Promoting Work in Public Housing

The Effectiveness of Jobs-Plus

Final Report

Howard S. Bloom
James A. Riccio
Nandita Verma

with

Johanna Walter

mdrc
BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY

March 2005

Jobs-Plus Funding Partners

U.S. Department of Housing and Urban Development
U.S. Department of Health and Human Services
U.S. Department of Labor
The Rockefeller Foundation
The Joyce Foundation
The Annie E. Casey Foundation
The James Irvine Foundation
Surdna Foundation, Inc.
Northwest Area Foundation
The Stuart Foundation
BP
Washington Mutual Foundation

Dissemination of MDRC publications is also supported by the following foundations that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Atlantic Philanthropies; the Alcoa, Ambrose Monell, Bristol-Myers Squibb, Ford, Grable, and Starr Foundations; and the Open Society Institute.

The findings and conclusions in this report do not necessarily represent the official positions or policies of the funders.

For information about MDRC and copies of our publications, see our Web site: www.mdrc.org.

Overview

Can a multicomponent employment initiative that is located in public housing developments help residents work, earn more money, and improve their quality of life? The Jobs-Plus Community Revitalization Initiative for Public Housing Families (Jobs-Plus, for short) sought to achieve these goals at selected public housing developments in six cities: Baltimore, Chattanooga, Dayton, Los Angeles, St. Paul, and Seattle. Jobs-Plus was conducted as a research demonstration project from 1998 to 2003 with sponsorship from a consortium of funders, led by the U.S. Department of Housing and Urban Development and the Rockefeller Foundation. The program — which was targeted to all working-age, nondisabled residents of selected public housing developments and implemented by a collaboration of local organizations — had three main components: employment-related services, rent-based work incentives that allowed residents to keep more of their earnings, and activities to promote neighbor-to-neighbor support for work. This final report on MDRC's evaluation of Jobs-Plus describes the program's *impacts*, that is, the difference it made for residents in Jobs-Plus developments in comparison with residents living in similar developments who did not receive the program.

Key Findings

- Four of the six study sites built substantial Jobs-Plus programs — although it took over two years to accomplish.
- Once Jobs-Plus was in place at the four sites, it markedly increased the *earnings* of residents (including those who eventually moved away) relative to the comparison group. This impact was sustained over time at three of the sites but disappeared at the fourth when its residents were displaced by a federal HOPE VI renovation project. There was no program effect on earnings at the two sites that did not fully implement Jobs-Plus. The effects of Jobs-Plus on *employment* were positive at the sites that substantially implemented the program but were smaller and less consistent than the effects on earnings.
- The large positive earnings effect of Jobs-Plus in the stronger implementation sites held for a wide range of residents defined in terms of their gender, race or ethnicity, age, past employment, past welfare receipt, past duration of residence, and future resident mobility. Most striking were the especially large impacts for immigrant men.
- Welfare receipt by residents dropped precipitously after Jobs-Plus was launched, but this decline was not related to Jobs-Plus.
- The positive effects on individual earnings were more likely to translate into more earnings across the housing development as a whole in sites where fewer residents moved out. However, these effects did not spark changes in overall social conditions or quality of life in the developments.

These and other findings in the report offer important lessons to policymakers and program administrators about how to increase the economic self-sufficiency of public housing residents.

Contents

List of Tables and Figures

Preface

Sociologist William Julius Wilson and other researchers have documented the consequences of concentrated joblessness and poverty in urban neighborhoods, conditions that are often especially severe among residents of public housing. With this in mind, the U.S. Department of Housing and Urban Development, the Rockefeller Foundation, and MDRC launched an ambitious enterprise called the Jobs-Plus Community Revitalization Initiative for Public Housing Families (Jobs-Plus), a comprehensive program located within public housing developments and designed to help move residents into work and increase their earnings. This final report on the initiative offers encouraging evidence that a strategy like Jobs-Plus can help people in high-poverty public housing developments succeed in the labor market.

Success was by no means assured at the outset of Jobs-Plus. Living conditions in public housing are difficult, and few employment programs have been attempted — let alone rigorously tested — in such settings. The challenges were myriad: developing an innovative and credible research design; creating real collaboration among housing authorities, social service agencies, and residents; appealing to residents of different racial and ethnic groups; and dealing with enduring issues of safety, substance abuse, and other family crises. The six study sites themselves, as well as the many funders who provided support, deserve great credit for their steadfast work and commitment through this nearly decade-long project.

In an era of scarce resources, when policymakers seek ever more information about whether programs work, Jobs-Plus offers hard evidence that a work-focused intervention based in public housing developments *can* be effective. However, the report also shows that success requires the commitment of housing officials who see a broad mission for public housing in the nation's social safety net, as well as the active partnership of the welfare and workforce systems. Most importantly, these findings from Jobs-Plus speak directly to the challenges confronting managers of public housing, who feel increasingly pressured to promote the self-sufficiency of residents and change the income mix of those living in public housing. We hope that the promising lessons of Jobs-Plus can help policymakers and practitioners meet those challenges.

Gordon L. Berlin
President

Acknowledgments

We deeply appreciate the many people who made this report possible, particularly the residents, Jobs-Plus program staff, housing authority officials, and other members of the Jobs-Plus collaboratives. They allowed us to learn firsthand from their pioneering experiences.

We owe special gratitude to Julia Lopez and Darren Walker of the Rockefeller Foundation and to Margery Turner and Garland E. Allen, formerly of the U.S. Department of Housing and Urban Development (HUD), for their leadership, inspiration, and unwavering support throughout the many years of the demonstration. We are similarly grateful to many others who have worked at HUD or the Rockefeller Foundation for their steady support and guidance, which helped us to accomplish the long-term learning objectives that we have pursued in this report and earlier publications. These staff include, at HUD, Michael Stegman, Xavier de Souza Briggs, Kevin Neary, Jennifer Stoloff, Mark Shroder, and Paul Leonard and, at the Rockefeller Foundation, Aida Rodriguez and Chet Hewitt. Sincere gratitude is owed also to the federal agencies and private foundations that, along with HUD and the Rockefeller Foundation, funded the demonstration. These include the U.S. Department of Health and Human Services and the U.S. Department of Labor; the Joyce, Annie E. Casey, James Irvine, Surdna, Northwest Area, Stuart, and Washington Mutual Foundations; and BP. We also thank the many staff at state and local housing, employment, and welfare agencies for their time and guidance over many years, helping us acquire and use the critical administrative records data that are the foundation of this study.

At MDRC, Judith Gueron, Gordon Berlin, Craig Howard, John Wallace, David Butler, Suzanne Lynn, and Maxine Bailey played pivotal roles at various junctures that helped shape and sustain the program and the research. Electra Small, Colleen Sommo, Lynn Miyazaki, Susan Bloom, Natasha Piatnitskaia, and Gaston Murray provided critical assistance in acquiring the administrative records or survey data used in this report or in programming the analysis of those data. Jo Anna Hunter and Marla Sherman helped manage the most recent resident surveys, which were skillfully administered by Battelle Centers for Public Health Research and Evaluation and the Wilder Research Center of the Amherst H. Wilder Foundation. Shirley James, Donna George, Carmen Troche, and Zuleka Abakoyas provided data entry services. Linda Kato and Alissa Gardenhire-Crooks contributed insights from their field research on the implementation of Jobs-Plus. External reviewers Barbara Sard, Thomas Cook, Robinson Hollister, Edward Liebow, and Stephen Raudenbush, along with MDRC's Charles Michalopoulos, provided valuable feedback on the analysis. Herbert Collado contributed general research support, including the preparation of exhibits. John Hutchins and Bob Weber edited the report, and Stephanie Cowell prepared it for publication.

The Authors

Executive Summary

Can a multicomponent employment initiative that is located in public housing developments help residents work, earn more money, and improve their quality of life? The Jobs-Plus Community Revitalization Initiative for Public Housing Families (Jobs-Plus, for short) sought to achieve these ambitious goals in difficult environments. Operated as a special demonstration project in selected housing developments in six U.S. cities, Jobs-Plus was sponsored by a consortium of public and private funders led by the U.S. Department of Housing and Urban Development and the Rockefeller Foundation. MDRC, a nonprofit social policy research firm, managed the demonstration and evaluated the program.

This final MDRC report on the initiative assesses the program's success in achieving key outcomes for residents and their housing developments. It analyzes the program's effects — or "impacts" — on residents' employment rates, average earnings, and welfare receipt by comparing the outcomes for residents of the Jobs-Plus developments with the outcomes for their counterparts in similar "comparison" developments that did not implement the program. (Because housing developments were allocated randomly to the Jobs-Plus or comparison group, their outcomes provide an especially rigorous basis for estimating program impacts.) The report also examines changes in social and material conditions at the developments.

In summary, the findings show that:

- For all sites combined, Jobs-Plus produced positive impacts on residents' earnings, whether or not the residents continued living in their developments.
- These overall effects were driven primarily by large and sustained impacts in three sites (in Dayton, Los Angeles, and St. Paul) where the implementation of Jobs-Plus was stronger and more complete. A fourth site (Seattle) had strong early earnings effects that ended when residents were displaced by a federal Hope VI renovation project. The program had no earnings effects in two sites (Baltimore and Chattanooga) that did not fully implement Jobs-Plus.
- These impacts were more likely to translate into higher earnings in the housing development as a whole in sites where fewer residents moved out. However, the program's effects did not spark changes in broader social conditions.
- In the stronger implementation sites, Jobs-Plus had positive earnings impacts for many different types of residents, striking earnings effects for immigrant men, positive but smaller impacts on residents' employment rates, and no

impact on residents' welfare receipt (because rates were dropping precipitously among all welfare recipients).

These findings offer lessons to policymakers and program administrators about a number of important issues, including the considerable willingness and ability of public housing residents to enter the labor market, the importance of rent-based financial incentives as a program "hook" and a driver of the positive earnings impacts, and the critical role of housing authority leadership in the implementation of a "place-based" self-sufficiency initiative in public housing. They also show the promise of one approach to achieving the employment and self-sufficiency objectives of the 1998 federal housing law (the Quality Housing and Work Responsibility Act, or QHWRA).

What Is Jobs-Plus?

Jobs-Plus attempted to deliver an employment and training program within public housing developments to all working-age, nondisabled residents. The initiative had three core components:

- **Employment-related services and activities** to help residents secure and retain employment, including job search assistance, education programs, vocational training, and such support services as child care and transportation assistance.
- **Financial incentives to work,** consisting of changes in public housing rent rules that helped make work "pay" by reducing the extent to which increases in earnings were offset by increased rents.
- **Community support for work,** which sought to strengthen social ties among residents in ways that would help support their job preparation and work efforts — for instance, by fostering neighbor-to-neighbor exchanges of information about job opportunities or employment services.

The program was delivered by local collaboratives comprising — at a minimum — the public housing authority, resident representatives, the welfare department, and the workforce development system. MDRC provided extensive technical assistance to facilitate program implementation in the six cities that were chosen through a national competition to be Job-Plus study sites: Baltimore, Maryland; Chattanooga, Tennessee; Dayton, Ohio; Los Angeles, California; St. Paul, Minnesota; and Seattle, Washington.

How Was Jobs-Plus Evaluated?

Random Assignment of Housing Developments

At each study site, one housing development was randomly selected (through a type of lottery) to operate Jobs-Plus from a matched pair or triplet of eligible public housing developments nominated by the local public housing authority. The other one or two developments were assigned to a comparison group. Each development nominated had at least 250 units occupied by families with a working-age adult. No more than 30 percent of these families could have an employed member, and at least 40 percent had to be receiving welfare. The random assignment to the program and comparison groups greatly reduced the risk of bias in the selection of housing developments to participate in Jobs-Plus. Surprisingly good matches between the program developments and their comparison developments were obtained for all sites combined as well as within each site.

Long-Term Trend Data on Residents

Data on residents' work and welfare receipt in both the Jobs-Plus and the comparison developments were used to examine the program's impacts on residents and on their housing developments. These data were obtained from administrative records of government agencies for up to six years before and six years after Jobs-Plus was launched in 1998. In addition, two resident surveys were conducted (in 1998 and 2003) in three sites to assess whether the general quality of life within the housing developments had changed in terms of economic and material well-being, social conditions, personal safety, residential satisfaction, and child well-being.

How Well Was Jobs-Plus Implemented — and in What Context?

- **Before the Jobs-Plus initiative was launched, living conditions were difficult in both the Jobs-Plus and the comparison developments.**

Many public housing residents in the study sites faced challenges to employment, including limited education, lack of adequate child care, health or medical problems, and worry about crime and safety. Nevertheless, while residents expressed concern about problems in their housing development, three-quarters of them rated their development as at least a "good" place to live. Across the sites, there was considerable demographic diversity — for example, while three sites were predominantly African-American, the others had a more varied ethnic and racial mix (including Southeast Asian and East African immigrants); in one site, as many as 22 different languages were spoken.

- **The Jobs-Plus model was ambitious and took over two years to implement. Four of the six sites overcame numerous obstacles and operated programs of reasonable quality.**

Jobs-Plus's multicomponent approach — which was aimed at all working-age, nondisabled residents and which included new rent rules to help make low-wage work "pay" — made the program one of the most comprehensive efforts ever attempted to improve work and welfare outcomes for public housing residents. The challenges of implementation were magnified by focusing the intervention on a diverse set of high-poverty housing developments within high-poverty communities and involving multiple public agencies and residents. To meet these challenges, the sites had to enlist the active support of senior officials in the public housing authorities and other agencies; overcome cumbersome personnel and procurement policies of local housing authorities; create a new culture of collaboration among housing authorities, residents, and welfare, workforce, and social service agencies; deal with enduring issues of safety, substance abuse, and other family crises; and, in some sites, adapt the services to suit a mix of immigrant and native-born residents or to respond to high move-out rates. In addition, the programs encountered some skepticism among residents, a situation that was not helped when, due to federal funding problems, the centerpiece of the program — the rent-based financial work incentives — was delayed for nearly two years. Furthermore, in one site (Seattle), Jobs-Plus also had to contend with a federal HOPE VI "tear down and rebuild" renovation initiative that displaced many of the residents soon after Jobs-Plus was fully in place.

Despite many false starts and wrong turns — which took several years and considerable effort to overcome — four of the six sites (Dayton, Los Angeles, St. Paul, and Seattle) were able to build coherent programs of reasonable quality, making the demonstration a "fair test" of the Jobs-Plus model. Although the program was voluntary, many residents chose to make use of its services and rent-based work incentives, and, by a number of measures, Jobs-Plus informally reached many others in the developments as well.

- **The implementation of Jobs-Plus came at a time of momentous changes in welfare, workforce, and housing policy — and in the national economy. These changes expanded work opportunities for public housing residents even in the absence of Jobs-Plus.**

As a consequence of the booming national economy and, perhaps, of the broad range of federal policy reforms, employment and earnings rose dramatically for residents both of the Jobs-Plus developments and of the comparison developments during the baseline period before the start of Jobs-Plus. By the time the program was launched in 1998, employment rates were higher than had been anticipated, and welfare receipt rates were lower, so that the margin for Jobs-Plus to "make a difference" was smaller than originally envisioned. Nonetheless, Jobs-Plus

still had considerable room to improve these outcomes further. In addition, rent-based work incentives for all public housing residents were increasing due to reforms in federal housing law, and some work-related services were expanding. Nevertheless, the concerted effort by Jobs-Plus to provide additional services and incentives to residents of the program's developments beyond those available to residents of the comparison developments was successful.

Did Jobs-Plus Make a Difference?

MDRC looked at the impacts of Jobs-Plus from two perspectives: (1) the levels of work and welfare receipt among individuals (whether or not they continued living in their developments) and (2) the levels of work and welfare receipt in the developments overall. It also examined, in a more exploratory way, changes in a variety of community outcomes within the developments. The findings described below represent effects for residents and developments that had access to Jobs-Plus relative to outcomes for residents and developments that did not have access to the program.

Work and Welfare Impacts on Individuals

- **Across all six sites combined, once Jobs-Plus was in place, the program increased residents' average annual earnings by 6.2 percent beyond what they would have been without the program.**

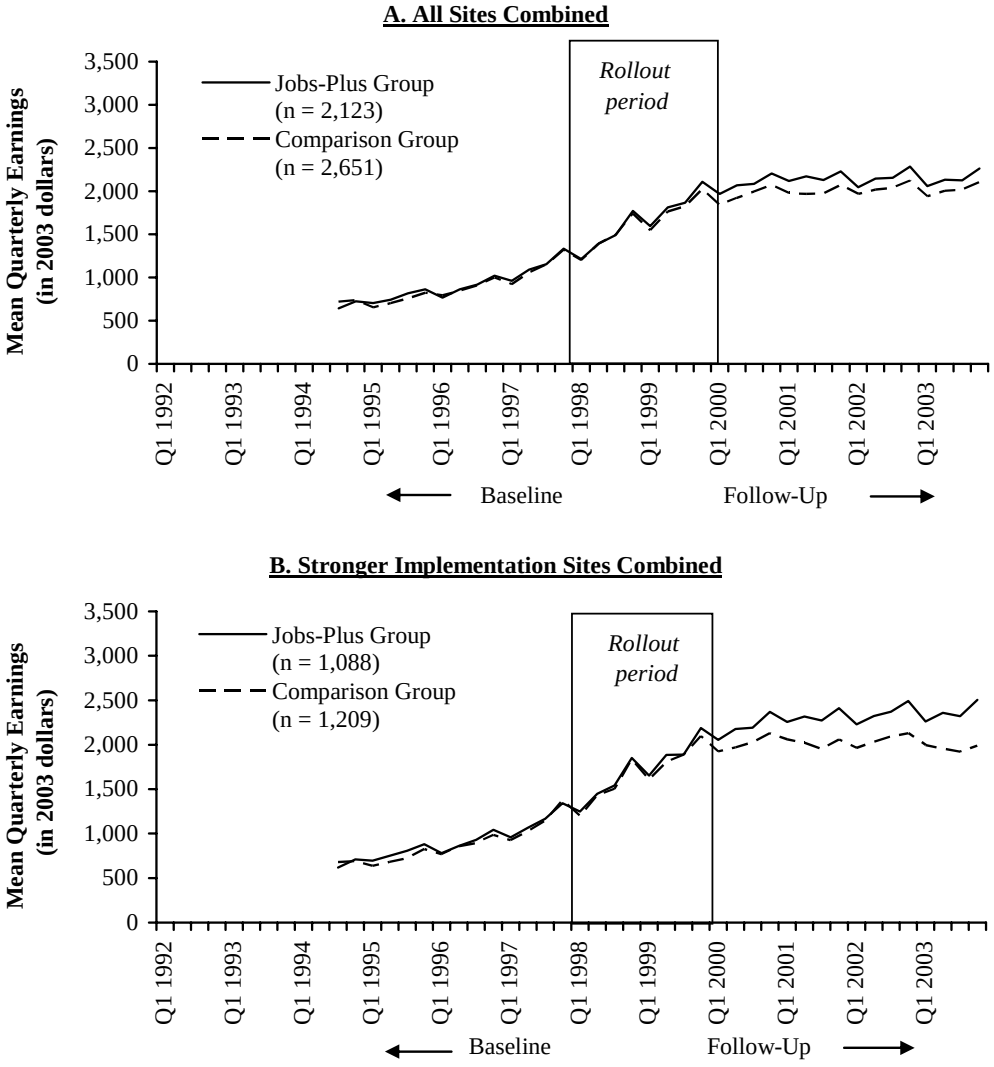
Panel A of Figure ES.1 illustrates, for all six sites combined, the earnings of residents living in the Jobs-Plus or comparison developments in 1998 (a group of residents that is referred to as the "1998 cohort"). During the baseline period before the program began (from 1994 to 1997), earnings for both groups were extremely similar and rose rapidly in response to the booming economy and changes in federal policies.[1] Their earnings remained similar during most of the program rollout period (1998 and 1999). Subsequently, from 2000 through 2003, when the program was most fully implemented, earnings for the Jobs-Plus group pulled well ahead of those for the comparison group. This difference illustrates the effect of Jobs-Plus on earnings for the 1998 cohort, which includes all targeted residents, whether they stayed in their original development or moved away. Based on these data, the estimated impact of Job-Plus on residents' earnings averaged $498 per person per year over the four years after the rollout period. This means that, across all sites, the residents of the Jobs-Plus developments earned an average of $498 more per year than they would have earned in the absence of the program.

[1]The baseline period began in 1992 for four sites and in 1994 for two sites, St. Paul and Chattanooga, because earlier data were not available.

The Jobs-Plus Demonstration

Figure ES.1

Pooled Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

- **In three sites that built programs of reasonable quality, Jobs-Plus had an earnings effect that averaged 14 percent per year — and nearly 20 percent in the fourth year.**

The all-site averages hide important findings at the site level. Panel B of Figure ES.1 further illustrates the impacts of Jobs-Plus on residents' earnings in the three stronger implementation sites (Dayton, Los Angeles, and St. Paul) combined. There the annual impacts averaged $1,141 once the full program was in place. Note that the impacts in these sites grew larger over time. By the last year of follow-up, they had reached $1,540, which is nearly 20 percent higher they otherwise would have been. These impacts, which totaled $4,563 over four years, are especially noteworthy both because they persisted even after the onset of a national economic recession and because they represent "value added" by the program over and above any effects produced by concurrent reforms in the welfare, workforce, and public housing systems.

The earnings impacts for the fourth strong site, Seattle, were also growing larger over time, but they then disappeared when its residents were relocated by a federal HOPE VI renovation initiative. In Baltimore and Chattanooga — sites that did not fully implement the program — Jobs-Plus had no earnings impacts.

- **Where it was implemented well, Jobs-Plus's effects on employment rates were also positive, but they were smaller, less consistent, and less frequently statistically significant.**

For the three stronger implementation sites combined, Jobs-Plus increased the average percentage of residents employed per quarter from 2000 through 2003 by an estimated 4.6 percentage points (or by over 9 percent relative to what this rate would have been without the program). Because this finding is not statistically significant, there is considerable uncertainty about it. Nevertheless, because large and statistically significant effects on employment rates were observed for key subgroups at these sites, it seems reasonable to infer that the overall employment impacts are real. This suggests that roughly two-thirds of the program's effects on earnings at the sites were due to an increase in the number of persons employed. The remaining one-third was due to an increase in the amount earned per person employed, which represents a mix of increased employment stability, hours worked per week, and hourly wage rates. However, there was no single simple relationship between the program's estimated effects on employment rates and earnings. For some subgroups, the findings suggest that almost all of the earnings gains produced by Jobs-Plus were due to an increase in the number of persons employed. For other subgroups, the findings suggest that almost all of the program-induced earnings gains were due to an increase in the amount earned per person employed.

- **Where it was implemented well, Jobs-Plus was effective for many different types of public housing residents.**

In the stronger implementation sites, Jobs-Plus had large positive earnings effects for many subgroups of residents. For example, it caused earnings to increase for men as well as for women, for residents who were receiving welfare when the program began and for those who were not, and for residents from different racial and ethnic groups. It also worked for subgroups of residents defined in terms of age, past employment, past duration of residence, and future residential mobility.

- **In the two sites with sizable populations of men, Jobs-Plus's earnings impacts were exceptionally large for immigrant men.**

Jobs-Plus increased the average annual earnings of Hispanic men in Los Angeles by $3,248 (or 28 percent) and of Southeast Asian men in St. Paul by $2,129 (or 21 percent). Almost all these men were immigrants and members of two-parent families. The impacts are illustrated by the graphs in Figure ES.2. Those show that, during the baseline period, the earnings of the Jobs-Plus group and comparison group within each of these two subgroups were quite similar and that, after Jobs-Plus was fully implemented, the earnings of the Jobs-Plus group greatly surpassed those of the comparison group. Moreover, the effects continued to grow, and, by the final year of follow-up (2003), they reached $3,828 (a 35 percent gain) in Los Angeles and $3,366 (a 32 percent gain) in St. Paul. Over four years, these impacts totaled $12,994 and $8,517, respectively.

- **Although Jobs-Plus was effective in boosting earnings both for welfare recipients and nonrecipients, it was much more effective for nonrecipients.**

In the three stronger implementation sites, Jobs-Plus increased the average annual earnings of welfare recipients during each of the last four years of the study period by $761 (or almost 11 percent) and those of nonrecipients by $1,654 (or 18 percent). This difference may reflect the fact that welfare recipients in comparison developments experienced a "push" toward work and had access to services and financial incentives through existing mandatory welfare-to-work programs, time limits on benefits, and other features of welfare reform in their localities. In contrast, nonrecipients would not have been affected by these policies (although they were free to seek any other services they wanted). Thus, for the nonrecipients, Jobs-Plus may have represented a bigger additional (or net) intervention in their lives than it did for recipients.

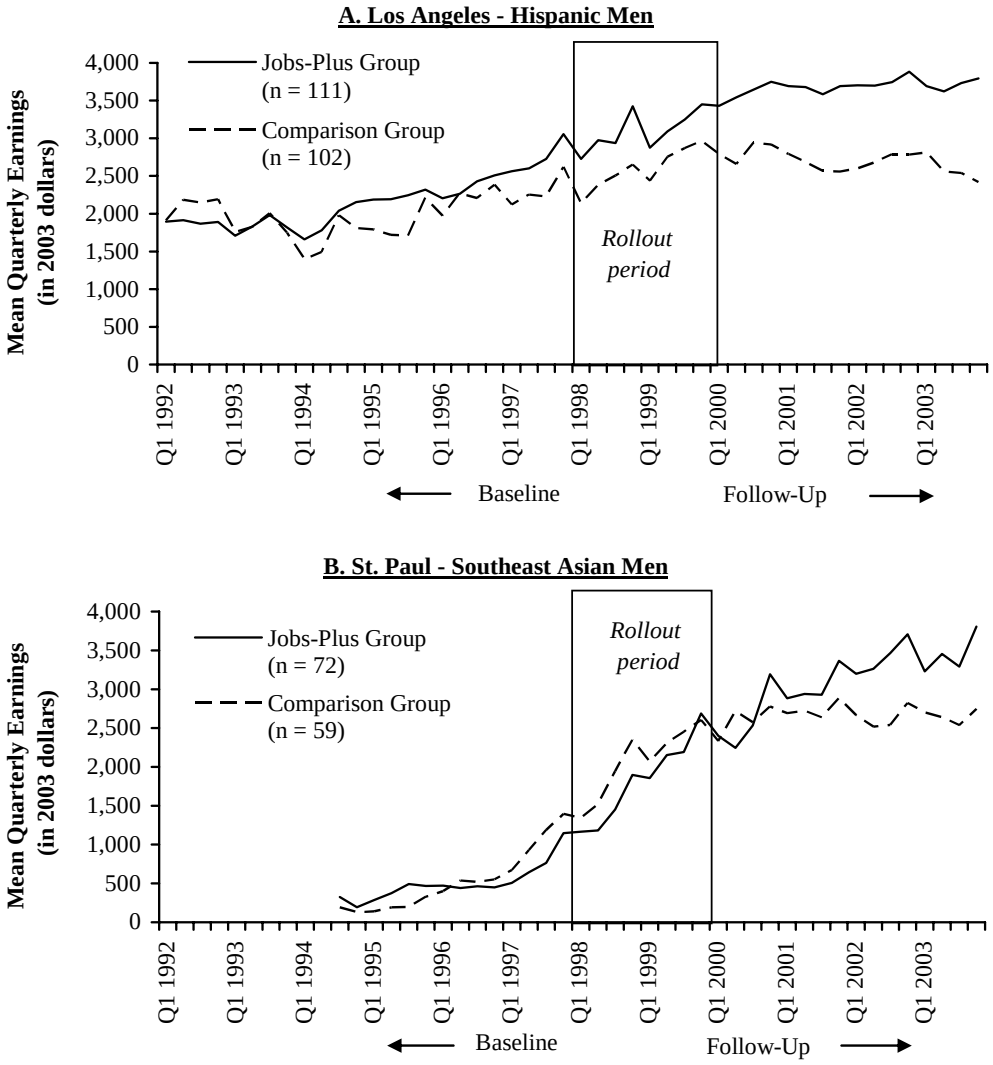
- **Welfare receipt by residents dropped precipitously after Jobs-Plus was launched, but this decline was not related to Jobs-Plus.**

Instead, the drop in residents' reliance on welfare was more likely due to forces such as a booming economy, welfare reform, and increases in the generosity of the Earned Income Tax Credit. These factors are viewed by many as causing the dramatic declines in welfare rolls that occurred throughout the United States at the time.

The Jobs-Plus Demonstration

Figure ES.2

Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group, for Men in the Largest Demographic Subgroups in the Stronger Implementation Sites (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Work and Welfare Impacts on Public Housing Developments

This study also sought to determine whether, because of Jobs-Plus, housing authorities would see an increase in the overall levels of employment and earnings and a reduction in welfare receipt among residents living in the Jobs-Plus housing developments at any given time — recognizing that people move in and out of public housing developments. For example, would the people who were helped by Jobs-Plus quickly move away, leaving no overall improvement in earnings or employment rates within the developments themselves? The findings suggest that:

- **Not surprisingly, when no impacts were produced on the sample of residents who were followed over time (that is, the 1998 cohort, some of whom moved away), no year-by-year changes in outcome levels were observed within the developments.**

- **When positive impacts were produced for the sample of residents followed over time, they yielded improvements in outcomes within the developments — but by an amount that was inversely related to residents' mobility. In other words, the more stable the resident population was, the greater the degree to which individual-level impacts were reflected by development-level impacts.**

Therefore, earnings gains for developments were largest in the two stronger implementation sites (Los Angeles and St. Paul) where move-out rates were lowest.

Changes in Other Community Indicators

- **There is no evidence that the impact of Jobs-Plus on earnings for public housing developments (which were sometimes large but not transformative) produced spillover effects on other community outcomes.**

Drawing on resident surveys in three of the six sites, the study found, in a largely descriptive analysis of community change, no indication that Jobs-Plus improved prevailing social conditions and the quality of life within the housing developments themselves, including economic and material well-being, personal safety, residential satisfaction, and child well-being. (The study did not measure quality-of-life changes among residents who moved away.)

What Are the Implications for Public Policy?

The Jobs-Plus demonstration shows that an employment-focused intervention that is based in public housing developments can work. Although Jobs-Plus proved challenging to implement, it eventually succeeded at four of the six study sites in increasing public housing resi-

dents' earnings relative to what they would otherwise have been. Hence, this initiative offers one promising approach for helping to achieve the self-sufficiency objectives espoused by QHWRA, the 1998 federal housing reform law.

Among the most striking findings from this study are that, even in some of the nation's poorest housing developments in tough urban environments, residents were more attached to the formal labor force than had been expected and that many more of them than were anticipated responded to the expanding employment opportunities driven by the booming national economy of the 1990s.

This study suggests important implications for policymakers to consider, including:

- **Jobs-Plus's effects compare favorably with those of other successful employment interventions.** When properly implemented, Jobs-Plus created earnings impacts at the high end of those found among many employment interventions that have been tested rigorously. This is particularly encouraging, given the limited evidence of effectiveness of self-sufficiency interventions in the housing and community development fields.

- **The success of Jobs-Plus in increasing the earnings of public housing residents was not limited to a narrow segment of the resident population; it was widespread across many subgroups of this population.** When implemented properly, programs like Jobs-Plus can be effective for men as well as women and for native-born residents as well as for immigrants from very different parts of the world.

- **Improving Jobs-Plus's impacts on employment rates might require additional efforts.** The substantial pre-program rise in residents' employment levels left Jobs-Plus with less room than anticipated to produce dramatic further improvement. Notwithstanding the positive employment impacts the program did have, a minority of residents remained largely out of the formal labor market. Thus, any effort to replicate the program should consider ways of reaching such harder-to-employ residents.

- **The rent breaks offered by Jobs-Plus encouraged residents to participate in the program and helped them increase their work efforts and earnings.** (Normally, public housing residents' rent is raised as their earnings increase; in Jobs-Plus, rent was held stable or rose less quickly than usual.) This suggests that, at a minimum, the more modest rent incentives that currently exist under the 1998 federal housing law should be fully implemented and aggressively marketed to residents, and perhaps expanded. The idea of combining rent-

based financial work incentives with services focused on work might also be worth rigorously testing in other housing assistance programs.

- **Jobs-Plus can aid the cause of welfare reform by improving the earnings of residents who are welfare recipients** — even though the program had much larger effects on the earnings of nonrecipients.

- **Jobs-Plus has the potential to work in a variety of settings,** given the demographic and geographic diversity of the sites in which it was successfully implemented. Implementing the program was a difficult task that required sustained attention and concentrated resources over an extended period of time. However, as further experience is gained with such initiatives and more is learned about implementing them, this process should become less difficult and time-consuming.

- **Strong housing authority leadership is vital.** Successful replication of Jobs-Plus would require the sustained commitment of local public housing authorities to lead local collaboratives, to ensure that housing managers cooperate with the day-to-day operation of the program, to hold the program managers accountable for high performance, and to involve resident representatives in planning and operations.

- **Resident mobility matters.** The Jobs-Plus findings caution that resident move-out rates greatly influence how earnings effects for individuals can translate into development-level effects. Thus, high rates of resident mobility would make the goal of substantially improving the income mix within public housing developments difficult to achieve through programs like Jobs-Plus alone.

Finally, Jobs-Plus offers many practical lessons for constructing and operating labor market interventions, even outside public housing. In particular, the experiences of the six study sites speak directly to the challenges and opportunities of using "places" as the platform for a work-promoting intervention. They also point to many productive strategies for building partnerships among multiple local agencies to address the employment needs of low-income populations and for involving local residents in that process.

Chapter 1

The Origin and Goals of Jobs-Plus

Can a multicomponent employment initiative located in public housing developments help residents get and keep jobs, earn more money, and improve the quality of their lives? To find out, a consortium of public and private funders led by the U.S. Department of Housing and Urban Development (HUD) and the Rockefeller Foundation sponsored the Jobs-Plus Community Revitalization Initiative for Public Housing Families ("Jobs-Plus" for short).[1] Designed to help policymakers learn "what works," this research demonstration project has been testing an innovative employment strategy operating in public housing developments in six cities (or demonstration "sites") across the United States.

The designers of Jobs-Plus envisioned the program as a way to offer an economic boost to some of the nation's poorest people and neighborhoods. Its principal goals were threefold: (1) to help people living in these very poor places increase their levels of employment and earnings; (2) by doing so, to help foster the emergence of a broader mix of incomes within those places; and (3) to achieve improvements in residents' quality of life as a result of the gains in employment and earnings. These goals are similar to several core objectives of the Quality Housing and Work Responsibility Act (QHWRA), the federal legislation passed by Congress in 1998 that also seeks to promote residents' self-sufficiency through new economic incentives and opportunities to facilitate mixed-income communities and poverty deconcentration within public housing.[2] Thus, the results of Jobs-Plus speak to the challenges, feasibility, and effectiveness of one approach for achieving these important national purposes.

Jobs-Plus also has relevance beyond public housing. For example, many of the types of people it targets make up part of the low-income populations that welfare-to-work, workforce development, and community development organizations aim to help. Consequently, Jobs-Plus's mission of improving life outcomes for public housing residents partially overlaps with the mission of these other institutions, and, if it "works," it will mean that a program based in public housing can help such institutions accomplish their broader purposes. In addition, the

[1]In addition to the Rockefeller Foundation and HUD, the demonstration was funded by the U.S. Departments of Health and Human Services and Labor; the Joyce, James Irvine, Surdna, Northwest Area, Annie E. Casey, Stuart, and Washington Mutual Foundations; and BP. The basic Jobs-Plus model was designed jointly by HUD, the Rockefeller Foundation, and MDRC. MDRC has been responsible for overall management of the demonstration, providing or arranging for extensive technical assistance to each participating city on the design and operation of its particular local approach, and for conducting the evaluation.

[2]Sard and Bogdon, 2003; U.S. Department of Housing and Urban Development, 1999.

particular operating strategies tried under Jobs-Plus — such as efforts to build new interagency and resident partnerships, promote rent-based financial incentives and other work supports, link work supports to employment services, involve resident volunteers in program outreach strategies, and take advantage of "place" in assisting residents with their employment needs — can inform efforts to try similar kinds of approaches in programs aimed at other low-income families living outside public housing.

This report is the final one in a series produced as part of MDRC's comprehensive evaluation of Jobs-Plus, and it focuses primarily on the program's effectiveness, or "impacts." To provide context and background for that analysis, the first few chapters discuss the demonstration's origins and goals, the characteristics and circumstances of the people that Jobs-Plus aimed to help, the local context within which the program had to operate, and the sites' experiences in implementing the Jobs-Plus model. (Earlier publications, listed at the end of the document, explore these topics in much greater depth.) The report then turns to the impact findings themselves, and it concludes with a discussion of the policy lessons and implications of those findings.

Concentrated Poverty and Public Housing

The problems plaguing inner-city communities can be particularly acute in many of the nation's public housing developments, which rank among the most economically deprived neighborhoods in the country and are often part of larger neighborhoods with high rates of joblessness and poverty. When the Jobs-Plus demonstration was launched in the late 1990s, almost 54 percent of the nation's 1.2 million units of public housing were located in high-poverty census tracts, and 68 percent were located in census tracts where 40 percent or more of working-age men had no regular employment.[3] Moreover, welfare recipients living in public housing were heavily concentrated in developments located in high-poverty neighborhoods.[4] This concentration of public housing in poor communities is believed by many to contribute to the social and economic problems experienced by residents living in those developments. It has also contributed to the extreme social isolation of many poor black families.[5] In addition, inner-city public housing developments are widely believed to adversely affect the neighborhoods that surround them.

