	- 16.93 (-1.19)	- 0.32 (-0.02)
White female	- 10.84 (-1.68)	- 16.71 (-2.54)	-17.21 (-2.40)	- 14.46 (-1.95)	- 14.09 (-2.12)	- 29.54 (-4.39)	- 7.29 (-0.95)
Black female	- 0.25 (-0.10)	1.38 (0.56)	- 3.75 (-1.38)	- 4.03 (-1.45)	- 3.04 (-1.21)	- 3.36 (-1.38)	- 7.99 (-2.81)
Hispanic female	- 11.96 (-0.82)	- 6.10 (-0.39)	-24.24 (-1.54)	- 22.05 (-1.29)	- 8.50 (-0.51)	- 8.93 (-0.59)	- 21.87 (-1.20)
Age (months)	17.09 (6.73)	12.18 (4.23)	1.50 (0.38)	6.82 (1.46)	14.32 (5.10)	3.00 (0.89)	7.61 (1.29)
Age squared	- 0.04 (-6.59)	- 0.03 (-4.16)	- 0.00 (-0.41)	- 0.02 (-1.51)	- 0.03 (-5.13)	- 0.01 (-0.94)	- 0.02 (-1.31)
Labor force participation rate, Spring 1977	0.07 (-1.10)	0.02 (0.28)	- 0.08 (-1.04)	- 0.02 (-0.24)	0.01 (0.12)	- 0.07 (-1.04)	0.06 (0.69)
Labor force participation rate, Summer 1977	0.15 (4.18)	0.12 (3.19)	0.07 (1.78)	0.04 (1.06)	0.21 (5.52)	0.16 (4.24)	0.05 (1.19)
Labor force participation rate, Fall 1977	- 0.00 (-0.06)	0.01 (0.24)	0.06 (0.89)	0.08 (1.22)	- 0.06 (-1.17)	- 0.02 (-0.28)	- 0.00 (-0.01)
R <sup>2</sup>	.119	.106	.030	.038	.073	.051	.021
N	1299	1279	1037	992	1170	1204	884
<u>Pilot Site Means:</u>							
White male	.019	.018	.023	.022	.020	.023	.023
Black male	.422	.421	.433	.436	.421	.422	.430
Hispanic male	.006	.006	.005	.005	.007	.005	.006
White female	.028	.027	.029	.029	.028	.025	.027
Black female	.520	.524	.505	.503	.521	.525	.509
Hispanic female	.005	.004	.005	.005	.003	.004	.005
Age (month)	205.42	203.95	200.53	199.50	208.76	202.61	197.62
Age squared	42387.41	41765.09	40343.86	39912.53	43757.43	41193.20	39138.56
Labor force participation rate, Spring 1977	7.36	6.50	5.64	5.11	8.61	6.05	4.07
Labor force participation rate, Summer 1977	34.08	33.73	32.11	31.76	35.12	33.66	31.51
Labor force participation rate, Fall 1977	11.80	10.83	9.54	8.49	13.63	10.51	7.11
N	1002	988	794	759	894	926	664

Table B5.11. Program Effects on Employment Rates, Separately by Period, for Baltimore/Cleveland (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1887.54 (-6.32)	-1380.94 (-4.18)	-225.16 (0.49)	-396.56 (-0.75)	-1751.01 (-5.11)	-199.18 (-0.49)	-1047.68 (-1.55)
Pilot dummy	21.91 (6.91)	32.38 (10.18)	19.24 (5.33)	18.53 (5.10)	9.20 (2.76)	7.97 (2.41)	5.60 (1.49)
White male	- 4.29 (-0.55)	11.43 (1.46)	12.73 (1.51)	12.60 (1.49)	- 11.61 (-1.41)	6.97 (0.85)	6.88 (0.78)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	- 1.42 (-0.09)	- 2.42 (-0.16)	13.00 (0.72)	- 2.14 (-0.12)	- 7.25 (-0.46)	- 19.54 (-1.17)	12.56 (0.71)
White female	- 4.99 (-0.68)	- 12.46 (-1.70)	-12.12 (-1.46)	- 4.59 (-0.55)	- 18.06 (-2.34)	- 25.67 (-3.24)	2.26 (0.25)
Black female	0.89 (0.32)	2.61 (0.96)	- 1.31 (-0.42)	- 3.67 (-1.17)	- 0.94 (-0.32)	- 3.10 (-1.09)	- 9.68 (-2.94)
Hispanic female	- 12.67 (-0.76)	- 9.10 (-0.52)	- 1.39 (-0.19)	- 28.75 (-1.49)	5.66 (0.29)	- 5.46 (-0.30)	- 12.12 (-0.58)
Age (months)	18.09 (6.30)	13.45 (4.19)	- 1.39 (-0.30)	4.92 (0.93)	17.20 (5.31)	2.96 (0.74)	11.66 (1.71)
Age squared	- 0.04 (-6.19)	- 0.03 (-4.14)	0.00 (0.19)	- 0.01 (-1.05)	- 0.04 (-5.37)	- 0.01 (-0.87)	- 0.03 (-1.80)
Employment rate, Spring 1977	- 0.11 (-1.88)	- 0.02 (-0.27)	- 0.05 (-0.68)	- 0.05 (-0.63)	- 0.03 (-0.42)	- 0.08 (-1.34)	- 0.00 (-0.00)
Employment rate, Summer 1977	0.04 (1.16)	0.03 (0.84)	0.05 (1.35)	0.00 (0.04)	0.17 (4.75)	0.10 (2.90)	0.06 (1.44)
Employment rate, Fall 1977	0.09 (2.08)	0.07 (1.59)	0.04 (0.90)	0.13 (2.60)	0.06 (1.46)	0.04 (0.94)	0.02 (0.46)
R <sup>2</sup>	.082	.098	.046	.053	.072	.042	.036
N	1299	1279	1037	992	1170	1204	884
<u>Pilot Site Means:</u>							
White male	.019	.018	.023	.022	.020	.019	.023
Black male	.422	.421	.433	.436	.421	.422	.430
Hispanic male	.006	.006	.005	.005	.007	.005	.006
White female	.028	.027	.029	.029	.028	.025	.027
Black female	.520	.524	.505	.503	.521	.525	.509
Hispanic female	.005	.004	.005	.005	.003	.004	.005
Age (months)	205.42	203.95	200.53	199.50	208.76	202.61	197.62
Age squared	42387.41	41765.09	40343.86	39912.53	43757.43	41193.20	39138.56
Employment rate, Spring 1977	5.74	5.31	4.48	4.03	6.33	5.19	3.43
Employment rate, Summer 1977	26.98	26.97	23.61	23.29	27.68	26.69	22.92
Employment rate, Fall 1977	15.40	14.70	12.67	11.83	16.79	14.39	11.11
N	1002	988	794	759	894	926	664

Table B5.12. Program Effects on Labor Force Participation Rates, Separately by Period, for Mississippi Pilot/Control (Table A5.5 OLS Coefficients and Pilot Site Means)

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1008.50 (-3.01)	-799.84 (-2.19)	-404.94 (-0.78)	-384.82 (-0.62)	345.84 (0.85)	-707.32 (-1.46)	-1227.39 (-1.48)
Pilot dummy	22.85 (8.05)	25.41 (8.81)	14.56 (4.19)	17.00 (4.80)	15.91 (5.25)	19.03 (5.88)	11.85 (2.91)
White male	17.86 (3.10)	21.57 (3.67)	0.09 (0.01)	6.46 (0.91)	14.95 (2.38)	15.65 (2.33)	11.74 (1.51)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
White female	- 6.67 (-1.15)	- 6.54 (-1.12)	- 21.78 (-2.91)	- 21.75 (-2.76)	- 4.11 (-0.66)	- 19.72 (-2.79)	- 21.36 (-2.21)
Black-female	- 6.07 (-2.11)	- 6.65 (-2.27)	- 9.56 (-2.72)	- 9.51 (-2.67)	- 3.93 (-2.89)	- 11.60 (-3.52)	- 18.21 (-4.33)
Age (months)	9.48 (2.93)	7.56 (2.13)	4.04 (0.79)	3.88 (0.63)	- 3.47 (-0.90)	6.77 (1.42)	12.16 (1.45)
Age squared	- 0.02 (-2.79)	- 0.02 (-2.01)	- 0.01 (-0.74)	- 0.01 (-0.58)	0.01 (1.01)	- 0.02 (-1.30)	- 0.03 (-1.37)
Labor force participation rate, Spring 1977	- 0.16 (-1.85)	- 0.13 (-1.48)	- 0.11 (-0.91)	0.00 (0.00)	- 0.26 (-2.81)	- 0.29 (-2.50)	- 0.12 (-0.83)
Labor force participation rate, Summer 1977	0.06 (1.3)	0.09 (1.97)	0.09 (1.73)	0.10 (1.78)	0.12 (2.68)	0.15 (3.05)	0.16 (2.60)
Labor force participation rate, Fall 1977	0.22 (2.97)	0.13 (1.65)	0.12 (1.15)	0.04 (0.37)	0.18 (2.29)	0.04 (0.38)	- 0.08 (-0.73)
R <sup>2</sup>	.145	.150	.070	.082	.111	.133	.140
N	802	800	613	580	704	645	390
<u>Pilot Site Means:</u>							
White male	.070	.070	.073	.072	.067	.071	.087
Black male	.448	.455	.471	.469	.446	.476	.523
White female	.064	.064	.058	.051	.064	.056	.046
Black female	.418	.411	.398	.408	.423	.397	.344
Age (months)	203.63	202.57	199.86	198.58	206.22	200.38	197.80
Age squared	41623.83	41178.28	40066.44	39536.31	42654.78	40281.12	39210.65
Labor force participation rate, Spring 1977	5.77	5.58	4.71	4.04	6.24	4.83	4.21
Labor force participation rate, Summer 1977	24.72	24.40	22.39	21.57	25.40	22.95	22.87
Labor force participation rate, Fall 1977	7.64	7.24	6.65	5.90	8.20	6.97	6.81
N	517	516	400	375	449	411	241



Table B5.33. Program Effects on Employment Rates, Separately by Period, for Mississippi Pilot/Control (Table A5.5):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1155.71 (-3.18)	-1035.47 (-2.52)	-577.14 (-1.03)	398.75 (0.56)	347.10 (0.70)	-1149.31 (-1.98)	-798.47 (-0.82)
Pilot dummy	23.00 (7.39)	23.03 (7.04)	15.29 (4.02)	18.44 (4.54)	12.23 (3.28)	10.93 (2.80)	12.03 (2.50)
White male	22.42 (3.60)	20.70 (3.14)	1.34 (0.18)	8.48 (1.05)	6.93 (0.91)	3.95 (0.50)	12.01 (1.32)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
White female	1.47 (0.23)	1.16 (0.18)	-14.96 (-1.84)	-18.09 (-2.02)	-7.23 (-0.95)	-23.71 (-2.80)	-15.92 (-1.40)
Black female	-6.32 (-2.01)	-8.05 (-2.43)	-12.00 (-3.15)	-13.38 (-3.29)	-9.84 (-2.61)	-16.15 (-4.08)	-19.57 (-3.97)
Age (months)	10.77 (3.07)	9.76 (2.44)	5.77 (1.04)	-3.80 (-0.54)	-3.33 (-0.71)	11.38 (1.99)	7.97 (0.81)
Age squared	-0.02 (-2.91)	-0.02 (-2.31)	-0.01 (-1.00)	0.01 (0.56)	0.01 (0.78)	-0.03 (-1.92)	-0.02 (-0.76)
Employment rate, Spring 1977	-0.07 (-1.10)	-0.05 (-0.75)	-0.02 (-0.28)	0.10 (1.14)	-0.11 (-1.52)	-0.03 (-0.32)	0.07 (0.73)
Employment rate, Summer 1977	0.05 (1.12)	0.12 (2.42)	0.06 (1.03)	0.12 (1.86)	0.23 (4.19)	0.16 (2.57)	0.11 (1.51)
Employment rate, Fall 1977	0.08 (1.41)	0.03 (0.40)	0.08 (0.98)	-0.09 (-1.01)	-0.02 (-0.28)	-0.16 (-2.03)	-0.10 (-1.02)
R <sup>2</sup>	.135	.112	.060	.079	.067	.075	.099
N	802	800	613	580	704	645	390
<u>Pilot Site Means:</u>							
White male	.070	.070	.073	.072	.067	.071	.087
Black male	.448	.455	.471	.469	.446	.476	.523
White female	.064	.064	.058	.051	.064	.056	.046
Black female	.418	.411	.398	.408	.423	.397	.344
Age (months)	203.63	202.57	199.86	198.58	206.22	200.38	197.80
Age squared	41623.83	41178.28	40066.44	39536.31	42664.78	40281.12	39210.65
Employment rate, Spring 1977	5.89	5.90	4.92	4.44	6.12	5.52	5.27
Employment rate, Summer 1977	15.12	14.36	13.09	11.95	15.24	13.68	14.66
Employment rate, Fall 1977	7.90	7.36	6.77	5.61	8.65	7.32	6.65
N	517	516	400	375	449	411	241

Table B5.34. Estimated Pilot Site Labor Force Participation  
and Employment Rates in the Absence of the Program,  
Separately by Period (Table A5.5)

	School-year average	Summer average	During-program average
<u>Denver</u>			
Labor force parti- cipation rate	43.43	45.11	43.99
Employment rate	47.31	48.58	47.74
<u>Cincinnati</u>			
Labor force parti- cipation rate	31.74	38.23	33.90
Employment rate	23.72	33.21	26.88
<u>Baltimore</u>			
Labor force parti- cipation rate	37.41	48.04	40.95
Employment rate	29.73	47.18	35.55
<u>Mississippi</u>			
Labor force parti- cipation rate	23.87	33.34	27.03
Employment rate	20.53	35.06	25.38

<sup>1</sup>See notes to Table 5.3



Table B5.35. Program Effects on Labor Force Participation Rates, Separately by Period, for White Males (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-810.11 (-1.27)	-414.38 (-0.57)	-397.32 (-0.38)	-248.86 (-0.18)	76.13 (0.11)	-555.41 (-0.64)	820.74 (0.43)
Pilot dummy	15.47 (2.83)	13.48 (2.45)	- 0.13 (-0.02)	9.10 (1.50)	12.84 (2.27)	- 0.18 (-0.03)	1.54 (0.24)
Age (months)	7.67 (1.25)	3.81 (0.54)	3.77 (0.37)	2.16 (0.16)	- 0.57 (-0.08)	5.49 (0.65)	- 8.06 (-0.43)
Age squared	- 0.02 (-1.18)	- 0.01 (-0.46)	- 0.01 (-0.31)	- 0.00 (-0.11)	0.00 (0.11)	- 0.01 (-0.59)	0.02 (0.45)
Labor force participation rate, Spring 1977	- 0.13 (-1.42)	- 0.06 (-0.63)	- 0.14 (-1.34)	- 0.18 (-1.62)	- 0.21 (-2.25)	- 0.14 (-1.39)	- 0.08 (-0.63)
Labor force participation rate, Summer 1977	0.13 (1.42)	0.22 (2.43)	0.22 (2.30)	0.34 (3.49)	0.21 (2.32)	0.16 (1.75)	0.22 (2.07)
Labor force participation rate, Fall 1977	0.17 (2.01)	0.06 (0.66)	0.10 (1.10)	0.03 (0.29)	0.16 (1.86)	0.07 (0.74)	0.04 (0.34)
R <sup>2</sup>	.093	.100	.082	.117	.079	.048	.055
N	239	232	194	178	217	206	149
<u>Pilot site means:</u>							
Age (months)	204.90	204.23	201.93	199.77	207.55	202.98	198.37
Age squared	42167.15	41882.69	40921.65	40016.17	43246.03	41363.23	39433.78
Labor force participation rate, Spring 1977	21.57	20.95	19.47	16.23	25.12	20.59	17.02
Labor force participation rate, Summer 1977	41.28	40.93	40.49	39.54	42.83	40.53	41.92
Labor force participation rate, Fall 1977	26.28	25.70	26.99	23.87	29.25	27.26	26.39
N	127	126	107	96	114	113	79

Table B5.36. Program Effects on Labor Force Participation Rates, Separately by Period, for Black Males (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-930.07 (-3.57)	-809.85 (-2.79)	69.72 (0.18)	-469.52 (-1.05)	-246.77 (-0.85)	-144.45 (-0.42)	-650.57 (-1.15)
Pilot dummy	21.96 (8.90)	23.37 (9.40)	17.30 (6.38)	18.52 (5.66)	15.74 (6.12)	13.11 (5.16)	12.46 (4.32)
Age (months)	8.64 (3.44)	7.62 (2.70)	- 0.62 (-0.16)	4.86 (1.09)	2.34 (0.85)	1.49 (0.44)	6.75 (1.18)
Age squared	- 0.02 (-3.21)	- 0.02 (-2.52)	0.00 (0.24)	- 0.01 (-1.05)	- 0.00 (-0.73)	- 0.00 (-0.34)	- 0.02 (-1.13)
Labor force par- ticipation rate, Spring 1977	0.00 (0.08)	0.02 (0.42)	0.06 (-0.95)	- 0.06 (-0.82)	0.00 (0.07)	- 0.12 (-2.11)	- 0.06 (-0.88)
Labor force par- ticipation rate, Summer 1977	0.08 (2.40)	0.08 (2.40)	0.05 (1.28)	0.04 (1.08)	0.10 (2.72)	0.11 (3.19)	0.03 (0.85)
Labor force par- ticipation rate, Fall 1977	0.03 (0.67)	0.03 (0.62)	0.06 (1.10)	0.05 (0.77)	0.01 (0.12)	0.04 (0.69)	0.07 (1.02)
R <sup>2</sup>	.104	.103	.046	.046	.052	.042	.029
N	1349	1331	1121	1067	1208	1226	903
<u>Pilot site means:</u>							
Age (months)	204.62	203.67	200.58	199.50	208.07	202.09	197.76
Age squared	42048.72	41645.89	40359.41	39909.77	43460.84	40982.67	39192.77
Labor force par- ticipation rate, Spring 1977	11.36	10.76	9.21	8.78	13.18	9.90	7.99
Labor force par- ticipation rate, Summer 1977	41.42	40.86	38.44	37.79	42.91	39.75	38.93
Labor force par- ticipation rate, Fall 1977	15.31	14.39	12.56	11.62	17.77	13.72	10.76
N	975	967	807	768	858	887	653

Table B5.37. Program Effects on Labor Force Participation Rates, Separately by Period, for Hispanic Males (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1976	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	58.28 (0.08)	152.53 (0.20)	558.79 (0.44)	-687.77 (-0.46)	130.88 (0.16)	524.92 (0.18)	-178.54 (-0.09)
Pilot dummy	0.95 (0.14)	3.38 (0.52)	6.04 (0.80)	4.09 (0.51)	4.81 (0.71)	- 7.66 (-1.17)	11.30 (1.41)
Age (months)	- 0.90 (-0.14)	- 1.59 (-0.22)	- 4.76 (-0.38)	7.55 (0.51)	- 1.20 (-0.16)	- 5.03 (-0.57)	2.98 (0.15)
Age squared	0.00 (0.25)	0.01 (0.29)	0.01 (0.35)	- 0.02 (-0.53)	0.00 (0.21)	0.01 (0.62)	- 0.01 (-0.19)
Labor force participation rate, Spring 1977	- 0.01 (-0.07)	- 0.02 (-0.14)	- 0.05 (-0.34)	0.05 (0.38)	- 0.07 (-0.61)	- 0.13 (-1.21)	0.03 (0.22)
Labor force participation rate, Summer 1977	0.18 (1.87)	0.21 (2.41)	0.20 (2.00)	0.20 (1.88)	0.14 (1.48)	0.19 (2.19)	0.18 (1.80)
Labor force participation rate, Fall 1977	- 0.09 (-0.89)	0.05 (0.48)	0.11 (0.88)	- 0.01 (-0.06)	0.02 (0.22)	0.08 (0.84)	0.09 (0.77)
R <sup>2</sup>	.088	.102	.052	.038	.041	.072	.078
N	188	180	148	144	169	166	121
<u>Pilot site means:</u>							
Age (months)	207.77	206.03	202.49	202.14	209.84	204.25	199.76
Age squared	43371.36	42623.95	41124.02	40976.60	44211.43	41859.94	39992.08
Labor force participation rate, Spring 1977	20.81	18.88	15.62	14.83	22.27	16.76	15.17
Labor force participation rate, Summer 1977	49.39	48.70	47.42	46.53	52.12	48.44	46.34
Labor force participation rate, Fall 1977	27.97	25.18	23.95	23.32	30.64	24.02	22.57
N	132	126	103	100	120	117	87

Table B5.38. Program Effects on Labor Force Participation Rates, Separately by Period, for White Females (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	11.97 (0.02)	-695.63 (-1.15)	175.97 (0.21)	-972.34 (-1.03)	-65.06 (-0.11)	-721.19 (-0.93)	-2233.40 (-1.67)
Pilot dummy	7.61 (1.60)	10.15 (2.16)	- 1.96 (-0.33)	1.31 (0.22)	2.34 (0.48)	6.04 (1.13)	- 0.51 (-0.07)
Age (months)	0.06 (0.01)	6.92 (1.19)	- 1.36 (-0.17)	10.29 (1.09)	9.63 (0.11)	7.21 (0.96)	23.51 (1.73)
Age squared	- 0.00 (-0.00)	- 0.02 (-1.19)	0.00 (0.16)	- 0.03 (-1.12)	- 0.00 (-0.07)	- 0.02 (-0.94)	- 0.06 (-1.77)
Labor force participation rate, Spring 1977	0.13 (1.15)	0.10 (0.88)	- 0.11 (-0.64)	0.34 (1.91)	0.05 (0.46)	0.11 (0. '9)	0.50 (2.47)
Labor force participation rate, Summer 1977	- 0.01 (-0.15)	- 0.01 (-0.09)	0.13 (1.36)	0.13 (1.34)	0.09 (1.15)	0.09 (1.00)	- 0.04 (-0.36)
Labor force participation rate, Fall 1977	0.18 (1.69)	0.28 (2.80)	0.20 (1.30)	- 0.22 (-1.30)	0.17 (1.66)	0.18 (1.42)	- 0.13 (-0.69)
R <sup>2</sup>	.054	.089	.032	.034	.074	.064	.058
N	286	274	213	201	263	233	160

<u>Pilot site means:</u>							
Age (months)	207.13	205.86	201.98	200.52	210.00	203.91	197.64
Age squared	43108.31	42558.03	40940.10	40327.84	44294.19	41728.63	39141.24
Labor force participation rate, Spring 1977	12.58	11.45	10.96	10.25	14.43	10.60	8.22
Labor force participation rate, Summer 1977	27.47	26.78	27.33	25.49	30.07	27.04	23.81
Labor force participation rate, Fall 1977	16.29	15.20	12.64	11.07	18.33	14.28	9.38
N	162	155	120	112	148	134	89

Table B5.39. Program Effects on Labor Force Participation Rates, Separately by Period, for Black Females (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1158.88 (-4.94)	-980.28 (-3.65)	-642.66 (-1.65)	-840.28 (-1.84)	-918.52 (-3.29)	-710.93 (-2.12)	-177.23 (-0.30)
Pilot dummy	26.07 (11.86)	27.72 (12.18)	18.28 (6.97)	18.59 (6.94)	18.50 (7.92)	17.32 (7.10)	9.39 (3.16)
Age (months)	11.16 (4.94)	9.69 (3.71)	6.84 (1.78)	8.94 (1.96)	9.05 (3.42)	7.47 (2.27)	2.34 (0.39)
Age squared	- 0.03 (-4.87)	- 0.02 (-3.70)	- 0.02 (-1.83)	- 0.02 (-2.02)	- 0.02 (-3.48)	- 0.02 (-2.32)	- 0.01 (-0.42)
Labor force participation rate, Spring 1977	- 0.02 (-0.23)	- 0.03 (-0.46)	- 0.06 (-0.67)	- 0.07 (-0.69)	- 0.01 (-0.15)	- 0.15 (-1.78)	- 0.06 (-0.52)
Labor force participation rate, Summer 1977	0.18 (5.61)	0.14 (4.37)	0.10 (2.61)	0.08 (1.99)	0.24 (7.18)	0.17 (4.88)	0.09 (2.21)
Labor force participation rate, Fall 1977	- 0.02 (-0.34)	0.08 (1.46)	0.05 (0.72)	0.13 (2.04)	- 0.02 (-0.37)	- 0.00 (-0.07)	0.05 (0.64)
R <sup>2</sup>	.114	.106	.049	.054	.087	.057	.018
N	1568	1542	1192	1140	1396	1362	925
<u>Pilot site means:</u>							
Age (months)	204.48	203.08	200.01	199.01	207.46	201.67	197.90
Age squared	41984.70	41392.54	40125.23	39708.04	43200.34	40803.36	39248.67
Labor force participation rate, Spring 1977	4.41	3.84	3.51	3.31	5.14	3.66	2.62
Labor force participation rate, Summer 1977	30.01	30.03	29.27	29.10	30.63	30.17	29.81
Labor force participation rate, Fall 1977	8.56	7.98	7.44	6.86	9.78	7.75	6.71
N	1109	1092	850	811	989	978	671

Table B5.40. Program Effects on Labor Force Participation Rates, Separately by Period, for Hispanic Females (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1513.26 (-2.53)	-1245.85 (-1.60)	35.10 (0.03)	-68.99 (-0.04)	-1020.54 (-1.25)	-1724.45 (-1.68)	-284.91 (-0.16)
Pilot dummy	13.89 (2.26)	11.89 (1.90)	- 3.14 (-0.44)	- 5.32 (-0.74)	21.41 (3.02)	3.74 (0.53)	15.93 (2.13)
Age (months)	14.49 (2.52)	12.65 (1.66)	0.02 (0.00)	1.09 (0.07)	10.00 (1.29)	17.76 (1.76)	3.37 (0.18)
Age squared	- 0.03 (-2.48)	- 0.03 (-1.70)	- 0.00 (-0.01)	- 0.00 (-0.08)	- 0.02 (-1.32)	- 0.04 (-1.81)	- 0.01 (-0.21)
Labor force par- ticipation rate, Spring 1977	0.22 (1.67)	0.14 (1.02)	- 0.07 (-0.41)	- 0.06 (-0.35)	0.13 (0.89)	0.04 (0.28)	0.20 (1.14)
Labor force par- ticipation rate, Summer 1977	0.13 (1.41)	0.21 (2.39)	0.29 (2.87)	0.45 (4.37)	0.18 (1.85)	0.13 (1.32)	0.39 (3.81)
Labor force par- ticipation rate, Fall 1977	0.00 (0.01)	0.10 (0.92)	- 0.04 (-0.29)	- 0.18 (-1.38)	- 0.01 (-0.10)	0.06 (0.52)	- 0.21 (-1.60)
R <sup>2</sup>	.109	.115	.056	.119	.100	.054	.144
N	210	200	169	160	175	184	145
<u>Pilot site means:</u>							
Age (months)	204.41	202.30	200.53	199.16	207.94	201.64	198.47
Age squared	41976.11	41068.72	40331.85	39757.55	43411.09	40789.38	39476.25
Labor force par- ticipation rate, Spring 1977	7.88	6.94	5.62	4.87	9.59	6.53	4.19
Labor force par- ticipation rate, Summer 1977	36.46	36.83	35.58	36.28	39.25	37.68	35.73
Labor force par- ticipation rate, Fall 1977	16.85	16.11	13.62	13.46	17.85	15.90	12.85
N	147	139	120	113	124	133	106

Table B5.41. Program Effects on Labor Force Participation Rates, Separately by Period, for Whites (Table A5.6):

## OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-330.72 (-0.80)	-557.25 (-1.20)	63.82 (0.10)	-488.35 (-0.63)	77.22 (0.17)	-619.50 (-1.08)	-739.89 (-0.70)
Pilot dummy	11.28 (3.14)	11.63 (3.24)	- 1.33 (-0.32)	5.34 (1.24)	7.23 (1.96)	3.28 (0.85)	2.18 (0.45)
Male	14.78 (4.01)	18.03 (4.91)	14.36 (3.39)	16.39 (3.69)	16.52 (4.35)	20.05 (5.06)	14.77 (2.97)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	3.15 (0.80)	5.31 (1.18)	- 0.53 (-0.08)	5.02 (0.65)	- 0.74 (-0.17)	6.07 (1.08)	7.96 (0.75)
Age squared	- 0.01 (-0.74)	- 0.01 (-1.12)	0.00 (0.12)	- 0.01 (-0.64)	0.00 (0.22)	- 0.01 (-1.04)	- 0.02 (-0.76)
Labor force participation rate, Spring 1977	- 0.02 (-0.26)	0.02 (0.25)	- 0.10 (-1.14)	0.01 (0.11)	- 0.11 (-1.54)	- 0.04 (-0.52)	0.15 (1.36)
Labor force participation rate, Summer 1977	0.05 (0.89)	0.10 (1.77)	0.17 (2.54)	0.21 (3.03)	0.15 (2.46)	0.12 (1.93)	0.08 (1.01)
Labor force participation rate, Fall 1977	0.18 (2.72)	0.15 (2.34)	0.14 (1.70)	- 0.02 (-0.22)	0.17 (2.66)	0.12 (1.61)	- 0.01 (-0.13)
R <sup>2</sup>	.100	.138	.089	.089	.113	.115	.063
N	525	506	407	379	480	439	309
<u>Pilot site means:</u>							
Male	.439	.448	.471	.462	.435	.457	.470
Female	.561	.552	.529	.538	.565	.543	.530
Age (months)	206.15	205.13	201.96	200.17	208.94	203.49	197.98
Age squared	42694.72	42255.21	40931.41	40183.99	43838.12	41561.46	39278.80
Labor force participation rate, Spring 1977	16.53	15.71	14.97	13.01	19.08	15.17	12.36
Labor force participation rate, Summer 1977	33.54	33.12	33.53	31.98	35.62	33.21	32.32
Labor force participation rate, Fall 1977	20.68	19.91	19.40	16.98	23.08	20.22	17.38
N	289	281	227	208	262	247	168

Table B5.42. Program Effects on Labor Force Participation Rates, Separately by Period, for Blacks (Table A5.6):

## OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1082.87 (-6.20)	-911.36 (-4.61)	-266.91 (-0.98)	-640.89 (-2.00)	-597.41 (-2.96)	-412.90 (-1.71)	-432.53 (-1.05)
Pilot dummy	24.07 (14.63)	25.78 (15.33)	17.72 (9.39)	18.52 (9.60)	16.96 (9.77)	15.22 (8.62)	10.87 (5.26)
Male	3.00 (1.98)	2.97 (1.93)	7.39 (4.30)	7.53 (4.28)	5.72 (3.57)	7.51 (4.68)	10.26 (5.49)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	10.27 (6.10)	8.81 (4.59)	2.88 (1.07)	6.72 (2.11)	5.82 (3.05)	4.30 (1.82)	4.68 (1.13)
Age squared	- 0.02 (-5.90)	- 0.02 (-4.46)	- 0.01 (-1.06)	- 0.02 (-2.12)	- 0.01 (-3.01)	- 0.01 (-1.79)	- 0.01 (-1.12)
Labor force participation rate, Spring 1977	- 0.00 (-0.04)	0.00 (0.02)	- 0.06 (-1.16)	- 0.07 (-1.23)	- 0.00 (-0.08)	- 0.12 (-2.59)	- 0.06 (-1.02)
Labor force participation rate, Summer 1977	0.13 (5.78)	0.11 (4.88)	0.07 (2.75)	0.06 (2.10)	0.18 (7.15)	0.14 (5.74)	0.06 (2.23)
Labor force participation rate, Fall 1977	0.01 (0.35)	0.05 (1.48)	0.06 (1.40)	0.09 (1.92)	- 0.01 (-0.26)	0.02 (0.57)	0.06 (1.15)
R <sup>2</sup>	.110	.101	.050	.055	.067	.051	.037
N	2917	2873	2313	2207	2604	2588	1828
<u>Pilot site means:</u>							
Male	.468	.470	.487	.486	.465	.476	.493
Female	.532	.530	.513	.514	.535	.524	.507
Age (months)	204.55	203.36	200.28	199.25	207.74	201.87	197.83
Age squared	42014.65	41511.53	40239.29	39806.16	43321.35	40888.64	39221.10
Labor force participation rate, Spring 1977	7.66	7.09	6.29	5.97	8.88	6.63	5.27
Labor force participation rate, Summer 1977	35.35	35.11	33.74	33.32	36.33	34.73	34.31
Labor force participation rate, Fall 1977	11.71	10.99	9.93	9.18	13.49	10.59	8.70
N	2084	2059	1657	1579	1847	1865	1324

295



Table B5.43. Program Effects on Labor Force Participation Rates, Separately by Period, for Hispanics (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-909.35 (-2.03)	-496.34 (-0.92)	317.36 (0.37)	-458.47 (-0.43)	-558.98 (-0.99)	-500.36 (-0.73)	-487.77 (-0.38)
Pilot dummy	8.27 (1.82)	9.13 (2.03)	1.48 (0.29)	- 0.36 (-0.07)	13.53 (2.77)	- 0.80 (-0.16)	13.68 (2.55)
Male	12.61 (2.97)	16.37 (3.91)	22.79 (4.87)	21.17 (4.40)	10.57 (2.34)	12.83 (4.26)	21.35 (4.39)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	8.53 (1.98)	4.96 (0.95)	- 2.70 (-0.32)	5.03 (0.48)	5.49 (1.02)	5.30 (0.79)	5.60 (0.43)
Age squared	- 0.02 (-1.88)	- 0.01 (-0.93)	0.01 (0.30)	- 0.01 (-0.50)	- 0.01 (-1.01)	- 0.01 (-0.79)	- 0.02 (-0.47)
Labor force participation rate, Spring 1977	0.10 (1.10)	0.05 (0.61)	- 0.05 (-0.47)	0.00 (0.03)	0.01 (0.12)	- 0.06 (-0.61)	0.08 (0.78)
Labor force participation rate, Summer 1977	0.16 (2.47)	0.22 (3.58)	0.24 (3.45)	0.31 (4.40)	0.16 (2.45)	0.17 (2.60)	0.27 (3.90)
Labor force participation rate, Fall 1977	- 0.03 (-0.36)	0.09 (1.21)	0.04 (0.49)	- 0.08 (-0.87)	0.03 (0.41)	0.08 (1.02)	- 0.04 (-0.47)
R <sup>2</sup>	.110	.138	.127	.134	.077	.091	.172
N	398	380	317	304	344	350	266
<u>Pilot site means:</u>							
Male	.473	.475	.462	.469	.492	.468	.451
Female	.527	.525	.538	.531	.508	.532	.549
Age (months)	206.00	204.08	201.43	200.56	208.88	202.86	199.05
Age squared	42636.23	41808.19	40697.74	40329.87	43804.70	41290.40	39708.77
Labor force participation rate, Spring 1977	14.00	12.62	10.24	9.55	15.83	11.32	9.14
Labor force participation rate, Summer 1977	42.58	42.48	41.05	41.09	45.58	42.71	40.51
Labor force participation rate, Fall 1977	22.11	20.43	18.39	18.09	24.14	19.70	17.23
N	279	265	223	213	244	250	193

Table B5.44. Program Effects on Labor Force Participation Rates, Separately by Period, for Males (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-799.46 (-3.52)	-658.79 (-2.60)	47.11 (0.14)	-459.87 (-1.13)	-158.41 (-0.62)	-148.96 (-0.49)	-482.03 (-0.92)
Pilot dummy	18.67 (8.77)	19.66 (9.22)	13.21 (5.65)	15.28 (6.35)	13.96 (6.34)	8.94 (4.10)	10.74 (4.30)
Whites	8.49 (2.87)	9.93 (3.36)	4.28 (1.32)	6.98 (2.06)	5.25 (1.71)	4.86 (1.58)	5.48 (1.55)
Blacks	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanics	4.30 (1.34)	10.49 (3.25)	7.84 (2.19)	7.53 (2.07)	5.44 (1.63)	7.75 (2.36)	5.43 (1.44)
Age (months)	7.41 (3.39)	6.16 (2.50)	-0.35 (-0.10)	4.75 (1.17)	1.53 (0.63)	1.54 (0.52)	5.12 (0.98)
Age squared	-0.02 (-3.13)	-0.01 (-2.29)	0.00 (0.18)	-0.01 (-1.12)	-0.00 (-0.51)	-0.00 (-0.40)	-0.01 (-0.94)
Labor force participation rate, Spring 1977	-0.02 (-0.45)	0.01 (0.30)	-0.06 (-1.20)	-0.04 (-0.78)	-0.05 (-1.25)	-0.12 (-2.61)	-0.03 (0.62)
Labor force participation rate, Summer 1977	0.10 (3.21)	0.11 (3.69)	0.08 (2.48)	0.09 (2.69)	0.11 (3.63)	0.12 (4.08)	0.07 (2.07)
Labor force participation rate, Fall 1977	0.05 (1.28)	0.04 (1.12)	0.08 (1.83)	0.04 (0.79)	0.05 (1.32)	0.05 (1.21)	0.06 (1.13)
R <sup>2</sup>	.095	.103	.042	.044	.052	.041	.030
N	1776	1743	1463	1389	1594	1598	1173
<u>Pilot site means:</u>							
White	.103	.103	.105	.100	.104	.101	.096
Blacks	.790	.794	.794	.796	.786	.794	.798
Hispanic	.107	.103	.101	.104	.110	.105	.106
Age (months)	204.99	203.97	200.91	199.80	208.21	202.41	198.03
Age squared	42202.39	41771.47	40496.01	40031.04	43520.90	41113.06	39300.92
Labor force participation rate, Spring 1977	13.42	12.65	10.94	10.15	15.43	11.70	9.62
Labor force participation rate, Summer 1977	42.26	41.68	39.56	38.87	43.91	40.74	40.00
Labor force participation rate, Fall 1977	17.79	16.67	15.23	14.05	20.39	16.17	13.52
N	1234	1219	1017	964	1092	1117	819

297

Table B5.45. Program Effects on Labor Force Participation Rates, Separately by Period, for Females (Table A5.6):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1061.59 (-5.24)	-956.01 (-4.09)	-441.10 (-1.31)	-784.94 (-1.96)	-749.52 (-3.11)	-730.50 (-2.18)	-522.98 (-1.01)
Pilot dummy	21.77 (11.43)	23.46 (12.01)	12.91 (5.68)	13.83 (5.95)	15.88 (7.85)	14.18 (6.68)	9.17 (3.58)
Whites	- 3.69 (-1.41)	- 6.06 (-2.25)	- 4.00 (-1.28)	- 3.96 (-1.23)	- 6.08 (-2.22)	- 8.45 (-2.87)	- 0.74 (-0.21)
Blacks	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanics	- 6.19 (-2.10)	- 4.92 (-1.61)	- 8.91 (-2.62)	- 7.98 (-2.27)	- 0.52 (-0.16)	- 4.91 (-1.53)	- 7.30 (-2.00)
Age (months)	10.25 (5.26)	9.50 (4.19)	4.84 (1.45)	8.40 (2.11)	7.40 (3.25)	7.67 (2.65)	5.87 (1.13)
Age squared	- 0.02 (-5.18)	- 0.02 (-4.20)	- 0.01 (-1.50)	- 0.02 (-2.18)	- 0.02 (-3.29)	- 0.02 (-2.72)	- 0.02 (-1.17)
Labor force par- ticipation rate, Spring 1977	0.07 (1.33)	0.04 (0.71)	- 0.05 (-0.74)	0.01 (0.20)	0.04 (0.68)	- 0.03 (-0.41)	0.09 (1.11)
Labor force par- ticipation rate, Summer 1977	0.15 (5.31)	0.13 (4.58)	0.12 (3.75)	0.11 (3.33)	0.22 (7.46)	0.15 (5.04)	0.11 (2.95)
Labor force par- ticipation rate, Fall 1977	0.01 (0.31)	0.12 (2.81)	0.07 (1.24)	0.06 (1.03)	0.01 (0.25)	0.04 (0.84)	- 0.01 (-0.21)
R <sup>2</sup>	.095	.098	.039	.043	.078	.053	.026
N	2064	2016	1574	1501	1834	1779	1230
<u>Pilot site means:</u>							
White	.114	.112	.110	.108	.117	.108	.103
Blacks	.782	.788	.780	.783	.785	.785	.775
Hispanic	.104	.100	.110	.109	.098	.107	.122
Age (months)	204.78	203.31	200.28	199.19	207.80	201.91	197.94
Age squared	42112.18	41490.40	40237.69	39780.44	43349.44	40901.46	39265.48
Labor force par- ticipation rate, Spring 1977	5.70	5.00	4.57	4.23	6.67	4.72	3.39
Labor force par- ticipation rate, Summer 1977	30.39	30.35	29.75	29.49	31.41	30.64	29.92
Labor force par- ticipation rate, Fall 1977	10.30	9.60	8.69	8.04	11.58	9.32	7.73
N	1418	1386	1090	1036	1261	1245	866

Table B5.46. Program Effects on Employment Rates, Separately by Period, for White Males (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1174.81 (-1.71)	-920.43 (-1.14)	-1964.13 (-1.63)	-311.25 (-0.20)	-363.37 (-0.44)	258.61 (0.25)	1925.28 (0.90)
Pilot dummy	17.69 (2.99)	16.27 (2.67)	5.31 (0.78)	14.29 (2.10)	11.17 (1.71)	- 3.12 (-0.47)	9.14 (1.23)
Age (months)	11.33 (1.71)	8.96 (1.15)	19.06 (1.61)	2.81 (0.18)	4.09 (0.52)	- 2.03 (-0.20)	- 19.11 (-0.89)
Age squared	- 0.03 (-1.68)	- 0.02 (-1.12)	- 0.05 (-1.56)	- 0.01 (-0.14)	- 0.01 (-0.57)	0.00 (0.21)	0.05 (0.90)
Employment rates, Spring 1977	- 0.01 (-0.13)	0.07 (0.88)	0.04 (0.43)	- 0.10 (-0.95)	0.02 (0.24)	0.07 (0.79)	0.03 (0.25)
Employment rates, Summer 1977	0.03 (0.43)	0.07 (0.95)	0.07 (0.83)	0.26 (3.01)	0.05 (0.62)	0.06 (0.71)	0.12 (1.25)
Employment rates, Fall 1977	0.26 (3.48)	0.15 (1.95)	0.10 (1.18)	0.07 (0.87)	0.23 (2.75)	0.03 (0.37)	0.16 (1.72)
R <sup>2</sup>	.116	.093	.075	.117	.073	.019	.087
N	239	232	194	178	217	206	149
<u>Pilot site means:</u>							
Age (months)	204.90	204.23	201.93	199.77	207.55	202.98	198.37
Age squared	42167.15	41882.69	40921.65	40016.17	43246.03	41363.23	39433.78
Employment rates, Spring 1977	22.45	21.84	21.05	17.21	25.89	21.70	18.38
Employment rates, Summer 1977	38.16	37.67	36.46	35.44	39.88	36.78	39.27
Employment rates, Fall 1977	28.38	27.81	30.20	26.94	31.61	30.12	30.46
N	127	126	107	96	114	113	79