By the 1990s, the population living in public housing had become substantially poorer than in recent decades. This trend emerged out of the changing mission of public housing itself. Since its inception during the Great Depression, this strand of the nation's social safety net evolved from offering transitional shelter for unemployed and low-wage workers to providing permanent housing for the chronically nonemployed and impoverished. Families with working

[3]Newman and Schnare, 1997.
[4]Khadduri, Shroder, and Steffen, 2003.
[5]Massey and Denton, 1993.

members made up a minority of residents, especially in large inner-city housing developments. Nationally, in 1999, only 43 percent of public housing families with children relied on wages as their primary source of income, whereas public assistance — including cash aid under the Temporary Assistance for Needy Families (TANF) program, state-provided General Assistance (GA), and Supplemental Security Income (SSI) — was the primary source of income for 38 percent of those families.[6]

In some cities, public housing residents appeared to be among the hardest people to employ among welfare recipients and other low-income groups, in part because of their poor education and job skills, meager work-relevant credentials, and array of personal problems or situations that make it difficult to work.[7] However, these personal constraints are not all that matter. Traditional public housing rent rules, under which rent usually increases as earnings rise, have long been thought to discourage many residents from working because they see little to gain. Furthermore, the mere circumstance of living in public housing may also impede work. This might happen because of the stigma that public housing casts on its residents in the eyes of many employers in the community, the physical or social separation of its residents from parts of the city or region where jobs are more abundant, and the influence of a social environment within the housing developments that discourage work.

In response to these trends, policy experts began to consider new responses. Attention focused on a few very different kinds of strategies, including changing who moves into public housing, helping residents move out with portable rental assistance, and building the employment capacity of existing residents.[8]

- **Changing who moves in.** One way to transform public housing developments into places with a better mix of incomes is for housing authorities to recruit more working families. Indeed, QHWRA, the 1998 federal housing legislation, encourages and makes it easier for them to do just that by giving

[6]U.S. Department of Housing and Urban Development, 2000. General Assistance is cash and/or in-kind support that some states and localities provide to eligible persons who do not qualify for federal cash assistance (such as single adults and childless couples). Supplemental Security Income is a federal program for low-income disabled adults. More recent HUD data (U.S. Department of Housing and Urban Development, 2004) show that about 30 percent of all households (including those headed by elderly and disabled people) had *any* wages. Khadduri, Shroder, and Steffen (2003, Table 2.1) estimate that about 13 percent of all public housing units were occupied by families receiving TANF in 2000, which — following the steep national decline in the welfare rolls over the course of the 1990s — is down substantially from 23 percent of units occupied by families receiving Aid to Families with Dependent Children (AFDC) in 1996. Among just the 550,000 public housing units occupied by families with children, about 29 percent were receiving TANF in 2000, down from the 51 percent who were receiving AFDC in 1996. For further information and analysis concerning the relationship between welfare reform and housing assistance, see Newman (1999) and Sard and Bogdon (2003).

[7]Riccio and Orenstein, 2003.

[8]For a broader review of housing assistance and affordable housing strategies, see Katz and Turner (2004).

them more discretion to set admissions preferences.[9] However, this approach would do nothing directly to improve the employment prospects of residents already living in public housing or of new residents who do not work. Moreover, convincing larger numbers of working families to move into the developments may be a formidable challenge, given the negative reputation of public housing in many cities.

- **Helping residents move out with portable rental assistance.** One approach that might help people already living in public housing is to offer them portable rental assistance (such as rent vouchers) that subsidizes the rent they pay to private landlords willing to lease to voucher recipients.[10] With such assistance, they might be able to relocate to areas where job opportunities are better and where they might connect better to informal social networks through which information about job opportunities flows. In one innovative test of this concept sponsored by HUD, the Moving To Opportunity (MTO) demonstration is assessing the effects of offering public housing residents either regular Section 8 rent vouchers or special Section 8 vouchers that could only be used in low-poverty neighborhoods (that is, where less than 10 percent of the population were poor). The offer usually came with some relocation assistance but without any special employment assistance. Interim results from the evaluation of MTO show that neither type of voucher led to increases in residents' employment or earnings — at least through two years of follow-up — although the vouchers did generate some positive impacts on a mix of noneconomic outcomes.[11]

- **Building the employment capacity of existing residents.** An alternative to helping public housing residents move to more promising communities or to recruiting more working people as tenants is to try to increase employment and earnings among current tenants. Jobs-Plus falls into this class of interventions. Self-sufficiency initiatives attempting to do this are certainly not

[9]Sard and Bodgon, 2003; U.S. Department of Housing and Urban Development, 1999.

[10]Under tenant-based Section 8 rules, voucher holders pay at least 30 percent of their adjusted income in rent to a qualifying landlord, and HUD makes up the difference up to a standard set for modest housing in the area.

[11]Orr et al., 2003. MTO and Jobs-Plus were two of three demonstration research projects that HUD (with private foundations) launched to test innovative strategies for reducing concentrated poverty and some of its deleterious effects. A third one, called "Bridges to Work," emphasized reverse commuting to connect inner-city residents (but not necessarily public housing residents) to jobs in the suburbs. See Reardon, 2001.

new to public housing, but Jobs-Plus is considerably more ambitious in scope and intensity.[12]

Increasing the amount of earnings within the tenant population — by building their earnings capacity or by getting more working people to move in — may be critical for ensuring the future viability of public housing itself as a source of decent, affordable housing for low-income families. When Jobs-Plus was first conceived in the 1990s, it was widely feared that welfare time limits and other restrictions on access to welfare benefits might leave many public housing residents less able to contribute to their rent, requiring greater subsidies to cover the cost of housing them.[13] In addition, reductions in federal operating subsidies to local public housing authorities could make it harder for those authorities to fill the gap left by declining rent revenues. Thus, increasing residents' earnings — out of which they could pay more rent — could help make up some of this difference.

Although Jobs-Plus represented one way to address employment problems in public housing, it was also conceived as a kind of community intervention; the community, in this case, was the public housing development itself. Over the past two decades, community initiatives have become an increasingly popular approach for fighting geographically concentrated joblessness and poverty.[14] Like all such initiatives, Jobs-Plus targeted a definable geographical area to be the focus of its efforts to help low-income people improve the quality of their lives. It sought to help individuals, whether or not they choose to continue living in public housing, as well as the places themselves. However, rather than attempting to achieve a variety of community change goals simultaneously (a common strategy of comprehensive community initiatives), Jobs-Plus focused on a single goal: improving employment-related outcomes. This was the driving force around which all program elements were to be organized. It was hypothesized (drawing on the work of William Julius Wilson and others)[15] that, by substantially increasing residents' rates and stability of employment, other improvements in residents' quality of life

[12]See Bogdon, 1999. Other current efforts include HUD's Step-Up program, which provides apprenticeship training in home construction trades with on-the-job experience offered through rehabilitation projects within public housing developments. Another is the Family Self-Sufficiency program, in which housing authorities offer employment and training referrals, job counseling and support, and opportunities to have rent increases that result from higher earnings put into a special escrow savings account for residents. Innovative strategies attempting to enhance residents' self-sufficiency are also being tried under HUD's Moving to Work demonstration, which, in a test of devolution, frees selected housing authorities from a variety of restrictions on their decision-making authority imposed by the 1937 federal housing law. For an overview and assessment of this demonstration, see Abravavel et al. (2004). It should be noted that, of the 30 site slots that were initially included in the Moving to Work demonstration, HUD set aside six for inclusion in the Jobs-Plus demonstration. For an examination of a long-standing self-sufficiency and home ownership program operated by the Charlotte Housing Authority in North Carolina, see Kleit and Rohe (2005).

[13]See, for example, Naparstek, Dooley, and Smith, 1997.

[14]Aspen Institute, 1997.

[15]See, for example, Wilson, 1996; Dickens, 1999; and Jargowsky, 1997.

would follow — including, for example, reduced poverty and material hardship, crime, substance abuse, and social isolation; increased general satisfaction with living in the community; and improved outcomes for children. Although the evaluation would not be able to test whether Jobs-Plus had all these effects, the program design was premised on the notion that improving residents' employment and earnings could be an engine for broader social changes for them personally and for life within their public housing developments.

The Jobs-Plus Model

With the lessons from past employment initiatives in mind, the demonstration's main designers — HUD, the Rockefeller Foundation, and MDRC — believed that Jobs-Plus should address, in depth, a combination of problems widely believed to conspire against sustained employment among public housing residents. These included poor preparation for work; inadequate knowledge about seeking work; personal, family, or situational problems (such as lack of child care or transportation) that can impede work; absence of a strong financial incentive to take a low-wage job; and living in a social environment that does not encourage or facilitate work.

A Broadly Targeted, Three-Component Intervention

The designers thus conceived of a broad, three-component intervention (see Table 1.1).[16] One component would focus on *employment-related services and activities.* These would draw on the best practices of past employment initiatives and include such activities as instruction in job search skills, combined with some education and training. Also necessary would be assistance with child care and transportation, to make it feasible to work and participate in work-related activities. Some of these services could be offered on-site at the developments, but the great diversity in residents' job readiness and service needs would also require access to networks of existing services in the local community. The second component would involve the creation of new *financial incentives to work.* These would include new public housing rent rules to replace the traditional HUD rules under which residents paid 30 percent of their income (after certain adjustments) in rent, imposing an implicit "tax" on their earnings. The new rules would help make low-wage work "pay," by reducing the extent to which gains in earnings are offset by increases in rent. The program's third component, *community support for work*, would involve strengthening residents' work-supporting social capital. For example, Jobs-Plus would attempt to foster work-related information-sharing, peer support, and mutual aid among residents and with people living outside public housing.

[16]For further details on the rationale behind these features of the program, see Riccio (1999).

The Jobs-Plus Demonstration

Table 1.1

The Jobs-Plus Model

The Jobs-Plus model calls for "saturation" targeting of all working-age, nondisabled residents with:

- **Employment-related services and activities** to help residents secure and retain employment, including job search instruction, education programs, vocational training, and support services, such as child care and transportation assistance.
- **Financial incentives to work,** consisting of changes in public housing rent rules that help to "make work pay" by reducing the extent to which higher earnings from work result in increases in rent, which may discourage work.
- **Community support for work,** which seeks to strengthen social ties and activities among residents to support their job preparation and work efforts — for instance, by fostering neighbor-to-neighbor exchanges of information about job opportunities or various employment services available through Jobs-Plus.

Jobs-Plus's multicomponent approach is fundamental to the program's underlying theory — the vision of how it is expected to produce large impacts on employment and earnings. According to this theory, tackling a variety of obstacles to work through a combination of employment services, financial incentives, and social network strategies would enhance residents' interest in and commitment to working, their capacity to look for and find work, their skills to qualify for better jobs, and their knowledge about job opportunities. These changes, in turn, would increase their participation and success in the labor market and reduce their reliance on welfare. Increases in employment and earnings, if they occurred, would then foster improvements in the quality of life within the developments and residents' own personal and family well-being, growing out of residents' increased income and more productive engagement in society.

Jobs-Plus is also distinctive because of its attempt to implement all three program components at saturation levels within the participating public housing developments. That is, it was to be targeted toward *all* residents who were of working age and not disabled (as classified by the housing authority according to HUD rules). Thus, at the very least, all such residents were to be exposed to new work-promoting "messages" from program staff and neighbors. Furthermore, the families who participated could benefit from the new financial incentives and take advantage of a diverse array of services and supports.

The saturation focus of the intervention was seen as a way to promote and strengthen a normative environment focused on work throughout participating housing developments. It was also viewed as having the potential to spark escalating change within the developments: Target-

ing the intervention toward the entire working-age population of a public housing development may produce a critical mass of employed residents (reaching a "tipping point")[17] whose experiences would generate momentum for change across the development. As these vanguard workers grew in number, their visibility and influence as role models would be enhanced. Their own success would signal to others the feasibility and benefits of working, elevate and strengthen the social norms that encourage work, foster the growth of work-supporting social networks, and, ultimately, contribute to still more residents getting and keeping jobs.

A Collaborative Approach

Jobs-Plus targeted public housing residents, but its national sponsors did not intend for it to be a program solely "owned" and operated by public housing authorities. Instead, they envisioned it as a locally collaborative undertaking and required that each participating city tap a reservoir of local knowledge, technical expertise, and resources to adapt the generic model to local circumstances and operate the program. The sponsors hoped that, by taking this approach, the program would stand a much greater chance of success than if any single local partner were to design and operate it alone or if it were to be designed in detail by the national demonstration partners.

To qualify for the demonstration, each local collaborative had to include, at a minimum, the following four partners: the public housing authority, resident representatives, the welfare department, and the workforce development system (represented by the agency operating since 1998 under the Workforce Investment Act, or WIA). Each of these partners could bring something special to the task of designing and implementing an effective Jobs-Plus program but was limited in what it could do alone. For example, the housing authorities had access to HUD resources and controlled many policies affecting housing developments and their tenants, but they needed the experience and resources of the welfare department and the workforce development agency in providing employment and social services. At the same time, these agencies had little knowledge of the circumstances of public housing residents, who formed a sizable percentage of their caseloads. Resident representatives on the collaboratives could bring an in-depth awareness of their communities and service needs and could foster community trust and "buy-in" for the program. Finally, other local organizations were expected to join as a source of services, expertise, and other resources that would help advance Jobs-Plus's employment mission.

[17]Gladwell, 2001.

Recruiting and Selecting Sites

Cities were chosen for the demonstration through a national competition sponsored by HUD and the Rockefeller Foundation and managed by MDRC.[18] Together, these three organizations established the site selection criteria and picked the sites. They did not attempt to recruit cities and local housing authorities that, as a group, were nationally representative. This would not have been feasible. Instead, they placed priority on recruiting a diverse set of sites where joblessness in public housing was a serious problem and where there appeared to be a good opportunity to build and test a large-scale, well-managed employment initiative.

Only large housing developments — defined as having at least 250 family-occupied units, not counting those occupied only by people 62 years old or older — could qualify for the demonstration. Qualifying housing authorities had to have at least two such developments. In addition, according to housing authority records, no more than 30 percent of families living in these developments could have an employed member, and at least 40 percent had to be receiving Aid to Families with Dependent Children (AFDC). These criteria were meant to ensure that Jobs-Plus would be tested in places where the need for an employment intervention was great and where the scale of the intervention could be substantial.[19] Across the continental United States, 442 housing developments managed by 53 local housing authorities met these criteria.[20]

The quality of local housing authority management was also important. Because Jobs-Plus was a new intervention with details of the design to be developed at the local level, even the most effective housing authorities would be challenged by it, and by the added demands of a research demonstration. Thus, an effort was made to screen out housing authorities that were having substantial difficulty managing basic housing services — although this was not always easy to assess.

Furthermore, cities eligible for the demonstration had to be willing to adopt a collaborative strategy for designing and operating the intervention, and at least some of the key local partners had to have collaborated successfully in the past. The core role anticipated for the housing authority and for the welfare and job training systems made their commitment essential. Cities also had to show a willingness to include residents as partners, and existing resident organizations had to have a reasonable capacity to play that role.

---

[18]For additional details on the site selection process, see Riccio (1999).

[19]The sample-size needs of the demonstration's evaluation design were another consideration.

[20]This estimate is based on MDRC calculations using 1993 data from HUD's Information Services Division of Public and Indian Housing. According to 1998 data, approximately 3,300 public housing authorities nationwide manage a total of 13,919 housing developments. Approximately 10 percent of these properties (1,396) include 200 or more units, accounting for 600,206 units in total (or 46 percent of all public housing units nationwide) (Council of Large Public Housing Authorities, 2004).

Finally, the local partners had to be willing and able to meet the demands of a rigorous and innovative research design. As described below, this design limited the housing authority's role in choosing the development in which Jobs-Plus would be operated and required its cooperation with substantial data collection efforts.

In June 1996, an invitation to submit a statement of interest in the demonstration was sent to 50 of the 53 cities where, according to nationally available data, the public housing authority had the types of developments that were being sought. Attesting to the importance that housing authorities and other city agencies ascribed to the goals of the project, responses were received from 42 cities. By August 1996, 15 cities had been chosen to develop preliminary plans for a Jobs-Plus program, and, of these, seven were selected as the final set of sites in March 1997. Six of these cities continued into the main stage of the project:[21] Baltimore, Maryland; Chattanooga, Tennessee; Dayton, Ohio; Los Angeles, California;[22] St. Paul, Minnesota; and Seattle, Washington.

An intensive planning process continued in each of the selected sites for roughly a year. To help each collaborative develop its plans and then implement the Jobs-Plus components, MDRC deployed special "site representatives" and other experts to provide ongoing operations-related technical assistance.

Over the course of the demonstration, important changes took effect in two sites that affected their role in the evaluation. In Seattle, the housing authority received a federal HOPE VI grant in 1999, which is being used to tear down and rebuild the Rainier Vista development where Jobs-Plus was located.[23] Because of the temporary dislocation of the residents that demolition and

[21]Cleveland, Ohio, had also been included among the seven cities selected to participate in the demonstration. However, in 1999, due to a shift in local priorities, Cleveland left the demonstration by mutual agreement between its housing authority and the national Jobs-Plus sponsors and MDRC.

[22]Unless otherwise indicated, all references in this report to the Jobs-Plus development in Los Angeles refer to William Mead Homes. However, in Los Angeles, a second housing development — Imperial Courts — was selected to operate Jobs-Plus, in addition to William Mead Homes. For a variety of reasons, it was not possible to select a comparison development matched to Imperial Courts, in order to estimate the effectiveness of its Jobs-Plus program. Consequently, Imperial Courts is not included in the impact analysis and is excluded from this report, although it has been included in all of MDRC's earlier implementation research on Jobs-Plus.

[23]HOPE VI is a HUD program that is aimed at redeveloping the most "severely distressed" housing projects across the country. The redevelopment process involves replacing public housing units with apartments or townhouses, some of which will become available at market rate to working families in an effort to reduce the concentration of poor households in the development communities. The local housing authority must use some HOPE VI funds to offer supportive services to residents who are relocated during the demolition, to help them find housing on the private market. However, housing authorities also have the option of offering — in addition to housing search assistance — various employment-related services to prepare residents for employment and life as private housing tenants (U.S. Department of Housing and Urban Development, 1999). For an assessment of the accomplishments of HOPE VI, see Popkin et al. (2004).

reconstruction has entailed — along with the infusion of special funds and requirements associated with the HOPE VI initiative — the circumstances within which the Seattle program would continue to operate were unique among the Jobs-Plus sites. Consequently, Seattle was withdrawn from the national Jobs-Plus demonstration. However, because the site continued to operate a Jobs-Plus program at the development in modified form as the centerpiece of its HOPE VI community and supportive services plan (under the name "HOPE-Plus"), MDRC has continued to evaluate the Seattle program in a companion study, but with a scaled-back research design.[24] Where possible, findings on Seattle's program are included in sections of this report.

In Chattanooga, the housing authority, MDRC, and the lead demonstration funders mutually agreed in April 2002 to change the Jobs-Plus program there into one that would offer only the financial incentives component, ending attempts to develop a full-scale program that also included employment-related services and community support for work. A number of factors prompted this decision, including the site's lack of progress in operating the latter two components at a sufficient level of quality and the housing authority's decision to bring its developments under the management of a private contractor. The demands of implementing this privatization initiative would have limited the attention that the housing authority could give to a full Jobs-Plus program. The site's official transition into a financial-incentives-only program was completed by the late summer of 2002, although the housing authority did continue to offer residents some on-site job search guidance and help accessing employment-related services.[25]

Evaluating Jobs-Plus

As previously mentioned, Jobs-Plus is not the first employment intervention in public housing, but its scale and scope surpass those of other current and past initiatives. It is also the subject of the most in-depth evaluation of any other such program in public housing — or of any undertaken as part of a comprehensive community initiative.[26]

The saturation and place-based nature of Jobs-Plus made it impossible to assess the effectiveness of the intervention using a traditional randomized experiment, a method widely viewed as the most credible way of determining a program's effectiveness. In such an experiment, individuals are randomly assigned to either a program group, which receives the new intervention, or a control group, which does not. The estimate of the effect — or "impact" — of

[24]The companion evaluation was sponsored by HUD, the Stuart Foundation, and the Seattle Housing Authority. For a detailed account of the implementation of Jobs-Plus in conjunction with HOPE VI in Seattle, see Liebow et al. (2004).

[25]See Bowie, 2003.

[26]For a review of past studies, see Bodgon (1999). For a discussion of the many special difficulties of producing credible evidence on the effectiveness of comprehensive community initiatives, see Hollister and Hill (1995).

the program is the difference between the groups on the outcomes of interest, such as average earnings. It was not possible to use this methodology for evaluating Jobs-Plus because the program's services, incentives, and supports for work were to be targeted toward all working-age, nondisabled residents at each development. This made it impossible to create a randomly selected control group of individuals within a development who would be left "untouched" by the program. The evaluation therefore had to rely on an alternative approach.

An Innovative Research Design

The approach that was adopted, which is described in Chapter 4, involved randomly assigning entire housing developments (rather than individual residents) to either a program group or a comparison group within each site. Coupled with this is a comparative interrupted time-series analysis of administrative records that compares each groups' earnings trend before and after the introduction of Jobs-Plus. For this design to work, the housing authority in each candidate city had to have at least two — and preferably three — developments that would qualify for Jobs-Plus and that housed demographically similar tenants. It also had to allow MDRC to determine randomly which one of these developments would be selected to operate the program. The other one or two developments would become part of a comparison group where research would be conducted but Jobs-Plus would not be operated. The purpose of the comparison group was to show how residents' employment, earnings, and welfare trends would have changed in the absence of Jobs-Plus. In other words, the change in outcomes for the comparison group would establish the benchmarks for assessing the "added value" of Jobs-Plus. As shown in Table 1.2, a total of 15 housing developments were used for the final impact analysis: six that operated Jobs-Plus and nine that served as comparison developments. These program and comparison developments were generally separated by a distance of several miles, so they were not part of the same immediate community. These developments had roughly between 300 and 500 units each.

The random allocation process was used in order to avoid systematically selecting for Jobs-Plus the best managed of the available developments or those that enjoyed the most favorable conditions for achieving employment outcomes. In other words, it was an attempt to set up a "fair" comparison so that if better outcomes were observed for residents of the program developments, these improvements could more confidently be attributed to Jobs-Plus rather than to other factors. Although the total number of developments is small, this process offers at least some assurance that, when all the sites are combined, those developments assigned to the program group are generally similar to those allocated to the comparison group. Of course, random assignment helps little in this regard within each site, since only two or three developments are available per site. However, the fact that, within each site, the developments were demographically similar to begin with increased the likelihood that the types of residents living in the program and comparison developments would be comparable. As subsequent chapters demonstrate, the program and comparison developments within each site do include residents who, on

average, were extraordinarily well matched in terms of their prospects for success in the labor market in the absence of Jobs-Plus. This is evident from their long-term pre-program employment and earnings trends as well as their demographic characteristics, and these conditions set the stage for conducting a credible impact analysis.

Table 1.2

Cities and Housing Developments in the Jobs-Plus Impact Study

City	Jobs-Plus Development	Comparison Development(s)
Baltimore	Gilmor Homes	Perkins Homes Somerset Courts
Chattanooga	Harriet Tubman Homes	College Hill Courts Emma Wheeler Homes
Dayton	DeSoto Bass Courts	Arlington Courts Parkside Homes
Los Angeles	William Mead Homes	Dana Strand Village
St. Paul	Mt. Airy Homes	Roosevelt Homes
Seattle	Rainier Vista Garden Community	Yesler Terrace

This strategy for testing the impacts of Jobs-Plus is unique among evaluations of public housing employment programs and comprehensive community initiatives. Although not as robust a research design as a social experiment involving the random assignment of individuals, it holds the potential to supply unusually reliable evidence of the impacts of a place-based intervention.

Jobs-Plus's dual emphasis on "helping individuals" and "helping places" presented another analytical challenge. If residents who benefit from Jobs-Plus quickly move away, their contribution to average earnings or to the employment rate within a development at any given time will be less than if those residents do not move. Taking this into account, the impact study assesses Jobs-Plus's "success" from two perspectives: (1) What happens to individuals, whether or not they remain in public housing? and (2) What happens to the year-to-year employment and earnings levels in the developments themselves? The evaluation also explores whether any

improvements in development-level employment and earnings lead to improvements in tenants' quality of life or conditions at the developments.

Data for the impact analysis come from a variety of sources. The main sources include housing authority records that provide information on residents' background characteristics and their tenure in public housing, state Unemployment Insurance (UI) wage records, and welfare payment records (the latter was available for only three sites). These data were collected to cover a period extending back to 1992 and through the end of 2003. They make it possible to determine how similar residents' employment, earnings, and welfare trends were prior to the start of Jobs-Plus and whether, afterward, residents of the Jobs-Plus developments proceeded along a more positive trajectory than their counterparts in the comparison developments. These trends were measured for all sample members, regardless of whether they moved out of or continued to live in public housing.

In addition to these data, two surveys of residents were conducted: a *baseline wave*, fielded near the start of Jobs-Plus operations (1998-1999); and a *follow-up wave* (except in Seattle), fielded four to five years later, during the final year of the demonstration's operational period (2003). The surveys were limited to tenants of the developments at either of these points in time. They provide a basis for assessing whether, as hoped, residents of the Jobs-Plus development made greater use of work-promoting services and financial incentives than did their comparison development counterparts. A more extensive version of the follow-up survey was conducted in three of the sites[27] and offers a basis for inferring whether Jobs-Plus contributed to important changes in social patterns within the developments and in residents' quality of life. Other data were also collected on residents' use of Jobs-Plus services and rent-based financial incentives in the program developments from housing authority and program records.

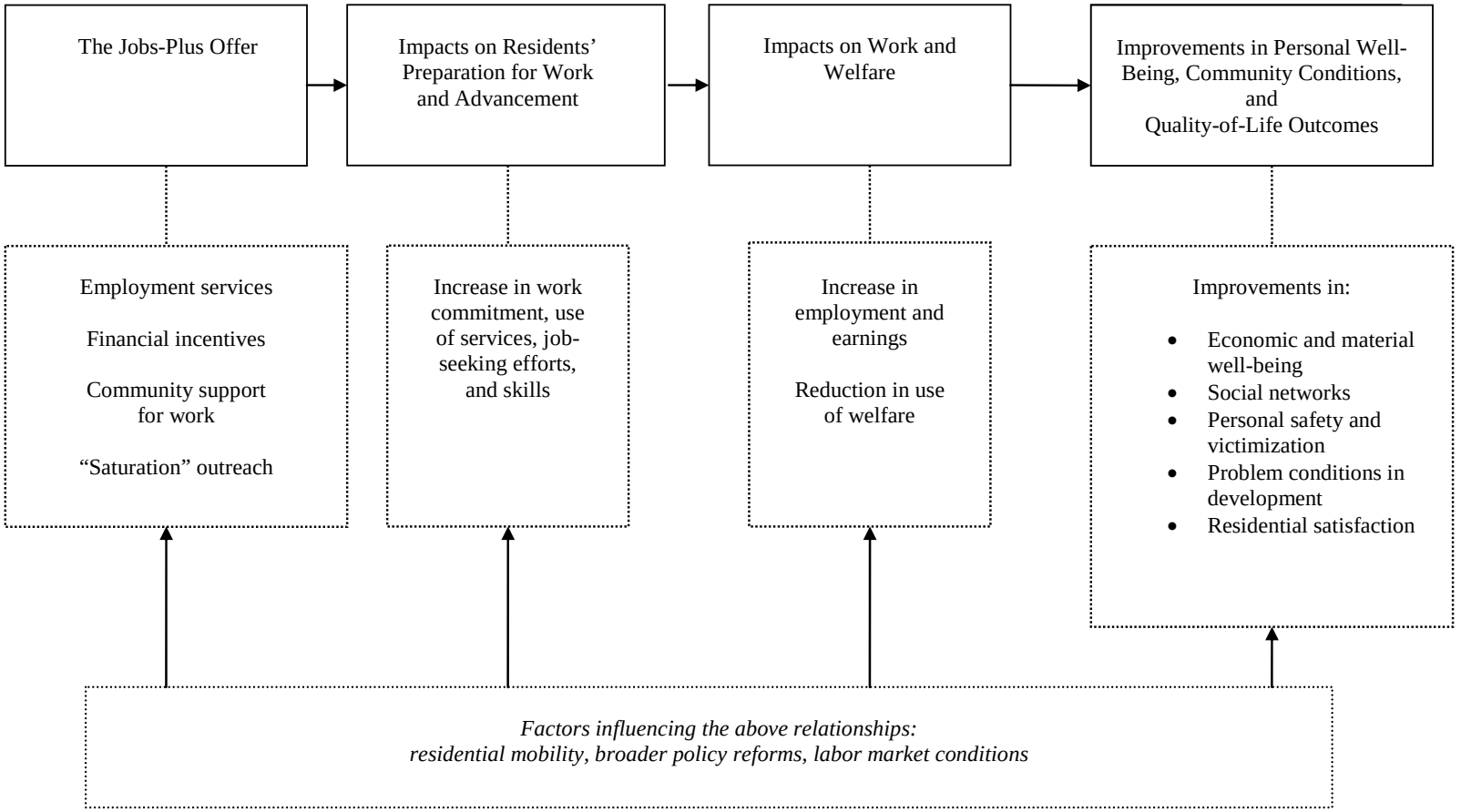
Finally, the evaluation included an intensive effort to collect qualitative data. A combination of on-site field researchers and central MDRC staff spent many hours over the life of the demonstration observing the operation of the collaboratives and the program, conducting open-ended interviews with residents, and investigating activities at the comparison developments.

Using all these data, the evaluation assesses the overall feasibility and effectiveness of Jobs-Plus. The analysis is structured to an important degree around the pathways of change that were assumed in the design of the Jobs-Plus model. Figure 1.1 depicts these pathways. The analysis thus examines how well the features of the program model were implemented; whether Jobs-Plus increased residents' efforts to prepare for and look for work; whether these efforts, in turn, improved their labor market and welfare outcomes; and whether any improvements in those outcomes yielded positive "spillover" effects on residents' quality of life.

[27]The fuller version of the survey was not conducted in all sites because of cost considerations.

Figure 1.1

Hypothesized Effects of Jobs-Plus



A Changing National Context

Jobs-Plus did not operate in a policy vacuum, as can be seen in Figure 1.2. When the demonstration was launched in the latter part of the 1990s, the states and localities were implementing the major overhaul of the nation's welfare system called for under the 1996 federal legislation, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). Under that legislation, states were required to impose time limits on receipt of federal welfare benefits and to expand requirements for recipients to take part in welfare-to-work programs. Many states also introduced more generous earnings disregards — that is, rules that allowed recipients to earn more money before losing their welfare grants — to help make low-wage work "pay." Soon after the Jobs-Plus sites had been selected, the federal government replaced the Job Training Partnership Act (JTPA) with the Workforce Investment Act (WIA) of 1998, in the hope of providing better and easier access to job placement assistance, education, training, and other workforce services for low-income populations. And, in 1998, the federal government overhauled its housing policies with passage of the Quality Housing and Work Responsibility Act, which, as previously mentioned, included some provisions to encourage greater employment among public housing residents. The 1990s also saw a large expansion of the federal Earned Income Tax Credit (EITC), which supplements the earnings of low-wage workers.

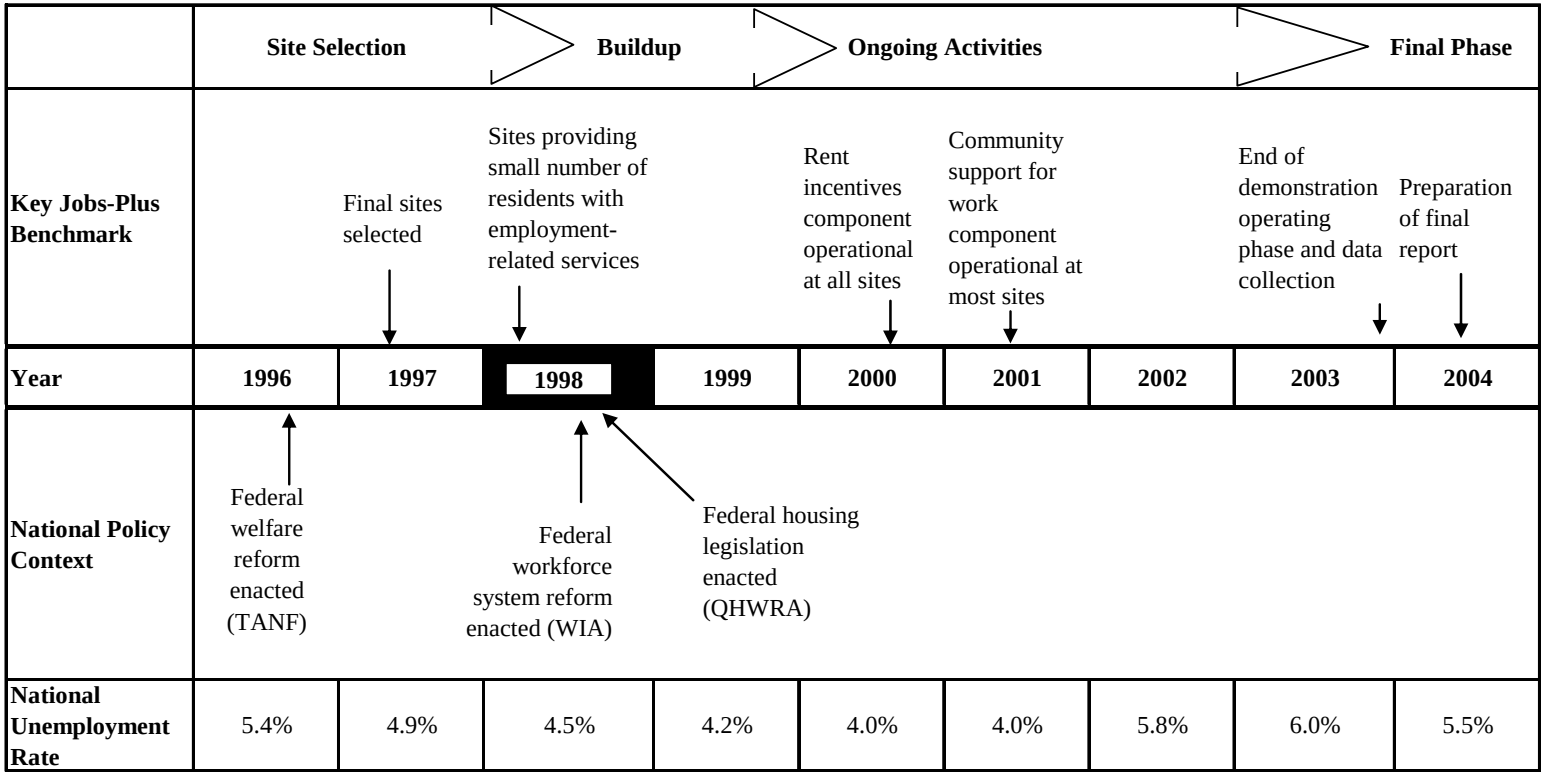
As Jobs-Plus was rolling out, the national economy was in the midst of an economic boom that had brought unemployment rates to their lowest levels in decades. By 1996, the national rate stood at 5.4 percent, and it continued to fall, to 4.0 percent in 2000. However, the picture had changed by 2001, when the country entered a recession,[28] and the unemployment rate rose over the next few years, to 6.0 percent in 2003 — the last year in the operational phase of the demonstration.

All these changes may have had some influence on the labor market decisions of residents living in the Jobs-Plus developments as well as of residents in the comparison developments. In and of themselves, the changes may have contributed to increased employment and earnings and to reduced reliance on welfare among public housing residents. Consequently, the Jobs-Plus impact analysis is a test of whether the program can make a difference in residents' outcomes above and beyond what these residents might have accomplished in this changing context in the absence of Jobs-Plus.

[28]The National Bureau of Economic Research identified March 2001 as the date when the national recession began (Hall et al., 2004).

Figure 1.2

Time Line and National Context of the Jobs-Plus Demonstration



SOURCES: Public documents; MDRC field research; site documents; and (for unemployment data) U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, http://data.bls.gov, data extracted on February 3, 2005.

NOTES: TANF = Temporary Assistance for Needy Families created by the Personal Responsibility and Work Opportunity Reconciliation Act; WIA = Workforce Investment Act; QHWRA = Quality Housing and Work Responsibility Act.

The Remainder of This Report

Chapter 2 begins the comprehensive assessment of Jobs-Plus by describing the widely varying settings and the highly diverse types of public housing residents for whom the model was tested. Chapter 3 then analyzes the sites' struggles and accomplishments as they worked to translate the core elements of the Jobs-Plus model into a functioning program suitable to their particular real-world circumstances.

Chapters 4 and 5 assess the effectiveness of Jobs-Plus in improving residents' employment, earnings, and welfare receipt — first through a longitudinal analysis of individuals (some of whom moved out of public housing) and then from the perspective of public housing developments themselves, which experienced a steady turnover in their tenant populations.