Table B5.47. Program Effects on Employment Rates, Separately by Period, for Black Males (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1173.46 (-3.99)	-1177.46 (-3.58)	410.65 (0.94)	-165.58 (-0.32)	-404.57 (-1.19)	-789.91 (-1.93)	-419.98 (-0.62)
Pilot dummy	21.44 (7.69)	25.61 (9.09)	19.96 (6.40)	18.32 (5.70)	12.58 (4.17)	8.37 (2.77)	9.89 (2.87)
Age (months)	11.11 (3.92)	11.18 (3.50)	- 3.91 (-0.91)	2.07 (0.40)	4.02 (1.25)	8.20 (2.05)	4.78 (0.70)
Age squared	- 0.03 (-3.77)	- 0.03 (-3.34)	0.01 (0.94)	- 0.01 (-0.42)	- 0.01 (-1.21)	- 0.02 (-2.05)	- 0.01 (-0.72)
Employment rates, Spring 1977	- 0.03 (-0.68)	0.00 (0.10)	- 0.04 (-0.74)	- 0.01 (-0.14)	- 0.00 (-0.08)	- 0.06 (-1.26)	0.07 (1.26)
Employment rates, Summer 1977	0.07 (2.16)	0.07 (2.28)	0.06 (1.69)	0.04 (1.10)	0.19 (5.40)	0.12 (3.46)	0.04 (1.12)
Employment rates, Fall 1977	0.08 (2.06)	0.01 (0.23)	0.04 (0.98)	0.01 (0.32)	- 0.01 (-0.31)	- 0.01 (-0.12)	- 0.02 (-0.42)
R <sup>2</sup>	.080	.091	.043	.032	.049	.022	.014
N	1349	1331	1121	1067	1208	1226	903
<u>Pilot site means:</u>							
Age (months)	204.62	203.67	200.58	199.50	208.07	202.09	197.76
Age squared	42048.72	41645.89	40359.41	39909.77	43460.84	40982.67	39192.77
Employment rates, Spring 1977	11.52	11.31	9.78	9.51	12.68	10.85	8.76
Employment rates, Summer 1977	35.82	35.44	31.87	31.14	37.04	33.90	32.70
Employment rates, Fall 1977	21.64	20.79	18.16	17.49	24.62	20.10	17.37
N	975	967	807	768	858	887	653

Table B5.48. Program Effects on Employment Rates, Separately by Period, for Hispanic Males (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-198.83 (-0.25)	-51.50 (-0.06)	3.25 (0.00)	-837.17 (-0.50)	25.43 (0.03)	1241.38 (1.16)	-1525.76 (-0.67)
Pilot dummy	- 0.44 (-0.06)	3.61 (0.49)	12.19 (1.39)	12.00 (1.35)	11.01 (1.52)	- 1.58 (-0.21)	15.07 (1.64)
Age (months)	1.91 (0.25)	0.61 (0.07)	0.53 (0.04)	8.94 (0.54)	0.06 (0.01)	- 11.74 (-1.12)	16.20 (0.71)
Age squared	- 0.00 (-0.19)	- 0.00 (-0.02)	- 0.00 (-0.04)	- 0.02 (-0.55)	0.00 (0.01)	0.03 (1.14)	- 0.04 (-0.73)
Employment rates, Spring 1977	- 0.10 (-0.94)	0.02 (0.20)	- 0.12 (-1.01)	- 0.11 (-0.95)	0.03 (0.31)	- 0.17 (-1.70)	0.01 (0.10)
Employment rates, Summer 1977	0.08 (0.93)	0.10 (1.27)	0.08 (0.85)	0.03 (0.31)	0.23 (2.85)	0.14 (1.78)	0.05 (0.58)
Employment rates, Fall 1977	0.10 (1.18)	0.05 (0.65)	0.08 (0.85)	0.11 (1.16)	0.08 (1.04)	- 0.03 (-0.37)	0.05 (0.53)
R <sup>2</sup>	.042	.048	.031	.033	.113	.035	.039
N	188	180	148	144	169	166	121
<u>Pilot site means:</u>							
Age (months)	207.77	206.03	202.49	202.14	209.84	204.25	199.76
Age squared	43371.36	42623.95	41124.02	40976.60	44211.43	41859.94	39992.09
Employment rates, Spring 1977	23.74	22.57	19.43	18.01	25.28	20.89	19.60
Employment rates, Summer 1977	49.61	49.15	47.81	46.45	52.07	48.92	46.50
Employment rates, Fall 1977	40.92	38.61	37.55	37.67	43.35	38.06	37.24
N	132	126	103	100	120	117	87

Table B5.49. Program Effects on Employment Rates, Separately by Period, for White Females (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	317.92 (0.51)	-1076.37 (-1.52)	743.43 (0.83)	-520.95 (-0.51)	271.717 (-0.40)	-448.97 (-0.51)	-739.25 (-0.51)
Pilot dummy	5.00 (0.92)	0.70 (0.13)	- 3.49 (-0.55)	5.43 (0.81)	0.10 (0.02)	- 0.48 (-0.08)	3.93 (0.52)
Age (months)	- 2.98 (-0.50)	10.52 (1.54)	- 7.19 (-0.81)	5.84 (0.57)	2.56 (0.40)	4.73 (0.55)	8.57 (0.59)
Age squared	0.01 (0.53)	- 0.02 (-1.52)	0.02 (0.83)	- 0.02 (-0.60)	- 0.01 (-0.36)	- 0.01 (-0.55)	- 0.02 (-0.63)
Employment rates, Spring 1977	0.14 (1.50)	0.26 (2.61)	0.02 (0.15)	0.13 (0.94)	0.18 (1.96)	0.22 (2.02)	0.27 (1.81)
Employment rates, Summer 1977	- 0.14 (-1.68)	- 0.07 (-0.88)	0.01 (0.13)	- 0.08 (-0.70)	0.02 (0.25)	- 0.02 (-0.25)	- 0.20 (-1.46)
Employment rates, Fall 1977	0.22 (2.49)	0.23 (2.57)	0.08 (0.75)	0.27 (2.12)	0.21 (2.30)	0.09 (0.90)	0.26 (1.75)
R <sup>2</sup>	.056	.092	.014	.052	.102	.033	.067
N	286	274	213	201	263	233	160
<u>Pilot site means:</u>							
Age (months)	207.13	205.86	201.98	200.52	210.00	203.91	197.64
Age squared	43108.31	42558.03	40940.10	40327.84	44294.19	41728.63	39141.24
Employment rates, Spring 1977	14.52	13.24	12.38	11.48	16.26	12.48	10.61
Employment rates, Summer 1977	22.33	21.41	22.09	20.54	23.20	22.53	18.37
Employment rates, Fall 1977	19.92	18.89	17.33	15.39	21.81	18.17	13.75
N	162	155	120	112	148	134	89

Table B5.50. Program Effects on Employment Rates, Separately by Period, for Black Females (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1615.92 (-6.22)	-1263.75 (-4.27)	-634.60 (-1.49)	-311.00 (-0.61)	-1231.41 (-3.85)	-952.12 (-2.42)	-212.29 (-0.31)
Pilot dummy	29.98 (12.17)	32.16 (12.72)	23.64 (8.18)	21.30 (7.13)	20.83 (7.68)	14.31 (4.97)	10.47 (3.05)
Age (months)	15.50 (6.20)	12.41 (4.31)	6.91 (1.64)	3.84 (0.76)	12.11 (4.00)	9.99 (2.58)	2.95 (0.43)
Age squared	- 0.04 (-6.13)	- 0.03 (-4.31)	- 0.02 (-1.76)	- 0.01 (-0.87)	- 0.03 (-4.08)	- 0.03 (-2.66)	- 0.01 (-0.50)
Employment rates, Spring 1977	- 0.14 (-2.34)	- 0.08 (-1.38)	- 0.03 (-0.37)	0.01 (0.11)	- 0.16 (2.67)	- 0.11 (-1.49)	- 0.07 (-0.79)
Employment rates, Summer 1977	0.12 (3.90)	0.12 (3.80)	0.03 (0.93)	0.02 (0.42)	0.25 (7.70)	0.11 (3.16)	0.06 (1.46)
Employment rates, Fall 1977	0.04 (0.91)	0.05 (1.34)	0.09 (1.87)	0.13 (2.60)	0.01 (0.03)	0.01 (0.28)	0.04 (0.68)
R <sup>2</sup>	.118	.113	.070	.062	.100	.035	.023
N	1568	1542	1192	1140	1396	1362	925
<u>Pilot site means:</u>							
Age (months)	204.48	203.08	200.01	199.01	207.46	201.67	197.90
Age squared	41984.70	41392.54	40125.23	39708.04	43200.34	40803.36	39248.67
Employment rates, Spring 1977	3.71	3.49	3.16	3.02	4.22	3.41	2.61
Employment rates, Summer 1977	20.90	21.49	19.30	19.28	21.56	21.81	20.53
Employment rates, Fall 1977	11.12	10.83	9.72	9.34	11.96	10.67	9.61
N	1109	1092	850	811	989	978	671

Table B5.51. Program Effects on Employment Rates, Separately by Period, for Hispanic Females (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-914.45 (-1.38)	-1361.90 (-1.50)	25.18 (0.02)	-1467.76 (-0.80)	-920.84 (-1.02)	-1368.78 (-1.18)	-842.52 (-0.41)
Pilot dummy	15.91 (2.34)	11.22 (1.53)	- 7.63 (-0.98)	- 10.29 (-1.24)	31.50 (4.05)	9.17 (1.14)	20.04 (2.34)
Age (months)	8.69 (1.37)	14.06 (1.58)	0.30 (0.02)	15.14 (0.83)	9.11 (1.07)	14.43 (1.26)	8.95 (0.43)
Age squared	- 0.02 (-1.32)	- 0.04 (-1.64)	- 0.00 (-0.04)	- 0.04 (-0.83)	- 0.02 (-1.10)	- 0.04 (-1.31)	- 0.02 (-0.45)
Employment rates, Spring 1977	0.14 (1.26)	0.19 (1.57)	0.11 (0.79)	0.11 (0.78)	- 0.03 (-0.28)	- 0.03 (-0.24)	0.16 (1.05)
Employment rates, Summer 1977	0.18 (2.41)	0.15 (1.90)	0.25 (2.88)	0.21 (2.28)	0.19 (2.15)	0.10 (1.20)	0.28 (3.13)
Employment rates, Fall 1977	0.04 (0.46)	0.02 (0.27)	0.02 (0.16)	- 0.03 (-0.31)	0.09 (0.95)	0.05 (0.57)	- 0.01 (-0.06)
R <sup>2</sup>	.126	.098	.084	.064	.158	.054	.163
N	210	200	169	160	175	184	145
<u>Pilot site means:</u>							
Age (months)	204.41	202.30	200.53	199.16	207.94	201.64	198.47
Age squared	41976.11	41068.72	40331.85	39757.55	43411.09	40789.38	39476.25
Employment rates, Spring 1977	12.17	11.43	10.74	9.29	14.43	11.20	8.44
Employment rates, Summer 1977	40.93	41.85	40.30	40.58	43.68	42.98	40.91
Employment rates, Fall 1977	26.65	26.02	22.38	22.88	28.37	25.69	22.74
N	147	139	120	113	124	133	106

Table B5.52. Program Effects on Employment Rates, Separately by Period, for Whites (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-298.78 (-0.65)	-924.23 (-1.75)	-143.77 (-0.20)	-323.27 (-0.38)	-101.55 (-0.19)	-102.34 (-0.15)	553.92 (0.48)
Pilot dummy	11.05 (2.76)	8.19 (2.01)	- 0.07 (-0.01)	9.60 (2.01)	5.55 (1.31)	- 1.38 (-0.31)	7.70 (1.46)
Male	9.03 (2.22)	10.77 (2.60)	13.49 (2.86)	11.47 (2.35)	11.21 (2.59)	18.44 (4.06)	10.52 (1.94)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	2.89 (0.65)	8.98 (1.76)	1.36 (0.19)	3.44 (0.41)	1.17 (0.24)	1.33 (0.21)	- 4.94 (-0.42)
Age squared	- 0.01 (-0.61)	- 0.02 (-1.72)	- 0.00 (-0.14)	- 0.01 (-0.40)	- 0.00 (-0.24)	- 0.00 (-0.21)	0.01 (0.40)
Employment rate, Spring 1977	0.07 (1.05)	0.15 (2.36)	0.05 (0.66)	0.03 (0.32)	0.09 (1.36)	0.13 (1.92)	0.15 (1.70)
Employment rate, Summer 1977	- 0.05 (-0.94)	0.01 (0.17)	0.05 (0.71)	0.11 (1.71)	0.04 (0.66)	0.02 (0.34)	- 0.00 (-0.06)
Employment rate, Fall 1977	0.23 (4.07)	0.18 (3.07)	0.09 (1.30)	0.14 (1.91)	0.21 (3.56)	0.06 (0.90)	0.17 (2.17)
R <sup>2</sup>	.082	.102	.058	.078	.096	.071	.073
N	525	506	407	379	480	439	309
<u>Pilot site means:</u>							
Male	.439	.448	.471	.462	.435	.457	.470
Female	.561	.552	.529	.538	.565	.543	.530
Age (months)	206.15	205.13	201.96	200.17	208.94	203.49	197.98
Age squared	42694.72	42255.21	40931.41	40183.99	43838.12	41561.46	39278.80
Employment rate, Spring 1977	18.00	17.09	16.46	14.12	20.45	16.70	14.26
Employment rate, Summer 1977	29.29	28.70	28.87	27.42	30.46	29.05	28.20
Employment rate, Fall 1977	23.64	22.89	23.40	20.72	26.07	23.64	21.61
N	289	281	227	208	262	247	168

Table B5.53. Program Effects on Employment Rates, Separately by Period, for Blacks (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1431.39 (-7.33)	-1222.68 (-5.54)	-79.39 (-0.26)	-214.38 (-0.59)	-820.35 (-3.52)	-855.71 (-3.02)	-14.87 (-0.65)
Pilot dummy	26.10 (14.12)	29.20 (15.50)	21.80 (10.26)	19.77 (9.03)	16.79 (8.31)	11.49 (5.52)	10.10 (4.16)
Male	3.11 (1.84)	3.38 (1.96)	7.40 (3.83)	8.05 (4.04)	5.10 (2.74)	8.63 (4.56)	10.55 (4.82)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	13.65 (7.27)	11.81 (5.51)	1.14 (0.38)	2.68 (0.75)	8.07 (3.65)	8.90 (3.20)	3.81 (0.79)
Age squared	- 0.03 (-7.11)	- 0.03 (-5.40)	- 0.00 (-0.44)	- 0.01 (-0.83)	- 0.02 (-3.69)	- 0.02 (-3.26)	- 0.01 (-0.85)
Employment rate, Spring 1977	- 0.06 (1.85)	- 0.03 (-0.80)	- 0.04 (-0.92)	- 0.01 (-0.18)	- 0.06 (-1.72)	- 0.07 (-1.83)	0.03 (0.59)
Employment rate, Summer 1977	0.09 (4.19)	0.09 (4.30)	0.05 (1.93)	0.03 (1.11)	0.22 (9.12)	0.11 (4.65)	0.05 (1.82)
Employment rate, Fall 1977	0.06 (2.21)	0.03 (1.09)	0.07 (2.02)	0.07 (1.95)	0.02 (0.54)	0.00 (0.15)	0.01 (0.16)
R <sup>2</sup>	.098	.100	.057	.052	.074	.035	.030
N	2917	2873	2313	2207	2604	2588	1828
<u>Pilot site means:</u>							
Male	.468	.470	.487	.486	.465	.476	.493
Female	.532	.530	.513	.514	.535	.524	.507
Age (months)	204.55	203.36	200.28	199.25	207.74	201.87	197.83
Age squared	42014.65	41511.53	40239.29	39806.16	43321.35	40888.64	39221.10
Employment rate, Spring 1977	7.36	7.16	6.38	6.18	8.15	6.95	5.64
Employment rate, Summer 1977	27.88	28.04	25.39	25.05	28.75	27.56	26.53
Employment rate, Fall 1977	16.04	15.51	13.83	13.30	17.84	15.15	13.44
N	2084	2059	1657	1579	1847	1865	1324



Table B5.54. Program Effects on Employment Rates, Separately by Period, for Hispanics (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-732.10 (-1.46)	-649.01 (-1.05)	-33.83 (-0.03)	-942.23 (-0.78)	-384.07 (-0.63)	-47.09 (-0.06)	-1724.41 (-1.15)
Pilot dummy	8.49 (1.66)	9.05 (1.75)	1.98 (0.34)	0.57 (0.10)	21.71 (4.12)	4.74 (0.85)	18.17 (2.94)
Male	12.36 (2.61)	15.60 (3.24)	21.27 (3.99)	17.94 (3.27)	16.18 (3.33)	15.64 (3.10)	18.27 (3.28)
Female	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Age (months)	6.95 (1.44)	6.69 (1.11)	0.75 (0.08)	9.78 (0.81)	3.93 (0.68)	1.09 (0.14)	17.88 (1.20)
Age squared	- 0.02 (-1.38)	- 0.02 (-1.12)	- 0.00 (-0.09)	- 0.02 (-0.82)	- 0.01 (-0.69)	- 0.00 (-0.17)	- 0.05 (-1.22)
Employment rate, Spring 1977	0.00 (0.04)	0.10 (1.25)	- 0.02 (-0.17)	- 0.01 (-0.10)	0.01 (0.08)	- 0.11 (-1.39)	0.07 (0.70)
Employment rate, Summer 1977	0.15 (2.55)	0.14 (2.42)	0.16 (2.61)	0.12 (1.79)	0.22 (3.74)	0.13 (2.22)	0.18 (2.78)
Employment rate, Fall 1977	0.08 (1.29)	0.05 (0.81)	0.06 (0.83)	0.05 (0.76)	0.09 (1.51)	0.02 (0.26)	0.02 (0.26)
R <sup>2</sup>	.092	.090	.093	.064	.163	.051	.137
N	398	380	317	304	344	350	266
<u>Pilot site means:</u>							
Male	.473	.475	.462	.469	.492	.468	.451
Female	.527	.525	.538	.531	.508	.532	.549
Age (months)	206.00	204.08	201.43	200.56	208.88	202.86	199.05
Age squared	42636.23	41808.19	40697.74	40329.87	43804.70	41290.40	39708.77
Employment rate, Spring 1977	17.64	16.73	14.76	13.39	19.77	15.73	13.47
Employment rate, Summer 1977	45.03	45.32	43.76	43.34	47.81	45.76	43.43
Employment rate, Fall 1977	33.40	32.01	29.39	29.83	35.73	31.48	29.28
N	279	265	223	213	244	250	193

Table B5.55. Program Effects on Employment Rates, Separately by Period, for Males (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1085.00 (-4.26)	-1049.31 (-3.66)	139.33 (0.36)	-192.95 (-0.41)	-377.08 (-1.28)	-489.40 (-1.38)	-278.25 (-0.45)
Pilot dummy	18.19 (7.59)	21.59 (8.95)	16.45 (6.11)	16.75 (6.09)	11.89 (4.65)	5.58 (2.16)	10.28 (1.49)
White	6.16 (1.87)	9.86 (2.97)	7.12 (1.91)	8.33 (2.16)	0.32 (0.09)	1.89 (0.53)	5.72 (1.39)
Black	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic	10.00 (2.77)	18.07 (4.94)	15.70 (3.79)	12.41 (2.97)	17.59 (4.53)	8.38 (2.15)	10.57 (2.37)
Age (months)	10.30 (4.20)	9.98 (3.59)	- 1.26 (-0.32)	2.26 (0.49)	3.82 (1.37)	5.24 (1.50)	3.33 (0.54)
Age squared	- 0.02 (-4.05)	- 0.02 (-3.43)	0.00 (0.36)	- 0.01 (-0.49)	- 0.01 (-1.35)	- 0.01 (-1.50)	- 0.01 (-0.56)
Employment rate, Spring 1977	- 0.03 (-0.93)	0.02 (0.58)	- 0.03 (-0.66)	- 0.03 (-0.58)	0.00 (0.13)	- 0.05 (-1.24)	0.06 (1.38)
Employment rate, Summer 1977	0.06 (2.26)	0.07 (2.66)	0.06 (1.94)	0.06 (1.97)	0.17 (5.65)	0.12 (3.90)	0.05 (1.42)
Employment rate, Fall 1977	0.11 (3.61)	0.04 (1.24)	0.06 (1.73)	0.04 (1.13)	0.04 (1.23)	- 0.00 (-0.08)	0.02 (0.54)
R <sup>2</sup>	.079	.095	.047	.040	.068	.020	.024
N	1776	1743	1463	1389	1594	1598	1173
<u>Pilot site means:</u>							
White	.103	.103	.105	.100	.104	.101	.096
Black	.790	.794	.794	.796	.786	.794	.798
Hispanic	.107	.103	.101	.104	.110	.105	.106
Age (months)	204.99	203.97	200.91	199.80	208.21	202.41	198.03
Age squared	42202.39	42177.47	40496.01	40031.04	43520.90	41113.06	39300.92
Employment rate, Spring 1977	13.95	13.56	11.94	11.16	15.45	13.00	10.84
Employment rate, Summer 1977	37.53	37.09	33.92	33.16	38.99	35.76	34.80
Employment rate, Fall 1977	24.40	23.36	21.39	20.52	27.41	23.00	20.74
N	1234	1219	1017	964	1092	1117	819

305

Table B5.56. Program Effects on Employment Rates, Separately by Period, for Females (Table A5.7):  
OLS Coefficients and Pilot Site Means

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>Coefficients (t-statistics):</u>							
Constant	-1287.58 (-5.69)	-1191.01 (-4.54)	-332.12 (-0.90)	-402.52 (-0.91)	-967.04 (-3.51)	-828.11 (-2.42)	-372.10 (-0.63)
Pilot dummy	24.93 (11.64)	25.61 (11.60)	16.60 (6.63)	15.86 (6.13)	18.66 (7.99)	11.73 (4.74)	11.36 (3.88)
White	0.56 (0.19)	0.74 (0.24)	- 0.06 (-0.02)	1.17 (0.33)	- 5.62 (-1.79)	- 8.85 (-2.59)	3.90 (0.97)
Black	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic	0.22 (0.07)	4.44 (1.28)	0.30 (0.08)	0.64 (0.16)	4.29 (1.15)	1.44 (0.38)	1.91 (0.22)
Age (months)	12.34 (5.67)	11.76 (4.62)	3.84 (1.05)	4.71 (1.07)	9.51 (3.65)	8.77 (2.61)	4.54 (0.77)
Age squared	- 0.03 (-5.58)	- 0.03 (-4.62)	- 0.01 (-1.14)	- 0.01 (-1.17)	- 0.02 (-3.71)	- 0.02 (-2.70)	- 0.01 (-0.85)
Employment rate, Spring 1977	- 0.02 (-0.34)	0.04 (0.85)	0.01 (0.26)	0.07 (1.12)	- 0.06 (-1.25)	- 0.01 (-0.27)	0.07 (0.97)
Employment rate, Summer 1977	0.09 (3.44)	0.09 (3.40)	0.05 (1.66)	0.03 (0.77)	0.23 (7.75)	0.09 (2.95)	0.07 (2.10)
Employment rate, Fall 1977	0.06 (1.76)	0.08 (2.32)	0.08 (1.89)	0.12 (2.90)	0.08 (2.18)	0.03 (0.86)	0.05 (1.05)
R <sup>2</sup>	.088	.086	.040	.044	.093	.034	.031
N	2064	2016	1574	1501	1834	1779	1230
<u>Pilot site means:</u>							
White	.114	.112	.110	.108	.117	.108	.103
Black	.782	.788	.780	.783	.785	.785	.775
Hispanic	.104	.100	.110	.109	.098	.107	.122
Age (months)	204.78	203.31	200.28	199.19	207.80	201.91	197.94
Age squared	42112.18	41490.40	40237.69	39780.44	43349.44	40901.46	39265.48
Employment rate, Spring 1977	5.82	5.38	5.01	4.62	6.63	5.22	4.15
Employment rate, Summer 1977	23.14	23.52	21.92	21.74	23.93	24.15	22.81
Employment rate, Fall 1977	13.73	13.26	11.95	11.47	14.73	13.08	11.64
N	1418	1386	1090	1036	1261	1245	866

**Table A5.57. Program Effects on Labor Force Participation Rates, Separately by Period,  
for the 15-16 Year Old Cohort Excluding Denver/Phoenix (Table A5.9):  
OLS Coefficients and Pilot Site Means**

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>Coefficients (t-statistics):</b>							
Constant	-2133.43 (-1.42)	-1278.57 (-0.97)	-1354.96 (-1.53)	-1276.15 (-1.44)	-4847.74 (-1.64)	-880.43 (-0.74)	-1046.31 (-1.17)
Pilot dummy	24.57 (11.85)	25.95 (12.27)	19.66 (8.94)	20.39 (9.14)	17.46 (7.33)	15.44 (7.21)	11.49 (4.95)
White male	6.41 (1.49)	7.09 (1.61)	0.87 (0.19)	0.75 (0.16)	5.12 (1.03)	6.67 (1.49)	0.10 (0.02)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	8.22 (0.36)	- 3.72 (-0.16)	5.52 (0.23)	- 16.34 (-0.69)	- 3.07 (-0.13)	- 3.56 (-0.15)	- 21.99 (-0.96)
White female	- 5.61 (-1.41)	- 8.77 (-2.15)	- 12.18 (-2.84)	- 10.48 (-2.44)	- 13.28 (-2.86)	- 21.97 (-5.21)	- 7.94 (-1.80)
Black female	0.33 (0.16)	1.16 (0.55)	- 4.93 (-2.22)	- 5.80 (-2.61)	- 1.07 (-0.44)	- 3.22 (-1.51)	- 9.08 (-3.96)
Hispanic female	4.05 (0.32)	4.97 (0.39)	- 9.13 (-0.66)	- 11.94 (-0.87)	28.15 (1.58)	5.70 (0.45)	- 16.01 (-1.13)
Age (months)	20.76 (1.34)	12.41 (0.92)	14.18 (1.54)	13.44 (1.46)	48.69 (1.62)	9.04 (0.74)	11.15 (1.20)
Age squared	- 0.05 (-1.25)	- 0.03 (-0.85)	- 0.04 (-1.51)	- 0.03 (-1.43)	- 0.12 (-1.59)	- 0.02 (-0.70)	- 0.03 (-1.18)
Labor force par- ticipation rate, Spring 1977	0.02 (0.28)	0.01 (0.12)	- 0.08 (-1.05)	- 0.02 (-0.27)	- 0.00 (-0.00)	- 0.09 (-1.26)	- 0.05 (-0.69)
Labor force par- ticipation rate, Summer 1977	0.14 (4.52)	0.12 (4.07)	0.09 (2.82)	0.06 (1.95)	0.19 (5.47)	0.16 (5.02)	0.06 (1.70)
Labor force par- ticipation rate, Fall 1977	- 0.03 (-0.51)	0.01 (0.14)	0.09 (1.54)	0.07 (1.10)	- 0.03 (-0.51)	0.02 (0.40)	0.06 (0.98)
R <sup>2</sup>	.115	.107	.064	.063	.081	.070	.036
N	1668	1714	1603	1600	1264	1652	1401
<b>Pilot site means:</b>							
White male	.045	.044	.045	.045	.044	.043	.044
Black male	.407	.407	.424	.424	.398	.418	.437
Hispanic male	.002	.002	.002	.002	.002	.002	.002
White female	.055	.053	.054	.054	.055	.051	.057
Black female	.485	.488	.470	.469	.497	.480	.455
Hispanic female	.006	.006	.005	.006	.004	.006	.005
Age (months)	194.12	193.80	193.01	193.00	196.41	193.47	192.96
Age squared	37709.28	37590.40	37284.51	37281.71	38595.19	37461.87	37269.44
Labor force par- ticipation rate, Spring 1977	3.17	3.07	3.28	3.29	3.70	3.17	3.26
Labor force par- ticipation rate, Summer 1977	29.91	29.69	29.38	29.43	31.17	30.05	30.26
Labor force par- ticipation rate, Fall 1977	6.17	6.00	5.84	5.85	7.32	6.12	6.02
N	1136	1171	1093	1091	841	1129	970