Chapter 6 examines indicators of community change over the study's five-year period, starting with the year that Jobs-Plus operations began and ending with the year that the operational phase of the demonstration concluded. Using resident survey data, that analysis offers limited but important evidence about changes on a variety of dimensions of the quality of life among residents in the Jobs-Plus and comparison developments.

Chapter 7 concludes the report with a discussion of the policy lessons and implications of the evaluation's findings.

Chapter 2

The Residents and Their Communities

Jobs-Plus was intended to improve the well-being of residents of some of the poorest communities in the country — public housing developments distinguished by low rates of employment and high reliance on welfare. This chapter shows that, in the six developments selected to operate the program, residents faced many barriers to employment, and when they did work, the jobs they held were usually very low paying and often without fringe benefits. Limited education, lack of adequate child care, health or medical problems, and worry about crime and safety were common. Reliance on welfare was high; poverty was widespread; and living conditions were difficult. Residents expressed great concern over serious social problems in their developments, and yet three-quarters rated their development as at least a "good" place to live.

The racial and ethnic composition of the tenant populations differed across the six sites. For example, while three sites were predominantly African-American, the others had a more varied ethnic and racial mix. Moreover, the combination of large and midsize cities in which the developments are located confronted Jobs-Plus with varying labor markets, housing markets, and social conditions. These types of variation in local context make it possible to ask whether Jobs-Plus can "work" under a range of circumstances.

Although most of this chapter describes the people and conditions at the Jobs-Plus developments, the same descriptions also apply to the comparison developments. This high-quality match is important because it lends credibility to the evaluation's impact findings discussed in Chapters 4 and 5.

Characteristics of the Surrounding Communities

Census data from 2000 indicate that the areas in which the Jobs-Plus housing developments are located are similar to those featured in the literature on high-poverty communities. They are primarily census tracts populated by people of color (see Appendix Table A.1). They are also tracts in which households headed by single parents are common and large numbers of adults do not have a high school diploma. Three of the six Jobs-Plus developments (in Los Angeles, St. Paul, and Seattle) are located in tracts where a high proportion of residents — from 26 percent to 62 percent — were foreign born. Five of the six developments (Seattle is the exception) are located in tracts in which 37 percent to 62 percent of families were living in poverty. These rates are generally well above the 30 percent or 40 percent threshold commonly used to designate "high-poverty" areas.

Comparing the poverty rates of the census tracts containing the developments operating the Jobs-Plus program and the poverty rates of the surrounding counties reveals that most of the Jobs-Plus tracts were essentially islands of high poverty in their respective regions, which were not particularly poor. This is starkly evident in Panel A of Figure 2.1. For example, in Baltimore, whereas 43 percent of families in the Jobs-Plus census track were living in poverty, only 14 percent of families in the surrounding county were poor.[1] A similar if less extreme pattern holds with unemployment rates in four of the six sites (Figure 2.1, Panel B). Again using Baltimore as an example, the 21 percent rate of unemployment of the Jobs-Plus census tract is three times higher than the surrounding county's unemployment rate (7 percent). However, the contrast between local and countywide unemployment is much lower in St. Paul and only marginal in Seattle.[2]

The 2000 Census also reveals that rental vacancy rates varied across locations in the demonstration. For example, vacancy rates were highest in the census tracts containing the Jobs-Plus housing developments in Baltimore and Dayton (16 percent and 14 percent, respectively) and much lower elsewhere (see Appendix Table A.2). As Chapter 3 discusses, the Jobs-Plus developments in Baltimore and Dayton had the highest move-out rates among residents during the demonstration.

Longer-term data on unemployment rates in the counties surrounding the Jobs-Plus sites offer another perspective on the context in which Jobs-Plus was implemented. Figure 2.2 presents the long-term trends in unemployment rates, covering the six years before Jobs-Plus began operating in 1998 (the "baseline period" used in the impact analysis in Chapter 4) and six years afterward. As the graphs for each site indicate, unemployment rates varied markedly across locations at the start of this period, ranging from about 5 percent in St. Paul to about 10 percent in Los Angeles. Reflecting the national economic boom over the course of the 1990s (see Chapter 1), the rates dropped substantially in all sites. By 1998, they ranged from around 3 percent in St. Paul to about 7 percent in Los Angeles. By 2001, when Jobs-Plus was well under way, all sites had unemployment rates of around 5 percent or lower. From there on, however, they began to climb with the onset of the national recession and rose to about 7 percent in Dayton, Los Angeles, and Seattle, where they stayed until the end of 2003, the last year of the demonstration's operational phase. Unemployment rates also rose in Baltimore, Chattanooga, and St. Paul, but to no higher than about 5 percent. As Chapter 4 shows, the labor market experiences of residents in the Jobs-Plus and comparison developments track these broader trends to an important degree.

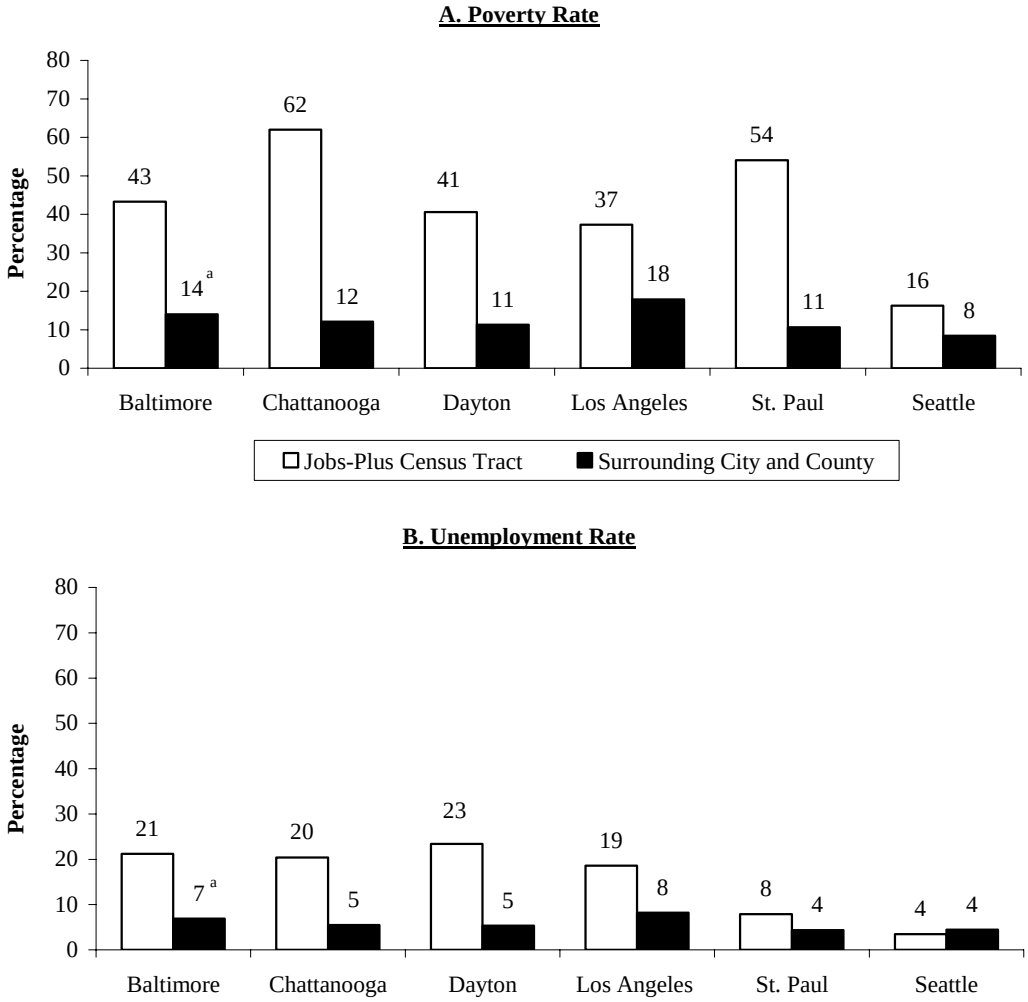
[1] In Baltimore, the estimates for the surrounding county include both Baltimore County and Baltimore City.

[2] A more detailed analysis in Seattle that looks at blocks within census tracts suggests that poverty rates were about 45 percent in the blocks encompassing the Jobs-Plus housing development.

The Jobs-Plus Demonstration

Figure 2.1

Rates of Poverty and Unemployment in 2000 in the Census Tracts of the Jobs-Plus Development and Surrounding City and County, by Site



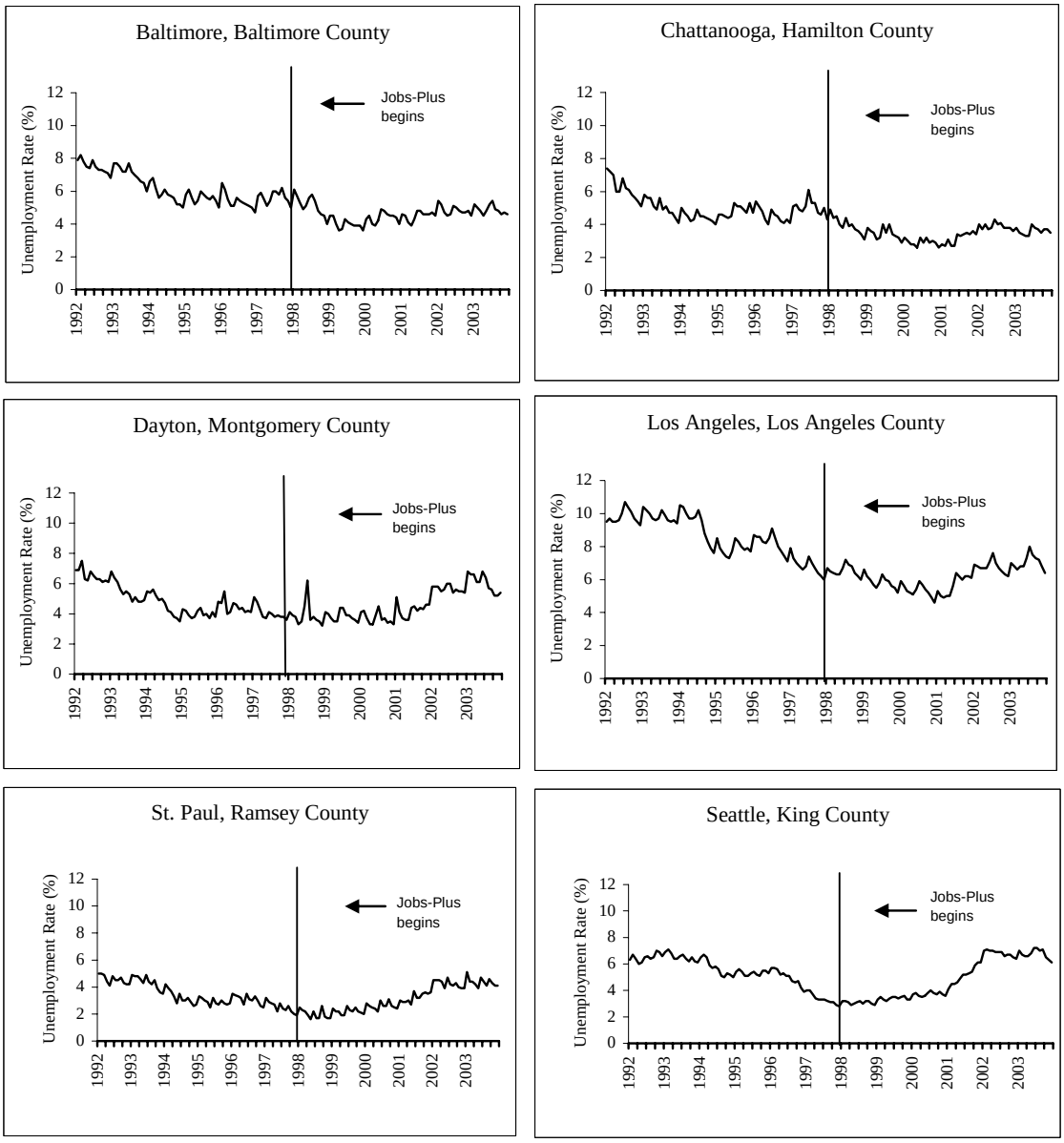
SOURCE: MDRC calculations using data from the U.S. Bureau of the Census, Census 2000 Summary File 3.

NOTE: [a]With the exception of Baltimore, each county includes its central city. Baltimore County, however, is not inclusive of Baltimore City. To make Baltimore County data comparable to county data for the other sites, poverty and unemployment rates for Baltimore City and Baltimore County were combined.

The Jobs-Plus Demonstration

Figure 2.2

Local Unemployment Rates for the Jobs-Plus Sites from 1992 to 2003



SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, http://data.bls.gov; data extracted on February 23, 2005.

Characteristics of the Jobs-Plus Developments and Residents

All the housing developments where Jobs-Plus was implemented comprise mainly low-rise units (in contrast to the popular image of public housing as agglomerations of high-rise towers). All but one are relatively large, however — each with more than 400 households in residence. Several have a particularly good appearance, while others convey greater age and disrepair. And while some are close to commercial districts via public transportation, others are more isolated.

Table 2.1 shows the characteristics of residents of the six housing developments that operated Jobs-Plus, who are part of the main research sample for evaluating the program's impacts. This sample includes 2,259 individuals who were living in the Jobs-Plus developments in October 1998, the year that Jobs-Plus operations began; hence, they are referred to as members of the "1998 cohort" of residents of the Jobs-Plus developments. At that time, all these sample members were between ages 21 and 61 and were not classified as disabled by the housing authority. Although the full "target group" for the Jobs-Plus program extended to residents as young as age 18, the impact analysis (for methodological reasons explained in Chapter 4 and Appendix D) focuses only on those between ages 21 and 61, as does this entire report. (Another 2,807 individuals with similar characteristics lived in the comparison developments, for a total 1998 cohort sample of 5,066. For their characteristics, see Appendix Table A.3.)

Three developments operating the Jobs-Plus program (in Baltimore, Chattanooga, and Dayton) were populated almost exclusively by African-Americans, who made up 94 percent or more of the Jobs-Plus sample for those sites. Residents of the other Jobs-Plus developments were a more varied ethnic mix, including large numbers of Hispanic and Asian/Pacific Islander households and substantial numbers of immigrants. For example, one of these developments (in Los Angeles) has predominantly Hispanic residents (79 percent of the sample), primarily of Mexican or Central American descent, but it also houses a sizable minority of Southeast Asians (12 percent), particularly from Vietnam and Cambodia. In another development (in St. Paul), Hmong and other immigrant families from Southeast Asia predominate (56 percent). And a third development (in Seattle) houses a wide mix of residents from different East African and Southeast Asian countries, as well as native-born U.S. citizens, with residents speaking as many as 22 different languages.

The Jobs-Plus developments also varied with respect to other demographic characteristics, such as the percentage of females (ranging from 65 percent to 91 percent of the sample) and households with two or more adults (ranging from 14 percent to 74 percent). The latter households were most highly represented in the sites with high proportions of immigrants (Los Angeles, St. Paul, and Seattle), which included many married couples.

Table 2.1

Selected Characteristics of Targeted Residents Aged 21 to 61 Living in the Jobs-Plus Developments in 1998

Characteristic	Baltimore	Chattanooga	Dayton	Los Angeles	St. Paul	Seattle	All Developments Combined
Race/ethnicity[a] (%)							
White (non-Hispanic)	0	4	1	1	3	8	3
Black (non-Hispanic)	99	94	97	6	21	32	58
Hispanic	1	2	0	79	4	0	14
Asian/Pacific Islander	0	0	0	12	56	28	16
Other	0	0	0	0	0	14	3
Missing	0	0	2	1	16	19	7
Household head (%)	91	93	93	57	66	70	78
Female (%)	81	91	86	65	66	71	77
Age[a] (%)							
21-24 years	13	27	26	12	13	12	17
25-34 years	33	38	42	28	40	33	36
35-61 years	55	35	32	59	47	55	47
Average age (years)	37	32	32	39	36	37	35
Lived in a household with (%):							
Two or more adults	16	15	14	74	67	54	40
No children	45	17	27	26	5	23	24
Children ages							
0-5 years	25	44	47	29	56	42	40
6-17 years	44	64	48	63	88	62	61
Sample size	367	282	351	513	312	434	2,259

(continued)

Table 2.1 (continued)

SOURCE: MDRC calculations using data from housing authority tenant (50058) records.

NOTES: This sample (referred to as the "1998 cohort") includes all residents of each development in October 1998 who were between 21 and 61 years old and not listed as disabled on public housing authority records. Because of missing data, the sample size for each characteristic may vary.

In the average for all developments combined, the results for each housing development are weighted equally.

[a]Due to rounding, distributions may not sum exactly to 100 percent.

Turnover in the tenant populations was considerable over the course of the demonstration. For example, for the six developments combined, 42 percent of the 1998 cohort had moved out of the Jobs-Plus developments over the subsequent three years.[3]

Work, Welfare, and Community Life When Jobs-Plus Was Launched

The results of the baseline survey of residents — administered to household heads near the time that Jobs-Plus began[4] — offer additional insights into the types of people and places that Jobs-Plus was working to change. They show that the Jobs-Plus developments were places where residents had a stronger connection to the labor market than had been anticipated, the work was low-paying, reliance on welfare was high, poverty was widespread, and living conditions were difficult (see Table 2.2).

Across the sites, 69 percent of the heads of household reported having had some employment experience within the 12 months prior to the survey. Among all respondents, 51 percent said that they had worked in a full-time job during that period; 18 percent said that they had worked only in a part-time job. The work was not always steady, however. A somewhat lower proportion (57 percent) were working at the time they were interviewed. Most of the respondents who had worked in the recent past had done so in jobs that paid very low wages — $6.71 per hour, on average — and only slightly more than half of the jobs (53 percent) provided important fringe benefits.[5]

Longer-term trend data from Unemployment Insurance (UI) wage records presented in Chapter 5 indicate that the rates of employment in these developments had been climbing steadily (and unexpectedly) over the course of the 1990s, most likely in response to expanding job opportunities fueled by a growing economy. Thus, by the time Jobs-Plus operations began, these rates had already exceeded the 30 percent cap on the proportion of families employed that had been set as a condition for site selection.

Table 2.2 also shows that residents faced an array of personal and situational problems that could make steady work and job advancement difficult. For example:

- **Limited education.** Over half (56 percent) of survey respondents had no high school diploma or General Educational Development (GED) certificate.

[3]Chapter 3 presents a more detailed discussion of residents' mobility patterns, and Chapters 4 and 5 consider the implications of resident mobility for Jobs-Plus's effects on work outcomes.

[4]The baseline survey was administered in 1998 in all sites except St. Paul, where it was conducted in 1999. For further information on the baseline and follow-up surveys of residents, see Appendix C.

[5]For further detail on residents' prior employment experiences, see Martinez (2002).

The Jobs-Plus Demonstration

Table 2.2
1998 Baseline Survey (Household Heads)

Selected Characteristics of Residents of the Jobs-Plus Developments

Characteristic	Baltimore	Chattanooga	Dayton	Los Angeles	St. Paul	Seattle	All Developments Combined
Female (%)	91	97	92	95	70	83	88
Married and living together (%)	6	6	5	42	44	25	21
No high school diploma or GED (%)	43	46	33	68	94	53	56
Prior and current employment							
Ever employed (%)	97	94	96	88	77	77	88
Employed at time of interview (%)	53	60	61	60	53	53	57
Employed within the past 12 months (%)	68	78	77	66	67	59	69
Full time (%)	43	62	60	43	56	43	51
Part time (%)	25	16	17	23	10	16	18
If employed:							
Average hourly wage ($)	6.09	5.34	6.19	6.51	8.72	7.42	6.71
Received any fringe benefits (%)	42	55	50	44	63	63	53
Concerns associated with working full time (%)							
Making sure children are okay while at work[a]	19	17	27	42	NA	33	27
Rent would be raised because making too much money	53	57	57	37	46	41	48
Losing benefits because making too much money	32	32	35	22	23	26	28
Receipt of public benefits in the past 12 months[a] (%)							
Anyone in household received welfare[b]	48	54	59	50	NA	44	51
Anyone in household received food stamps	69	85	72	56	NA	56	68

(continued)

Table 2.2 (continued)

Characteristic	Baltimore	Chattanooga	Dayton	Los Angeles	St. Paul	Seattle	All Developments Combined
Estimated yearly household income (%)							
$5,000 or less	57	68	48	33	8	28	40
$5,001-$10,000	21	19	26	32	35	41	29
$10,001-$15,000	14	6	16	20	24	21	17
More than $15,000	8	6	9	15	33	10	14
Health condition limits work or type of work (%)	29	29	25	28	35	35	30
Victimization (%)							
Victim of violence, robbery, or burglary or threatened with a weapon at the development within the past 12 months	29	42	37	17	24	23	29
Reported that the following were "pretty big" or "very big" problems at the development (%)							
People selling or using drugs	81	58	74	49	15	34	52
Guns and gunfire	67	39	68	49	18	27	45
Gangs causing trouble	32	24	24	56	33	27	33
Rated their housing development as a “good,” “very good,” or “excellent” place to live (%)	59	73	60	83	89	91	76
Reported they traveled outside the neighborhood at least once a week (%)	84	90	91	90	85	90	88
Sample size	219	220	241	237	151	160	1,228

SOURCE: MDRC calculations using data from the 1998 baseline survey.

NOTES: In the average for all developments combined, the results for each housing development are weighted equally.

[a]Respondents in St. Paul were not asked these survey questions.

[b]Includes cash aid through AFDC/TANF and General Assistance.

- **Lack of adequate child care or child supervision while at work.** Twenty-seven percent of respondents with children under age 18 indicated that full-time work would pose a significant problem for them because they would be concerned about whether their children would be okay.

- **Health or medical problems.** Thirty percent said they had health conditions that would make it hard for them to work or would limit the amount or kind of work they could do.

- **Expectation of little or no economic improvement from employment.** Forty-eight percent of respondents expressed concern about having their rent raised if they earned too much, while 28 percent believed that earning too much would cause them to forfeit benefits they had been receiving.

Given the prevalence of unsteady and low-paying jobs, it is unsurprising that a large proportion of households had to rely on public assistance to help them get by. Indeed, 51 percent of all heads of household reported using Aid to Families with Dependent Children/Temporary Assistance for Needy Families (AFDC/TANF) or General Assistance during the prior year, and 68 percent reported using food stamps.

Residents saw many problems — but also strengths — in their public housing developments. For example, they voiced a variety of concerns about their personal safety and the public housing environment in general. Many experienced or feared apartment break-ins or thefts of personal property and identified the presence of guns and drugs as significant problems. Across the sites, 29 percent had been victimized by an actual or attempted robbery, burglary, or violent attack or threat within the year prior to the survey. Moreover, 52 percent said that people selling or using drugs was a "pretty big" or "very big" problem in their development, and 45 percent said the same about guns and gunfire. In addition to diminishing the overall quality of life in the developments, these safety concerns may have caused residents to fear traveling to work, especially if it required commuting by public transportation, and late at night.

On these measures, some differences among the sites are striking. For example, as Table 2.2 shows, crime victimization rates ranged from 17 percent in Los Angeles to 42 percent in Chattanooga. Moreover, while 15 percent of respondents in St. Paul said that "people selling or using drugs" in their developments was a "pretty big" or "very big" problem, 81 percent gave that response in Baltimore. According to the evaluation's field research, much of the problem in Baltimore centered on use and sale of heroin, while Dayton had a greater problem with crack cocaine. And while 18 percent of St. Paul respondents said that "guns and gunfire" were a "pretty big" or "very big" problem in their developments, over two-thirds gave this response in Baltimore and Dayton. Concerns with "gangs causing trouble" stood out in the Los Angeles site, where 56 percent of respondents identified this as a "pretty big" or "very big" problem.

Overall, crime and safety concerns appeared lowest in St. Paul and Seattle — a pattern consistent with observations made by the field researchers.

Yet, across the sites, these and other problems did not lead residents to adopt a completely negative attitude toward their developments. Indeed, 76 percent said that their development was a "good," "very good," or "excellent" place to live (with "good" being the most common rating), although this positive assessment was lowest (about 60 percent) in Baltimore and Dayton. And few residents reported feeling isolated — in fact, 88 percent said that they traveled at least once a week outside the neighborhood where their development is located. These more positive features of the developments were all foundations on which Jobs-Plus could build to help public housing communities better encourage and support employment.

Comparability of the Program and Comparison Developments

As Chapter 1 explains, the evaluation's research design involved identifying in each city two or more housing developments that had roughly similar types of people. One of these developments was then randomly selected to operate Jobs-Plus, and one or two were allocated to a comparison group. Because random assignment was conducted at the development level — and for only a few developments within each city — the samples of individuals in the program and comparison groups were not expected to have perfectly matching demographic profiles. As it turns out, however, the quality of the match is quite good overall, as shown in Appendix Table A.3. Furthermore, responses from the residents (household heads) who were interviewed as part of the baseline survey administered at the start of Jobs-Plus shows that, on a variety of dimensions (such as perceptions of problems in the development, concerns about crime and safety, assessments of the quality of life in the developments, and employment rates), the program and comparison developments were remarkably similar.[6] And in sites where the differences appear somewhat larger, there is little indication that conditions were consistently more favorable in the Jobs-Plus than the comparison developments; if anything, they were somewhat worse.[7] Furthermore, as Chapter 4 illustrates, prior to the start of Jobs-Plus, the employment and earnings trends of residents in the 1998 cohort who were living in the Jobs-Plus development were extraordinarily similar to the trends of those living in the comparison developments. Together, these findings provide strong assurance that the impact analysis, when comparing subsequent outcomes for those two

[6]Table 6.5 in Chapter 6 helps supports this point in three sites (Baltimore, Chattanooga, and Dayton). Supporting evidence from other sites and across other measures is available in tabulations presented in unpublished baseline survey "data resources books" compiled by MDRC.

[7]For example, the survey data and field research interviews in Baltimore suggest that crime was a more pressing problem at the Jobs-Plus development than at the comparison developments. At the same time, it is important to note that the pre-Jobs-Plus employment and earnings trends are remarkably similar, suggesting that the crime and safety problems did not lead to differences in labor market participation.

groups of residents, does so for essentially the same types of people — a necessary condition for safely attributing any difference in those outcomes to Jobs-Plus.[8]

Summary and Conclusions

This chapter shows that the developments selected to operate Jobs-Plus all housed very poor tenants with significant impediments to employment. Although their residents had more work experience than had been expected, large numbers were unemployed or underemployed, and many who were working had jobs that would not lift them out of poverty. Thus, there remained considerable room for Jobs-Plus to improve their employment rates and (especially) their average earnings. Still — and to their credit — residents were already responding to the expanding job opportunities spawned by an improving economy across all the sites before Jobs-Plus began.

Despite their many similarities, the Jobs-Plus developments were distinguished by a variety of local conditions and population characteristics that would present the sites with different kinds of challenges in implementing the program. Some, for example, would have to adapt their operating strategies to suit the different cultural orientations of diverse immigrant groups and native-born residents; some would have to contend with social environments in which crime and safety issues and extensive drug dealing (often emanating from outside the development) were a daily reality; and, with differences in local rental vacancy rates in the broader community, some would have to adapt to a frequently changing tenant population, while others worked with a more stable group.

Chapter 3 examines how the sites implemented their Jobs-Plus programs across these varied settings. It thus considers whether the model is a feasible one to operate under a range of circumstances that can be found among many other public housing developments across the nation.

[8]Data from the 2000 Census (see Appendix Tables A.1 and A.2) show that, in each city, the match between the characteristics of the broader population of census tracts encompassing the Jobs-Plus and comparison developments is not nearly as close as the match between the residents of the housing developments themselves. However, the comparison group tracts, like the Jobs-Plus tracts, were generally high-poverty areas.

Chapter 3

The Implementation Experience

Jobs-Plus was an ambitious program to implement. Planning and delivering the intervention through new interagency and resident partnerships, bringing employment assistance directly into public housing developments, crafting new rent rules to make work pay, fostering neighbor-to-neighbor support for work, and offering assistance on a "saturation" basis — that is, to all working-age, nondisabled residents of the developments — pushed well beyond the scope of typical self-sufficiency initiatives in public housing. Thus, it was not at all clear at the outset of the demonstration that it would be feasible to operate the Jobs-Plus model in the real world.

This chapter shows that, in the end, most of the sites did a good job of implementing the program, although not without difficulty. The challenges varied across the sites, but, in general, the sites had to work hard to create a new culture of collaboration among housing authorities, social service agencies, and residents; sustain the active support of senior housing officials; overcome cumbersome personnel and procurement policies of the housing agencies; appeal to residents of different racial and ethnic groups; deal with enduring issues of safety, substance abuse, and other family crises; and contend with high resident turnover. In addition, Jobs-Plus at first encountered widespread skepticism from residents, who had often seen programs of various kinds come and go. This was not helped when, due to federal funding problems, a central component of the program — the rent-based financial work incentives — was not put into place in most sites for well over two years after site selection.

In time, four of the six sites were able to build coherent programs of reasonable quality (even if not all the components were well integrated), making the demonstration a "fair test" of the Jobs-Plus model (see Table 1.1 in Chapter 1). Although the program was voluntary, large numbers of residents decided to participate actively, and, by a variety of measures, Jobs-Plus "touched" many other residents as well.

This chapter recounts the sites' major strategies, difficulties, and accomplishments in implementing Jobs-Plus, drawing heavily on earlier MDRC reports that have examined the program's operations in much greater depth.[1] By showing how Jobs-Plus operated in very different local settings and how residents responded to it, the chapter sets the stage for understanding the program's impacts on residents' employment, earnings, and welfare receipt.

[1]See, for example, Bloom, 2000; Gardenhire-Crooks, 2004; Kato, 2003a, 2003b, 2004; Kato and Riccio, 2001; Liebow, 2004; Miller and Riccio, 2002; and Riccio, 1999.

Launching Jobs-Plus

The participating housing authorities and their partners began operating some elements of Jobs-Plus in 1998. The program offices were located in converted housing units, community centers, or other facilities that provided a convenient place for program staff and residents to meet. It was universally accepted by the sites that, as a place-based initiative, Jobs-Plus must have a strong physical presence, which was essential in helping staff to feel like and be seen as a vital part of the community they were serving.

The program offices — which functioned in many respects like on-site "job centers" — opened their doors about a year after being selected for the demonstration. However, it took another two years or so (until late 2000, which was much longer than had been hoped) before Jobs-Plus could evolve into a mature intervention that reflected much of the designers' original vision, and getting there was a complicated journey.

One problem contributing to the long and difficult gestation period was the inevitable struggle involved in establishing new collaborative forms of decision-making. As explained in Chapter 1, responsibility for the detailed design of and oversight over the program in each site rested not with the local housing authority alone but with an interagency and resident partnership, or "collaborative." Each collaborative included representatives of the public housing authority, the welfare department, the workforce development agency, public housing residents, and other local organizations — particularly nonprofit social service and employment and training providers. In each collaborative, the local housing authority functioned as the "lead agency."

The sites struggled to build efficient and effective collaboratives. Although most began with aspirations of sharing decision-making responsibilities and building a sense of collective "ownership" over Jobs-Plus — goals embraced also by the demonstration's designers — these goals proved very difficult to achieve in practice. In fact, the collaboratives got bogged down for long periods of time as they sorted out how to make decisions and how the lines of authority and accountability should flow. Moreover, in some sites, tensions often flared between the residents and the representatives of the housing authority — fueled partly by preexisting adversarial relationships — as they struggled to define the boundaries between resident empowerment and housing authority control. In addition, managing the collaboratives typically fell to the Jobs-Plus project directors, and this competed with the time that they needed to spend on program activities. Although it is difficult to imagine that Jobs-Plus could have operated well without some form of collaboration among the housing authority, other local agencies, and residents, it is also fair to say that probably none of the partners would go about the task of collaboration in exactly the same way again, for they themselves were frustrated by the pace of progress in getting a fully functioning Jobs-Plus program designed and implemented. Yet, despite these problems,

the collaboratives in most sites continued to function — even if in modified form — as active, cooperating entities through to the end of the demonstration.[2]

Another source of complication and delay in launching Jobs-Plus was the fact that the housing authorities and their partners had to build a new program from "scratch" at each participating development. This meant solving fundamental problems of infrastructure facing any new program, such as designing and filling new staff positions and arranging for space in which to operate the program. In addition, each collaborative had to design and implement its own package of job search, education, training, and support services, along with the program's other two components, financial work incentives and community supports for work. (The choices they made are described in a later section.) Although MDRC provided technical assistance to help the sites make their design decisions, the expectation was that specific programmatic strategies would be designed locally rather than imposed centrally by MDRC or the demonstration's sponsors. Finding the right balance between a "bottom-up" approach (led by the sites) and "top-down" approach (led by MDRC and the demonstration's sponsors) proved difficult, however. In some sites, progress was impeded by staff members' limited time and capacity for such design work and by the slow process of making program design choices through the collaborative. At the same time, some local staff complained that they were not being given enough concrete design direction by MDRC soon enough, particularly in developing strategies for work-focused case management and for implementing the community support for work component. The latter component presented a special challenge to implement because it was the least well formulated, least precise element of the Jobs-Plus model at the start of the demonstration.

The problems in launching Jobs-Plus were exacerbated by unanticipated delays in securing federal funding for the rent-based work incentives, which was beyond the control of the sites. Although the rent incentives had been widely expected to galvanize residents' support for and involvement in Jobs-Plus, the incentives had to be approved by the U.S. Department of Housing and Urban Development (HUD), which would provide the funding needed to cover potential losses in rent revenues that the local housing authority might incur by permitting employed households that participated in Jobs-Plus's rent incentives program to keep more of their earnings. However, issues arose between HUD and the Congressional committee that oversees HUD's total departmental budget over how to cover the potential losses in rent revenues to local housing authorities. After many months of negotiations, the funding problem was solved in the spring of 2000. But, in the meantime, the long delay in implementing the rent incentives fueled widespread disappointment and cynicism among residents — and staff — and threatened to

[2]For a detailed study of the experiences of the Jobs-Plus collaboratives, see Kato and Riccio (2001).

undermine Jobs-Plus's credibility among the residents who had been eagerly anticipating rent incentives as a tangible benefit of participating in the program.[3]

In St. Paul, Jobs-Plus had begun to offer the rent incentives at the end of 1998, after receiving HUD's initial approval for its plan. Impressively, in an effort to salvage the program's fledgling reputation, the housing authority made good on its rent incentives promise to residents even after HUD temporarily suspended approval, and it absorbed the costs of the rent reductions directly for the first year. Across all the sites, the rent incentives did not become available with full federal funding until mid to late 2000. By then, however, with guidance from MDRC and HUD, the sites had crafted a diverse and innovative set of policies for countering what were widely believed to be work-depressing effects of traditional public housing rent rules.

Jobs-Plus thus did not begin at any of the demonstration sites as a fully formed program with the capacity to provide all three of the model's components to the residents. As illustrated by Figure 3.1, when Jobs-Plus opened its doors in 1998, the programs began enrolling residents and offering them some employment-related services, such as job search assistance and help in entering education and training classes. The rent-based financial work incentives came on-line next. The community support for work component was generally the last piece of the Jobs-Plus model to be launched in a formal, structured way. (Although some sites, such as Dayton, began this component relatively early, it did not fully take shape anywhere until later in the demonstration.)

In retrospect, this "staged" implementation, although not planned, may have had a positive side to it. Because Jobs-Plus is a complex model for which there was no precedent to guide the sites in adapting it to their local circumstances, trying to operationalize all components simultaneously may have added a significant extra burden to an already-difficult startup process.

Because of the slow implementation process and many startup difficulties, the years 1998 and 1999 have been defined for the purposes of the evaluation as a transitional, or "rollout," period for Jobs-Plus. Consequently, as explained in Chapter 4, the program's impacts on employment and earnings after that transitional period (that is, during the years 2000 to 2003) are considered a better estimate of the potential of Jobs-Plus than its effects during the earlier years.