307

236

**Table B5.58. Program Effects on Employment Rates, Separately by Period,  
for the 15-16 Year Old Cohort excluding Denver/Phoenix (Table A5.9):  
OLS Coefficients and Pilot Site Means**

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>Coefficients (t-statistics):</b>							
Constant	-3962.71 (-2.36)	-816.47 (-0.56)	-2186.80 (-2.19)	-2782.63 (-2.79)	-6748.14 (-1.95)	-1721.67 (-1.23)	-1743.91 (-1.67)
Pilot dummy	25.98 (11.25)	28.76 (12.19)	24.06 (9.61)	25.54 (10.19)	14.81 (5.27)	9.57 (3.77)	13.24 (4.86)
White male	5.55 (1.17)	7.93 (1.63)	1.41 (0.28)	1.48 (0.29)	1.14 (0.20)	3.28 (0.62)	- 1.26 (-0.23)
Black male	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)	0.00 (-)
Hispanic male	31.51 (1.26)	- 9.97 (-0.38)	- 10.46 (-0.39)	- 47.24 (-1.77)	- 9.11 (-0.34)	- 26.40 (-0.96)	- 38.93 (-1.45)
White female	- 3.70 (-0.84)	- 3.38 (-0.75)	- 9.40 (-1.95)	- 2.93 (-0.61)	- 18.17 (-3.34)	- 26.47 (-5.31)	- 3.88 (-0.75)
Black female	- 1.14 (-0.49)	1.34 (0.57)	- 4.83 (-1.94)	- 6.08 (-2.44)	- 2.42 (-0.85)	- 6.56 (-2.60)	- 9.43 (-3.52)
Hispanic female	0.31 (0.02)	2.71 (0.19)	1.38 (0.09)	- 19.34 (-1.25)	40.83 (1.96)	4.94 (0.33)	- 11.87 (-0.72)
Age (months)	39.31 (2.28)	7.44 (0.49)	22.99 (2.22)	29.44 (2.84)	68.04 (1.93)	17.95 (1.24)	18.80 (1.73)
Age squared	- 0.10 (-2.18)	- 0.02 (-0.42)	- 0.06 (-2.22)	- 0.08 (-2.87)	- 0.17 (-1.90)	- 0.05 (-1.22)	- 0.05 (-1.75)
Employment rate, Spring 1977	- 0.06 (-1.12)	0.02 (0.42)	- 0.02 (-0.32)	0.05 (0.92)	- 0.11 (-1.86)	- 0.01 (-0.20)	0.35 (0.77)
Employment rate, Summer 1977	0.11 (3.82)	0.09 (3.10)	0.04 (1.11)	0.03 (1.03)	0.22 (6.32)	0.13 (3.96)	0.05 (1.38)
Employment rate, Fall 1977	- 0.01 (-0.27)	- 0.01 (-0.20)	0.05 (1.30)	0.05 (1.16)	0.00 (0.00)	- 0.06 (-1.33)	0.02 (0.41)
R <sup>2</sup>	.110	.100	.066	.076	.076	.041	.033
N	1668	1714	1603	1600	1264	1652	1401
<b>Pilot site means:</b>							
White male	.045	.044	.045	.045	.044	.043	.044
Black male	.407	.407	.424	.424	.398	.418	.437
Hispanic male	.002	.002	.002	.002	.002	.002	.002
White female	.055	.053	.054	.054	.055	.051	.057
Black female	.485	.488	.470	.469	.497	.480	.455
Hispanic female	.006	.006	.005	.006	.004	.006	.005
Age (months)	194.12	193.80	193.01	193.00	196.41	193.47	192.96
Age squared	37709.28	37590.40	37284.51	37281.71	38595.19	37461.87	37269.44
Employment rate, Spring 1977	4.11	4.07	4.02	4.02	4.43	4.15	4.01
Employment rate, Summer 1977	22.14	22.04	21.17	21.21	23.09	22.33	22.21
Employment rate, Fall 1977	10.69	10.37	10.39	10.40	12.55	10.67	10.77
N	1136	1171	1093	1091	841	1129	970

**Table B6.1. Program Effects on the Percentage of Program-Eligible Time  
Spent in Different School and Employment States (Table 6.1):  
OLS Coefficients and Pilot Site Means**

Variable	Coefficients (t-statistics): <sup>1</sup>			Pilot site means:
	Percentage of time enrolled, employed	Percentage of time enrolled, not employed	Percentage of time not enrolled employed	
Constant	-.503 (3.796)	-.034 (.212)	-.248 (2.083)	1.000
Pilot site	.132 (17.116)	-.091 (10.904)	.020 (3.212)	1.000
Age in June 1978 (months/100)	.699 (5.309)	.722 (4.612)	-.264 (2.237)	2.050
Age squared	-.184 (5.437)	-.216 (5.460)	.097 (3.234)	4.230
White male	-.027 (2.443)	-.003 (.371)	-.068 (6.449)	.048
Black male	0.000 (-)	0.000 (-)	0.000 (-)	.368
Hispanic male	-.010 (.566)	-.059 (3.073)	.104 (7.261)	.049
White female	-.037 (2.556)	-.038 (2.427)	-.007 (.586)	.061
Black female	.021 (2.535)	.027 (3.102)	-.059 (8.917)	.420
Hispanic female	-.021 (1.300)	-.026 (1.492)	-.025 (1.853)	.054
Proportion of pre- program time:				
Enrolled, employed	.229 (9.114)	-.263 (9.615)	.034 (1.682)	.057
Not enrolled, employed	-.135 (5.233)	-.425 (15.173)	.401 (19.159)	.081
Not enrolled, not employed	-.215 (2.925)	-.403 (5.503)	.038 (.512)	.282
R <sup>2</sup>	.169	.239	.207	
N	4033	4033	4033	2778

<sup>1</sup> Fitted values for the percentage of time not enrolled and not employed are calculated by subtracting the fitted values for the three estimated categories from 100.

309

Table B6.2. Program Effects on the Percentage of Program-Eligible Time Spent in Different School and Employment States, by Primary State in the Pre-program Period (Table 6.2):  
OLS Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics): <sup>1</sup>						Pilot site means:	
	Youths primarily enrolled, employed in preprogram period			Youths primarily enrolled, not employed in preprogram period			Youths primarily enrolled, employed in pre-program period	Youths primarily enrolled, not employed in pre-program period
	Percentage of time enrolled, employed	Percentage of time enrolled, not employed	Percentage of time not enrolled, employed	Percentage of time enrolled, employed	Percentage of time enrolled, not employed	Percentage of time not enrolled, employed		
Constant	1.434 (.357)	1.602 (.468)	3.832 (1.187)	-2.420 (2.511)	2.948 (2.765)	-1.257 (2.035)	1.000	1.000
Pilot site	.107 (2.404)	-.030 (.788)	-.015 (.416)	.166 (17.562)	-.131 (12.539)	.023 (3.829)	1.000	1.000
Age in June 1978 (months/100)	-1.052 (.271)	-.709 (.215)	-3.996 (1.283)	2.599 (2.773)	-2.069 (1.995)	1.187 (1.977)	2.050	2.010
Age squared	.218 (.235)	.082 (.104)	1.043 (1.397)	-.653 (2.867)	.444 (1.763)	-.253 (1.734)	4.230	4.060
White male	.009 (.158)	-.168 (3.390)	.094 (1.998)	-.033 (1.537)	-.090 (3.792)	.077 (5.618)	.119	.036
Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	.488	.384
Hispanic male	.038 (.553)	-.152 (2.623)	.120 (2.179)	-.023 (.988)	-.079 (3.116)	.110 (7.475)	.104	.040
White female	-.032 (.309)	-.017 (.194)	.032 (.384)	-.035 (1.813)	-.048 (2.238)	-.002 (.192)	.044	.048
Black female	.025 (.436)	-.034 (.720)	-.051 (1.128)	.026 (2.743)	.016 (1.528)	-.044 (7.061)	.193	.444
Hispanic female	.250 (2.901)	-.092 (1.257)	-.033 (.479)	-.041 (1.919)	-.052 (2.186)	.021 (1.517)	.052	.048
Proportion of pre-program time:								
Enrolled, employed	.116 (.752)	-.231 (2.006)	.153 (1.308)	.409 (7.106)	-.555 (8.725)	.228 (6.192)	.637	.028
Not enrolled, employed	-.106 (.368)	-.190 (1.132)	.294 (1.439)	-.051 (.660)	-.510 (6.025)	.194 (3.963)	.169	.054
Not enrolled, not employed	-.230 (1.80)	.159 (.277)	.043 (.043)	-.381 (1.369)	-.401 (1.452)	.046 (.168)	.058	.189
R <sup>2</sup>	.031	.115	.098	.135	.106	1.06		
N	194	194	194	2995	2995	2995	135	2080

Variable	Coefficients (t-statistics): <sup>1</sup>						Pilot site means:	
	Youths primarily not enrolled, employed in preprogram period			Youths primarily not enrolled, not employed in preprogram period			Youths primarily enrolled, employed in pre-program period	Youths primarily enrolled, not employed in pre-program period
	Percentage of time enrolled, employed	Percentage of time enrolled, not employed	Percentage of time not enrolled, employed	Percentage of time enrolled, employed	Percentage of time enrolled, not employed	Percentage of time not enrolled, employed		
Constant	1.453 (.580)	-4.493 (1.614)	8.299 (1.126)	-1.899 (1.633)	1.563 (1.231)	-4.785 (2.645)	1.000	1.000
Pilot site	.004 (2.33)	.005 (.212)	-.037 (.653)	.037 (3.001)	-.005 (.359)	.033 (1.707)	1.000	1.000
Age in June 1978 (months/100)	-1.189 (.521)	4.347 (1.716)	-8.076 (1.204)	1.911 (1.766)	-1.085 (.918)	4.630 (2.749)	2.230	2.190
Age squared	.276 (.534)	-1.011 (1.762)	2.012 (1.324)	-.435 (1.739)	.244 (.893)	-1.074 (2.756)	5.000	4.810
White male	-.061 (2.386)	-0.021 (.732)	.207 (2.759)	-.076 (3.021)	-.044 (1.613)	.046 (1.173)	.230	.053

Table B6.2. (Continued)

Black male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	.311	.272
Hispanic male	-.071 (2.353)	.001 (.035)	.051 (.580)	-.026 (.949)	.024 (.774)	.063 (1.451)	.156	.047
White female	-.038 (1.298)	-.020 (.618)	.076 (.877)	-.073 (3.853)	-.038 (1.818)	-.069 (2.339)	.133	.112
Black female	-.029 (.970)	-.010 (.306)	-.096 (1.105)	-.025 (1.718)	.022 (1.350)	-.122 (5.327)	.133	.438
Hispanic female	.016 (.356)	.005 (.105)	-.079 (.592)	-.066 (2.891)	-.014 (.564)	-.101 (2.842)	.067	.078
Proportion of pre-program time:								
Enrolled, employed	.061 (.555)	.170 (1.731)	.011 (.037)	.561 (4.830)	-.216 (1.708)	-.200 (1.111)	.069	.013
Not enrolled, employed	-.118 (1.447)	-.124 (1.819)	.248 (1.177)	-.136 (2.236)	-.375 (5.659)	.561 (5.931)	.750	.049
Not enrolled, not employed	-.164 (1.88)	-.067 (.119)	-.319 (.443)	-.145 (.603)	-.311 (1.300)	.015 (.061)	.114	.791
R <sup>2</sup>	.064	.068	.184	.126	.130	1.50		
N	147	147	147	697	697	697	90	473

See note to Table B6.1.



APPENDIX C

Tests of Sample Attrition Bias

241

313

## APPENDIX C

In measuring program impacts for this report, we have restricted attention to sample members who responded to all three during-program interviews: Waves I, II, and III. Both Waves II and III are required if our data are to cover the period of full program operation. However, since a significant portion of the original sample did not complete all three interviews, this opens the possibility of bias in our results. Such attrition bias may occur if pilot site sample respondents are systematically different from comparison site sample respondents in ways that are not corrected for in our statistical analyses of the data.

In an attempt to test for the existence and magnitude of such bias, a special survey of a subset of Wave II nonrespondents was undertaken during Wave III data collection. That is, special efforts were made to locate Hispanics in Denver and Phoenix and blacks in Baltimore and Cleveland who had not responded to Wave II; those located were administered both Waves II and III.<sup>1</sup> The resulting attrition sample was then used to estimate program efforts for survey nonrespondents; these results were then compared with estimated efforts for otherwise identical respondents. The result is a straightforward calculation of potential attrition bias, utilizing a methodology which is likely to be more reliable than the econometric techniques employed to estimate bias in our previous report. (See Farkas et al. (1980: Appendix A1).)<sup>2</sup>

### Program Participation

Table C2.1 shows program participation rate estimates for the local field survey and attrition survey samples, and estimated program participation rates in the absence of attrition for (a) Hispanic youths in Denver,

---

<sup>1</sup> Attention was restricted to particular race and site groups in an attempt to use limited resources to provide as much information as possible concerning the most substantively important program effects.

<sup>2</sup> The difficulty with econometric tests for attrition bias is that they rely upon (necessarily) untested assumptions regarding relationships among the variables in the analysis. It should be noted, however, that our previous work in this regard concluded that sample attrition was not a problem for the analysis.