Variation in the Sites' Efforts to Operate a Quality Program

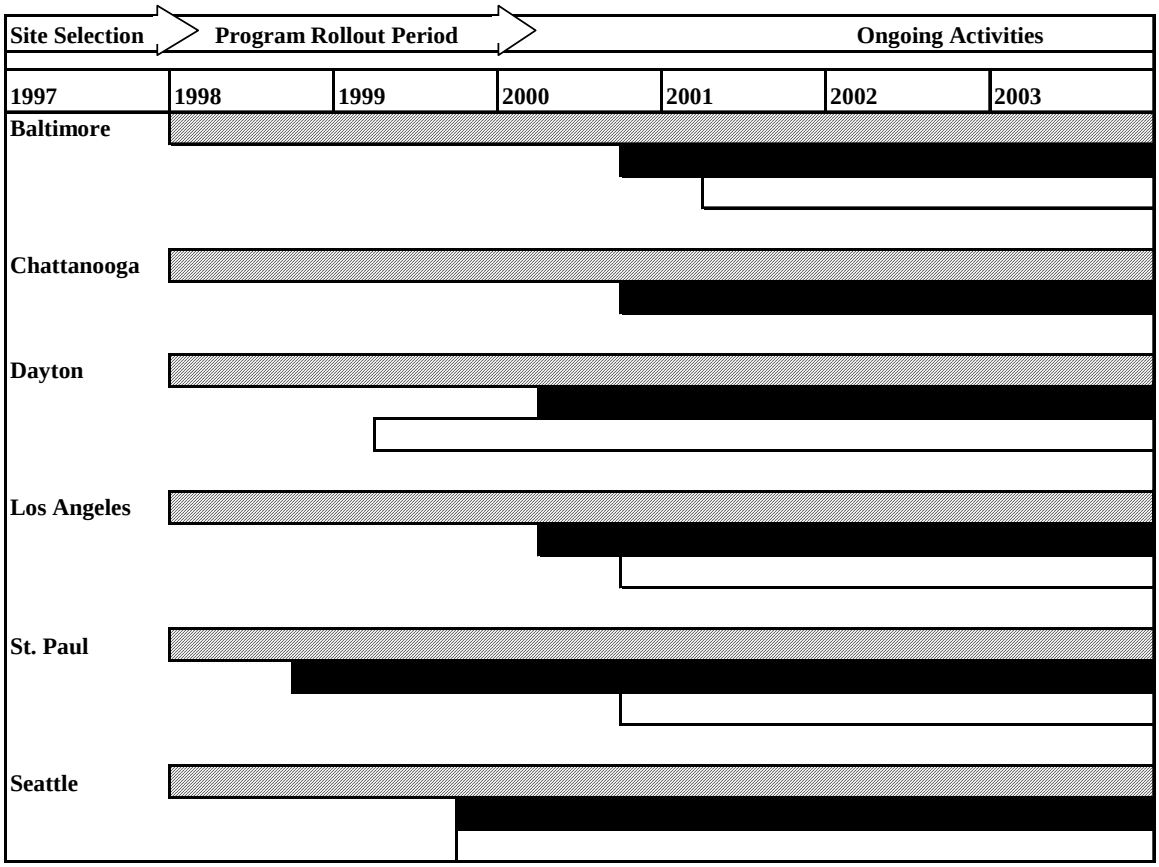
Building and sustaining a viable Jobs-Plus program was a challenge for all the sites. However, the particular difficulties that they encountered were not the same everywhere, and

[3]Kato and Riccio, 2001.

The Jobs-Plus Demonstration

Figure 3.1

The Jobs-Plus Implementation Time Line



Refers to the availability of the **employment-related services** component at each site, beginning with the year when the local Jobs-Plus program opened an office and began assisting residents. Chattanooga scaled back these services in 2002.

Refers to the availability of the **financial (rent) incentives** component at each site, beginning with the year when Jobs-Plus could begin enrolling households into the incentives program.

Refers to the availability of the **community support for work** component at each site, defined in this figure as the establishment of a formal cadre of volunteer resident outreach workers. Chattanooga had not fully implemented this component. Seattle included a range of other community-building activities under this component.

NOTES: "Program Rollout Period" refers to the demonstration time period during which the sites had not implemented all of the Jobs-Plus components and were still developing the program flow and building the program staff.

"Ongoing Activities" refers to the demonstration time period during which the full complement of Jobs-Plus components was generally in place across the sites (with the exception of Chattanooga). However, activities began to wind down at several sites around mid-2003.

they did not all operate programs of similar quality. Table 3.1 illustrates this variation by highlighting the key efforts, setbacks, and achievements at each site as it struggled to make the Jobs-Plus vision a reality on the ground.

Personnel and Procurement Issues

The Jobs-Plus programs typically included the following staff positions. A project director managed the program's daily operations. Case managers or job counselors guided and monitored residents' efforts to prepare for, seek, and retain jobs and also connected residents to relevant on-site or off-site services. Job developers built program links with employers and identified job openings and arranged interviews for residents. Resident liaisons led efforts to tell residents about Jobs-Plus and get them involved in the program. These staff positions were filled by employees of the housing authority and employees from collaborating agencies (for example, the welfare office or other education, training, or social service providers) who were colocated at the Jobs-Plus office. In some sites, residents were also hired for regular staff positions.

In some cases, filling these positions with appropriate staff and in a timely way became problematic, in part because of the slow and cumbersome personnel and procurement regulations of the local housing authorities. For example, in Los Angeles during the first few years of the demonstration, chronic turnover of the Jobs-Plus project director and staff vacancies hampered the ability of the site to develop a smoothly functioning program, raising serious questions at the time about its continued viability. However, steps were taken to address these problems, and — with the sustained support of senior housing authority officials and development-level housing management staff — these efforts led to an impressive revival of the program, setting it on a sound operational footing by 2000. In a number of sites, program operations were hindered early on by other housing authority regulations. In particular, procurement rules significantly delayed purchasing and installing essential equipment, such as an automated management information system (MIS) and the computers needed to enroll, assess, and track clients.

In most sites, key program positions were eventually filled with competent staff, many of whom stayed with the program until the end of the demonstration. Personnel problems were most enduring in Chattanooga. Some of the difficulties encountered there arose from the collaborative's unusually strong commitment to the concept of a "resident-driven" Jobs-Plus program. While admirable, this vision led the collaborative to assign to key staff positions residents who were not fully prepared or trained for the roles they had to play in a complicated programmatic intervention. This contributed to the relatively weak employment intervention that emerged during the program's initial period.

Table 3.1

Highlights of the Sites' Experiences in Operating Jobs-Plus

Site	Operational Highlights
Baltimore *Gilmor Homes*	• Made a promising start with a full complement of staff and good relationships with an extensive network of local service agencies. Distinctive in its close coordination with a special on-site health office early on. • Jobs-Plus had peaked by the end of 2000. Reductions in funding following expiration of key grants starting in 2001 resulted in steady loss of staff, including case managers, colocated welfare caseworker, and job developer. Retrenchment of workforce services in local Sandtown-Winchester neighborhood eroded capacity of referral network to offer employment services to Jobs-Plus participants. On-site health office closed in 2002. • Rent incentives available in November 2000 but poorly administered by housing authority.
Chattanooga *Harriet Tubman Homes*	• Until 2000, Jobs-Plus foundered. Program was partially staffed by residents unprepared for their roles and given inadequate oversight by senior housing officials. Rent incentives were implemented in November 2000. • Program was reconstituted between June 2000 and June 2002 with improved staffing, employment counseling, service referrals, and management. Overall, however, progress in strengthening program quality remained limited. Community support for work component was never fully implemented. • Housing authority remained enthusiastic and cooperative in implementing the rent incentives. • Overall, housing authority gave low priority to Jobs-Plus after a change in housing authority leadership. Its focus on privatizing its property management and resident services operations made it unlikely that the agency could oversee Jobs-Plus adequately. In the summer of 2002, the housing authority and national demonstration partners agreed to continue a scaled-down, financial-incentives-only version of the program (although provision of some on-site services continued informally).
Dayton *DeSoto Bass Courts*	• Sankofa (a nonprofit agency that was formerly the housing authority's Resident Services division) administered Jobs-Plus and provided stable and capable leadership and staff. • Enduring high-level support in securing funding and program services of the housing authority and other collaborative partners, including Montgomery County's multiservice "one-stop" job center. • Program offered extensive outreach, short-term training, job readiness and search, intensive case management, colocated welfare caseworker, and on-line access to local one-stop's employment database. First site to recruit residents for community support for work component (*building captains*). • Rent incentives were implemented in May 2000 and actively marketed by the housing management office as well as Jobs-Plus.

(continued)

Table 3.1 (continued)

Site	Operational Highlights
Los Angeles *William Mead Homes*	• Jobs-Plus was reconstituted in 2001 after a slow buildup due to housing authority-related staffing gaps, leadership turnover, and equipment needs. Became strong program that provided on-site job search, GED classes for Spanish speakers, and training, with intensive outreach and case management as well as on-site welfare-to-work caseworker and job developer from other public agencies. • Rent incentives were implemented in June 2000 with strong support from and active promotion by housing management staff. • Program had strong community support for work component. Beginning in November 2000, residents were hired and trained as *community coaches* to help Jobs-Plus publicize activities and job opportunities and recruit participants; played leading role in bringing basic education classes on-site.
St. Paul *Mt. Airy Homes*	• Program had to address special language- and immigrant-related barriers to outreach, service delivery, and employment. • Offered on-site job counseling, job clubs, and case management, some customized short-term training classes, U.S. citizenship classes, and ESL and GED instruction. Hmong Women's Support Group assisted with mental health and cultural issues. Head Start and after-school and summer programs were available for children and youth. Education and training were offered through referrals to local schools and agencies. Had consistent, professional staffing and colocation of staff from partner agencies. • First site to implement rent incentives, beginning in November 1998, using housing authority funds. Strong management office support in recruiting, orienting, and enrolling households for Jobs-Plus as well as administering rent incentives. • Residents volunteering as *community outreach workers* who spoke languages of ethnic groups at Mt. Airy provided important assistance in publicizing Jobs-Plus activities and job opportunities.

(continued)

Table 3.1 (continued)

Site	Operational Highlights
Seattle *Rainier Vista Garden Community*	• Program had strong and stable staff; built solid relationships with the development's highly ethnically diverse population, who collectively spoke 22 languages. Provided on-site job counseling and case management and ESL and financial management classes, in partnership with Refugee Women's Alliance. Off-site referrals for education, training, and support services. • Housing authority received HOPE VI grant to tear down and rebuild the Jobs-Plus development, in stages. Unique context of HOPE VI led to site's formal withdrawal from national demonstration at the end of 1999. However, Jobs-Plus continued to operate with a broader target group and expanded mission that included helping residents deal with issues related to relocation. • Resident relocation process was under way from 2000 to mid-2002 as part of the first stage of redevelopment. • Rent incentives were implemented in September 1999 with strong housing authority support. However, enrollment in this component closed in April 2001 with phasing in of HOPE VI. • With declining numbers of residents at Rainier Vista, intensity of services on-site declined as staff were assigned additional responsibilities to provide services to residents of other developments. Few services were provided to residents once they relocated out of public housing. • Residents who spoke languages of ethnic groups at Rainier Vista were hired and trained as *resident outreach and orientation specialists* to publicize Jobs-Plus services and job opportunities and to recruit participants.

SOURCES: MDRC field research and program documents.

NOTES: "GED" refers to General Educational Development; "ESL" refers to English as a Second Language.

Housing Authority Support

In general, strong support for Jobs-Plus from senior housing authority officials and collaborative partners was impressive, but it was not sustained everywhere over the course of the demonstration. In four sites — Dayton, Los Angeles, St. Paul, and Seattle — that support was strong and unwavering. In fact, because of that commitment, these same four sites continued operating a version of Jobs-Plus after the end of the demonstration (although without the special rent incentives).[4] This is a testament to their belief in the program's potential to make an important difference in the lives of residents.

The picture was much different in Chattanooga and Baltimore. In Chattanooga, the executive director of the housing authority at the outset of the demonstration was an avid supporter of Jobs-Plus. However, those who succeeded him had limited interest in the demonstration and were increasingly preoccupied by other housing authority initiatives — most importantly, a plan to transfer housing management responsibilities to a private company. Consequently, mounting managerial and staffing problems at Jobs-Plus in Chattanooga were not adequately addressed, and residents' confidence and participation in the program declined precipitously, bringing program activity in Chattanooga to a virtual standstill during the first half of 2000. Over the course of the next year, with extensive technical assistance provided by MDRC, efforts were made to rebuild and strengthen the Chattanooga program. New staff were hired; roles were redefined; and a new management structure was devised. Steps were also taken to build up the community support for work component, which, up to that point, had never really gotten off the ground. Despite these efforts, further progress was limited, and a decision was finally reached between MDRC, the Jobs-Plus collaborative, and the demonstration's main funders to restructure the program in the spring of 2002 to focus primarily on financial incentives.[5] Still, some employment-related assistance did continue, including referrals of residents to partner agencies for help with job placement, education, and training.

In Baltimore, although Jobs-Plus enjoyed continued support by some housing authority administrators, turnover among the top officials, in conjunction with other pressing issues confronting the housing authority, led those officials to give much less attention to Jobs-Plus than it needed.[6] On matters where their help was particularly critical — such as the implementation of

[4]For example, the housing authority in Dayton received funding from HUD under the Resident Opportunities for Self-Sufficiency (ROSS) grant program to extend aspects of Jobs-Plus services to all developments. This funding lasts through 2006.

[5]For a more detailed account of the evolution and transition of the Chattanooga program, see Bowie (2003).

[6]Some of the same problems, including an audit by HUD, that contributed to the housing authority's delay in implementing the provisions of the 1998 federal housing legislation (QHWRA), which did not occur until 2003, diverted attention from Jobs-Plus.

the rent-based financial work incentives (which depended on the cooperation of the housing management office) — efforts fell short, as explained later in this chapter.

Crime and Safety Issues

Serious problems with safety and crime undercut program operations at a few sites. Indeed, over the course of the demonstration, Los Angeles had to contend with a number of gang-related problems and two fire-bombings, which damaged a housing authority office and van; Los Angeles and Baltimore experienced a number of shootings at the Jobs-Plus developments (some fatal); and both developments, along with Dayton, continued to struggle with a very active drug trade (which was most pronounced in Baltimore). These problems were generally less severe in St. Paul and Seattle.

Other Challenges

The sites also had to contend with a variety of other types of challenges. For example, in the multiethnic developments (Los Angeles, St. Paul, and Seattle), the diversity of residents' cultural backgrounds and languages required efforts to provide assistance appropriate to their distinctive needs and circumstances.[7] High resident turnover in Baltimore, Chattanooga, and Dayton (which is discussed below) required Jobs-Plus continuously to direct staff and resources toward outreach efforts to inform incoming residents about the program. And, like many other programs, Jobs-Plus faced the difficult challenge of having to address the complex needs of some residents who struggled with substance abuse and various family crises.

The Baltimore Jobs-Plus program, in addition, confronted a severe and unanticipated retrenchment in funding and service access that ultimately compromised the quality of its program. Although it began the demonstration with substantial funding, with a full and dedicated staff, and with strong ties to the extensive network of service providers in the Sandtown-Winchester neighborhood where the Jobs-Plus housing development (Gilmor Homes) was located, many of these advantages began to dissipate just as the program was poised to enter a steady-state period of operations. Starting around 2000, funding losses, staff attrition, and reductions in services offered by partner agencies in Sandtown-Winchester led to a steady decline in the operational capacity and quality of Jobs-Plus. The tragic death of the Jobs-Plus office manager at the end of 2001 — which had a devastating effect on staff morale — compounded these problems. Indeed, just as Los Angeles and other sites were ramping up their Jobs-Plus programs, the Baltimore program, which had made a promising start, had already peaked.[8]

---

[7]Kato, 2002.

[8]For example, in 2001, the Enterprise Foundation, a key local funder, began to phase out its funding of workforce initiatives in Sandtown-Winchester. Moreover, the impressive network of about 20 agencies provid-

(continued)

HOPE VI Relocation and Redevelopment in Seattle

The Jobs-Plus program in Seattle operated in very special circumstances. In addition to having the most ethnically diverse tenant population, which collectively spoke 22 different languages, it had to adapt to the advent of a HOPE VI redevelopment plan. As explained in Chapter 1, this plan introduced a confounding contextual factor that was unique among the Jobs-Plus sites. The plan called for the housing development in which Jobs-Plus was located (Rainier Vista) to be demolished and replaced by a larger complex that would house a population with a broader mix of incomes, including subsidized and unsubsidized tenants. Demolition would proceed in stages, with one-half of the development being torn down and rebuilt before the focus shifted to the remainder of the property. The process of relocating residents to the other side of the development, other public housing developments, or private units (with Section 8 subsidies) began in 2000 and was completed by mid-2002, with the first phase of demolition beginning later that year.[9]

Because the HOPE VI plan called for completely rebuilding the physical space and social community in which Jobs-Plus was located — and in ways that were not comparable to any in the other Jobs-Plus sites — Seattle was withdrawn from the national demonstration, and MDRC's technical assistance was terminated at the end of 1999. Nonetheless, the housing authority continued to operate Jobs-Plus in modified form as the centerpiece of its efforts to provide residents with continuing self-sufficiency services throughout the redevelopment process. In doing so, it broadened the target group to include all residents of the development, not just the working-age, nondisabled residents originally targeted by Jobs-Plus. It also added relocation-related assistance to its menu of services. However, new enrollments in the rent incentives component were ended by March 2001,[10] and, contrary to what had been intended, little service was offered to residents who were relocated to off-site housing. In general, the scope and intensity of employment assistance offered at Rainier Vista for the remaining residents lessened after the first stage of relocation was

---

ing employment-related services in Sandtown-Winchester — a network on which Jobs-Plus depended for serving its residents through referral — dwindled to about three providers by 2003. Visions for Health Consortium, a collaboration of health care agencies that also provided on-site medical screenings and referrals for residents of the Jobs-Plus development, was closed in 2002. Jobs-Plus itself saw its staff shrink after the expiration of two important HUD grants without new resources to replace them: an Economic Development and Supportive Services grant and a Drug Elimination grant. An added problem in Baltimore was that the resident council, which had a strong but elderly leader who passed away early in the demonstration, became largely nonfunctional as the demonstration progressed, leaving Jobs-Plus without the benefit of a stable formal resident leadership organization on which it could draw to enhance its outreach efforts.

[9]New construction of that part of the development was expected to continue into late 2005, at which point relocation, demolition, and reconstruction activities would begin on the other side of the development.

[10]Thus, members of the 1998 cohort who had not worked or taken advantage of the rent incentives by then could not obtain them after that date. Those who had taken up the rent incentives could continue to receive them through the end of 2003.

completed.[11] MDRC continued to study the implementation and impacts of Jobs-Plus in Seattle, but (for funding reasons) the research agenda for this site was scaled back.

Cross-Site Comparison

In sum, three sites — Dayton, Los Angeles, and St. Paul — were able to contend best with the operational challenges they confronted, and Jobs-Plus owed much to the critical and sustained support it got from senior housing authority officials. Baltimore and Chattanooga had a more difficult time getting and keeping all the Jobs-Plus components in place. Finally, Seattle operated a strong program, especially during the first few years of the demonstration, but it had to contend with the special disruptions associated with the large-scale relocation of residents and reconstruction of the development.

Scope of Services, Incentives, and Supports for Work

Jobs-Plus's three components were intended to function as complementary ways of infusing public housing developments with a dramatic and unprecedented effort to promote work.[12] In time, the program became widely known in the participating developments as a place where residents could get help with their employment needs. The financial incentives were perhaps the most eagerly anticipated benefits of the new program. According to field research interviews, they were an important "hook" that grabbed residents' attention and got many of them to come forward. However, many residents also looked to the program's employment services component to help them find their way into work or into better jobs.

A Broad Set of Employment-Related Services with an Emphasis on Help Finding Jobs

A central thrust of Jobs-Plus at all sites was to help nonworking residents find work as quickly as possible — whether they were new to the labor force, detached from it for a long time, or only recently unemployed. The programs also aimed to help residents who were already working but who hoped to find better jobs. Assistance with job search was thus a core program feature everywhere, and it was typically provided on an individual basis by employment counselors with the aid of the job developers, who helped to identify employers needing workers in positions for which Jobs-Plus participants would be suitable. In several sites, the job developers also helped prepare residents for job interviews, sometimes escorting them to their appointments. Some pro-

[11] For a detailed account of the implementation of Jobs-Plus in the context of HOPE VI in Seattle, see Liebow et al. (2004).

[12] See Appendix Tables B.1 to B.6 for a site-by-site summary of the approaches to implementing the Jobs-Plus components.

grams supplemented these efforts by directly providing or referring residents to group-based job clubs, which taught job-hunting and interviewing techniques. Jobs-Plus also offered instruction (directly or through referral to other organizations) in "soft" employment skills, such as understanding employers' expectations and appropriate workplace behavior.

For residents interested in education and training, Jobs-Plus offered help locating and enrolling in suitable programs. In some cases, Jobs-Plus offered short-term basic education and certain skills training classes (for example, certified nurse assistant training) on-site at the developments. However, reflecting residents' own interest in quick employment or new jobs, education and training activities were emphasized considerably less than direct job placement assistance.

Jobs-Plus also offered a broad range of support services that could aid residents in finding and keeping jobs. These included assistance arranging and paying for child care and transportation and referrals to appropriate agencies for substance abuse treatment, counseling for family problems, and health services. In keeping with a broad vision of helping residents improve the quality of their lives, the programs also provided or facilitated access to a variety of life-skills classes, financial management workshops, driver's education, help with immigration-related problems in those developments with larger immigrant populations, help preparing tax returns and applications for the Earned Income Tax Credit (EITC), and "paperwork nights" to complete applications or documentation required by a variety of government programs.

Flat Rents and Other Rent Reforms to Help Make Work Pay

To encourage residents to take and keep the relatively low-paying jobs that they were likely to qualify for — as well as to encourage many of them to work more or to seek higher-paying jobs — Jobs-Plus included new rent policies that limited how much employed residents' rent increased when their incomes grew.[13] Under traditional rent policies, residents paid 30 percent of their household's countable income in rent, up to a maximum amount tied to the cost of operating their public housing units. Under Jobs-Plus, residents paid less of their overall income in rent, and the savings could be substantial.[14]

Jobs-Plus rent incentives incorporated two main strategies, with different sites taking one or the other approach: (1) flat rents, which specify a fixed rental payment regardless of

[13]Miller and Riccio (2002) provide a detailed description of the incentives packages offered by each site. Gardenhire-Crooks (2004) explores the sites' experiences in implementing these plans and residents' responses to them.

[14]Actual rent savings that a working family would enjoy under Jobs-Plus relative to traditional rent policies varied according to a number of factors. For example, in Dayton, a single parent with two children working full time at $6 per hour could see her rent drop by 50 percent or more relative to what she would pay under traditional rent rules, for a savings of nearly $1,700 to $2,300 per year (depending on the stage of the Jobs-Plus rent plan). If the same tenant earned $10 per hour, her rent savings under Jobs-Plus would amount to $3,600 to $4,200 per year.

earnings but with staged increases in the flat rate over time, and (2) reductions in the percentage of income paid in rent, to a rate that was lower than the traditional 30 percent. As further inducements to encourage residents to remain steadily employed, several sites allowed residents to earn credits toward a free month's rent by remaining employed for a specified period of time or to have some of their rent payments diverted into a special savings account that they could later redeem if they worked continuously.

In addition to these rent-based work incentives, the sites were expected to educate residents about the other financial work supports that are more generally available to low-income working families and individuals through a variety of government-funded programs (such as earnings disregards available under Temporary Assistance for Needy Families [TANF], child care subsidies, the EITC, and the Child Tax Credit). Although Jobs-Plus programs did make some attempts to advertise the EITC, they typically gave little attention to other financial work supports and, instead, concentrated most of their incentives marketing efforts on the rent incentives. They also gave little systematic attention to educating residents on how certain job choices — for example, a job offering a particular wage rate or number of hours of work per week — would affect their net family income, after taking into consideration work-related costs and the potential loss or reduction of other benefits, such as TANF or food stamps and the potential gain from the EITC. Nor did the staff regularly try to connect this information to the career guidance that they offered residents or to their recommendations concerning education or training options.[15] In this sense, the services and incentives components of Jobs-Plus were not as well integrated as they might have been.

Resident-to-Resident Outreach: The Centerpiece of Community Support for Work

The third main component of Jobs-Plus was an explicit attempt to increase "community support for work." Because this concept was imprecise and meant different things to different people, it was no surprise that sites generally chose to implement the other two program components first.[16]

The original conception of community support for work envisioned a wide range of efforts to infuse residents' social networks with information, advice, and mutual support that would promote and facilitate work.[17] Part of this involved developing a cadre of residents who would function, in essence, as extension agents of the Jobs-Plus program through their day-to-

[15]See Gardenhire-Crooks, 2004.

[16]For a more detailed examination of the implementation of this component, see Kato (2004).

[17]Riccio, 1999. This vision of building social capital in ways that focused on work was inspired by studies that underscore the role of social networks in the job-finding process. See, for example, Briggs, 1998; and Jargowsky, 1997.

day interactions with their neighbors in the development, communicating with them about work and training opportunities. Other ideas involved helping residents establish cooperative child care arrangements; building relationships between residents and professional working people living outside public housing who could become mentors or additional sources of information about good job opportunities; and building ties with local churches and other institutions in the larger community that might support the program's work goals in a variety of ways. Also envisioned were changes in certain institutional practices that could support work, such as extending the hours that the housing management offices and the Jobs-Plus offices remained open so that employed residents need not miss work in order to attend to issues pertaining to their lease and rent or to get career counseling or other assistance from Jobs-Plus staff.

Although many of these kinds of activities were tried at some points during the demonstration (even within the year of program startup), most did not take root. What did take root — and grow — was the idea of using a small group of residents as extension agents of Jobs-Plus, and this became the centerpiece of the sites' community support for work component. With the exception of Chattanooga, all of the Jobs-Plus programs established a network of "community coaches" — residents who, on a "neighbor-to-neighbor" basis and working in partnership with the Jobs-Plus staff, disseminated information about job openings and about the opportunity to get employment help from Jobs-Plus.[18] This often involved going door-to-door to distribute flyers and to talk with other residents about specific job openings, the rent incentives, education and training opportunities, and other services and activities available through the program. The coaches were paid a small stipend for their volunteer time, and they were overseen by the Jobs-Plus staff. The community coaches would also answer residents' questions about Jobs-Plus and relay residents' concerns to program staff.

As one way to focus the community coaches' efforts specifically on employment-related activities, the sites were encouraged to adopt a new job-related outreach "campaign" each month — for example, on promoting rent incentives, on-site employer recruitments, or information about the EITC. This work supplemented other efforts at the developments, including communitywide events such as job fairs, health fairs, and holiday and back-to-school events that all sites sponsored as a way of fostering a stronger sense of community among residents. At the Los Angeles development — where this component was strongest — the community coaches spearheaded efforts to organize basic education classes at the development, and they recruited other residents to participate in those classes and provided child care for those who needed it while the classes were in session.

[18]The residents who were recruited and trained for this purpose were known by different titles at each site: court captains (Baltimore), building captains (Dayton), community coaches (Los Angeles), community outreach workers (St. Paul), and resident outreach and orientation specialists (Seattle).

Sometimes the community coaches approached their role in a fairly perfunctory manner, simply dropping off flyers without engaging other residents. Ensuring that the coaches were a vigorous, promotional arm of the program was thus a constant challenge. It required careful selection and training of the individuals who would play this role and ongoing direction and oversight from the Jobs-Plus staff. In general, according to field research interviews with staff and residents, the community support for work component was a helpful strategy for "spreading the word" about Jobs-Plus. Having information come not just from professionals but from neighbors as well may have enhanced the legitimacy of the program in the eyes of the broader tenant community that often had reasons to be suspicious of new programs.

Informal, On-Site Assistance: A Core Feature of Jobs-Plus

Jobs-Plus's case managers, job developers, and administrative staff coordinated outreach activities, conducted intake and assessment, and offered job search assistance and case management services at their offices located at the housing developments. However, being on-site also created many informal opportunities for staff to leave their offices and go out to the homes, courtyards, and neighborhood corners and shops where residents were likely to be found — to get to know them, hear directly about their concerns and needs, and assist them in ad hoc, individualized ways. "We discovered [that] we needed to do training services in nontraditional ways," said a staff member in Seattle. "We weren't taking advantage of our proximity if we didn't cross lines, going to homes, babysitting, visiting families." For instance, home visits during or after regular program hours permitted the staff to learn about people's lives and "see things happening in the family." Such visits helped break down cultural barriers with foreign-born residents and encouraged those who suffered from serious family or mental health issues to consider referrals for professional help. Indeed, staff members emphasized the necessity of being "opportunistic" in taking advantage of every interaction in the development to assist residents and build trust and credibility. In Dayton, a staff member talked about going outside for a cigarette as an occasion to grab residents as they went to and from work: "If I see somebody, if I'm hanging out in the back . . . I holler." Similarly, a staff member in Baltimore observed that, in meeting residents in the courtyards, "We can't get from here to there without someone [approaching us], and you have to deal. You have to satisfy that person's needs right where they are, or you say, 'Come on and walk me down to the office' or 'Walk me to my car.' And they will do that. We have some clients that will not come into the office."[19]

The Jobs-Plus programs also sponsored various activities for the entire development, often in partnership with existing resident-led organizations. Usually these events were held on weekends, and they included picnics, holiday celebrations, basketball tournaments, job fairs,

[19]Kato, 2003a, p. 44.

health fairs, and so on. These events became a popular way to inform residents about program services and opportunities for employment.

Collectively, these efforts helped staff develop a broad, holistic understanding of the needs and circumstances that could affect residents' employment — including family problems and supports, social networks, and neighborhood conditions — which expanded their notion of services for employment. For instance, staff members in St. Paul and Seattle saw that problems with health, children and teens, immigration status, and finances could undercut a resident's ability to secure and retain a job. Consequently, their notion of employment assistance included such efforts as accompanying residents to doctor's appointments or immigration hearings and helping them to buy furniture or translate letters and bills, which could build trust that could lead to better engagement with the program.

Residents' Participation in Jobs-Plus

Two Cohorts, Varying Experiences

All the efforts described in the foregoing section helped Jobs-Plus become widely known among residents as a place to get help with employment needs. But how many residents took advantage of what Jobs-Plus offered? To answer this question, measures of resident engagement in the program have been calculated using two overlapping samples of tenants: those residents of the Jobs-Plus developments who are part of the main impact analysis sample, referred to as the "1998 cohort," and those who are part of a supplementary impact sample, referred to as the "2000 cohort." The earlier cohort, as described in Chapter 2, is made up of all working-age, nondisabled residents aged 21 to 61 who were living in a Jobs-Plus development in 1998, the year when Jobs-Plus operations began in all sites. The experiences of this cohort thus reflect the behavior and outcomes of residents who had an opportunity to be involved with Jobs-Plus *from its earliest days*. However, the 1998 cohort also includes many residents who moved out of the Jobs-Plus developments before the crucial rent incentives component became available (in mid to late 2000 in most sites) and, in general, before the program reached a more mature stage of operations after the initial "rollout period."

Move-out rates in some developments were much higher than had been anticipated at the start of the demonstration. As Table 3.2 shows, nearly one-third (31 percent) of residents in the 1998 cohort for all Jobs-Plus developments combined had moved away within two years

The Jobs-Plus Demonstration

Table 3.2

Move-Out Rates for the 1998 Cohort of Residents of the Jobs-Plus Developments

Development	Percentage Moving Out Within: One Year	Two Years	Three Years
Baltimore	30	41	51
Chattanooga	26	36	52
Dayton	35	48	58
Los Angeles	9	17	22
St. Paul	14	27	38
Seattle	11	18	31
All developments combined	21	31	42

SOURCE: MDRC calculations using data from housing authority tenant (50058) records.

NOTES: The 1998 cohort includes all residents of each public housing development in October 1998 who were between 21 and 61 years old and not listed as disabled on public housing authority records.

The follow-up period for calculating the move-out rates began in October 1998.

(that is, before October 2000), and 42 percent had done so within three years (before October 2001).[20] Move-out rates were highest in Baltimore, Chattanooga, and Dayton, where public housing functioned as transitional housing or housing of last resort for a large proportion of families. In those developments, over half the 1998 cohort (from 51 percent to 58 percent) had moved out within three years, with a quarter or more leaving as early as within one year. As mentioned in Chapter 2, softer housing markets in the Baltimore and Dayton areas undoubtedly contributed to these higher move-out rates. In addition, concerns over safety and drug use in the surrounding community and at the three developments were important factors propelling some residents to leave if they could.[21] Finally, the availability of extra Section 8 rent vouchers aimed at TANF leavers who were entering work may have contributed to the high move-out rates in Baltimore and Chattanooga.[22] At the other three developments (Los Angeles, St. Paul, and Seat-

[20]For a comparison of these move-out rates and the rates for residents of the comparison developments, see Appendix Table B.7.

[21]A special analysis of residential mobility among residents of the Jobs-Plus developments found that being a victim of crime or threatening behavior was correlated with the likelihood of subsequently moving (see Verma, 2003).

[22]Kato, 2003b.

tle), move-out rates were considerably lower though hardly trivial, with 22 percent to 38 percent of residents leaving within three years.[23]

The combination of a slow implementation of Jobs-Plus and, in some sites, a high move-out rate means that many residents in the 1998 cohort were never exposed to a full and mature Jobs-Plus program, making it harder, of course, for Jobs-Plus to affect their earnings and employment (see Chapter 4). Moreover, participation measures based on that cohort's experiences may underestimate what the response to Jobs-Plus would have been when it operated in a way that was closer to its designers' original vision. The 2000 cohort helps to correct for this limitation. It includes residents living in the Jobs-Plus developments in 2000 — about the time that fully formed Jobs-Plus programs were finally in place.[24]

Substantial Engagement That Varied Over Time and by Location

Records kept by Jobs-Plus offer one source of insight into residents' uses of the program's services and incentives and how those patterns varied across sites and cohorts.[25] Using those data, Table 3.3 presents findings on two broad measures:

- The Jobs-Plus *rent incentives take-up rate*, which refers to the percentage of all targeted residents (not just working residents) who belonged to households receiving Jobs-Plus rent incentives.[26]

- The Jobs-Plus *attachment rate*, which refers to the percentage of all targeted residents who were personally enrolled in Jobs-Plus or, even if not enrolled, who belonged to households receiving Jobs-Plus rent incentives. (Being "enrolled" means that a resident signed up for Jobs-Plus, and it is a reasonable indicator of having received at least some case management or other assis-

[23]In Seattle, the move-out rate jumped by 21 percentage points between the third and fourth years (Appendix Table B.7) as relocations under HOPE VI began to increase.

[24]The 2000 cohort includes residents from the 1998 cohort who did not move away and any new tenants who moved into the development after 1998 and were living there in 2000.

[25]Enrollment data in all sites except Seattle were collected from each Jobs-Plus program through an on-site review of the case files that were maintained on each program participant; in Seattle, the data came from electronic records kept by the program (see Kato, 2003a). Data on rent incentives were obtained through payment spreadsheets maintained by the programs and provided to MDRC (see Gardenhire-Crooks, 2004). Data collection for the enrollment indicator covers the period from the start of Jobs-Plus in early 1998 (the exact startup date varied by site) through June 2001. Data on the use of financial rent incentives cover the period ending in December 2002. On average, the length of participation follow-up was shorter for residents of the 2000 cohort than it was for the 1998 cohort.

[26]A household needed to have at least one working member in order to be eligible for the rent incentives.

The Jobs-Plus Demonstration

Table 3.3

Selected Measures of Jobs-Plus Participation for Targeted Residents in the 1998 and 2000 Cohorts

Measure	Baltimore	Chattanooga	Dayton	Los Angeles	St. Paul	Seattle	All Developments Combined
Rent incentives receipt							
Lived in a household that received rent incentives by December 2002 (%)							
1998 cohort	12	28	30	61	67	42	40
2000 cohort	19	38	60	72	77	50	53
Attachment rate							
Enrolled in Jobs-Plus by June 2001 or received rent incentives by December 2002 (%)							
1998 cohort	50	50	63	66	85	58	62
2000 cohort	61	66	96	76	88	67	76
Sample size							
1998 cohort	378	340	425	524	316	425	2,408
2000 cohort	340	373	321	598	319	398	2,349

SOURCES: MDRC calculations using data from Jobs-Plus case files, Jobs-Plus rent incentives records, and housing authority tenant (50058) records.

NOTE: In the average for all developments combined, the results for each housing development are weighted equally.

tance.)[27] The attachment rate is thus a fairly inclusive measure of formal involvement or connection to Jobs-Plus, because it counts as "attached" people who met either one of these two conditions.

The results in Table 3.3 show that, for all developments combined, about 40 percent of all targeted residents in the 1998 cohort had lived in households receiving the Jobs-Plus rent incentives at any time within the subsequent four years (that is, by December 2002). As expected, because many of these residents had moved before the incentives became available, the rates were higher for the 2000 cohort, climbing by 13 percentage points, to 53 percent.[28]

Differences across sites were substantial. Baltimore ranked distinctively low on this measure, with 12 percent of residents in the 1998 cohort living in a household that received the incentives. This rate increased to only 19 percent for Baltimore's 2000 cohort. Chattanooga had the second-lowest rates (28 percent and 38 percent, respectively, for the two cohorts). For the 2000 cohort, only Baltimore and Chattanooga had take-up rates under 50 percent. At the other extreme, a substantial majority of residents in Los Angeles and St. Paul made use of rent incentives (72 percent and 77 percent, respectively, of the 2000 cohort).

The differences in participation rates between the earlier and the later cohorts were most pronounced in Dayton. Here, the high move-out rate in combination with the late availability of the incentives limited their use by the 1998 cohort. However, with an aggressive marketing effort, the program effectively reached many members of the 2000 cohort — residents who were living in the development when the rent incentives became available. For example, Table 3.3 shows that while only 30 percent of Dayton's 1998 cohort had used the incentives, the rate for its 2000 cohort reached 60 percent — twice as high. The increase was less dramatic in the other sites.

It might be thought that developments where the take-up rates were lower were ones that had a smaller proportion of households with an employed member — a key eligibility requirement to receive the rent incentives. But this was not the case. In fact, residents' employment rates did not differ widely across the sites. Moreover, when rates of incentives use were calculated only for targeted households in the 2000 cohort who were eligible for the rent incen-

[27]When residents showed up at the Jobs-Plus office to enroll, staff often wanted to take advantage of their presence there to begin an immediate discussion about their circumstances and job interests and how the program could help them. After they were enrolled, residents could be provided with job search and job placement assistance, referred to education or training activities, or assisted through such support services as bus tickets and help in locating or paying for child care.

[28]For more detailed analyses of the use of rent incentives, see Gardenhire-Crooks (2004).

tives (because they had at least one member employed), Baltimore still ranked lowest (23 percent), while Los Angeles and St. Paul ranked highest (75 percent and 84 percent, respectively).[29]

It appears that the very low incentives take-up rate in Baltimore and the higher rates in other sites resulted mostly from differences in the quality of administration and efforts to market the incentives to residents. As one illustration, the housing manager in the Los Angeles Jobs-Plus development personally signed off on every annual income and rent review, which was required of all public housing residents. Noting when individuals were candidates for Jobs-Plus, he called them in to the housing management office to talk about the program and encouraged them to enroll, sometimes even personally escorting them to the Jobs-Plus office. In St. Paul, housing authority staff took the lead in promoting and signing residents up for the incentives and, as in Dayton and Seattle, worked in close partnership with Jobs-Plus staff for this purpose. In sharp contrast, the housing authority in Baltimore had made processing resident applications for Jobs-Plus rent incentives a lower priority, and residents who did sign up often had to wait months before the adjustments to their rental bill took effect. Sometimes, after they began paying a lower rent under the Jobs-Plus rules, the housing authority would mistakenly issue warning notices that they had not paid their full rent on time. Not surprisingly, these actions bred cynicism about Jobs-Plus among other residents. Overall, the Jobs-Plus programs that most aggressively promoted the use of the incentives and that built strong partnerships for this effort with the housing management office generated a better response to the offer.[30]

The attachment rate — a broader measure that reflects either enrollment in Jobs-Plus or the use of its rent incentives or both — offers another way to gauge residents' formal connection to the program. This indicator shows that, across all developments, a majority of residents (62 percent of the 1998 cohort and 76 percent of the 2000 cohort) had a connection to Jobs-Plus — a significant accomplishment.

An analysis of program case file records on Jobs-Plus enrollees from 1998 through 2000 shows the extent to which residents participated in different types of employment-related activities (see Appendix Table B.8).[31] Across the developments, enrollees sought assistance with job referrals and job search more than other activities. In general, education and training activities (such as Adult Basic Education [ABE], English as a Second Language [ESL], and

[29]The rates by site for households in the 2000 cohort with employed members were as follows: Baltimore, 23 percent; Dayton, 64 percent; Los Angeles, 75 percent; St. Paul, 84 percent; Seattle, 59 percent. The rates for similar households in the 1998 cohort were somewhat lower: Baltimore, 17 percent; Dayton 33 percent; Los Angeles, 67 percent; St. Paul, 73 percent; Seattle, 52 percent. Data limitations made it impossible to compute this measure for Chattanooga.

[30]Gardenhire-Crooks, 2004.

[31]The samples used for collecting these participation data on enrollees are too small to show a breakdown by type of activity for the 1998 or the 2000 cohort.

vocational training courses) were more commonly sought in Los Angeles and St. Paul than in the other sites.

The quantitative analysis of case file data looked only at recorded referrals to or participation in various employment-related activities and did not examine help in accessing such support services as child care or transportation assistance. Moreover, these data do not capture the common practice across the sites of staff offering work-related counseling or guidance when residents called or "dropped in" to the Jobs-Plus office to check in with staff, pick up bus tokens, or use the fax or copy machines. Qualitative data from staff interviews and case file narratives suggest that these informal encounters often led to an extensive conversation about child care issues, a troublesome coworker, or a difficult commute — in other words, they became opportunities for the program to offer substantive though unscheduled help with employment-related issues and barriers.

An alternative source of evidence on residents' involvement in Jobs-Plus comes from the cross-sectional 2003 follow-up survey of residents, which is discussed more fully near the end of this chapter. As part of this survey, a sample of heads of households living in the Jobs-Plus developments in 2003 was asked a series of questions to determine whether Jobs-Plus had ever helped those residents participate in specific employment-related activities or obtain needed social services or ancillary services (such as transportation payments, child care assistance, or payments for books, tools, uniforms, and so on). Across the five survey sites (Seattle is not included), 54 percent of respondents — a substantial proportion for a voluntary program — said that they had been assisted by Jobs-Plus in these ways. Notably, this estimate does not take into account still other residents who were working and using the Jobs-Plus rent incentives without receiving other forms of assistance.[32]

Taken together, the evidence from the program case file records, the resident survey, and the qualitative field research suggests that Jobs-Plus had indeed achieved considerable reach into the tenant population of the participating public housing developments. And it did so across developments that differed markedly in terms of crime and safety, residents' racial and ethnic backgrounds, residents' family structures, and other conditions. While the findings do not necessarily mean that the program intensively served most residents and cannot speak to the quality of the services provided,[33] they make clear that Jobs-Plus "touched" in some way —

[32]By site, the percentages of respondents who said that Jobs-Plus helped them in these ways were as follows: Baltimore, 45 percent; Chattanooga, 60 percent; Dayton, 53 percent; Los Angeles, 38 percent; St. Paul, 67 percent.

[33]Data on the duration of receipt of rent incentives indicate that many residents who took up this benefit used it for an extended period of time. For example, across the sites, 68 percent of the recipients used the incentives for at least a year, and 32 percent used them for at least two years (Gardenhire-Crooks, 2004). These rates would have been even higher if the incentives had been available sooner and if the data collected for this part of the analysis had extended beyond 2002.

through concrete services, rent incentives, and formal and informal counseling and support — a majority of the residents it aimed to help and that it did so to a considerably higher degree among residents of the 2000 cohort, who were still living in the developments when Jobs-Plus was reaching its stride.

Services and Incentives for Residents of the Comparison Developments

Jobs-Plus far exceeded in scope and intensity the kinds of housing-authority-sponsored self-sufficiency services normally available on-site to residents of the demonstration's comparison developments. At the same time, those residents were hardly an unserved group. Indeed, many of them — more than expected — received employment-related assistance of some kind. Part of this assistance came through housing authority programs, but much more of it was obtained through programs operating outside public housing. Residents also had access to some rent-based work incentives that were available authoritywide under the 1998 federal housing legislation (the Quality Housing and Work Responsibility Act, or QHWRA) and under earlier reforms.

Less Intensive On-Site Assistance and Outreach

All the housing authorities offered residents of the comparison developments at least some self-sufficiency programs other than Jobs-Plus (see Appendix Tables B.1 through B.6). For example, some comparison developments operated on-site basic education or computer classes. Some had after-school and tutoring programs for children and youth. A few had on-site community centers, health clinics, and job readiness classes. Some provided access to social workers or even employment counselors at the developments, although such staff were usually not stationed full time at any one development, as were Jobs-Plus staff. The housing authorities also offered a limited number of opportunities for apprenticeship training, such as in buildings maintenance and groundskeeping.

As mentioned above, residents of the comparison developments also had access to rent-based work incentives that were available authoritywide. However, these incentives were less generous than those offered by Jobs-Plus or were available only to residents who met certain conditions. For example, the flat rents introduced under QHWRA were based on the market value of residents' apartments, making the rents considerably higher than the flat rents available under Jobs-Plus. Other rent policies under QHWRA called for disregarding increases in residents' income due to earnings when their rents were calculated. However, this provision applied only to particular categories of working residents, such as those who had received TANF bene-

fits within the prior six months or who had not worked for at least a year.[34] Not only were normally available rent incentives less generous or less broadly targeted, but housing authorities were also much less aggressive in marketing their incentives to residents than were the Jobs-Plus programs.

Although the comparison developments generally offered much less intensive employment assistance to their residents than was available to residents of the Jobs-Plus developments, two important qualifications to this conclusion should be noted. In St. Paul, one of the two comparison developments experienced an unanticipated growth in on-site services after the demonstration began — to a level that rendered that development problematic as a benchmark for assessing the effectiveness of Jobs-Plus. Simply put, the development's program looked too much like Jobs-Plus to permit a fair comparison with Jobs-Plus. Consequently, that development plays a more limited role in the impact analysis presented in Chapters 4 and 5.[35] For different reasons, Seattle's single comparison development also saw a gradual expansion of on-site services, and these were accompanied by the authoritywide adoption of rent-based work incentives that rivaled those of Jobs-Plus.[36] Nonetheless, this development remained a viable comparison development, especially during the first few years of the follow-up period. However, the degree of the service contrast experienced by its residents and those in Jobs-Plus lessened over time, particularly as HOPE VI relocation and demolition advanced at the Seattle Jobs-Plus development.[37]

---

[34]Under this provision, 100 percent of the earnings increase due to employment was disregarded in calculating a resident's rent for 12 months. After this 12-month period, rent for the next 12 months would increase by only half the amount it would have been raised under the traditional rules. Alternatively, the housing authority could have residents pay the higher rent and deposit the difference into an escrow account. For a fuller discussion of the QHWRA rent reforms, see Miller and Riccio (2002) and Sard and Bogdon (2003).

[35]In St. Paul — in response to increasingly urgent needs of the tenant population at this development (McDonough Homes) — the housing authority and other local partners increasingly invested in on-site social services and employment counseling over the course of the Jobs-Plus demonstration. Field research conducted at that comparison development showed that these activities far and away exceeded the efforts observed at the comparison developments in the other cities and at the second comparison development in St. Paul (see Appendix Table B.5). Because the service environment at McDonough Homes appears to have been so similar to that of Jobs-Plus, this development is only included as part of sensitivity tests of the impact findings (see Appendix D).

[36]From about 2000 onward, the Seattle Housing Authority, taking advantage of special funding through the U.S. Department of Labor's Welfare-to-Work program and other resources, and in cooperation with other local service partners, increasingly made employment assistance available to residents at the comparison development (Yesler Terrace). More important, perhaps, is that it used special waiver authority obtained under HUD's Moving to Work demonstration, which was intended to promote innovative management reforms and self-sufficiency initiatives, to introduce rent-based work incentives at Yesler Terrace (and other housing authority properties) that rivaled those of Jobs-Plus. At the same time, Yesler Terrace did not have the dedicated on-site staffing and intensive outreach efforts — which were so central in Jobs-Plus at Rainier Vista — to promote its services and incentives.

[37]It should also be noted that conditions changed during the latter part of the follow-up period in the Los Angeles comparison development (Dana Strand Village). During the period of the demonstration, the Los Angeles housing authority received a HOPE VI grant to tear down and rebuild Dana Strand Village. The housing
(continued)

Substantial Employment Assistance in the Larger Community

The services available to residents of the comparison developments (and to those of the Jobs-Plus developments) were not limited to services provided through the housing authority. Residents could also obtain services through the local welfare department (which operated mandatory welfare-to-work programs); the workforce system (which funded a variety of programs under the Workforce Investment Act); and a host of other human service agencies, schools, and training providers in the local community. Indeed, as discussed in Chapter 1, Jobs-Plus was implemented at a time of significant federal reform in these policy domains (see Figure 1.2), and these reforms promised to increase the use of work-promoting assistance and inducements by many low-income people, including public housing residents. Although residents of the comparison developments did not have the advantage of Jobs-Plus's interagency partnerships and intensive on-site assistance, neither were they insulated from local agencies' own recruitment and marketing efforts or, for some residents, welfare-to-work participation requirements. Consequently, in this environment, the capacity of Jobs-Plus to create a large difference in service receipt (or "service difference," for short) between tenants of the Jobs-Plus and comparison developments could not be taken for granted.

Estimates of the Service Difference: Jobs-Plus Versus the Comparison Developments

How big a service difference emerged? This question is not an easy one to answer with the data available to the evaluation. Ideally, longitudinal information on participation and service use would be available for residents in the main impact sample (the 1998 cohort) from the start of Jobs-Plus through the end of its operating period as part of the demonstration (generally, December 2003), regardless of whether those residents continued living in public housing. This information would need to come from a survey of residents in order to capture their use of any of a wide variety of services offered within or outside public housing. However, it was clear early on that tracking and interviewing residents who moved out of the developments would take far more resources than were available for this part of the research.

As an alternative, a follow-up survey wave was administered in early to mid-2003 to a cross-section of working-age, nondisabled residents living in the Jobs-Plus or comparison developments in five of the six sites. (The follow-up survey was not conducted in Seattle because of language barriers, the advent of the HOPE VI redevelopment process, and limited evaluation resources for that site after it was withdrawn from the national demonstration.) All respondents were

---

authority began relocating some residents near the end of 2001. The process began slowly and proceeded in stages through several sections of the development. By December 2002, 34 percent of households had moved out of Dana Strand Village, and 59 percent had done so by April 2003.

household heads who had lived in the developments for at least a year prior to the interview. The latter condition was intended to ensure that respondents would have had a reasonable opportunity to be exposed to Jobs-Plus or any alternative programs offered by the housing authorities at the comparison developments. (See Appendix C for further details on the resident survey.)

Although the results do not fully correspond to the experiences of residents in the 1998 cohort (especially in the high-mobility sites), the 2003 survey offers the best evidence available on whether Jobs-Plus boosted service receipt among the residents of the program developments relative to those in the comparison developments.[38] The overall findings for all the sites combined (excluding Seattle) are presented in Table 3.4.

The experiences of residents of the comparison developments offer a benchmark for assessing the added contributions of Jobs-Plus by indicating what the levels of service receipt for the Jobs-Plus group would have been in the absence of the program. The results show that these levels would have been substantial. For example, the top row in Table 3.4 reveals that 46 percent of survey respondents in the comparison developments reported that they had participated in an employment-related activity (such as job search assistance or education or training) *through any program or agency* within the 12 months prior to the survey interview. However, as the table's next row shows, only 13 percent of those residents participated in such activities *with the help of the housing authority or a program at their development.*

On the first of these measures — participation in activities through any program or agency — the rate for survey respondents in the Jobs-Plus developments was about 58 percent, reflecting a modest though statistically significant increase of 12 percentage points over the rate (46 percent) observed for their counterparts in the comparison developments. However, the difference on the second measure was larger: Respondents in the Jobs-Plus developments (taking advantage of the on-site Jobs-Plus program) were more likely — by a statistically significant 17 percentage points — than those in the comparison developments to have participated in such activities with help from the housing authority or a program at their housing development. In effect, Jobs-Plus, as a place-based initiative, appears to have had a bigger influence on how residents got employment-related activities than on residents' overall likelihood of getting such services.

Table 3.4 also distinguishes participation in activities focused on finding a job (such as individual or group job search assistance) from participation in education and training. In general, respondents in the Jobs-Plus developments were likely to have participated in each of these

[38]To help control for differences between the program and comparison developments in the types of people responding to the survey, the differences in participation and other outcomes were regression-adjusted. The following background characteristics of the sample members were statistically controlled: average number of years living in the development, presence of more than one adult in the household, race or ethnicity, gender, and age.

The Jobs-Plus Demonstration

Table 3.4
2003 Follow-Up Survey (Household Heads)

Use of Services and Incentives by Residents of the Jobs-Plus Developments and Their Comparison Developments, Five Sites Combined (Excluding Seattle)

Measure (%)	Jobs-Plus Developments	Comparison Developments	Difference
Participation and service use			
Participated in any employment-related activity within prior 12 months with help from:			
Any program/agency	57.6	45.5	12.1 ***
Housing authority or any program at development	30.5	13.4	17.1 ***
Within prior 12 months, participated in:			
Any job search activity	42.1	27.9	14.2 ***
Any education or training activity	42.7	38.1	4.6 *
Received any ancillary or social services within prior 12 months with help from:			
Any program/agency	50.5	42.3	8.2 ***
Housing authority or any program at development	29.0	10.1	18.9 ***
Financial incentives			
Heard of rent-based work incentives	65.5	41.2	24.2 ***
Currently using rent-based work incentives	45.5	23.7	21.8 ***
Currently using rent-based work incentives *(among currently working residents only)*[a]	*53.8*	*32.2*	*NA*
Heard of EITC[b]	60.8	54.3	6.5 **
Was encouraged to use EITC by housing authority or any program at development	11.8	6.0	5.8 ***
Used EITC during prior year	33.3	26.9	6.4 ***
Services and incentives			
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	61.4	43.9	17.5 ***
Overall current self-sufficiency efforts			
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	80.1	72.4	7.6 ***
Sample size	668	808	

(continued)

Table 3.4 (continued)

SOURCE: MDRC calculations using data from the 2003 follow-up survey.

NOTES: Estimates of program-comparison development differences control for various background characteristics of respondents.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]Because the calculations for this measure exclude respondents who were not working at the time of the interview, rather than all respondents, no differences in take-up rates between the Jobs-Plus and comparison developments are computed.

[b]Respondents in St. Paul were not asked this survey question.

categories of activities at higher rates than did their comparison development counterparts. However, the differential was larger for job search assistance (14 percentage points) than for education and training (about 5 percentage points).

Jobs-Plus also offered various forms of ancillary services that could help residents participate in activities or in work (such as help paying for books, fees, or tools) and assistance arranging for important social services (such as counseling for family problems). Survey respondents in the Jobs-Plus developments were more likely than those in the comparison developments to use such services. Again, the difference was larger for services obtained with the help of the housing authority or a program at the development (19 percentage points) than for such services received from any source (8 percentage points).

Survey respondents in the Jobs-Plus developments were also nearly 25 percentage points more likely than respondents in the comparison developments (about 66 percent versus 41 percent) to have heard about rent-based work incentives. They were also more likely, by 22 percentage points, to report using these incentives at the time of the interview (46 percent versus 24 percent). As previously noted, Jobs-Plus aggressively marketed these incentives to residents. In contrast, the housing authorities did much less to promote the more limited incentives available to residents of the comparison developments under the 1998 federal housing legislation. Respondents in the Jobs-Plus developments were more likely than those in the comparison developments to have heard of the EITC and to have used it in the prior year, although the differences were small (about 6 percentage points on each measure).

Finally, a more summary measure was constructed to assess the proportion of respondents who used at least one of the two main categories of work-promoting assistance that Jobs-Plus offered. It captures participation in employment-related activities within the past 12 months *or* use of rent incentives at the time of the follow-up survey interview. On this combined meas-

ure, respondents in the Jobs-Plus developments again ranked higher than their comparison development counterparts, by 18 percentage points (61 percent versus 44 percent).[39]

In sum, although the 2003 survey data must be interpreted cautiously, these results suggest that Jobs-Plus increased residents' likelihood of using employment-related services; more important, it changed how they got those services. Jobs-Plus also appears to have increased the extent to which residents used rent-based work incentives, relative to what would have occurred in the absence of the program. Although none of these differences are exceptionally large, they are in the direction expected according to the theory underlying Jobs-Plus, as described in Chapter 1. A similar overall pattern of service differences between residents of the Jobs-Plus and comparison developments is also evident, to varying degrees, in each of the five survey sites, as Appendix Table B.9 illustrates.[40]

Summary and Conclusions

The Jobs-Plus model presented the local collaboratives with the challenge of implementing as comprehensive and ambitious an employment initiative as has ever been attempted for public housing. Many problems were encountered, such as building the collaboratives themselves into functioning entities and getting them to make local program design decisions in a timely way, arranging for appropriate staffing for the program, sustaining a funding base, sustaining support among senior housing authority officials, operating all three program components together, and dealing with diverse tenant populations that had significant employment barriers and faced other impediments to sustained employment.

At the same time, much was accomplished: The collaboratives in at least four of the six sites were able to build coherent and sustainable programs that were operated at a reasonable level of quality, even if all three components of the model were not well integrated. The sites made good progress in "saturating" the developments with information about Jobs-Plus and the work-related opportunities it offered to residents. And although the program was entirely voluntary, a majority of targeted residents came forward seeking to take advantage of what it offered them. It is true that even the better-performing sites had room to improve their operation of the program. But, on the whole, their experiences demonstrate that the Jobs-Plus model is feasible to operate in very different kinds of local settings and that it can hold a powerful appeal to a

[39]Finally, an additional analysis of the survey participation measures was conducted in the three better-run sites (Dayton, Los Angeles, and St. Paul), where welfare administrative records data allowed the survey sample to be split between household heads who had received welfare (TANF) payments in the prior year and those who had not. The results suggest that, for both subgroups, Jobs-Plus ratcheted up their use of rent-based financial incentives, participation in employment-related activities, and the use of ancillary and other support services (see Appendix Tables B.10 and B.11).

[40]Because of the small survey sample sizes for each site, extra caution is urged in comparing results across sites.

large proportion of a housing development's working-age residents — regardless of the racial or ethnic composition of the tenant population.

The variation in the quality of Jobs-Plus implementation across sites is important to underscore in advance of the impact findings discussed in Chapters 4 and 5. Of course, it is difficult to gauge overall implementation quality with any precision and to offer a clear ranking of the sites' programs. Part of the difficulty is that the yardsticks for judging performance are not clear-cut, and the programs were not necessarily equally strong — or weak — across all aspects of performance. The quality of implementation also varied over time. For example, the Baltimore program made a promising start; by 2000, however, it suffered a steady decline, with a loss of staff, retrenchment of services offered by local agency partners, and poor housing authority implementation of the rent incentives. In contrast, the Los Angeles program had great difficulty finding its footing early on and nearly collapsed, but its chronic staffing problems were finally resolved by 2000, and it evolved into one of the strongest Jobs-Plus programs. Also noteworthy is that St. Paul and Seattle were the sites quickest to implement the rent incentives, although, later in the follow-up period, Seattle — with the onset of HOPE VI relocations and demolition — stopped allowing new enrollments in the rent incentives program and essentially stopped assisting residents who were relocated to homes outside the Jobs-Plus development.

With these complicated patterns in mind, the fairest summary assessment is as shown in Table 3.5. During the period from 2000 to 2003 (after rent incentives had become available everywhere), overall implementation of Jobs-Plus was strongest in three sites: Dayton, Los Angeles, and St. Paul. Although these sites had room to improve, they came closest to implementing

Table 3.5

Overall Ranking of Sites' Implementation of Jobs-Plus

Ranking	Site
Stronger	Dayton, Los Angeles, St. Paul
Problematic	Baltimore and Chattanooga
A HOPE VI site (special case)	Seattle

the Jobs-Plus model as the demonstration's designers had envisioned it. Implementation was most problematic in Baltimore and Chattanooga, to an important extent because of diminished attention from the housing authority in each of those sites. Seattle is a special case. While it had operated a strong program during the first few years, the advent of its HOPE VI redevelopment process made the context within which Jobs-Plus was implemented unique among the sites. Over time, this shifted the focus of the program, broadening the target group to include the elderly and the disabled, expanding social services, and lessening the intensity of outreach and employment assistance to the original Jobs-Plus target group. It most importantly disrupted the program by displacing tenants and tearing down the development.

Given the substantial cross-site differences in operating Jobs-Plus, the impact analysis presented in Chapters 4 and 5 examines the program's effectiveness using the sites in three different ways: (1) with all six sites combined, (2) with the three "stronger" implementation sites combined, and (3) separately for each site. Examining the program's effects from these different vantage points sets the stage for drawing inferences about the connections between the sites' implementation experiences described in this chapter and the effects of Jobs-Plus on residents' labor market and welfare outcomes.

Chapter 4

Work and Welfare Impacts on Public Housing Residents

Chapters 4 and 5 examine the impacts of Jobs-Plus on public housing residents' work and welfare — that is, the changes that it caused in these outcomes for the program group relative to the outcomes for the comparison group, which did not have access to Jobs-Plus. This chapter focuses on Jobs-Plus's effects for persons who were residents of public housing when the program was launched (1998), regardless of where they lived subsequently and where they had lived previously. This is the program's effect on that specific cohort of *people.* Chapter 5 focuses on how Jobs-Plus affected the quarter-by-quarter levels of work and welfare outcomes in the public housing developments where the program was run, regardless of who lived in these developments before and after it was launched. Ignoring the outcomes of people who move, this is the program's effect on *place.* As noted earlier, because residents move into and out of public housing in large numbers, it was necessary — in order to tell a balanced story — to conduct the analysis of program effects from the perspectives of both people and place.

Specifically, this chapter addresses the following questions:

- By how much did Jobs-Plus increase the average earnings of public housing residents and the percentage of residents who were employed?[1]
- How did these effects vary across the six years in the follow-up period for the Jobs-Plus evaluation, the six sites participating in the Jobs-Plus demonstration, earlier versus later cohorts of public housing residents, and different subgroups of residents?
- By how much did Jobs-Plus reduce average welfare benefits received by public housing residents and the percentage of residents who received those benefits?

Findings indicate that, at four of the six study sites (where implementation of the program was strongest), Jobs-Plus markedly increased the earnings of public housing residents (with positive but less clear effects on employment rates) once the program was in place. These impacts are especially impressive, given that they persisted even through the onset of a national economic recession and that they represent "value added" by the program over and above any

[1]This study focuses on earnings and employment in the formal labor market. It does not examine residents' participation in informal work activities that might provide material resources but are not recorded.

effects produced by recent national reforms to social support systems (welfare reform, public housing reform, and changes in the workforce development system). At three of those four sites, program impacts were sustained for at least four years and showed no signs of diminishing. These findings held for two different cohorts of public housing residents and for numerous subgroups of residents. At the fourth site, the effects of Jobs-Plus disappeared with the onset of a HOPE VI demolition and renovation program that displaced large numbers of residents. At the remaining two sites, where program implementation was problematic, Jobs-Plus had no effects on residents' earnings.

Even though Jobs-Plus was not a welfare-to-work program, assessing its effects on welfare receipt was judged important because so many residents of public housing were welfare recipients when the initiative was planned. The study's findings suggest that although welfare receipt by residents dropped precipitously after Jobs-Plus was launched, this decline was no greater than what would have occurred without the program. The decline is most likely due to forces — such as the booming economy, welfare reform, and increases in the generosity of the Earned Income Tax Credit (EITC) — that are viewed by many as causing the dramatic declines in welfare rolls that occurred throughout the United States at the time.

Measuring Program Impacts

At each study site, one Jobs-Plus development and one or two comparison developments were randomly selected (through a lottery) from a matched pair or triplet of eligible public housing developments nominated by the local public housing authority. Housing authority records were then used to identify all able-bodied working-age adults (defined as persons who were 21 to 61 years old and not listed as disabled) who were residents of the Jobs-Plus developments or the comparison developments when the demonstration was launched in October 1998. This group is referred to as the "1998 cohort." Cohort members from the Jobs-Plus developments are referred to as "the Jobs-Plus group," and those from comparison developments are referred to as "the comparison group."

Data on total quarterly earnings were obtained for each 1998 cohort member from wage records of state Unemployment Insurance (UI) agencies. These data are used widely to evaluate welfare and employment programs and represent over 90 percent of the jobs in the formal labor market.[2] UI wage records were obtained for up to six years before Jobs-Plus was launched (its baseline period) and six years after Jobs-Plus was launched (its follow-up period), regardless of where cohort members lived at the time. From these data, two measures were created for each Jobs-Plus group and comparison group. One measure, *average quarterly earnings*, is expressed

[2]Kornfeld and Bloom, 1999.

in 2003 dollars and includes values of zero for persons who were not employed. The second measure, *quarterly employment rates*, is defined as the percentage of persons with any UI-reported earnings in a quarter.

Monthly data on total welfare benefits (from Aid to Families with Dependent Children [AFDC] or Temporary Assistance for Needy Families [TANF]) that were paid to members of the 1998 cohort were obtained for three sites — Dayton, Los Angeles, and St. Paul — from the administrative records of state or county welfare agencies.[3] These data, which cover the Jobs-Plus baseline period and follow-up period, report total benefits paid to the welfare case to which each person was attached during a month (if he or she was attached to a case). From this information, two quarterly measures were created for every Jobs-Plus group and comparison group. One measure, *average quarterly benefits received*, is expressed in 2003 dollars and includes values of zero for persons who did not receive benefits. The second measure, *quarterly benefit receipt rates*, is defined as the percentage of persons who received at least one dollar of benefits in a quarter.

The impact of Jobs-Plus on work and welfare was estimated by comparing *changes* in outcomes after Jobs-Plus was launched for the Jobs-Plus group with changes in outcomes for the comparison group. Appendix D describes the analysis.

Because many 1998 cohort members moved away during the two years that Jobs-Plus was being implemented, some were not exposed to the full program. To help account for this "dosage dilution," the analysis was repeated for a later cohort of sample members defined as all working-age, nondisabled adults who were residents of a Jobs-Plus development or comparison development in October 2000 ("the 2000 cohort"). In addition, to assess the robustness of the program, the analysis was repeated for subgroups of the 1998 cohort defined in terms of individual characteristics for which data were available (gender, race/ethnicity, age, past employment, past welfare receipt, past residential tenure, and future residential mobility).

The Impact of Jobs-Plus on Residents' Work

This section examines the impact of Jobs-Plus on average earnings and employment rates for all the study sites combined, for the stronger implementation sites combined, for each site separately, for two cohorts of residents, and for several subgroups of residents.

[3]Welfare payments data were not received from Baltimore and Chattanooga. They were not requested from Seattle because of the site's change in status due to HOPE VI.

Large Earnings Impacts and Smaller Employment Impacts for All the Sites Combined

Although the full story of the effects of Jobs-Plus lies in its site-by-site details, it is helpful to begin with a summary of the data combined across sites. Because the implementation success of Jobs-Plus varied so much across sites, Figure 4.1 combines the sites in two different ways. The graph in Panel A combines all the sites, which addresses the question "What is the average impact of Jobs-Plus for all versions of the program that are implemented?" The graph in Panel B combines the three sites that had stronger implementation, which addresses the question "What is the average impact of Jobs-Plus when it is implemented relatively well?"

The graphs illustrate the time paths of average quarterly earnings with each site weighted equally.[4] Findings for the Jobs-Plus group are represented by a solid line, and those for the comparison group are represented by a dashed line. The baseline period in the figure is from 1994 through 1997 — the pre-program years for which all sites had data. This is followed by data for the two-year program rollout period (1998 and 1999) plus four more years after the program was implemented (2000 through 2003).

Consider the findings for all sites combined (Panel A of Figure 4.1). First, note that mean quarterly earnings for the Jobs-Plus group and the comparison group roughly doubled during the four baseline years in the figure. When presented with more job opportunities produced by a dynamic economy, public housing residents in the sample substantially increased their work in the formal labor market. Next, note that quarterly earnings for the Jobs-Plus group and the comparison group were virtually identical throughout the baseline period. Hence, these groups were well matched for a long time.

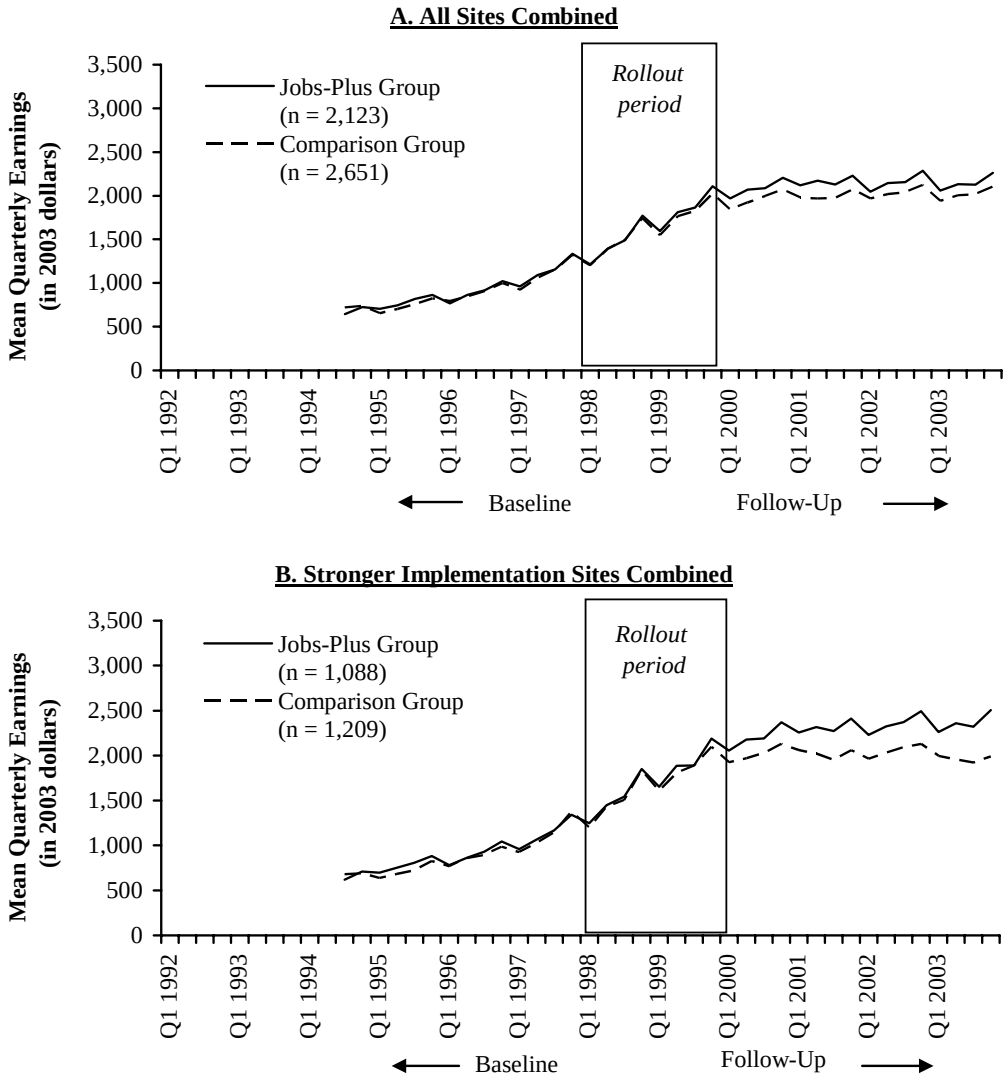
While the program was being rolled out, earnings for the Jobs-Plus group and comparison group continued to rise at the same rate. But once the program was implemented, the Jobs-Plus group began to pull ahead, and its lead was sustained for the rest of the follow-up period. Thus, on average, Jobs-Plus increased the earnings of public housing residents once the program was in place.

Panel B of Figure 4.1 presents the results for the three stronger implementation sites (Dayton, Los Angeles, and St. Paul) combined. It illustrates the same rapidly rising baseline earnings levels and the close match for the two study groups, which continued throughout the

[4]Mean quarterly earnings and quarterly employment rates were computed for the combined Jobs-Plus group by summing the corresponding site-specific means or rates and dividing by the number of sites. Findings for the combined comparison group were computed similarly. For sites with two comparison developments, an equally weighted average was computed for these developments before the site's comparison-group findings were averaged with those for the other sites.

Figure 4.1

Pooled Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

rollout period. However, the subsequent earnings gains for the Jobs-Plus group in this graph are much larger than in Panel A. This indicates that when Jobs-Plus was implemented relatively well, its effects on earnings were much larger than average.

Table 4.1 presents the results of a statistical analysis of the quarterly earnings data in Figure 4.1, showing findings for all sites combined and for the three stronger implementation sites. Consider the findings for all sites combined (Panel A). The first column indicates that average annual earnings for the Jobs-Plus group continued to rise, from $5,865 in 1998 to $8,649 in 2001, followed by a slight decline thereafter as the national economic recession set in. The second column indicates that, *relative to the comparison group,* Jobs-Plus changed the average earnings of residents in all sites combined by –$4 and $180 during 1998 and 1999, when the program was being implemented. However, in following years, it increased residents' average earnings relative to the comparison group by $461, $619, $440, and $472, for an average of $498 per year.

The third column of Panel A in Table 4.1 presents estimates of what average earnings would have been for the Jobs-Plus group without the program. This equals the *difference* between earnings that actually were observed for the Jobs-Plus group and the estimated program effect. For example, the $5,869 of estimated earnings without Jobs-Plus in 1998 equals the observed earnings of $5,865 minus the estimated program effect of -$4. This result provides a basis for expressing program effects as a percentage of what earnings would have been without the program, which are referred to as "percentage changes" and are reported in the rightmost column. For example, the estimated $498 average annual program effect for the period 2000 to 2003 represents a 6.2 percent gain relative to what earnings would have been without Jobs-Plus.

Results for the stronger implementation sites in Panel B of Table 4.1 indicate much larger effects once the program was implemented. These estimates range from $714 (8.8 percent) in 2000 to $1,543 (19.5 percent) in 2003, for an average of $1,141 per year (14.1 percent) from 2000 to 2003. This implies that Jobs-Plus increased total earnings per person by $4,564 over four years. Therefore, the results of the statistical analysis mirror those of the graphical analysis, with both indicating that the effects of Jobs-Plus on earnings were much greater than average in sites where the program was implemented relatively well.