Table C2.1. Sample Attrition and Program Participation Rates

	Cumulative: Spring 1978 through Summer 1980	Spring 1978	Summer 1978	Fall 1978	Spring 1979	Summer 1979	Fall 1979	Spring 1980	Summer 1980
Hispanic youths in Denver:									
Local field survey sample <sup>2</sup>	36.9 <sup>5</sup> (268)	19.1 (210)	25.4 (232)	23.2 (263)	26.0 (250)	26.7 (236)	17.5 (211)	15.9 (201)	13.7 (183)
Attrition sample <sup>3</sup>	18.7 (150)	7.7 (130)	9.5 (137)	9.7 (144)	10.0 (140)	12.3 (130)	10.4 (115)	8.5 (106)	4.3 (92)
Estimated participation rates in the absence of attrition <sup>4</sup>	27.8	13.4	17.5	16.5	18.0	19.5	14.0	12.2	9.0
Black youths in Baltimore:									
Local field survey sample	70.5 (999)	43.3 (770)	47.3 (842)	47.4 (944)	51.9 (933)	51.5 (876)	43.2 (745)	44.5 (712)	39.6 (624)
Attrition sample	61.7 (107)	33.7 (86)	34.0 (94)	34.3 (105)	41.4 (99)	32.2 (90)	27.9 (79)	31.6 (76)	28.8 (66)
Estimated participation rates in the absence of attrition	68.4	41.0	44.1	44.2	49.3	46.8	39.5	41.4	37.0

<sup>1</sup> The participation rate is the number of youths ever holding a program job in a period divided by the number ever program-eligible. See Chapter 3 for further details.

<sup>2</sup> The sample includes youths who completed three waves of the local field survey.

<sup>3</sup> The sample includes youths who did not complete the second wave of the survey but were reinterviewed at a later date, using a special questionnaire that collected information about their activities during both the Wave II and Wave III time periods.

<sup>4</sup> Average of the estimated participation rates for the local field survey sample and the attrition sample with one minus the attrition rate and the attrition rate, respectively, as weights. The Wave I - Wave III sample attrition rate for Denver is .499; for Baltimore, .244.

<sup>5</sup> Number of eligible youths.

and (b) black youths in Baltimore. Estimated rates in the absence of attrition are computed as a weighted average of the respondent and nonrespondent rates, with the weights being the percent of the total sample represented by each.

The first panel of this table shows the results for Hispanics in Denver. Youth completing the first three waves of the local field survey (LFS) have much higher participation than attritors--twice as high on a cumulative basis, and almost three times as high for particular periods. Combined with very high sample attrition for Denver (almost 50 percent for the Wave I - Wave III comparison), this leads to a large downward correction in the LFS participation rates--from 36.9 percent to 27.8 percent on a cumulative (ever participated) basis.

The second panel displays analogous results for blacks in Baltimore. Once again attritors show lower participation, but in this case the gap is narrower--from 70.5 percent to 61.7 percent on a cumulative basis. Since sample attrition was much lower in Baltimore (24.4 percent), the result is only a small correction to the LFS participation rate--from 70.5 percent down to 68.4 percent.

What are we to conclude regarding the effect of attrition on participation rate estimates for the sample as a whole? Not surprisingly, in all cases examined above attritors showed lower participation than LFS completers, and we certainly conclude that the LFS estimates of participation reported in Chapter 3 are biased upwards. As for the magnitude of this bias, the two panels of Table C2.1 yield conflicting stories--a large bias in Denver, but a very much smaller bias in Baltimore. This difference is partly attributable to the particularly low participation rates of Denver attritors, but is even more directly due to the very much higher attrition rate in Denver than Baltimore. This latter fact yields a relatively optimistic conclusion for attrition bias in the sample as a whole. For it is Denver/Phoenix which show the highest sample attrition--no other sites come close. Moreover, Baltimore in particular, and blacks in general, are a relatively large proportion of the sample as a whole. Thus we conclude that corrected participation rate estimates for the sample as a

whole would lie between those for Denver Hispanics and Baltimore blacks, but very much closer to the latter. This leaves undisturbed our overall substantive conclusion that participation was quite high in this demonstration.<sup>1</sup>

### School Enrollment

Table C2.2 shows regression-adjusted, program effect estimates on school enrollment in the LFS and attrition samples, as well as the estimated program effect in the absence of attrition. These are computed from probit regression calculations in which a dummy variable for pilot site, attrition sample members tests the hypothesis of different program effects for the LFS and attrition samples. These regression calculations are shown in Table C2.3.

The most important result from this analysis is that in all cases the pilot site attrition sample dummy variable coefficient fails to achieve statistical significance (see the t-statistics for the variables in the fourth row of Table C2.3), indicating no significant difference between LFS and attrition sample program effects. The estimated program effects in the absence of attrition calculated in Table C2.2 show an increase over the LFS effects in three out of four cases, so that the LFS findings reported in Chapter 4 may be downward biased. However, a conservative approach based on statistical significance must conclude that we have failed to find evidence of bias.

### Employment

Tables C2.4 and C2.5 repeat these analyses for program effects on employment. The pilot site attrition sample dummy variable is significant only for the summer of 1980 in Denver, and for the fall of 1979 and the summer of 1978 in Baltimore. For Denver, the estimated effect in the absence of attrition is generally smaller (or more negative) than the LFS estimated effect, but this is of little consequence since we have already concluded that for a variety of reasons (poor program implementation and a strong labor market, in particular), program effects were small or nonexistent in this site (see Chapter 5 above).

---

<sup>1</sup>It should also be noted that the over-time patterns in Table C2.1 generally reflect those reported for the sample as a whole.

Table C2.2. Sample Attrition and Program Effects  
on Total School Enrollment Rates

	<u>Local field survey sample</u> <sup>1</sup>		<u>Attrition sample</u> <sup>2</sup>		Estimated program effect in the absence of attrition
	Pilot site rate	Program effect	Pilot site rate	Program effect	
Hispanic youths in Denver:					
Fall 1978	58.9	3.2	39.6	1.0	2.1
Fall 1979	41.7	-1.1	26.9	6.3	2.6
Black youths in Baltimore:					
Fall 1978	75.9	3.3	59.8	14.1	5.9
Fall 1979	64.9	2.4	54.7	14.3	6.3

<sup>1</sup> The sample includes youths who completed three waves of the local field survey. The program effect is the difference between the pilot site rate and a regression-adjusted comparison site mean (fit at pilot site average personal characteristics, enrollment rates and highest grade completed). Means of the right-hand side variables and probit coefficients are reported in Table C2.3.

<sup>2</sup> The sample includes youths who completed the special attrition survey. The program effect for this sample is calculated in the same manner as the program effect for the local field survey sample. None of the program effects in the attrition sample are significantly different, in a statistical sense, from the effects for the local field survey sample.

<sup>3</sup> Average of the estimated program effects for the local field survey sample and the attrition sample with one minus the attrition rate and the attrition rate, respectively, as weights. The Wave I - Wave III sample attrition rate for Denver is .499; for Baltimore, .244.

Table C2.3. Sample Attrition and Program Effects on School Enrollment Rates (Table C2.2):  
Probit Coefficients and Pilot Site Means

Variable	Coefficients (t-statistics):				Pilot site means:							
	Total enrollment for Hispanic youths in Denver/ Phoenix		Total enrollment for black youths in Baltimore/ Cleveland		Denver Hispanics in LFS sample		Denver Hispanics in in attrition sample		Baltimore blacks in LFS sample		Baltimore blacks in attrition sample	
	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979	Fall 1978	Fall 1979
Constant	3.197 (2.635)	8.485 (5.455)	3.794 (4.913)	7.265 (8.162)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Attrition sample	-1.827 (1.166)	-2.229 (1.221)	-1.733 (1.415)	-1.590 (1.179)	.000	.000	1.000	1.000	.000	.000	1.000	1.000
Pilot site	.107 (.638)	-.037 (.201)	.150 (1.178)	.077 (.627)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Pilot site x attrition sample	-.075 (.218)	.272 (.612)	.328 (1.267)	.349 (1.293)	.000	.000	1.000	1.000	.000	.000	1.000	1.000
Age in June 1978 (months/100)	-2.821 (5.135)	-5.555 (6.456)	-3.456 (9.697)	-4.649 (10.727)	2.060	2.020	2.080	2.040	2.050	2.010	2.080	2.030
Male	0.000 (-)	0.000 (-)	0.000 (-)	0.000 (-)	.471	.460	.500	.530	.448	.462	.543	.570
Female	.018 (.148)	.111 (.794)	.002 (.021)	-.038 (.447)	.529	.540	.500	.470	.552	.538	.457	.430
Enrolled, Fall 1977	1.307 (6.621)	1.274 (3.343)	1.216 (8.237)	.628 (3.451)	.753	.806	.736	.800	.881	.909	.752	.797
Enrolled, Fall 1977 x attrition sample	-.190 (.523)	-.687 (1.176)	-.267 (.873)	-.182 (.513)	.000	.000	.736	.800	.000	.000	.752	.797
Highest grade completed, Summer 1977	.191 (2.175)	.150 (1.162)	.360 (7.814)	.238 (4.922)	6.810	7.340	6.830	7.110	6.680	6.610	6.170	6.130
Highest grade completed x attrition sample	.169 (1.018)	.248 (1.222)	.130 (1.016)	.136 (.978)	.000	.000	6.830	7.110	.000	.000	.0	6.130
Grade missing, Summer 1977	1.740 (2.131)	1.144 (.996)	2.434 (5.601)	1.427 (3.427)	.243	.171	.257	.209	.226	.20	.286	.266
Grade missing, x attrition sample	1.274 (.830)	2.232 (1.223)	1.757 (1.534)	1.679 (1.336)	.000	.000	.257	.209	.000	.000	.286	.266
N	553	441	1383	1097	263	211	144	115	744	745	105	79

Table C2.4. Sample Attrition and Program Effects  
on Employment Ratios

	<u>Local field survey sample</u> <sup>1</sup>		<u>Attrition sample</u> <sup>2</sup>		Estimated program effect in the absence of attrition <sup>3</sup>
	Pilot site rate	Program effect	Pilot site rate	Program effect	
<b>Hispanic youths in Denver:</b>					
Fall 1978	39.3	7.3	34.3	2.2	4.8
Spring 1979	46.1	6.2	39.7	0.9	3.6
Fall 1979	40.0	- 1.8	39.3	- 6.7	- 4.2
Spring 1980	41.6	- 4.3	33.8	- 5.9	- 5.1
Summer 1978	49.5	15.5	39.4	9.7	12.6
Summer 1979	47.6	- 0.1	46.7	5.6	2.7
Summer 1980	47.9	13.7	33.8	-13.6***	0.1
<b>Black youths in Baltimore:</b>					
Fall 1978	45.7	28.5	38.1	20.4	26.5
Spring 1979	49.9	33.7	46.6	25.2	31.6
Fall 1979	47.4	21.4	35.1	4.4**	17.3
Spring 1980	47.2	19.8	39.7	6.4	16.5
Summer 1978	48.7	14.8	38.6	1.0*	11.4
Summer 1979	51.6	12.5	41.3	7.1	11.2
Summer 1980	43.8	9.5	37.4	0.6	7.3

<sup>1</sup>The sample includes youths who completed three waves of the local field survey. The program effect is the difference between the pilot site rate and a regression-adjusted comparison site mean (fit at pilot site average personal characteristics and preprogram employment). Means of the right-hand side variables and regression coefficients are reported in Table C2.5.

<sup>2</sup>The sample includes youths who completed the special attrition survey. The program effect for this sample is calculated in the same manner as the program effect for the local field survey sample. Asterisks indicate attrition sample program effects different from local field survey program effects at the 10 percent (\*), 5 percent (\*\*), or 1 percent (\*\*\*) level of significance.

<sup>3</sup>Average of the estimated program effects for the local field survey sample and the attrition sample with one minus the attrition rate and the attrition rate, respectively, as weights. The Wave I - Wave III sample attrition rate for Denver is .499; for Baltimore, .244.



**Table C2.5. Regression Coefficient Estimates for Sample Attrition  
and Program Effects on Emolvment Ratios (Table C2.4)**