Figure 4.2 presents graphical analyses of quarterly employment rates. Results in Panel A for all sites combined illustrate that employment rates rose dramatically, from about 30 percent in 1994 to about 50 in 1998. This was the case for both the Jobs-Plus group and the comparison group. Thus, prior to the launch of Jobs-Plus, the two groups were well matched in terms of employment rates. However, the rapid escalation of employment rates that occurred

The Jobs-Plus Demonstration

Table 4.1

Pooled Average Annual Outcomes for Earnings, by Site Combination and Follow-Up Period (1998 Cohort)

Follow-Up Period	Observed Outcome with Jobs-Plus	Estimated Effect of Jobs-Plus	Estimated Outcome Without Jobs-Plus	Estimated Percentage Change in Outcome Due to Jobs-Plus
A. All Sites Combined ($)				
1998	5,865	-4	5,869	-0.1
1999	7,379	180	7,199	2.5
2000	8,329	461 **	7,868	5.9
2001	8,649	619 ***	8,030	7.7
2002	8,629	440 **	8,189	5.4
2003	8,578	472 **	8,106	5.8
2000-2003	8,546	498 ***	8,048	6.2
B. Stronger Implementation Sites Combined ($)				
1998	6,089	173	5,916	2.9
1999	7,619	209	7,410	2.8
2000	8,793	714 **	8,079	8.8
2001	9,256	1,135 ***	8,121	14.0
2002	9,419	1,171 ***	8,248	14.2
2003	9,443	1,543 ***	7,900	19.5
2000-2003	9,228	1,141 ***	8,087	14.1

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: All findings are reported in 2003 dollars.

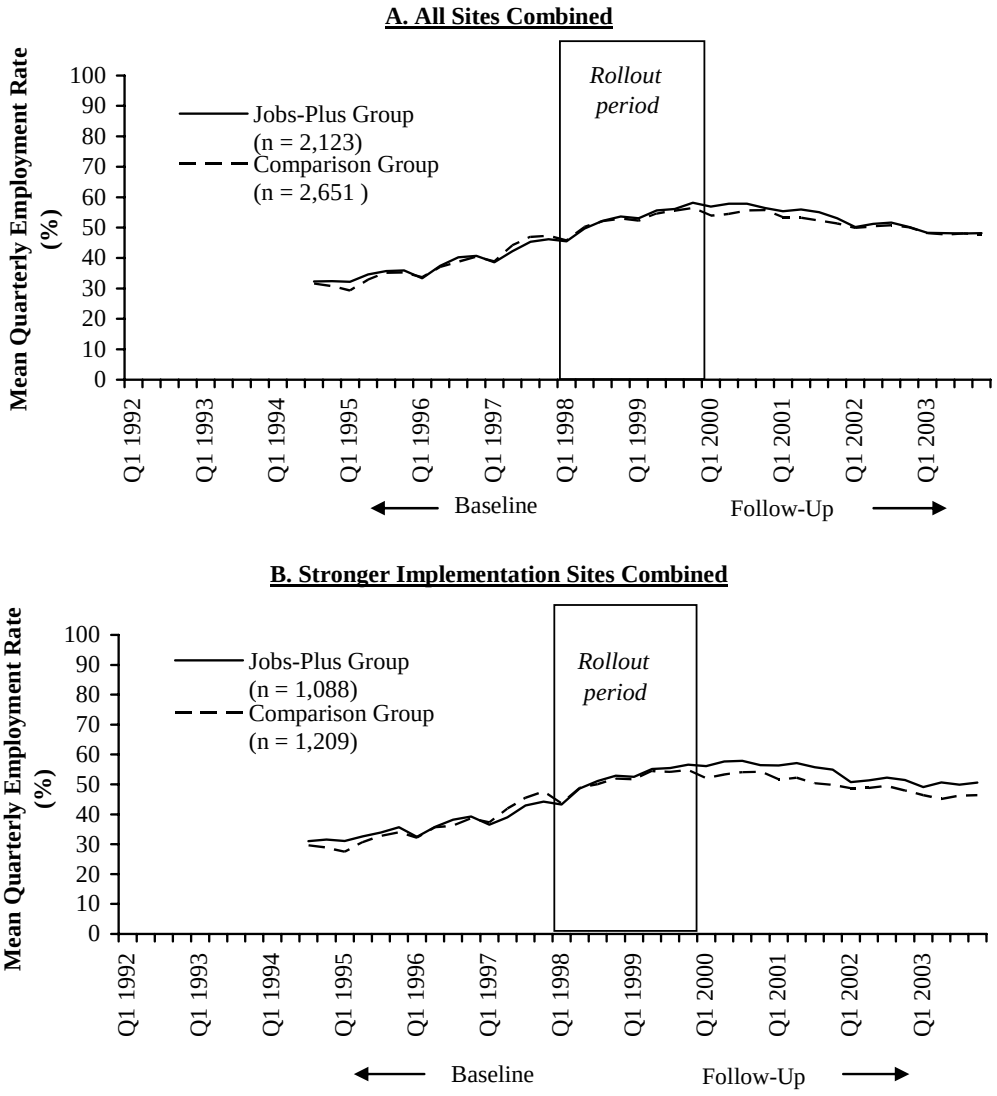
The 1998 cohort includes all residents of a Jobs-Plus development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

There were 2,123 persons in the Jobs-Plus group and 2,651 persons in the comparison group for all sites combined. There were 1,088 persons in the Jobs-Plus group and 1,209 persons in the comparison group for the stronger implementation sites combined.

Figure 4.2

Pooled Average Quarterly Employment Rates for the Jobs-Plus Group and Its Comparison Group (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

during the baseline period "raised the bar" on the program considerably in terms of what was required to produce future employment gains.[5]

The employment rates of the Jobs-Plus group and comparison group remained similar until early 2000, when the Jobs-Plus group began to move ahead slightly. This small advantage fluctuated over time but was sustained for the rest of the follow-up period. Therefore, the graph provides visual evidence of a small program-induced increase in quarterly employment rates for all sites combined.

Panel B of Figure 4.2 displays a more pronounced pattern for the three stronger implementation sites. This suggests that Jobs-Plus produced larger-than-average increases in employment rates for sites that implemented the program relatively well.

Table 4.2 presents the results of a statistical analysis of the employment rates in Figure 4.2. Findings are presented in terms of annual average quarterly employment rates — the mean percentage of sample members employed per quarter. For example, the 1998 rate of 50.3 percent for the Jobs-Plus group from all sites combined (Panel A) implies that half its members were employed during a quarter.

Results for employment rates follow a pattern over time that is similar to that for earnings. For example, the average quarterly employment rate for all sites combined rose from 50.3 percent in 1998 to 57.3 in 2000 and then fell somewhat as the national recession set in. However, the estimated effects of Jobs-Plus on employment rates are less striking than those for earnings. This is especially true for all sites combined: From 2000 to 2003, Jobs-Plus was estimated to have increased rates by only 1.2 percentage points — or 2.3 percent of what they would have been without the program. This finding is not statistically significant, meaning it is not outside the range of variation that could have occurred by chance due to random period-to-period fluctuation.

Findings for the three stronger implementation sites (Panel B of Table 4.2) indicate a program effect on employment rates that is four times that for all sites combined but is still not statistically significant — leaving considerable uncertainty about the result. For these sites, the data suggest that Jobs-Plus increased employment rates during the period from 2000 to 2003 by 4.6 percentage points, from 49.0 percent in the absence of the program to 53.6 percent in its presence. This implies that Jobs-Plus increased employment rates by 9.4 percent of what they would have been otherwise, which, in turn, implies that the program increased the number of persons employed per quarter by 9.4 percent. (Findings presented later in this chapter indicate

[5]It is also important to note that because employment impacts are based on quarterly UI data, the analysis of employment rates does not capture any impact that Jobs-Plus may have had in reducing the length of time out of work *within* a given quarter.

The Jobs-Plus Demonstration

Table 4.2

Pooled Average Annual Outcomes for Quarterly Employment Rates, by Site Combination and Follow-Up Period (1998 Cohort)

Follow-Up Period	Observed Outcome with Jobs-Plus	Estimated Effect of Jobs-Plus	Estimated Outcome Without Jobs-Plus	Estimated Percentage Change in Outcome Due to Jobs-Plus
A. All Sites Combined (%)				
1998	50.3	0.5	49.8	1.0
1999	55.7	1.0	54.7	1.8
2000	57.3	2.2	55.1	4.0
2001	54.8	2.1	52.7	4.0
2002	50.8	0.4	50.4	0.8
2003	48.2	0.1	48.1	0.2
2000-2003	52.8	1.2	51.6	2.3
B. Stronger Implementation Sites Combined (%)				
1998	49.0	2.9	46.1	6.3
1999	54.9	2.8	52.1	5.4
2000	57.0	4.7	52.3	9.0
2001	56.0	5.8	50.2	11.6
2002	51.5	3.3	48.2	6.8
2003	50.1	4.5	45.6	9.9
2000-2003	53.6	4.6	49.0	9.4

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The 1998 cohort includes all residents of a Jobs-Plus development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

There were 2,123 persons in the Jobs-Plus group and 2,651 persons in the comparison group for all sites combined. There were 1,088 persons in the Jobs-Plus group and 1,209 persons in the comparison group for the stronger implementation sites combined.

that Jobs-Plus increased the quarterly employment rates of key demographic subgroups from the stronger implementation sites by amounts that are substantial and statistically significant. Hence, it is reasonable to infer that the overall estimate for these sites combined represents a real program impact, even though it is not statistically significant.)

A further question to address when assessing these results is "How much of the program effect on earnings from 2000 to 2003 in the stronger implementation sites was due to increased employment rates?"[6] As noted, the data suggest that Jobs-Plus increased average earnings per member of the 1998 cohort by 14.1 percent and increased the number of cohort members employed by 9.4 percent. These findings imply that two-thirds (9.4 percent / 14.1 percent) of the earnings gain produced by Jobs-Plus was due to an increase in the number of persons employed.[7] The remaining third of the increase in earnings produced by Jobs-Plus represents a mix of increases in the number of weeks employed per period (employment stability), the number of hours worked per week employed (employment intensity), and wages paid per hour worked (the skill level of employment). Given available data, there is no way to identify the separate contributions of these factors.[8]

Large Variations in Earnings Impacts and Employment Impacts Across Sites

In order to understand the preceding findings more fully, it is important to consider how they vary across sites in the study. For this purpose, Figure 4.3 graphs average quarterly earnings for the Jobs-Plus group and for the comparison group from each site separately.[9] These graphs clearly illustrate that baseline earnings at all sites rose rapidly for the Jobs-Plus group and the comparison group and that their baseline earnings trajectories were well matched. The main difference between baseline findings for individual sites and those for sites combined is that individual sites have greater random fluctuation (often called "noise") due to their smaller samples. After Jobs-Plus was launched, the relationship between earnings for the Jobs-Plus group and earnings for the comparison group varied substantially across sites.

In Baltimore (Panel A), the earnings trajectories of the Jobs-Plus group and the comparison group remained almost identical during the six-year follow-up period after Jobs-Plus

[6]Because the three stronger implementation sites had the clearest earnings impacts, they provide the best basis for explaining how earnings impacts were produced by Jobs-Plus.

[7]Expressing the earnings and employment rate changes of 14.1 percent and 9.4 percent as ratios equal to 1.141 and 1.094, it follows that 1.141 equals (1.094)*x*, where *x* equals 1.043. This implies a 4.3 percent change in earnings per person employed.

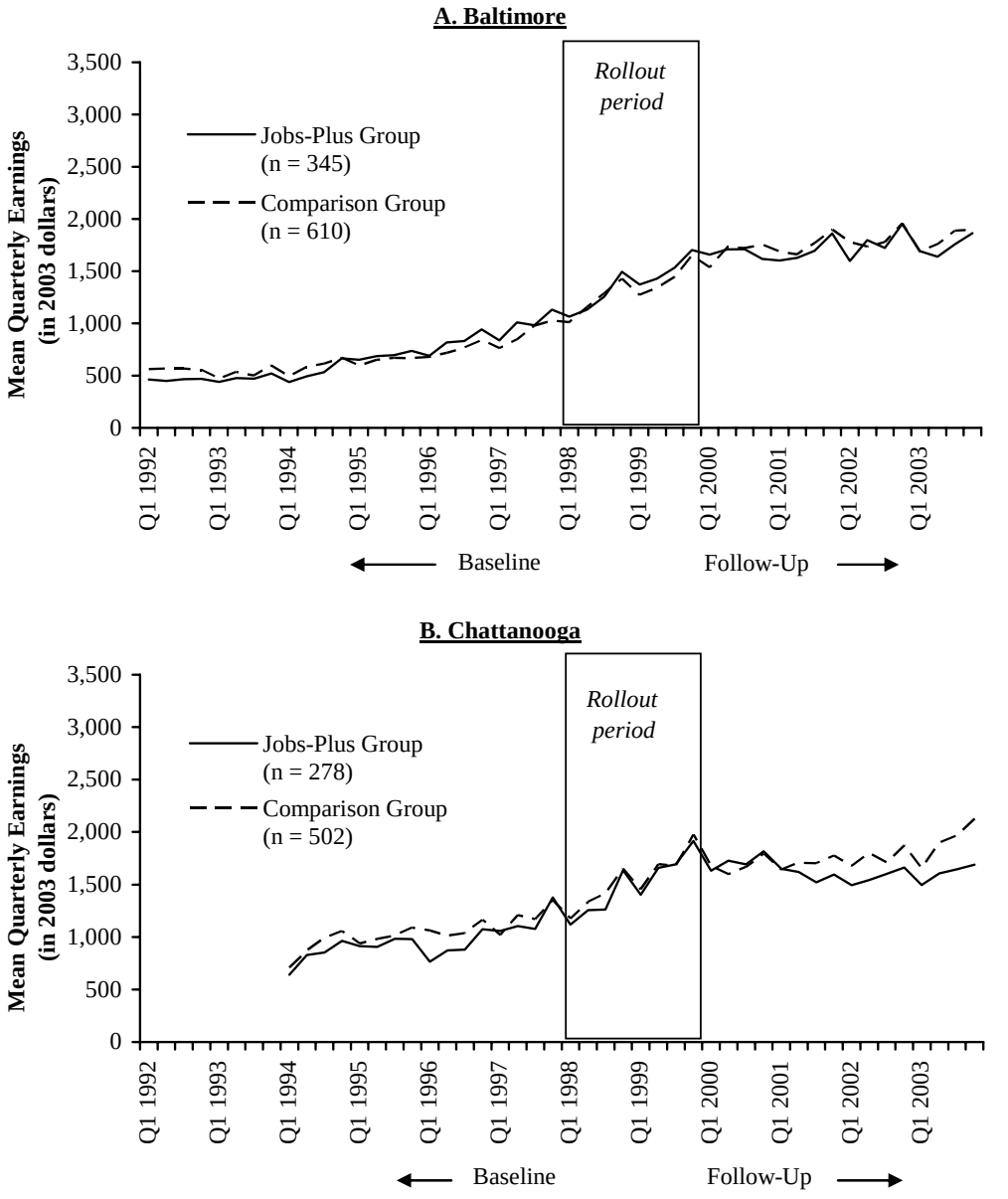
[8]Although no information exists on how Jobs-Plus *affected* the characteristics of jobs held by residents, Appendix Table E.1 presents data from the follow-up surveys in three sites — Baltimore, Dayton, and St. Paul — that *describe* the jobs held.

[9]Similar graphs for quarterly employment rates by site are presented in Appendix Figure E.1.

The Jobs-Plus Demonstration

Figure 4.3

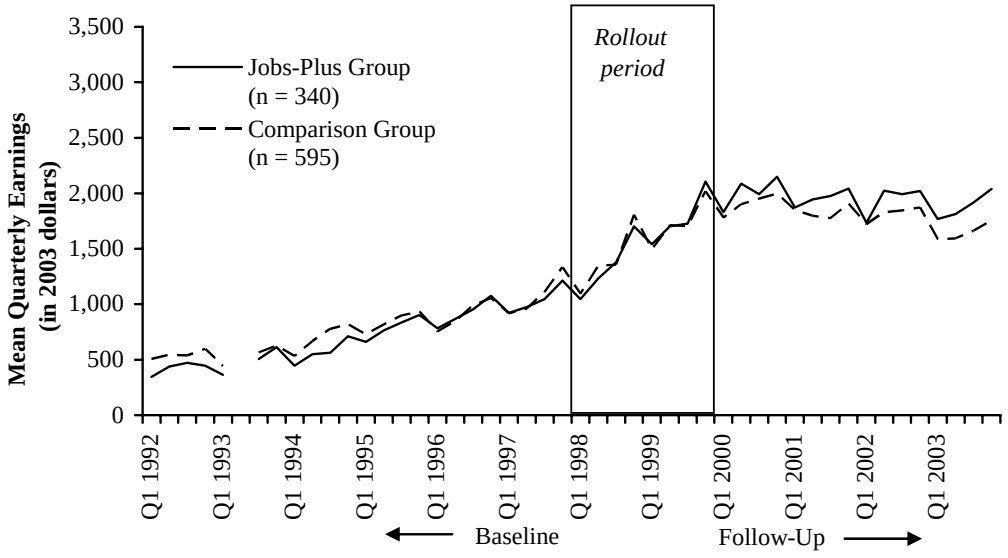
Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group, by Site (1998 Cohort)



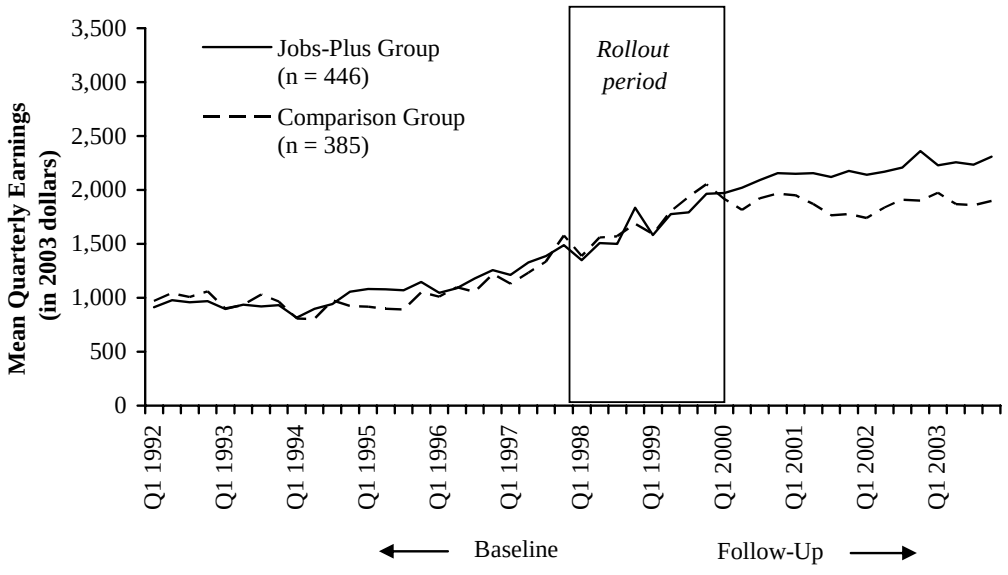
(continued)

Figure 4.3 (continued)

C. Dayton[a]

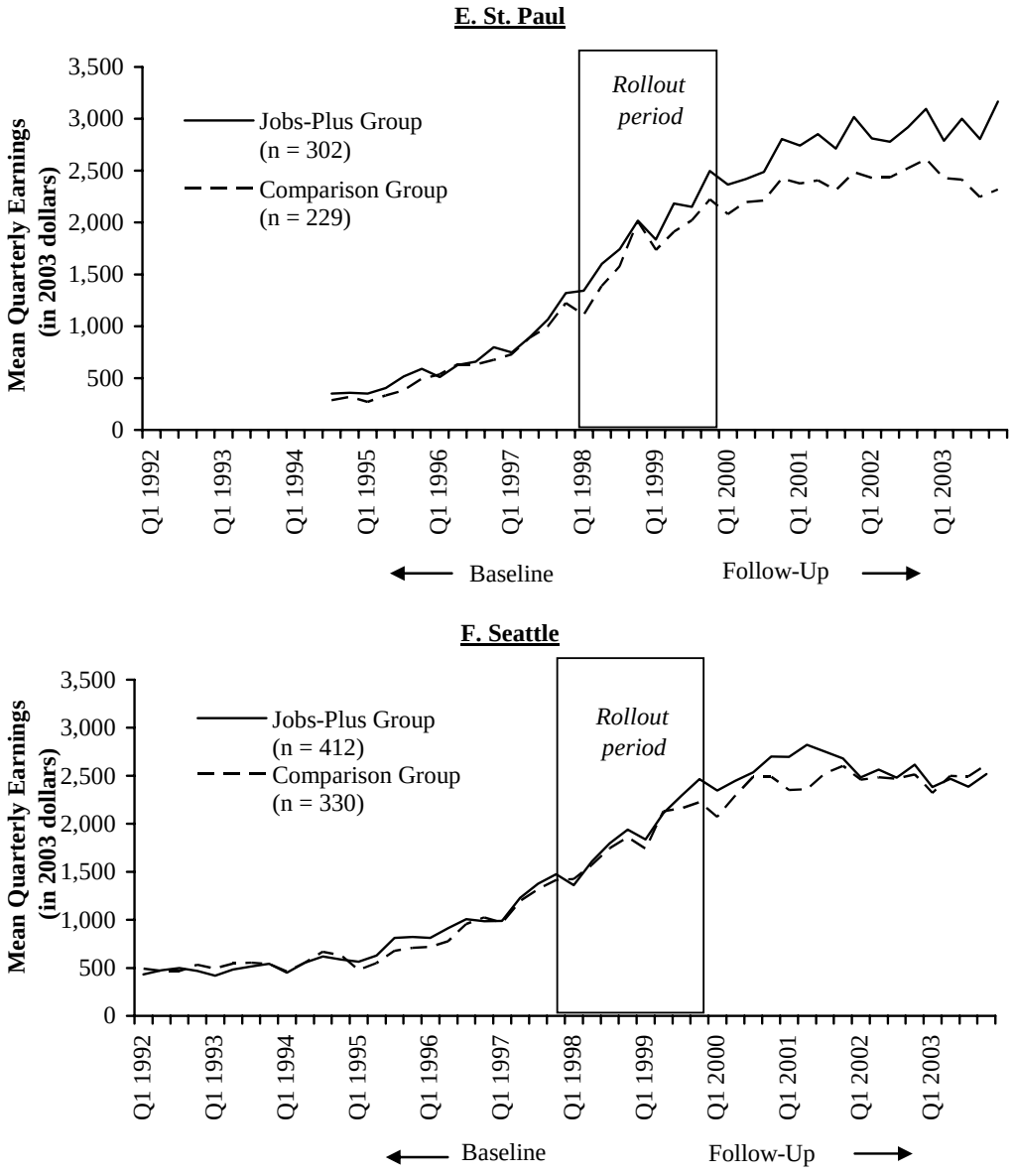


D. Los Angeles



(continued)

Figure 4.3 (continued)



(continued)

Figure 4.3 (continued)

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

was launched — strong evidence that the program in Baltimore did not have an earnings effect. This result is consistent with the exceptionally low penetration rate of the site's Jobs-Plus program, where, for example, only 12 percent of the 1998 cohort members used the rent incentives (versus 28 percent to 67 percent in the other sites). (As Chapter 3 shows, use of the rent incentives was highest in the sites that most strongly implemented Jobs-Plus overall. Thus, the incentives take-up rate is a convenient summary indicator of the quality of program implementation.)

In Chattanooga (Panel B), the earnings trajectory of the Jobs-Plus group was slightly below that of the comparison group for much of the baseline period and then somewhat below again during the latter part of the follow-up period. The pattern yields no indication that Jobs-Plus increased the earnings of residents from this site, which is consistent with the documented weak implementation of Jobs-Plus in Chattanooga and the fact that it never became a fully functioning program there.

In Dayton (Panel C), the earnings trajectories of the Jobs-Plus group and the comparison group continued to be very similar during the first two years after Jobs-Plus was launched. Soon thereafter, however, earnings for the Jobs-Plus group began to exceed those for the comparison group. The earnings advantage for the Jobs-Plus group was sustained throughout the remainder of the follow-up period, although its magnitude fluctuated. These positive findings are especially impressive in light of the high rates of resident mobility in Dayton, where 48 percent of the 1998 cohort members in the Jobs-Plus group moved away within two years (versus 17 percent to 41 percent in the other sites).

In Los Angeles (Panel D), the earnings trajectory of the Jobs-Plus group shifted sharply above that of the comparison group two years after Jobs-Plus was launched.[10] This pronounced

[10]The findings presented in this chapter for Los Angeles represent the Jobs-Plus program at William Mead Homes and its comparison development. Appendix Figure E.2 illustrates the earnings and employment histo-
(continued)

and prolonged earnings gain matches the timing of an aggressive revival of the Los Angeles Jobs-Plus program, following its earlier near-collapse. The finding is also consistent with the especially high penetration rate of the site's program, with 61 percent of the 1998 cohort members using the rent incentives. Furthermore, it is consistent with the site's especially low rate of resident mobility, with only 17 percent of the 1998 cohort members in the Jobs-Plus group moving away within two years.

In St. Paul (Panel E), which was the only site to implement rent incentives in the first year after Jobs-Plus was launched (1998), the earnings trajectory of the Jobs-Plus group moved immediately above that of the comparison group. The gap widened substantially in later years, as program group members pulled further ahead of comparison group members. This pattern reflects the largest estimated program effects on earnings for any site. And this finding is consistent with the fact that St. Paul had the highest program penetration rate, with 67 percent of the 1998 cohort members in its Jobs-Plus group participating in rent incentives. In addition, it is consistent with the site's relatively low rates of resident mobility, with only 27 percent of the 1998 cohort members in the Jobs-Plus group moving out in two years.

Lastly, in Seattle (Panel F), the earnings trajectory of the Jobs-Plus group stayed close to that of the comparison group until 2000, when it began to pull ahead, and 2001, when it was well above that of the comparison group. This earnings advantage disappeared by the next year, however, most likely because of the disruption and dislocation produced by the HOPE VI renovation and relocation program that was getting under way. It appears that as Jobs-Plus fully materialized in the site, it began to generate substantial earnings gains for residents. But these gains were overtaken by events as residents were relocated in large numbers through HOPE VI. The expansion of employment services and the introduction of new rent incentives in the comparison site as part of the housing authority's Moving to Work demonstration may have also contributed to the decline in Seattle's impacts.[11]

To summarize these site-specific stories and make their findings more concrete and precise, Figure 4.4 presents statistical estimates of the site-by-site effects of Jobs-Plus on earnings for each follow-up year. For Jobs-Plus in Baltimore, there is no sign of a program effect on earnings during any year. All estimated effects are near zero, and none are statistically significant. Hence, the program in this site did not achieve its work-related goals. For Jobs-Plus in Chattanooga, there also was no sign of a positive effect on earnings. Annual impact estimates varied from slightly positive to slightly negative after the program was launched and all but one were not statistically significant.

---

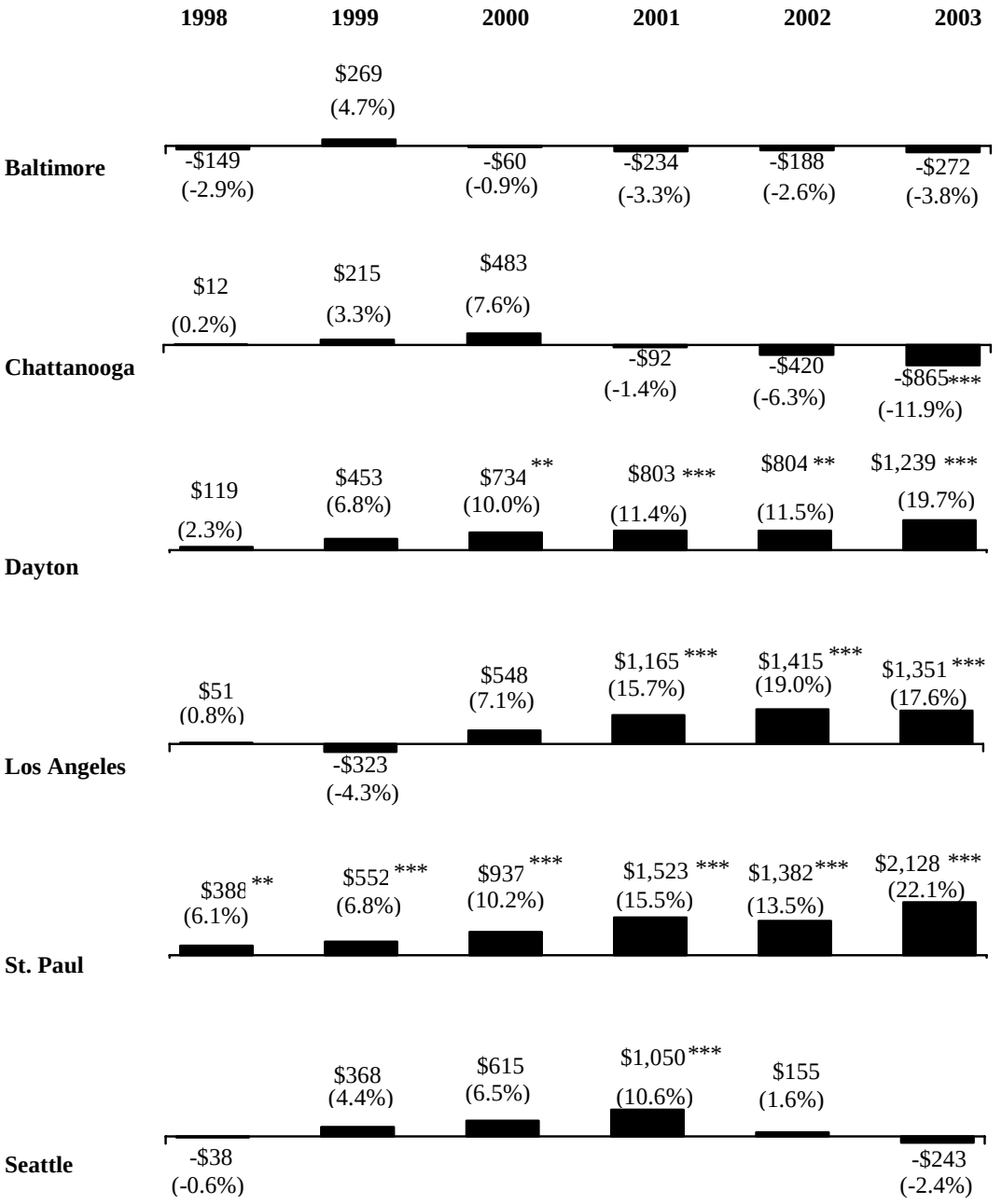
ries for residents of the other Jobs-Plus development in Los Angeles, Imperial Courts, which did not have a comparison development.

[11]See Liebow et al., 2004.

The Jobs-Plus Demonstration

Figure 4.4

Average Annual Effects of Jobs-Plus on Earnings, by Site (1998 Cohort)



(continued)

Figure 4.4 (continued)

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: All earnings effects are reported in 2003 dollars.

The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Statistical significance levels are indicated as *** =1 percent; ** = 5 percent; * =10 percent.

Sample sizes are 345 in the program group and 610 in the comparison group in Baltimore; 278 in the program group and 502 in the comparison group in Chattanooga; 340 in the program group and 595 in the comparison group in Dayton; 446 in the program group and 385 in the comparison group in Los Angeles; 302 in the program group and 229 in the comparison group in St. Paul; and 412 in the program group and 330 in the comparison group in Seattle.

For Jobs-Plus in Dayton, Los Angeles, and St. Paul (the stronger implementation sites), there are substantial estimated program effects on earnings during every year from 2000 to 2003.[12] Program-induced earnings gains ranged from $734 to $1,239 (10.0 percent to 19.7 percent) in Dayton; from $548 to $1,415 (7.1 percent to 19.0 percent) in Los Angeles; and from $937 to $2,128 (10.2 percent to 22.1 percent) in St. Paul. Therefore, there is considerable evidence that Jobs-Plus was successful in achieving its work-related goals in these sites.

Lastly, for Jobs-Plus in Seattle, there were signs of substantial early program effects ($615 and $1,050 in 2000 and 2001). Thus, when a relatively strong program was in effect, the site was able to achieve its work-related goals. But this initial success was not sustained when the Jobs-Plus development underwent a HOPE VI transformation. As this transformation got under way, the extra earnings that had been stimulated by Jobs-Plus disappeared, and earnings levels returned to what they would have been without the program.

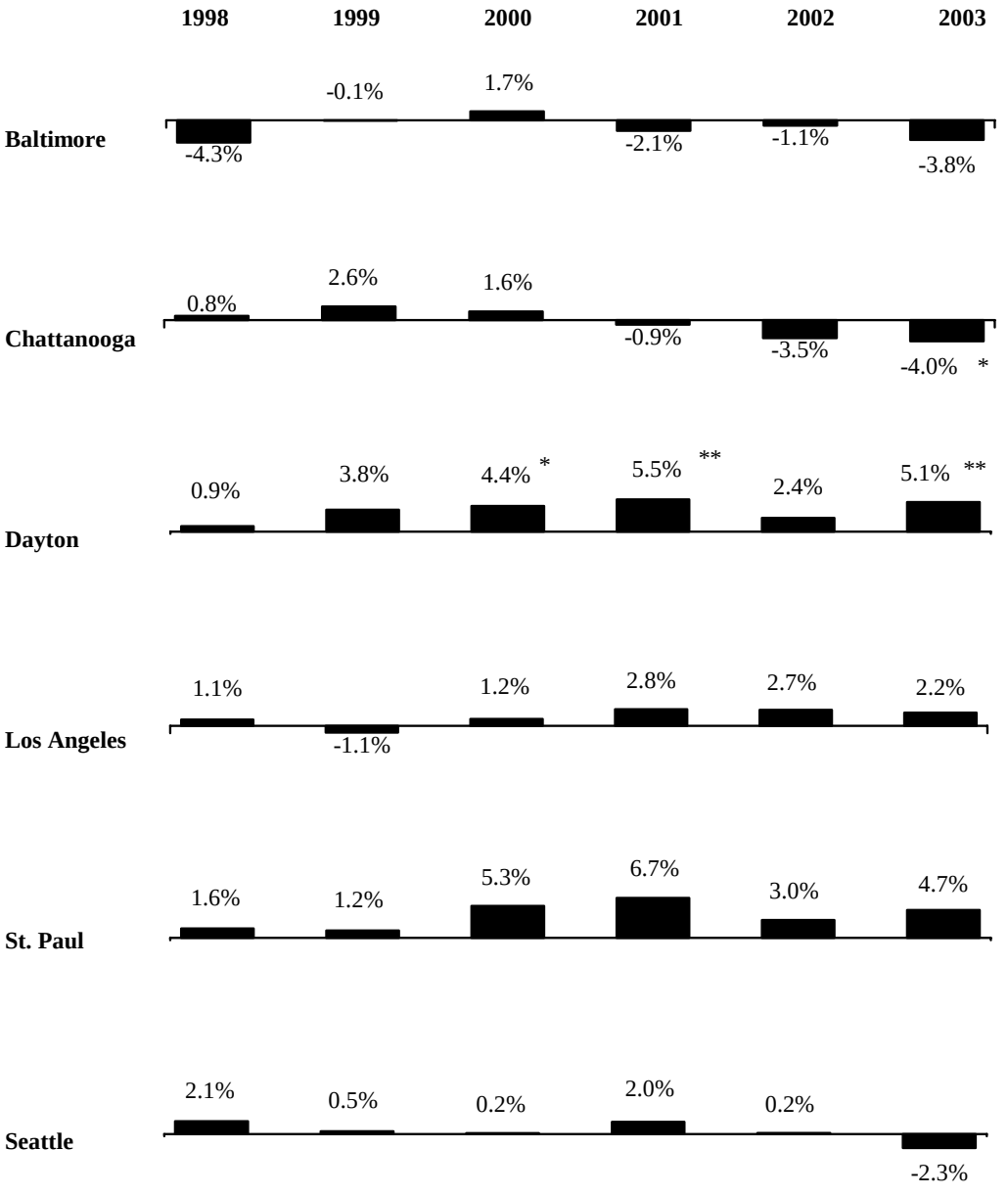
To complete this part of the analysis, Figure 4.5 presents site-by-site estimates of the impacts of Jobs-Plus on mean quarterly employment rates by follow-up year. The estimates for Jobs-Plus in Baltimore and Chattanooga fluctuate just above and below zero, with none that are large and only one that is statistically significant. The estimates for Dayton, Los Angeles, and

[12]During 2000, as the Los Angeles Jobs-Plus program was being rebuilt, its estimated earnings effect was substantial in magnitude but not yet statistically significant.

The Jobs-Plus Demonstration

Figure 4.5

Average Annual Effects of Jobs-Plus on Employment Rates, by Site (1998 Cohort)



(continued)

Figure 4.5 (continued)

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Statistical significance levels are indicated as *** =1 percent; ** = 5 percent; * =10 percent.

Sample sizes are 345 in the program group and 610 in the comparison group in Baltimore; 278 in the program group and 502 in the comparison group in Chattanooga; 340 in the program group and 595 in the comparison group in Dayton; 446 in the program group and 385 in the comparison group in Los Angeles; 302 in the program group and 229 in the comparison group in St. Paul; and 412 in the program group and 330 in the comparison group in Seattle.

St. Paul suggest a pattern of positive effects, with the largest effects in Dayton and St. Paul and the only statistically significant effects in Dayton. The findings for Seattle are near zero throughout the follow-up period. On balance, the three sites with the largest and most sustained program effects on earnings exhibit some evidence of a corresponding but proportionately smaller effect on employment rates. For both the sites with no earnings effects (Baltimore and Chattanooga) and the site with earnings effects that are not sustained (Seattle), there is little or no sign of a program effect on employment rates.

Large Impacts for Early and Later Cohorts of Residents

Results presented so far in this chapter are for persons who were residents of a Jobs-Plus development when the program was launched. This group was used as the primary basis for assessing the effects of Jobs-Plus on individuals because its composition was determined before the program existed and thus could not have been influenced by it.[13] Thus, it provides a valid comparison of the Jobs-Plus group and the comparison group. Nevertheless, many members of the 1998 cohort moved away before implementation of Jobs-Plus was completed — before they could be exposed to the full program. Therefore, it is possible that findings for the 1998 cohort understate the effects of Jobs-Plus. To address this possibility, the analysis was repeated for a later cohort of working-age, nondisabled adults who were residents of a Jobs-Plus development or a comparison development in October 2000 — the 2000 cohort.[14] Members of

[13]In statistical parlance, the composition of the 1998 cohort is "exogenous" to Jobs-Plus.

[14]Because it is possible that Jobs-Plus could have influenced the composition of the 2000 cohort at the Jobs-Plus developments by inducing selective in-migration or out-migration, findings for this cohort are used only for comparative purposes. However, there is no empirical evidence that Jobs-Plus actually influenced its composition.

the 1998 cohort who did not move away were also members of the 2000 cohort, meaning that the two cohorts overlap somewhat. Nevertheless, they differ considerably due to the many members of the 1998 cohort who moved away before October 2000 and the many members of the 2000 cohort who moved in after October 1998. Specifically, 59.9 percent of the 1998 cohort members and 62.1 percent of the 2000 cohort members were in both cohorts.[15]

Table 4.3 compares estimates of the impacts of Jobs-Plus on residents' earnings for the two cohorts from all sites except Seattle.[16] These findings represent the average effects of Jobs-Plus on annual earnings from 2000 to 2003, after the program had been implemented. Findings for the two cohorts tell the same story. For example, estimated program effects in Baltimore and Chattanooga are near zero for both cohorts. Thus, underexposure to the program because of resident mobility when it was being implemented cannot explain its lack of success at these sites. In Dayton, Los Angeles, and St. Paul, estimated program effects are positive, large, and statistically significant for both cohorts. In one of these sites, the estimate is larger for the 2000 cohort; in another, the estimates are virtually the same; and in another, the estimate is smaller for the 2000 cohort. Therefore, it does not appear that using results for the 1998 cohort understates the average effects of Jobs-Plus because of "dosage dilution" caused by resident mobility.[17]

Large Impacts for All Subgroups and Especially Large Impacts for Some

The preceding findings indicate that Jobs-Plus increased earnings substantially at the three sites where it was implemented strongly. Table 4.4 illustrates how these impacts differed for subgroups of the 1998 cohort that could be identified using available data.[18] The first column of the table lists the estimated effect of Jobs-Plus on average annual earnings from 2000 to 2003, after program implementation was completed. These findings are presented in 2003 dollars. The second column presents each estimated program effect as a percentage of what earnings would have been without Jobs-Plus. The third column indicates whether the estimates of program effects for subgroups defined in terms of a particular characteristic (for example,

[15]These figures are for all sites except Seattle.

[16]A program effect is not reported for the 2000 cohort in Seattle because evidence suggests that HOPE VI influenced its composition substantially.

[17]In addition, repeating the analysis for the 2000 cohort provides an internal replication of the analysis for the 1998 cohort, which helps to establish the robustness and generalizability of the findings.

[18]Results for each subgroup were obtained by (1) computing its mean earnings for the Jobs-Plus group and for the comparison group by site and quarter; (2) computing the three-site mean-of-mean earnings for the Jobs-Plus subgroup and the comparison subgroup by quarter, weighting each site equally; and (3) conducting a comparative interrupted time-series analysis of the pooled quarterly earnings results for the Jobs-Plus subgroup and comparison subgroup at the three sites. Weighting the subgroup samples from all sites equally eliminates potential confounds between site-specific program effects and subgroup sample sizes. In addition, because estimates of program effects are obtained for each subgroup separately, their average differs from that for the full sample due to random estimation error.

The Jobs-Plus Demonstration

Table 4.3

Average Annual Effects of Jobs-Plus on Earnings from 2000 to 2003: 1998 and 2000 Cohorts for Each Site

Site	Earnings Effect for 1998 Cohort		Earnings Effect for 2000 Cohort	
	Dollars	Percentage	Dollars	Percentage
Baltimore	-189	-2.7	168	2.5
Chattanooga	-224	-3.3	24	0.4
Dayton	895 ***	13.0	1,189 ***	19.4
Los Angeles	1,120 ***	14.8	1,076 ***	14.8
St. Paul	1,492 ***	15.4	767 ***	8.0
Seattle	394 **	4.0	NA	NA

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: All earnings effects are reported in 2003 dollars.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

The number of persons in the 1998 and 2000 cohorts, respectively, were 955 and 888 for Baltimore; 780 and 825 for Chattanooga; 935 and 684 for Dayton; 831 and 904 for Los Angeles; and 531 and 523 for St. Paul. There were 742 persons in the 1998 cohort in Seattle.

TANF receipt or not) are statistically significantly *different* from each other. These findings tell a story that demonstrates the robustness of the Jobs-Plus program effects and provides a deeper understanding of them.

Table 4.4 indicates that once Jobs-Plus was implemented, it produced large earnings gains for every subgroup and very large earnings gains for many of them.[19] This demonstrates that the program produced meaningful earnings gains for many different types of public housing residents, not just a small, idiosyncratic subgroup. In this regard the findings are quite robust.

[19]Subgroup estimates of program effects during 1998-1999 (not presented here) indicate that Jobs-Plus did not produce large program effects for any subgroups while the program was being implemented. For most subgroups, this early effect was very small, and for only one was it statistically significant.

The Jobs-Plus Demonstration

Table 4.4

Average Annual Effects of Jobs-Plus on Earnings for the Stronger Implementation Sites Combined, by Subgroup (1998 Cohort)

Subgroup	Program Effect 2000-2003 ($)	Percentage Change (%)	Statistical Significance of the Differences	Sample Sizes
Did not receive TANF in 1998	1,654 ***	17.9	†††	1,157
Received TANF in 1998	761 **	10.7		1,140
Had lived in development less than 4 years	650 ***	8.4	†††	1,382
Had lived in development at least 4 years	1,818 ***	21.1		915
Age				
21 - 24 years	1,921 ***	22.1	†††	414
25 - 34 years	1,323 ***	14.2		807
35 - 61 years	756 ***	10.7		1,076
Had been employed less than 3 of past 8 quarters	1,427 ***	37.8		1,050
Had been employed at least 3 of past 8 quarters	882 *	7.2		1,247
Moved out by October 2000	1,505 ***	15.9		799
Did not move out by October 2000	1,082 ***	14.4		1,498

SOURCES: MDRC calculations using data from housing authority tenant (50058) records, state Unemployment Insurance (UI) wage records, and state AFDC/TANF records.

NOTES: Findings are reported in 2003 dollars, and those for each site in the analysis — Dayton, Los Angeles, and St. Paul — are weighted equally.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

Statistical significance of the differences in levels are indicated as ††† = 1 percent; †† = 5 percent; and † = 10 percent.

Members of the welfare recipient subgroup received a welfare payment in 1998; members of the non-recipient subgroup did not.

However, there is also enormous variation in the earnings impacts of Jobs-Plus. These gains range from a low of $650 per year for cohort members who had lived in their development for less than four years before Jobs-Plus began (recent arrivals) to a high of $1,921 per year for those who were 21 to 24 years old at the time (young adults). In percentages, the gains ranged from a low of 7.2 percent for cohort members who were employed for at least three of the past eight quarters before Jobs-Plus began (less disadvantaged persons) to a high of 37.8 percent for those who were employed for less than three quarters (more disadvantaged persons). Consider the results for each set of subgroups.

Large Differences for Subgroups Defined in Terms of Welfare Receipt

Perhaps the most important subgroup differences in Table 4.4 are those for recent TANF recipients versus nonrecipients. These findings are important in their own right and provide insights into how the effects of Jobs-Plus should be interpreted. They indicate that, on average, during the four years after Jobs-Plus was implemented in Dayton, Los Angeles, and St. Paul, the program increased the earnings of cohort members who were not on welfare (were not receiving TANF) when Jobs-Plus was launched — by $1,654 per year, or 17.9 percent. For cohort members who were on welfare when the program was launched, Jobs-Plus increased average annual earnings by $761 per year, or 10.7 percent.[20] Both of these estimates are statistically significantly different from zero. In addition, they are statistically significantly different from each other.

The most likely explanation for this subgroup difference in program impacts is that the Jobs-Plus/comparison group "service differential" was reduced for welfare recipients by employment-related services and incentives that were available to welfare recipients in the comparison group from welfare reform initiatives that were under way when Jobs-Plus was being implemented. There were no existing counterparts to these welfare-to-work programs for cohort members who were not welfare recipients. It is therefore likely that the service differential produced by Jobs-Plus for welfare recipients in the 1998 cohort was smaller than that for nonrecipients. Unfortunately, there is no way to directly observe this subgroup difference because it was not feasible to collect data on employment-related services received by a representative sample of the 1998 cohort during the follow-up period for Jobs-Plus, given that so many moved away. (Recall that the follow-up survey of residents was limited to those living in the development in 2003.) However, the time-series earnings graphs in Figure 4.6 provide some indirect clues.

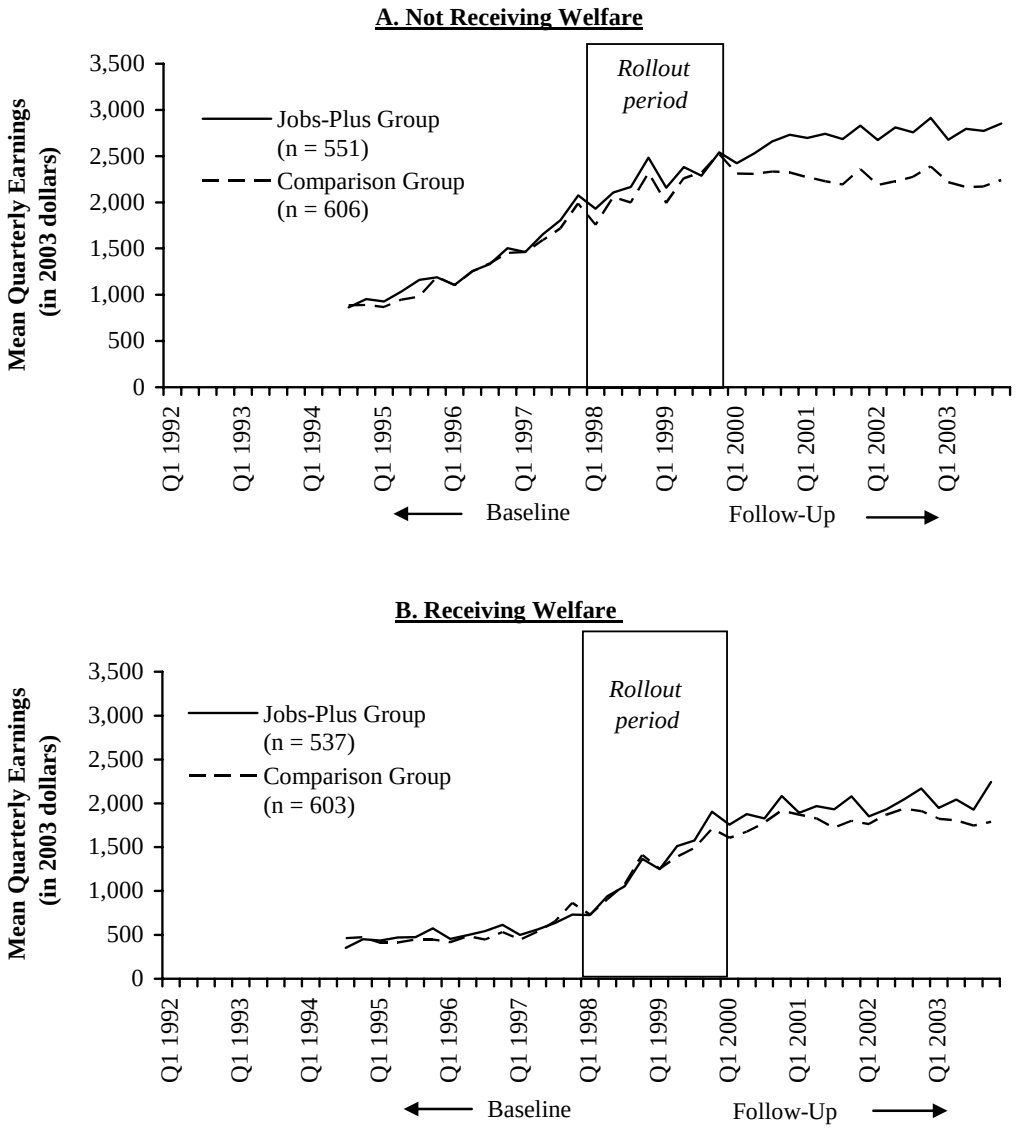
The graph in Panel A of Figure 4.6, for *nonrecipients* of TANF, indicates that, from 1994 through 1999, the earnings trajectories of the Jobs-Plus group and the comparison group were rapidly rising and very similar to each other. After 2000, with the onset of the national recession, earnings for the comparison group fell, whereas earnings for the Jobs-Plus group continued to rise rapidly. Thus, Jobs-Plus produced a very large earnings gain for the subgroup not receiving welfare.

[20]The ratio of earnings effects in dollars for the two welfare subgroups was 1,654/761, or 2.17, whereas the ratio in percentages was 17.9/10.7, or 1.67. The difference in these ratios reflects the fact that earnings in the absence of Jobs-Plus were much higher for nonrecipients of welfare than for recipients.

The Jobs-Plus Demonstration

Figure 4.6

Average Quarterly Earnings for Members of the 1998 Cohort Who Were and Were Not Receiving Welfare (Stronger Implementation Sites)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records, state Unemployment Insurance (UI) wage records, and state AFDC/TANF records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The graph in Panel B of Figure 4.6 is for TANF *recipients* in the Jobs-Plus group and the comparison group. Earnings for these subgroups remained almost constant at a very low level until 1997, when they began to rise rapidly.[21] This rise stopped after 2000 for the comparison group but continued somewhat for the Jobs-Plus group. Thus, Jobs-Plus produced a moderately large earnings gain for the subgroup receiving welfare.

So why did earnings for welfare recipients not increase until 1997 — about when welfare reforms began — and then increase sharply for both the Jobs-Plus group and the comparison group? One explanation is that employment services and work incentives provided by welfare reforms produced much of the earnings increases for both groups, thereby reducing the margin for Jobs-Plus to make a difference. This would not have been the case for residents who were not welfare recipients.

Large Differences for Subgroups Defined in Terms of Prior Duration of Residence

The findings presented in Table 4.4 indicate that the earnings gains produced by Jobs-Plus were much larger for cohort members who had lived in their development for a number of years than for recent arrivals. Specifically, it appears that Jobs-Plus increased the earnings of persons who had lived in their development for at least four years by $1,818 per year, or 21.1 percent. This earnings gain was $650 per year, or 8.4 percent, for persons who had moved into their development more recently. The difference between these estimates for the two subgroups was quite large and is highly statistically significant. One possible explanation for the difference is that residential stability (even in public housing) facilitates other positive changes. Thus, a stable housing situation might make it easier for some persons to participate in an employment initiative and take the steps needed to find and keep new employment. These conditions might be less prevalent for members of households that had moved recently and experienced the disruption that comes with doing so.

An alternative explanation is that longer-term public housing residents had lower past earnings than did recent arrivals and thus a greater margin for improvement. However, the data indicate that the reverse is true. Therefore, longer-term residents experienced larger program effects even though they had a smaller margin for improvement.

[21]One explanation for the rapid rise in earnings after 1998 is that persons who received welfare that year overrepresent those who had just experienced an unusually bad time and would rebound naturally. In statistical parlance, this implies that the rapid rise is a "regression artifact." But if this were the case, average earnings would also rise when going backward in time from 1998 — which did not occur.

Large Differences for Subgroups Defined in Terms of Age

Table 4.4 also indicates that the earnings gains produced by Jobs-Plus declined substantially and systematically as residents' age increased. These gains were $1,921, or 22.1 percent, for cohort members who were 21 to 24 years old when Jobs-Plus was launched; $1,323, or 14.2 percent, for those who were 25 to 34 years old; and $756, or 10.7 percent, for those who were 35 to 61 years old. One possible explanation for these large statistically significant differences is that younger residents are more flexible and can better adapt to changes made possible by an employment initiative such as Jobs-Plus.

Smaller Differences for Subgroups Defined in Terms of Past Employment and Future Mobility

Estimates of the effects of Jobs-Plus for subgroups defined in terms of recent past employment and future residential mobility differ by much less than do those for the preceding categories of subgroups. In addition, these differences are not statistically significant and thus might reflect random estimation error. Findings for the employment subgroups provide little evidence that Jobs-Plus was appreciably more or less effective for residents with a strong or weak recent attachment to the labor market.[22] Thus, they do not suggest a more refined targeting strategy for the program. Findings for the mobility subgroups suggest that program effects for residents who stayed in their development (and thus may have contributed to its economic improvement) were roughly comparable to those for residents who moved away (and took their economic benefits with them). They suggest that the program's positive effects for individual residents might translate into positive effects for their developments (discussed in Chapter 5).[23]

Lastly, to more fully interpret the preceding subgroup findings, it is useful to consider the degree to which subgroup characteristics are associated with each other. If this association is high, then subgroups defined in terms of one characteristic (for example, welfare receipt) will largely overlap subgroups defined in terms of other characteristics (for example, duration of tenancy). And, if so, differences in program effects might be related to one characteristic *because* they are related to another.

Perhaps most important in this regard is the degree to which welfare receipt is independent of the other subgroup characteristics. A simple cross-tabulation of welfare receipt ver-

[22]The especially large percentage increase in earnings (37.8 percent) for the less employed subgroup reflects these residents' especially low earnings levels in the absence of Jobs-Plus.

[23]Unlike all the other subgroups in Table 4.4, those defined in terms of future mobility are based on behavior that occurred after Jobs-Plus was launched and, thus, in theory, is behavior that could have been affected by the program. Estimates (not presented in this report) suggest, however, that resident mobility was not affected by the program.

sus each subgroup characteristic indicates that it is largely independent of the others.[24] Hence, subgroups defined in terms of welfare receipt do not substantially overlap those defined in terms of other characteristics. This is further evidence that the difference in program effects for welfare subgroups may reflect differences in services available to comparison group members rather than differences in their characteristics. Nevertheless, it is possible that welfare recipients in the study differ from nonrecipients in unobserved ways that caused the two groups to respond differently to Jobs-Plus.

Dramatic Findings for Subgroups Within Stronger Implementation Sites

So far, the analysis of subgroup impacts has focused on the three stronger implementation sites combined. This was done to ensure adequate sample sizes for each subgroup. It was also done to limit the number of impact findings presented in order to reduce the potential for "information overload." However, further important insights into the effectiveness of Jobs-Plus become apparent when estimates of its impacts are presented separately for the primary demographic subgroups from each of the three stronger implementation sites, which have adequate sample sizes to support separate analyses. These subgroups are African-American women in Dayton, immigrant Latin American men and Latin American women in Los Angeles, and immigrant Southeast Asian men and Southeast Asian women in St. Paul.[25]

Table 4.5 presents findings for these subgroups. The first two columns in the table report estimates of the impacts of Jobs-Plus on average annual earnings from 2000 to 2003 in dollars and as a percentage of what earnings would have been without the program. The two right-hand columns report estimates of the impacts of Jobs-Plus on average quarterly employment rates from 2000 to 2003 in percentage points and as a percentage of what employment rates would have been without the program. (Note that the rightmost column represents percentages of percentages.)

[24]The phi coefficient (which summarizes the association between two categorical variables) for residents' welfare receipt versus their duration of prior tenancy, age, prior employment, and future mobility was, respectively, –0.087, 0.140, 0.096, and 0.061.

[25]In Dayton, 75.8 percent of the 1998 cohort members were identified as black, non-Hispanic women according to their housing authority records. Moreover, 99.8 percent of the black, non-Hispanic women in the Dayton baseline survey sample said that they were born in the United States. In Los Angeles, 78.6 percent of the 1998 cohort members were identified as Hispanic according to their housing authority records, and 90.7 of the Hispanic members of the Los Angeles baseline survey sample said that they were born outside the United States (approximately two-thirds were born in Mexico, and one-third were born in El Salvador, Guatemala, Honduras, and other Central American countries). In St. Paul, 52.8 percent of the 1998 cohort members were identified as Asians or Pacific Islanders, according to their housing authority records, and 93.7 percent of the Asians and Pacific Islanders in the St. Paul baseline survey sample (almost all of whom were Hmong) said that they were born in Laos or Cambodia.

Table 4.5

Average Annual Effects of Jobs-Plus on Earnings and Quarterly Employment Rates from 2000 to 2003 for the Largest Demographic Subgroups in the Stronger Implementation Sites (1998 Cohort)

	Effect on Earnings		Effect on Employment Rate	
Site and Subgroup	Dollars	Percentage Change	Percentage Points	Percentage Change
Dayton				
Black, non-Hispanic women (n = 286 and 423)	1,144 ***	16.3	4.7 ***	8.1
Los Angeles				
Hispanic men (n = 111 and 102)	3,248 ***	28.3	10.8 ***	18.6
Hispanic women (n = 235 and 205)	649	10.4	1.4	3.6
St. Paul				
Southeast Asian men (n = 72 and 59)	2,129 *	20.6	2.2	4.7
Southeast Asian women (n = 98 and 78)	1,798 ***	23.4	12.8 ***	38.6

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The numbers of persons in the Jobs-Plus sample and comparison sample (respectively) are listed in parentheses after the name of each subgroup.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The overall pattern of impact estimates in the table illustrates three main points about the effectiveness of Jobs-Plus when it is implemented relatively well. First, note that large earnings gains were generated for four of the five subgroups.[26] This indicates that Jobs-Plus was capable of generating large earnings gains for public housing residents who vary enormously in their backgrounds and personal experiences, ranging from native-born African-American women to immigrant groups from two different parts of the world. Such findings reinforce the conclusion that Jobs-Plus can be effective for many different types of public housing residents.

[26]The second-largest demographic subgroup in the St. Paul sample was made up of 104 black, non-Hispanic women, half of whom lived in the Jobs-Plus development and half of whom lived in the comparison development. The erratic nature of the time-series data for this small sample (see Appendix Figure E.3) made it infeasible to estimate the impacts of Jobs-Plus for this subgroup.

Second, note that the findings for quarterly employment rates indicate that Jobs-Plus produced increases that were often sizable and statistically significant. This was the case for three of the four subgroups that experienced large earnings impacts. Hence, there is strong evidence that Jobs-Plus increased employment rates. This reinforces the conclusion that estimates of employment impacts for the combined sample of stronger implementation sites presented earlier (which are positive but not statistically significant) probably represent real effects of the program.

Third, note that the findings for earnings and employment rates in Table 4.5 present a complex picture of the relationship between the effects of Jobs-Plus on these two outcomes. This relationship varies dramatically across demographic subgroups. It covers the full range of possibilities from one extreme (for Southeast Asian men in St. Paul), where program-induced changes in quarterly employment rates (4.7 percent) comprise a small fraction of the program-induced change in earnings (20.6 percent), to the opposite extreme (for Southeast Asian women in St. Paul), where program-induced changes in employment rates (38.6 percent) comprise *all* the change in earnings (23.4 percent).[27] Hence, there is no single simple story about how Jobs-Plus created earnings gains for public housing residents. The only common theme is that it did so for very different subgroups.

Now consider the specific subgroup findings, starting with those for women. For African-American women in Dayton and immigrant Southeast Asian women in St. Paul, estimates of the impacts of Jobs-Plus on both earnings and employment rates are substantial and statistically significant. For Hispanic women in Los Angeles, the estimates are much smaller and not statistically significant. Thus, Jobs-Plus was effective for at least two of the three groups.

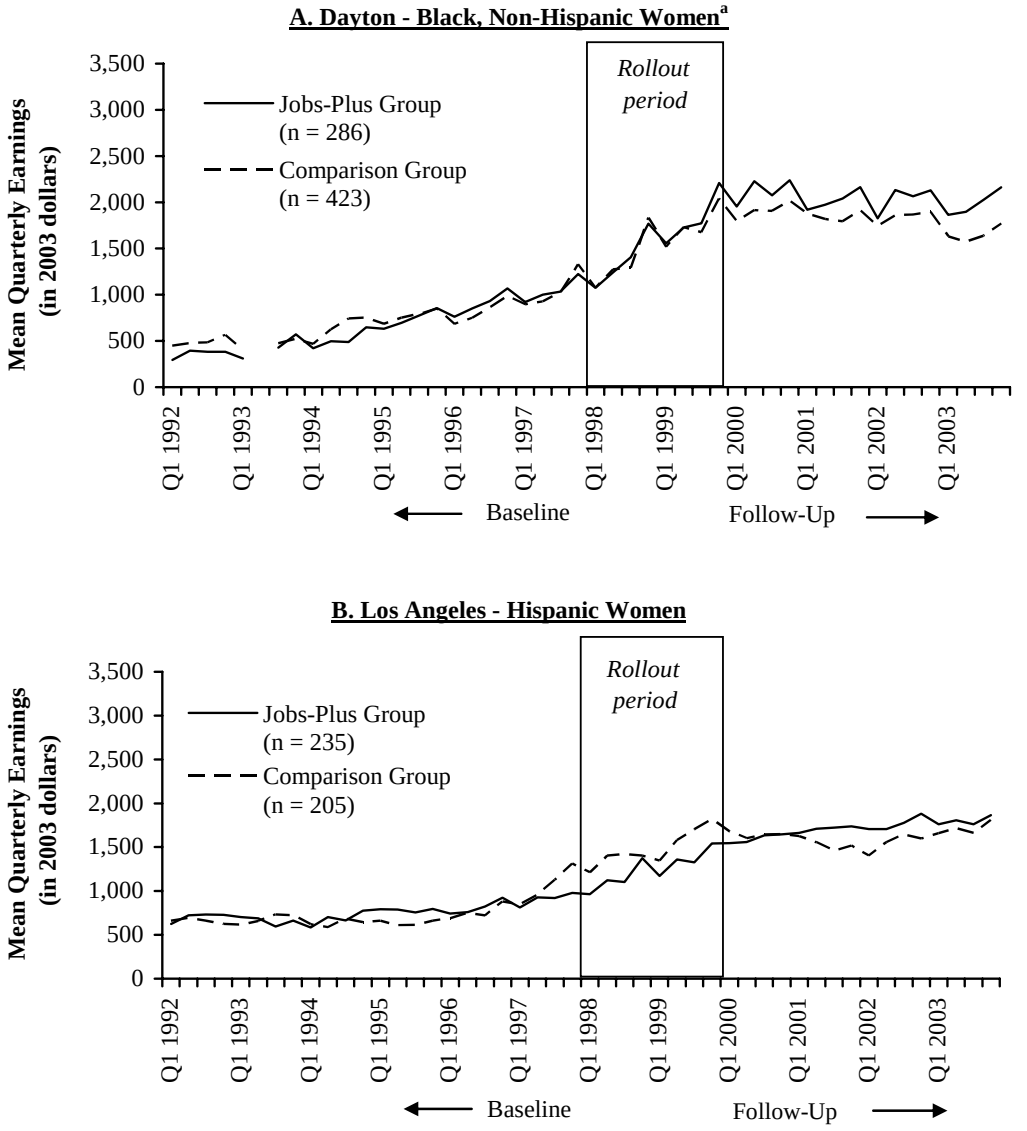
Figure 4.7 illustrates the quarterly earnings patterns that produced the estimates of earnings impacts for women.[28] The story in Dayton is one of a consistently close baseline match for the Jobs-Plus group and comparison group, followed by a visible and sustained relative improvement for the Jobs-Plus group after the program was implemented. The story in St. Paul is one where baseline earnings for the Jobs-Plus group were consistently below those for the comparison group, followed by a visible and sustained reversal of positions after Jobs-Plus was implemented. In Los Angeles, the relative positions of the Jobs-Plus group and comparison group fluctuated during the baseline period and did not move outside the range of fluctuation after the program was

[27]Taken literally, the estimated program effects on earnings and employment rates for Southeast Asian women suggest that all earnings gains for them were due to an increase in the number of persons employed and that, furthermore, some of the additional persons employed earned less than the average for those who would have been employed in the absence of the program. However, given the substantial random error in all the impact estimates presented and the fact that earnings impacts were estimated separately from employment impacts, it is likely that much of the margin by which the 38.6 percentage change for employment rates exceeds the 23.4 percentage change for earnings is due to estimation error.

[28]Appendix Figure E.4 presents corresponding graphs for quarterly employment rates.

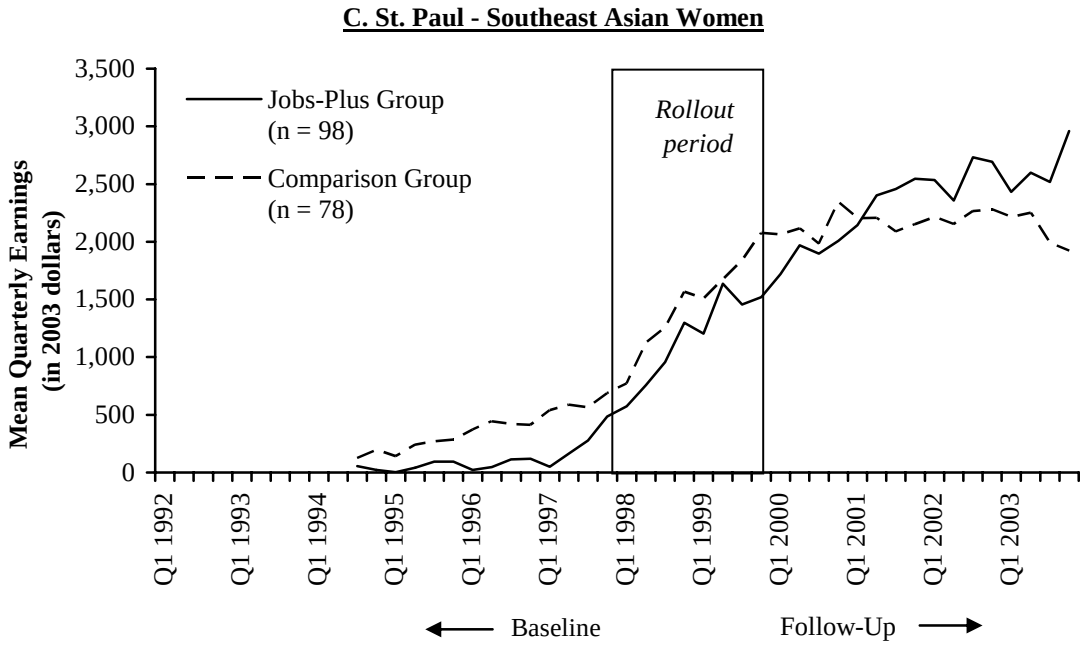
Figure 4.7

Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group, for Women in the Largest Demographic Subgroups in the Stronger Implementation Sites (1998 Cohort)



(continued)

Figure 4.7 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

implemented. These patterns produced statistically significant estimates of the impacts of Jobs-Plus on average annual earnings from 2000 to 2003 equal to $1,144 (or 16.3 percent) for African-American women in Dayton and $1,798 (or 23.4 percent) for Southeast Asian women in St. Paul. They produced a nonstatistically significant estimate of $649 (or 10.4 percent) for Hispanic women in Los Angeles. These findings indicate that Jobs-Plus increased average earnings per person over four years by a total of $4,576 for African-American women in Dayton, $7,192 for Southeast Asian women in St. Paul, and $2,596 for Hispanic women in Los Angeles.

Figure 4.8 illustrates the quarterly earnings histories of the two male subgroups, which provide dramatic evidence that Jobs-Plus was highly effective for them.[29] The graph in Panel A, for Hispanic men from Los Angeles, shows that the baseline earnings trend of the Jobs-Plus group was somewhat above that of the comparison group and that both trends fluctuated substantially.[30] But, after Jobs-Plus was implemented, earnings for the Jobs-Plus group continued to climb, while those for the comparison group leveled off and declined with the onset of the national recession. This produced a very large earnings advantage for the Jobs-Plus group, which showed no signs of decaying over time.

The graph in Panel B of Figure 4.8, for Southeast Asian men in St. Paul, shows that the baseline earnings trend of the Jobs-Plus group was somewhat below that of the comparison group and that both trends started almost at zero and climbed rapidly over time. Once again, however, after Jobs-Plus was implemented, earnings for the comparison group leveled off and declined somewhat with the onset of the recession, whereas those for the Jobs-Plus group continued to climb rapidly. This very large earnings advantage for the Jobs-Plus group also showed no signs of decaying.

The graphs in Figure 4.8 clearly illustrate the earnings histories that produced the impact estimates for men reported in Table 4.5. According to these findings, Jobs-Plus increased average annual earnings for Hispanic men in Los Angeles by $3,248 (or 28.3 percent) from 2000 to 2003. The corresponding increase for Southeast Asian men in St. Paul was $2,129 (or 20.6 percent). Thus, Jobs-Plus increased average earnings per person over four years by a total of $12,994 for Hispanic men in Los Angeles and $8,517 for Southeast Asian men in St. Paul. These findings fly in the face of the common perception that voluntary employment programs for economically disadvantaged persons are not effective for men.[31] In addition, they provide clear evidence that such

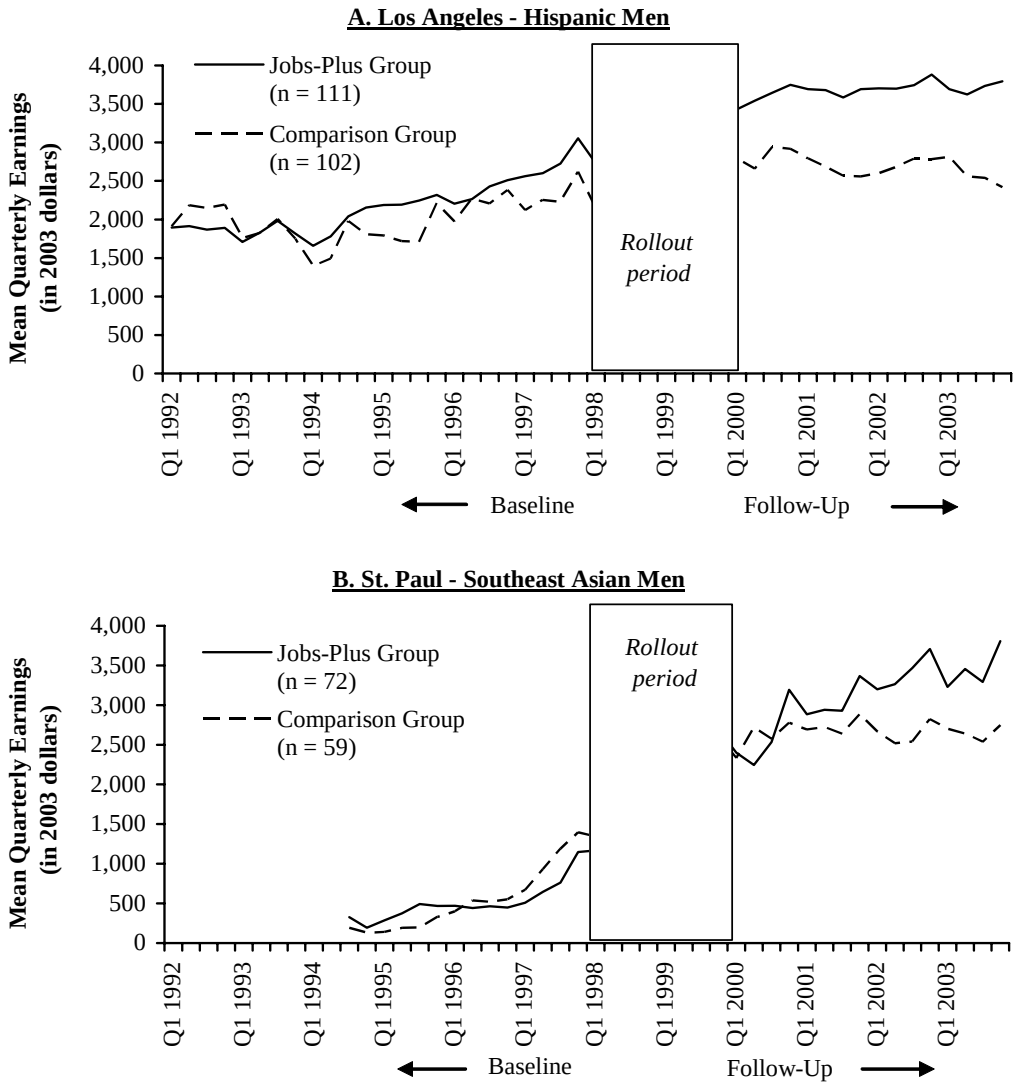
[29]Earnings for these men are literally "off the charts" relative to other subgroups. Hence, it was necessary to extend the vertical axis in this figure to $4,000 (from a maximum value of $3,500 for all other subgroups). Figure E.4 presents corresponding graphs for quarterly employment rates.