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<b>C2.5A. Hispanic Youths in Denver/Phoenix</b>							
Constant	-1017.1 (2.6)	- 838.0 (1.8)	- 113.8 (0.2)	-1053.2 (1.2)	- 448.7 (0.9)	- 243.7 (0.4)	- 821.9 (0.7)
Pilot dummy	7.26 (1.5)	6.22 (1.3)	- 1.79 (0.3)	- 48.2 (0.8)	15.54 (3.1)	- 0.13 (0.0)	13.74 (2.3)
Attrition sample dummy	- 1.30 (0.2)	- 3.70 (0.4)	3.67 (0.4)	- 10.81 (1.1)	- 13.72 (1.5)	- 12.11 (1.3)	15.60 (1.5)
Pilot x attrition sample dummy	- 9.41 (1.0)	- 5.35 (0.6)	- 4.89 (0.5)	- 1.61 (0.2)	- 5.83 (0.6)	5.76 (0.6)	- 27.35 (2.5)
Female Dummy	- 15.08 (3.6)	- 13.96 (3.8)	- 18.70 (4.6)	- 16.57 (3.9)	- 11.08 (2.9)	- 19.11 (4.9)	- 16.73 (3.8)
Age	9.90 (2.6)	8.67 (2.0)	1.58 (0.2)	11.01 (1.2)	4.73 (1.0)	3.09 (0.5)	9.12 (0.8)
Age squared	- 0.023 (2.5)	- 0.021 (2.0)	- 0.004 (0.2)	- 0.027 (1.3)	- 0.012 (1.1)	- 0.008 (0.6)	- 0.024 (0.9)
Employment ratio, Spring 1977	0.177 (2.0)	0.113 (1.2)	- 0.019 (0.2)	- 0.006 (0.1)	0.048 (0.5)	- 0.011 (0.1)	0.156 (1.3)
Employment ratio, Summer 1977	0.134 (2.1)	0.188 (2.9)	0.208 (2.9)	0.237 (3.2)	0.159 (2.4)	0.159 (2.3)	0.198 (2.7)
Employment ratio, Fall 1977	- 0.049 (0.6)	0.107 (1.4)	0.088 (1.0)	- 0.019 (0.2)	0.010 (0.1)	0.061 (0.7)	- 0.018 (0.2)
Employment ratio, Spring 1977 x attrition sample dummy	- 0.432 (2.8)	- 0.292 (1.9)	- 0.159 (0.9)	0.031 (0.2)	- 0.125 (0.8)	- 0.259 (1.5)	- 0.352 (1.5)
Employment ratio, Summer 1977 x attrition sample dummy	0.078 (0.7)	0.049 (0.4)	- 0.086 (0.7)	- 0.046 (0.4)	0.172 (1.5)	0.064 (0.5)	- 0.096 (0.7)
Employment ratio, Fall 1977 x attrition sample dummy	0.243 (1.8)	0.087 (0.7)	0.095 (0.6)	0.114 (0.7)	0.127 (0.9)	0.143 (1.0)	0.056 (0.3)
R <sup>2</sup>	.109	.131	.102	.101	.128	.105	.123
N	553	531	441	420	492	489	364
<b>C2.5B. Black Youths in Baltimore/Cleveland</b>							
Constant	-1795.0 (6.8)	-1282.4 (4.2)	150.0 (0.4)	- 530.3 (1.1)	-1441.8 (4.7)	- 392.9 (1.1)	- 902.3 (1.5)
Pilot dummy	28.53 (9.2)	33.69 (10.7)	21.36 (6.0)	19.83 (5.5)	14.81 (4.5)	12.50 (3.9)	9.46 (2.6)
Attrition sample dummy	- 2.70 (0.4)	3.34 (0.5)	4.10 (0.6)	4.81 (0.7)	2.22 (0.3)	- 8.20 (1.2)	1.76 (0.2)
Pilot x attrition sample dummy	- 8.09 (1.1)	- 8.49 (1.2)	- 17.0 (2.1)	- 13.42 (1.6)	- 13.78 (1.8)	- 5.43 (0.7)	- 8.89 (1.0)
Female Dummy	- 1.74 (0.7)	0.70 (0.3)	- 5.10 (1.9)	- 5.30 (1.9)	- 2.27 (0.9)	- 5.72 (2.3)	- 10.61 (3.7)
Age	17.12 (6.7)	12.50 (4.2)	- 0.74 (0.2)	6.18 (1.3)	14.12 (4.8)	4.68 (1.3)	9.92 (1.6)
Age squared	- 0.040 (6.6)	- 0.030 (4.2)	0.001 (0.1)	- 0.017 (1.4)	- 0.034 (4.9)	- 0.012 (1.4)	- 0.026 (1.7)
Employment ratio, Spring 1977	- 0.061 (0.8)	0.067 (0.8)	- 0.111 (1.1)	- 0.124 (1.2)	- 0.000 (0.0)	- 0.098 (1.1)	- 0.027 (0.2)
Employment ratio, Summer 1977	0.035 (0.9)	0.020 (0.5)	0.047 (1.0)	0.025 (0.5)	0.161 (3.9)	0.097 (2.4)	0.047 (1.0)
Employment ratio, Fall 1977	- 0.020 (0.3)	- 0.009 (0.1)	0.093 (1.2)	0.147 (1.8)	- 0.051 (0.8)	0.006 (0.1)	0.016 (0.2)
Employment ratio, Spring 1977 x attrition sample dummy	- 0.156 (0.8)	- 0.527 (2.5)	- 0.074 (0.3)	- 0.323 (1.4)	- 0.396 (1.8)	- 0.248 (1.2)	- 0.058 (0.3)
Employment ratio, Summer 1977 x attrition sample dummy	0.068/ (0.7)	0.022 (0.2)	0.009 (0.1)	0.062 (0.5)	0.048 (0.4)	0.101 (0.9)	0.063 (0.5)
Employment ratio, Fall 1977 x attrition sample dummy	0.206 (1.4)	0.407 (2.7)	0.131 (0.8)	0.255 (1.5)	0.204 (1.4)	0.173 (1.1)	0.008 (0.0)
R <sup>2</sup>	.111	.109	.056	.063	.059	.043	.036
N	1383	1357	1097	1050	1250	1278	934

Employment effects for Baltimore are more interesting, since they are reported to be large and positive in Chapter 5, and although not all pilot site attrition sample dummy variables are statistically significant in the lower panel of Table C2.5, the negative signs of this coefficient are consistent across time periods. As a result, Table C2.4 shows a reduced program effect in the absence of attrition for this site, with the reduction falling in the 2 to 3 percentage point range. That is, from 28.5 to 26.5 percent, from 33.7 to 31.6 percent, etc. (See the second and fifth columns in the bottom panel of Table C2.4.) Since, as discussed above for participation, Baltimore blacks more nearly resemble the full sample than do Denver Hispanics, this encourages us in the correctness of our basic substantive finding regarding YIEPP employment effects--they are large and positive.

Table C2.6. Means for Sample Attrition and Program  
Effects on Employment Ratios (Table C2.4)

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>C2.6A. Local Field Survey, Hispanic Youths in Denver</u>							
Female	.529	.528	.540	.532	.517	.534	.552
Age	206.1	204.2	201.6	200.6	208.8	203.0	199.2
Age squared	42668.4	41844.6	40748.4	40361.1	43776.0	41339.5	39756.0
Employment ratio, Spring 1977	12.7	11.6	9.1	8.5	14.1	10.4	8.7
Employment ratio, Summer 1977	36.6	36.5	34.8	34.8	39.2	36.4	34.6
Employment ratio, Fall 1977	20.2	18.7	16.7	16.6	21.9	18.0	16.1
Dependent variable (Employment ratio in ____)	39.3	46.1	40.0	41.6	49.5	47.6	47.9
N	263	250	211	201	232	236	183
<u>C2.6B. Attrition Sample, Hispanic Youths in Denver</u>							
Female	.500	.486	.470	.453	.504	.485	.434
Age	207.8	207.0	203.6	202.0	209.2	205.1	200.0
Age squared	43370.6	43004.7	41594.5	40899.5	43952.5	42231.0	40071.0
Employment ratio, Spring 1977	13.3	12.9	11.3	10.3	13.3	11.6	8.0
Employment ratio, Summer 1977	41.9	42.4	45.1	45.3	42.2	43.2	44.4
Employment ratio, Fall 1977	26.2	26.3	23.9	24.3	25.6	25.5	23.6
Dependent variable (Employment ratio in ____)	34.3	39.7	39.3	33.8	39.4	46.7	33.8
N	144	140	115	106	137	130	92
<u>C2.6C. Local Field Survey, Hispanic Youths in Phoenix</u>							
Female	.527	.528	.518	.518	.511	.505	.538
Age	204.9	203.3	199.7	199.2	208.8	201.1	199.8
Age squared	42189.8	41490.9	39992.4	39752.4	43752.5	40569.3	40011.5
Employment ratio, Spring 1977	13.0	11.6	8.3	7.3	15.4	9.0	7.3
Employment ratio, Summer 1977	28.2	27.4	23.3	22.7	31.2	23.0	20.4
Employment ratio, Fall 1977	18.2	17.1	12.3	11.4	22.6	13.8	11.0
Dependent variable (Employment ratio in ____)	30.9	38.1	39.5	43.7	33.0	46.3	31.3
N	110	106	85	83	92	91	65
<u>C2.6D. Attrition Sample, Hispanic Youths in Phoenix</u>							
Female	.528	.543	.533	.533	.516	.531	.542
Age	206.4	206.9	203.7	203.7	209.5	205.2	202.1
Age squared	42797.6	42995.7	41601.1	41601.1	44011.6	42235.8	40938.7
Employment ratio, Spring 1977	15.0	15.4	11.6	11.6	17.4	13.2	6.2
Employment ratio, Summer 1977	36.2	34.5	33.8	33.8	36.9	34.6	33.8
Employment ratio, Fall 1977	18.4	18.9	16.5	16.5	21.3	18.0	14.8
Dependent variable (Employment ratio in ____)	32.6	34.3	42.0	34.7	27.2	36.3	42.8
N	36	35	30	30	31	32	24

Table C2.6. (Continued)

	Fall 1978	Spring 1979	Fall 1979	Spring 1980	Summer 1978	Summer 1979	Summer 1980
<u>C2.6E. Local Field Survey, Black Youths in Baltimore</u>							
Female	.552	.555	.538	.536	.553	.555	.542
Age	205.4	204.0	200.6	199.6	208.8	202.7	197.7
Age squared	42357.6	41764.5	40368.0	39930.2	43758.9	41213.1	39178.3
Employment ratio, Spring 1977	4.0	3.7	2.9	2.8	4.5	3.5	2.4
Employment ratio, Summer 1977	20.2	20.1	17.6	17.3	21.0	19.8	17.0
Employment ratio, Fall 1977	7.6	7.1	5.9	5.1	8.7	6.9	4.5
Dependent variable (Employment ratio in ____)	45.7	49.9	47.4	47.2	48.7	51.6	43.8
N	944	933	745	712	842	876	624
<u>C2.6F. Attrition Sample, Black Youths in Baltimore</u>							
Female	.457	.444	.430	.447	.436	.433	.470
Age	208.0	205.9	202.7	201.9	211.0	204.0	200.2
Age squared	43500.3	42549.9	41222.8	40881.1	44717.2	41749.8	40178.4
Employment ratio, Spring 1977	4.7	4.4	5.5	5.7	5.2	4.8	6.5
Employment ratio, Summer 1977	24.3	23.9	22.8	22.9	24.5	24.1	23.2
Employment ratio, Fall 1977	8.8	8.5	8.2	8.6	9.8	9.3	7.8
Dependent variable (Employment ratio in ____)	38.1	46.6	35.1	39.7	38.6	41.3	37.4
N	105	99	79	76	94	90	66
<u>C2.6G. Local Field Survey, Black Youths in Cleveland</u>							
Female	.529	.526	.512	.518	.517	.527	.513
Age	204.5	202.6	199.8	198.9	207.0	201.5	197.8
Age squared	41989.0	41221.4	40029.5	39658.2	43042.1	40724.0	39217.5
Employment ratio, Spring 1977	5.3	5.5	5.7	4.8	6.3	5.7	5.1
Employment ratio, Summer 1977	35.8	36.2	34.9	34.6	37.5	35.7	35.1
Employment ratio, Fall 1977	9.5	9.5	8.6	7.7	11.0	8.5	7.1
Dependent variable (Employment ratio in ____)	17.2	16.6	27.3	28.6	36.1	41.2	35.4
N	255	249	207	199	238	239	187
<u>C2.6H. Attrition Sample, Black Youths in Cleveland</u>							
Female	.443	.434	.439	.460	.461	.425	.421
Age	206.9	205.0	203.3	202.4	208.9	204.5	201.3
Age squared	42946.1	42150.5	41461.4	41053.5	43791.0	41930.3	40620.3
Employment ratio, Spring 1977	4.5	4.6	5.4	4.6	4.2	4.8	5.1
Employment ratio, Summer 1977	29.6	30.8	30.3	30.1	29.9	30.3	32.1
Employment ratio, Fall 1977	9.5	9.9	11.4	10.3	11.2	10.3	11.4
Dependent variable (Employment ratio in ____)	20.3	23.7	31.5	35.1	40.8	36.0	38.3
N	79	76	66	63	76	73	57

PUBLISHED REPORTS ON THE YIEPP DEMONSTRATION

Ball, Joseph; Diaz, William; Leiman, Joan; Mandel, Sheila; McNutt, Kenneth. THE YOUTH ENTITLEMENT DEMONSTRATION: AN INTERIM REPORT ON PROGRAM IMPLEMENTATION, 1979.

Ball, Joseph; Wolfhagen, Carl; with David Gerould and Loren Solnick. THE PARTICIPATION OF PRIVATE BUSINESSES AS WORK SPONSORS IN THE YOUTH ENTITLEMENT DEMONSTRATION, 1981.

Ball, Joseph; Gerould, David M.; Burstein, Paul. THE QUALITY OF WORK IN THE YOUTH ENTITLEMENT DEMONSTRATION, 1980.

Barclay, Suzanne; Bottom, Christine; Farkas, George; Olsen, Randall; Stromsdorfer, Ernst W. SCHOOLING AND WORK AMONG YOUTHS FROM LOW-INCOME HOUSEHOLDS: A BASELINE REPORT FROM THE ENTITLEMENT DEMONSTRATION, 1979.

Diaz, William A.; Ball, Joseph; Jacobs, Nancy; Solnick, Loren; Widman, Albert. THE YOUTH ENTITLEMENT DEMONSTRATION: SECOND INTERIM REPORT ON PROGRAM IMPLEMENTATION, 1980.

Diaz, William A.; Ball, Joseph; Wolfhagen, Carl; with Judith Gueron, Stephanie Sheber, and Albert Widman. LINKING SCHOOL AND WORK FOR DISADVANTAGED YOUTHS: THE YIEPP DEMONSTRATION: FINAL IMPLEMENTATION REPORT, 1982.

Farkas, George; Smith, D. Alton; Stromsdorfer, Ernst W.; Bottom, Christine. EARLY IMPACTS FROM THE YOUTH ENTITLEMENT DEMONSTRATION: PARTICIPATION, WORK AND SCHOOLING, 1980.

Leiman, Joan. QUALITY CONTROL OF ELIGIBILITY: RESULTS OF A PILOT PROJECT, YOUTH ENTITLEMENT DEMONSTRATION, 1980.

Manpower Demonstration Research Corporation. THE YOUTH ENTITLEMENT DEMONSTRATION PROGRAM: A SUMMARY REPORT ON THE START-UP PERIOD OF THE YOUTH INCENTIVE ENTITLEMENT PILOT PROJECTS, 1979.

All published reports are available from Manpower Demonstration Research Corporation at a charge of \$5.00 each to handle printing costs and mailing.

### SUPPLEMENTAL PAPERS

Ivry, Robert; Wolfhagen, Carl; Van Horn, Carl E. THE ENRICHMENT PROGRAM: STRENGTHENING THE SCHOOL-WORK LINKAGE IN THE YOUTH INCENTIVE ENTITLEMENT PILOT PROJECTS, 1982.

Joans, Barbara. THE YOUTH INCENTIVE ENTITLEMENT PILOT PROJECTS DEMONSTRATION: HOW YOUTHS VIEW THE PROGRAM, AN ATTITUDINAL STUDY, 1981.

Mandel, Sheila; Solnick, Loren. A PRELIMINARY ESTIMATE OF THE IMPACT OF YOUTH ENTITLEMENT ON SCHOOL BEHAVIOR, 1979.

### FORTHCOMING REPORTS AND SUPPLEMENTAL PAPERS

Unicon Research Corporation, Measuring Displacement in the YIEPP Demonstration, forthcoming in 1983.

Abt Associates, Inc. Final Report on In-Program and Post-Program Impacts, forthcoming in 1983.



ERIC