[30]Baseline earnings for Hispanic men from Los Angeles were three to four times those for Hispanic women from the site.

[31]A prominent nonexperimental evaluation of the first federal job training program, the Manpower Development Training Act (MDTA), found positive earnings impacts for women but not for men (Ashenfelter, 1978). However, a reanalysis of these data found positive earnings impacts for both groups (Bloom, 1984). An experimental evaluation of the National Supported Work Demonstration found positive earnings effects for women but not for men (MDRC, 1980). A major nonexperimental evaluation of the second federal job training program, the Comprehensive Employment and Training Act (CETA), found positive earnings impacts for women but not for men (Bloom and McLaughlin, 1982). Other researchers using the same data found mostly positive impacts for women but mixed effects for men (summarized by Barnow, 1987). An experimental evaluation of the third federal job training program, the Job Training Partnership Act (JTPA), found positive earnings impacts for men and women (Bloom et al., 1997). Most recently, a meta-analysis of the findings from 31 evaluations of 15 voluntary employment programs operated between 1964 and 1998 found larger effects for women than for men (Greenberg, Michalopoulos, and Robbins, 2002).

Figure 4.8

Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group, for Men in the Largest Demographic Subgroups in the Stronger Implementation Sites (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

programs can be effective for men from two different immigrant groups. Hence, they are highly relevant to decisions about future employment policies in the United States.

The Impact of Jobs-Plus on Residents' Welfare Receipt

As noted earlier, Jobs-Plus was not a welfare-to-work program. Indeed, only between one-third and two-thirds of the public housing residents (depending on the site) were welfare recipients when Jobs-Plus was launched. Nevertheless, one of the principal factors motivating the Jobs-Plus demonstration was a concern over the potential implications of welfare reform, which was expected to reduce the ability of many public housing residents to pay their rent. Thus, welfare receipt was a key outcome of interest from the inception of the project.

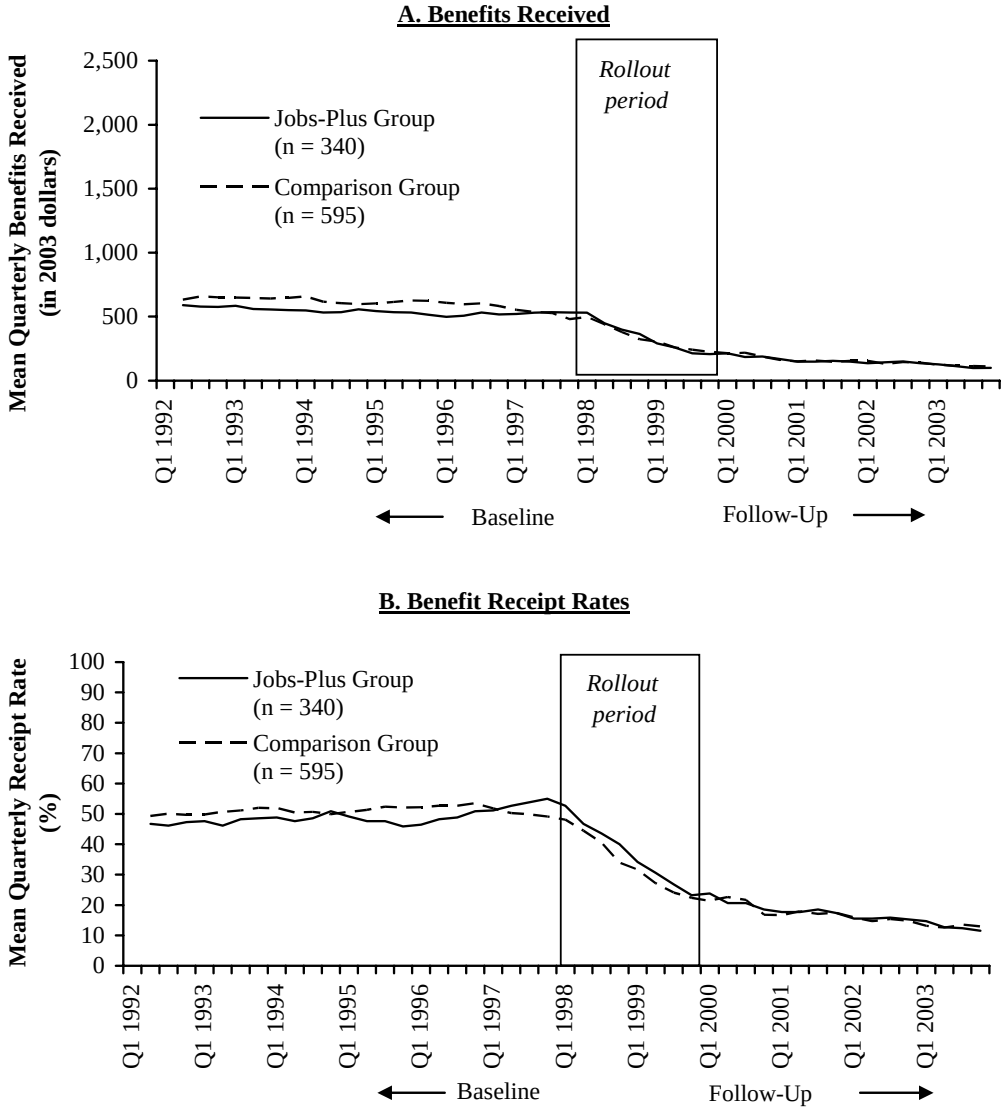
Figures 4.9, 4.10, and 4.11 present a graphical analysis of the effects of Jobs-Plus on welfare receipt for each of the three sites where data on this outcome were obtained: Dayton, Los Angeles, and St. Paul. The graph in Panel A of each figure illustrates how average quarterly benefits varied over time for the Jobs-Plus group and its comparison group. The graph in Panel B of each figure illustrates corresponding results for welfare receipt rates. On balance, these graphs indicate that although welfare receipt declined precipitously after Jobs-Plus was implemented, there is no evidence that the program caused this decline.

Figure 4.9 indicates that welfare receipt for both the Jobs-Plus group and the comparison group in Dayton remained roughly constant throughout the baseline period, followed by a sharp drop beginning in early 1998 and continuing thereafter. This pattern applies both to average benefits received per quarter and to quarterly benefit receipt rates. Thus, for example, while roughly 50 percent of the Jobs-Plus group and the comparison group were receiving welfare during a given quarter in the baseline period, only about 10 percent were doing so by the end of the follow-up period. This dramatic reduction in welfare receipt mirrors similar patterns observed throughout the United States.

There has been much debate about the extent to which a strong national economy, federal welfare reform (with provisions such as time limits), changes in the culture of welfare, and other factors have caused these reductions in welfare receipt. And it is difficult, if not impossible, to separate the effects of these forces. Nevertheless, it seems clear that Jobs-Plus did not cause this result in Dayton, because the pattern of welfare receipt over time is very similar for the Jobs-Plus group and its comparison group and because this pattern was virtually identical from about 1997 forward.

Figure 4.9

Average Quarterly Welfare Benefits Received and Benefit Receipt Rates for the Jobs-Plus Group and Its Comparison Group in Dayton (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Figure 4.10 tells a similar story for Los Angeles, although some of its details are different. Welfare receipt for both the Jobs-Plus group and its comparison group remained roughly constant throughout much of the baseline period (after an initial aberration), followed by a sharp and sustained drop.[32] In this case, the drop started in early 1996, but the ultimate result was similar to that for Dayton. Quarterly welfare receipt rates fell from roughly 35 percent during the baseline period to just above 10 percent at the end of the follow-up period. Once again, there is no evidence that Jobs-Plus had an effect on this outcome.

Figure 4.11 tells a similar story for St. Paul. However, this site had much bigger differences between the Jobs-Plus group and the comparison group before, during, and after Jobs-Plus was launched. In addition, there was a sharp upward shift in welfare payments received during 1998 for both groups, without a corresponding increase in welfare receipt rates. This shift reflects a change in the structure of welfare payments that occurred when the Minnesota Family Investment Program (MFIP) was implemented statewide, allowing working recipients to keep more of their welfare grants. Nevertheless, there was an overall pattern of rapid decline in welfare receipt for both groups after this point in time. For example, benefit receipt rates dropped from a high of almost 70 percent in 1998 to a low of roughly 30 percent in 2003.

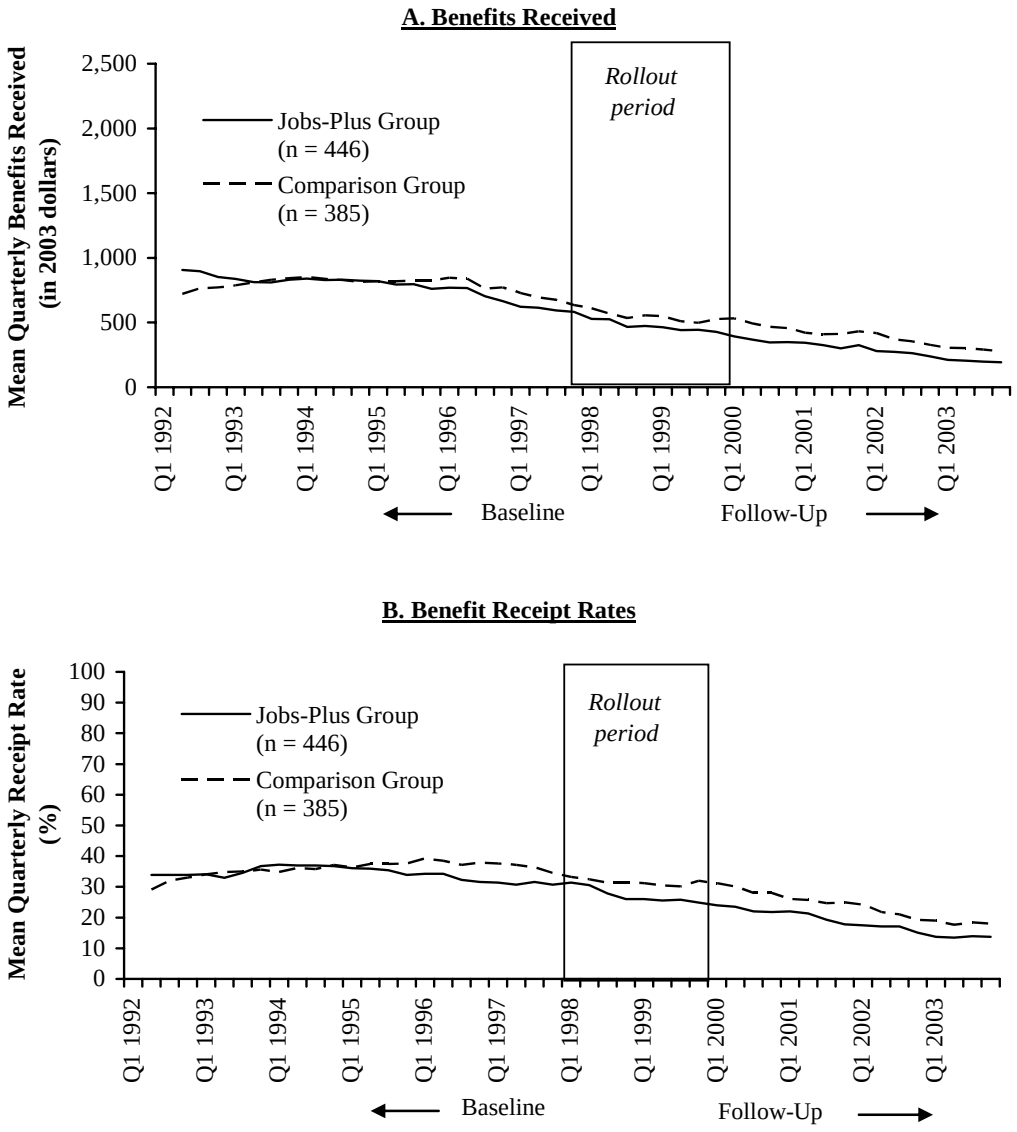
In all three sites, the patterns of welfare benefits over time do not fit a readily specifiable statistical model for estimating the effects of Jobs-Plus — although the graphs tell a pretty clear story. Thus, no statistical estimates are reported. Instead, the present analysis relies solely on an interpretation of the graphical findings. As noted, for Dayton and Los Angeles, these findings clearly demonstrate that Jobs-Plus had no effect on welfare receipt. The findings for St. Paul are more difficult to interpret because of time-varying baseline differences between the Jobs-Plus group and comparison group and a major change in the structure of welfare benefits when Jobs-Plus began.

[32]There is no clear explanation for the difference that exists in average benefits received by the Jobs-Plus group and comparison group during the first few quarters of the baseline period. This difference, which is much less pronounced for benefit receipt rates, may reflect early differences between the two groups in their family sizes or structures.

The Jobs-Plus Demonstration

Figure 4.10

Average Quarterly Welfare Benefits Received and Benefit Receipt Rates for the Jobs-Plus Group and Its Comparison Group in Los Angeles (1998 Cohort)



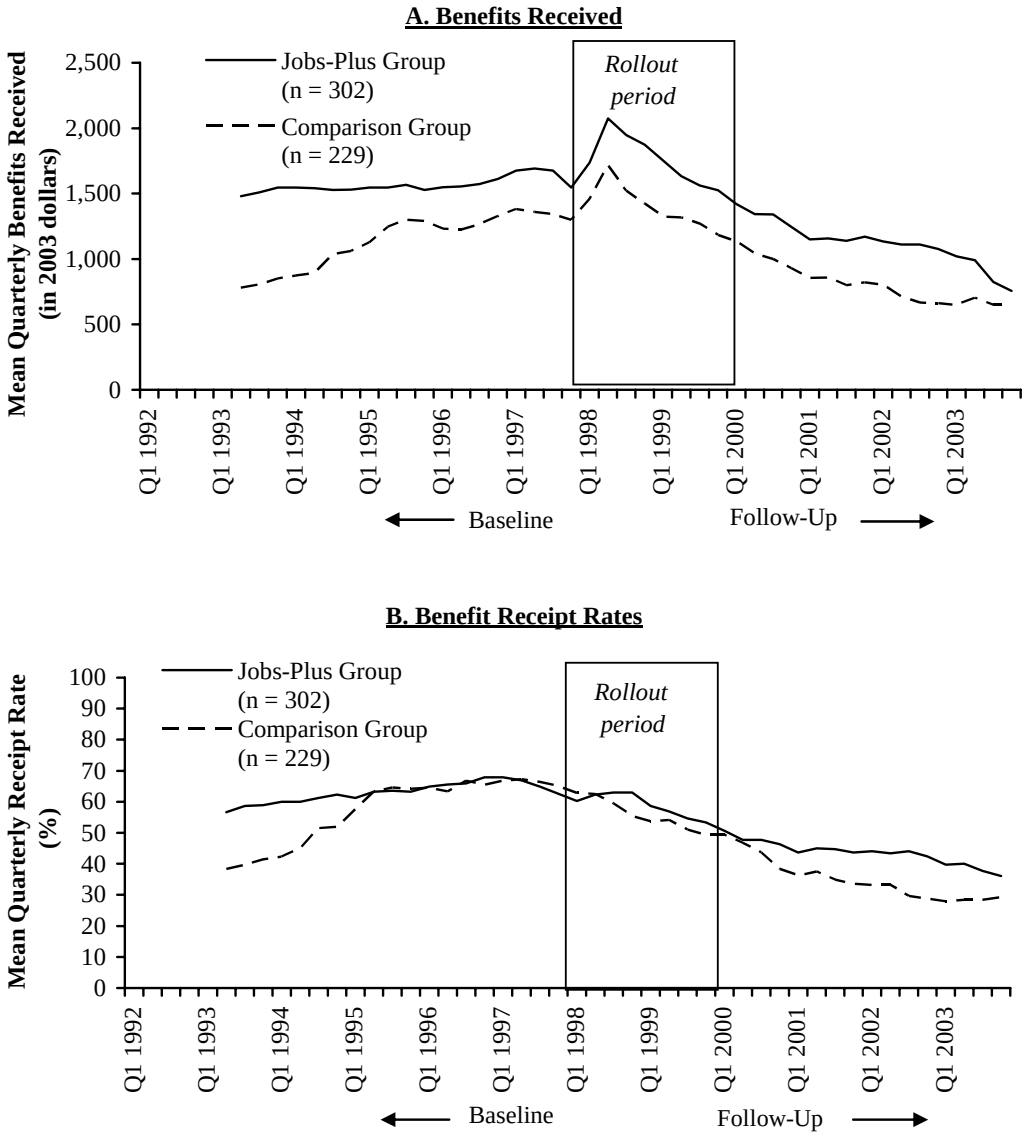
SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The Jobs-Plus Demonstration

Figure 4.11

Average Quarterly Welfare Benefits Received and Benefit Receipt Rates for the Jobs-Plus Group and Its Comparison Group in St. Paul (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

Summary and Conclusions

This chapter presents strong evidence that where and when Jobs-Plus was implemented relatively well it produced large earnings gains for public housing residents and proportionally smaller gains in employment rates. This "value added" by the program (particularly for earnings) is especially impressive for three reasons. First, it was sustained in the midst of a national economic recession, when jobs were becoming scarcer. Second, it followed almost a decade-long increase in earnings and employment fueled by a booming economy, which "raised the bar" with respect to what was required to produce further economic gains for program participants. Third, it had to exceed the effects on comparison group members of other major changes in public policies that were designed to stimulate work among low-income persons.

Although welfare receipt dropped precipitously after Jobs-Plus was launched, this decline was roughly the same for the Jobs-Plus group and comparison group. And, in some cases, the decline began before Jobs-Plus was implemented. Therefore, it is unlikely that Jobs-Plus had much effect on welfare receipt. Instead, it is more likely that factors such as the tail end of a booming economy, welfare reform, and increases in the generosity of the Earned Income Tax Credit caused the changes that were observed.

All these findings are based on a strong evaluation design that gives them substantial credibility. Randomly choosing Jobs-Plus developments and comparison developments eliminates the potential for "stacking the deck" for or against the program through this selection process.[33] Grounding estimates of program impacts on many years of baseline data for the Jobs-Plus group and comparison group greatly enhances the ability to make fair comparisons of their future outcomes. And tracking outcomes for six years after the program was launched provides a substantial basis for gauging its ultimate success. This is especially important for complex, large-scale projects like Jobs-Plus that take a long time to implement and thus require the passage of considerable time before their results can be seen. Further enhancing the credibility and utility of the findings is the fact that the patterns of program effects (both across sites and over time) closely match corresponding patterns in the program's implementation — suggesting that the overall pattern of findings accords well with the theory of the program.

The next logical step in evaluating Jobs-Plus is to consider how its impacts on individual public housing residents (people) translate into impacts on public housing developments (places). Chapter 5 turns to this question.

[33]In econometric parlance, this means that "selection bias" was eliminated.

Chapter 5

Work and Welfare Impacts on Public Housing Developments

This chapter builds on Chapter 4's analysis of the effects of Jobs-Plus on the earnings, employment, and welfare receipt of a specific cohort of public housing residents (some of whom moved away subsequently) to examine whether such effects on *people* get reflected by corresponding changes in their public housing developments (*place*). The chapter thus seeks to answer the question: "How did Jobs-Plus affect the levels of earnings, employment, and welfare receipt that prevailed in the public housing developments where the program was conducted?" In other words, did Jobs-Plus help the developments become places where, at any given time, work was more common, tenants' earnings were higher, and welfare receipt was lower than they would have been without the program? The chapter first outlines the basic issues involved and describes the data and analytic approach that were used. It then presents key findings from the analysis, which suggest that:

- Not surprisingly, when no effects are produced for public housing residents, no effects are produced for the housing developments in which they live.
- When positive effects are produced for residents, they are translated into positive effects for developments in inverse proportion to residents' mobility: The lower the rate of resident mobility, the greater the degree to which individual effects are reflected by development effects.

Basic Issues: Why Mobility Matters

One way to think about the processes by which individual effects on public housing residents might translate into neighborhood effects on public housing developments is to focus on three factors: individual program effects, individual mobility, and individual interactions. It seems reasonable to expect that, other things being equal, larger-than-average program impacts on individuals will produce a greater-than-average impetus for change in their housing developments. It also seems reasonable to expect that the more frequently and intensively individual residents interact with each other, the greater the opportunity there is for program effects on some residents to "rub off" on others, thereby magnifying the effects for their development. Furthermore, one might expect that high levels of resident mobility create a conduit though which large portions of the individual effects created by a program can be lost to a housing development.

Different combinations of these factors give rise to alternative scenarios about the potential relationships between individual program effects and development-level program effects. One scenario ("up and out") specifies that residents are inherently mobile and that when their economic circumstances improve in response to a program, they move out of public housing — thereby taking their program benefits with them. Under this scenario, although public housing might be a good platform for providing services that help individual residents, these services might not improve conditions in public housing.

A second scenario ("stability and synergy") specifies that residents who participate in a program tend to stay in place — perhaps due to the program's economic incentives. Under this scenario, persons who benefit from a program keep their benefits within their development. Over time, as such individuals accumulate in the development, its conditions improve. And if residents interact with each other extensively, the success of some residents might breed further successes for others, creating synergy that multiplies the individual program effect to create an even larger development-level effect.

A third scenario ("likes attract") assumes that, as increased work becomes the norm for more individual residents, the development becomes a more desirable place for working-poor families to live. As word of this situation gets out, more such families might apply and be accepted for residence in the development.

With these scenarios in mind, one can create three different hypotheses for how development-level effects might play out in the Jobs-Plus study. First, for those developments in which there is no program effect on individual residents, there would be no expectation of a program effect at the development level. Second, for developments showing a moderate to large program effect on individual residents but an especially high rate of resident mobility, there would be a reduced expectation for a program effect at the development level. Finally, for those sites demonstrating a large program effect on individual residents and low levels of resident mobility, one would expect good prospects for large effects at the development level.

Analytic Approach: Measuring Development Outcomes Over Time

The first step in an analysis of the impacts of Jobs-Plus on public housing developments was to the identify all working-age, nondisabled residents in each development during every quarter from 1992 through 2003.[1] This information was obtained in various forms (electronic

[1]To simplify the identification of residents in the sample during early baseline years (for which data from local public housing authorities were especially limited and difficult to obtain), only persons were included who lived in a household headed by a working-age, nondisabled person. Thus, a few able-bodied, working-age persons (continued)

and paper) from the administrative records and archives of local public housing authorities in the study (see Appendix D). From these records, it was possible to identify who was living in each development during each quarter of the baseline and follow-up periods for Jobs-Plus.

The next step was to obtain historical data from Unemployment Insurance (UI) wage records and from welfare records (Aid to Families with Dependent Children [AFDC] and Temporary Assistance for Needy Families [TANF]) for every person who was identified as a resident of the developments in the study at any time during the baseline or follow-up periods. This information was used to construct four quarterly outcomes for each Jobs-Plus development and its comparison development(s): average quarterly earnings (in 2003 dollars), quarterly employment rates (in percentages), average quarterly welfare benefits received (in 2003 dollars), and quarterly benefit receipt rates (in percentages). As shown in Chapter 4, these outcomes were computed each quarter for members of the 1998 cohort or for members of the 2000 cohort — producing time-series data for the same individuals over time. For this chapter, these outcomes are computed each quarter only for persons who were residents of a Jobs-Plus development or a comparison development *during that quarter*. In other words, data for each person are only used for the quarters in which he or she was a resident of a Jobs-Plus development or a comparison development. These data produce a times series for the same places over time, with different persons living in these places at different times.

The next step in the analysis was to construct graphs of the time paths of each outcome for each Jobs-Plus development and its comparison development(s). These graphs provide a visual analysis of how work or welfare outcomes in the developments compared before Jobs-Plus was launched and how this comparison changed (or not) after Jobs-Plus was launched. The final step in the analysis was to use the statistical model described in Appendix D to estimate the effects of Jobs-Plus from data in the graphs. These findings are presented below.

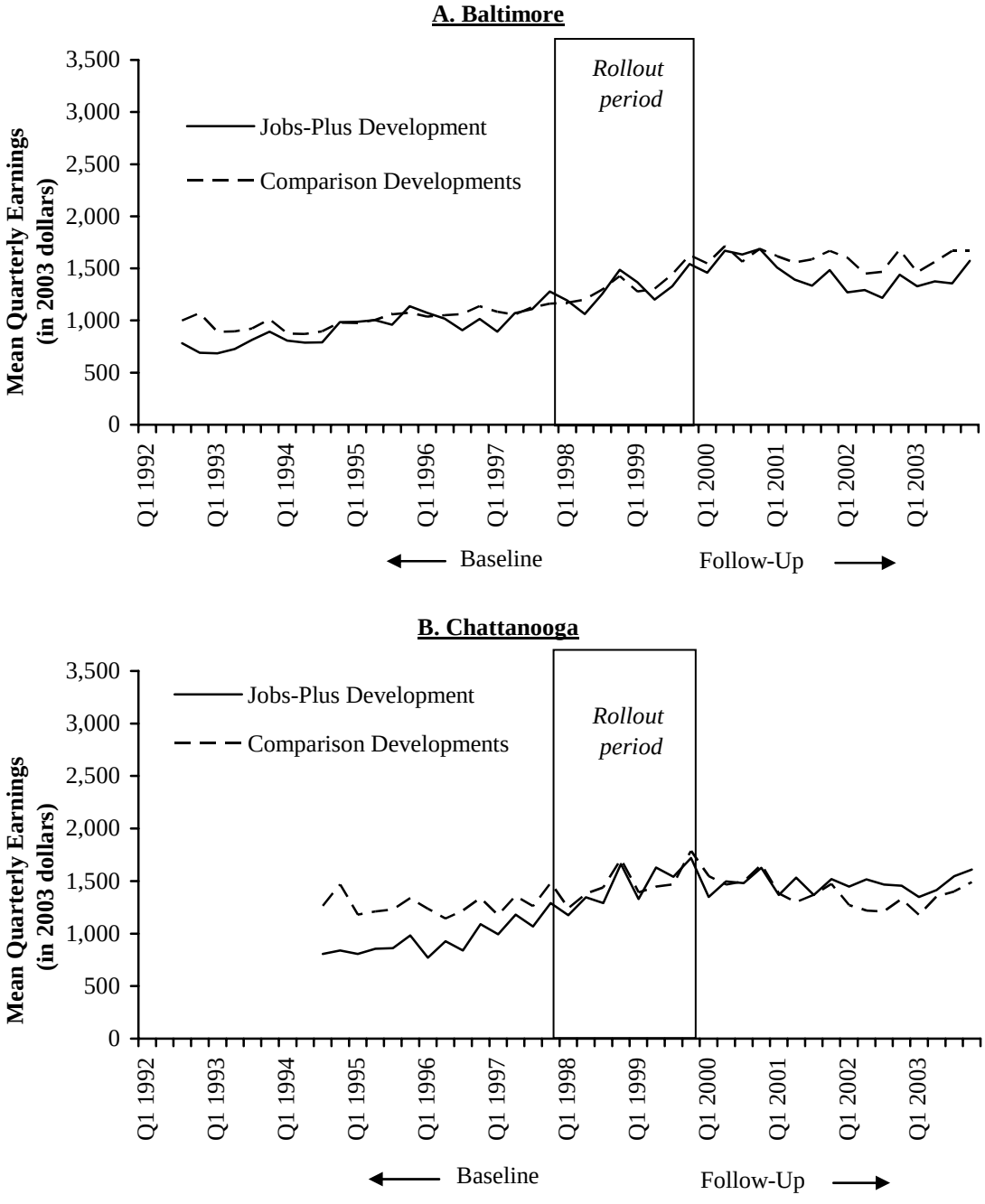
The Impact of Jobs-Plus on Earnings and Employment in Developments

Because the conditions for creating development-level program effects on work varied so much across sites, these outcomes are examined for each site separately. Figure 5.1 presents a site-by-site series of graphs that illustrate how average quarterly earnings changed over time

who lived in a household headed by an elderly person or by a person listed as disabled by the public housing authority were omitted from the development-level impact analyses.

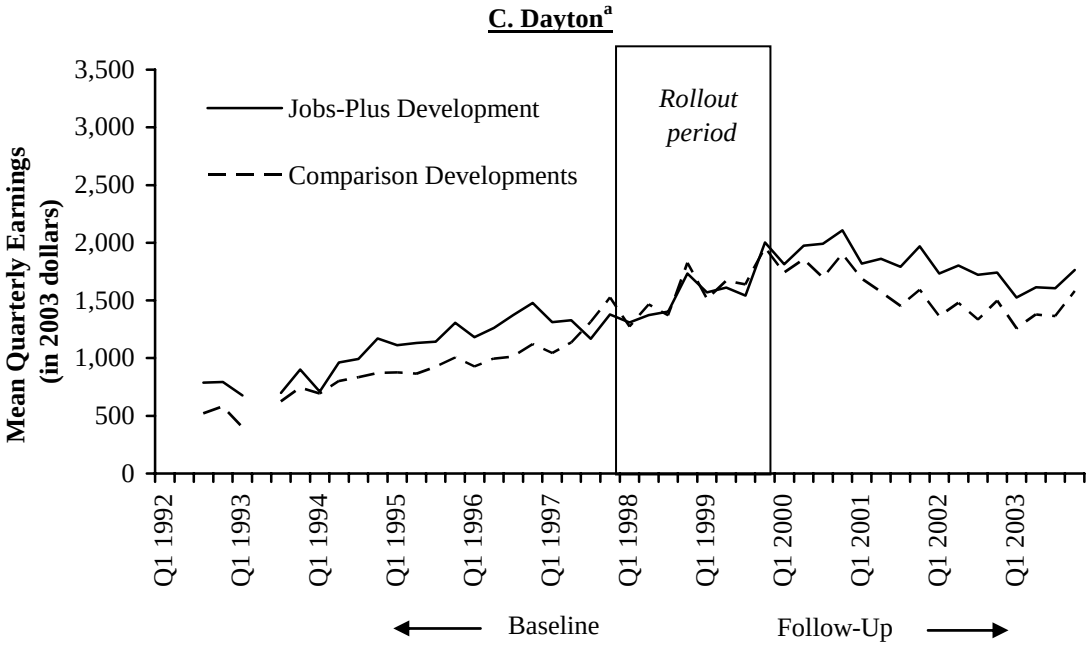
Figure 5.1

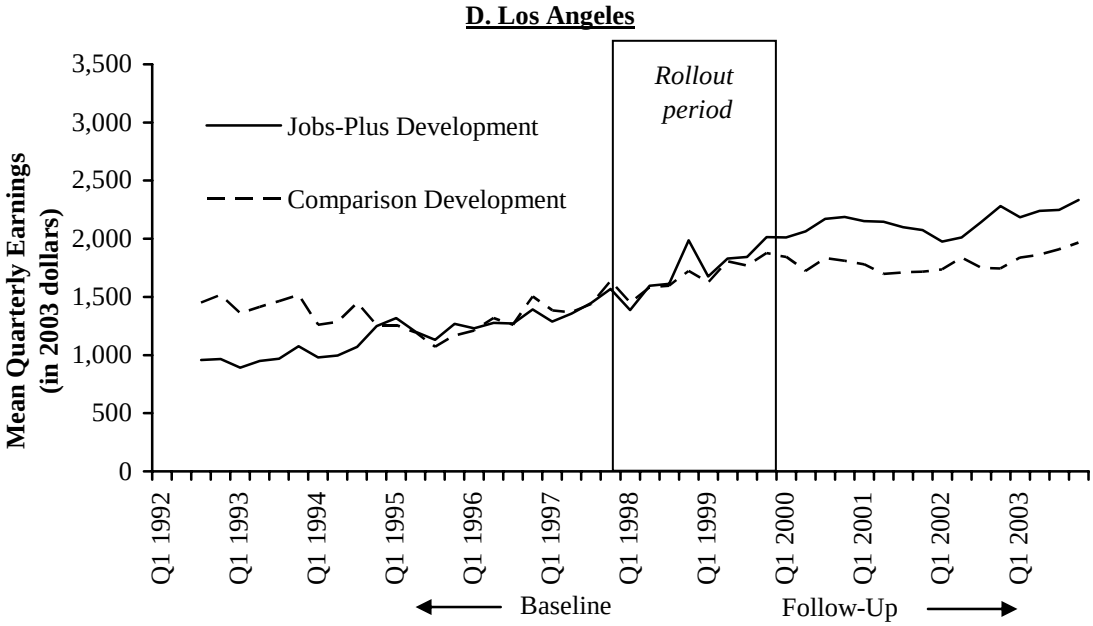
Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group, by Site (Development-Level Findings)



(continued)

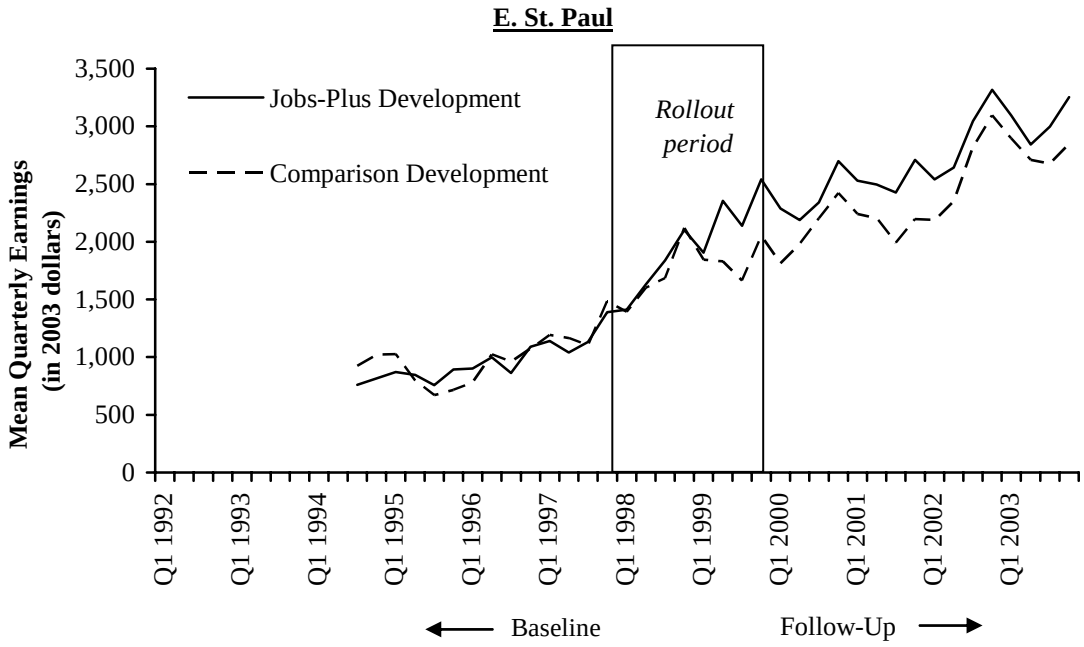
Figure 5.1 (continued)





(continued)

Figure 5.1 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Sample sizes varied from year to year, ranging from: 264 to 335 in the program group and 519 to 666 in the comparison group in Baltimore; 240 to 314 in the program group and 349 to 500 in the comparison group in Chattanooga; 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

for each Jobs-Plus development and comparison development(s).[2] Figure 5.2 presents a corresponding site-by-site series of bar charts that illustrate the annual effects of Jobs-Plus on development-level earnings.[3] And Table 5.1 compares estimated development-level impacts on earnings for the period 2000-2003 with their individual-level counterparts for each site. Seattle is not included because the HOPE VI renovation at its Jobs-Plus development appears to have influenced the composition of residents in ways that would invalidate a development-level analysis of the effects of Jobs-Plus.[4]

It is important to note that the development-level findings reflect more random period-to-period fluctuation than do corresponding individual-level findings from the preceding chapter. This is because development-level analyses contain an added source of random error: that which is due to changes in the composition of the sample over time as some residents move out and others move in. Hence, development-level estimates of program effects are less precise than are individual-level estimates. Now, consider the findings site by site.

Baltimore Had No Development-Level Impacts

Chapter 4 reports that Baltimore had far less program penetration than any other site and was one of only two sites with no program effects on individual work outcomes. Thus, one would expect no development-level effects on work at this site. This expectation is borne out by the data for Baltimore in Figure 5.1. Panel A illustrates that average quarterly earnings in Baltimore were similar for the Jobs-Plus development and comparison developments during the six-year baseline period and for the first three years of follow-up. Although average quarterly earnings for both sets of developments roughly doubled during this time, they remained very close to each other. For the next three years, however, earnings in the Jobs-Plus development dropped somewhat, and earnings in the comparison developments leveled off, as the national economic recession took effect. The Jobs-Plus development appears to have done less well than did the comparison developments during the recession, although this gap closed by the end of 2003.

Figure 5.2 presents estimates of the effects of Jobs-Plus on development-level earnings based on the data in Figure 5.1. For Baltimore, these findings indicate negligible program effects on earnings from 1998 to 2000 followed by negative effects from 2001 through 2003, although

[2] Appendix Figure F.1 presents corresponding graphs for quarterly employment rates.

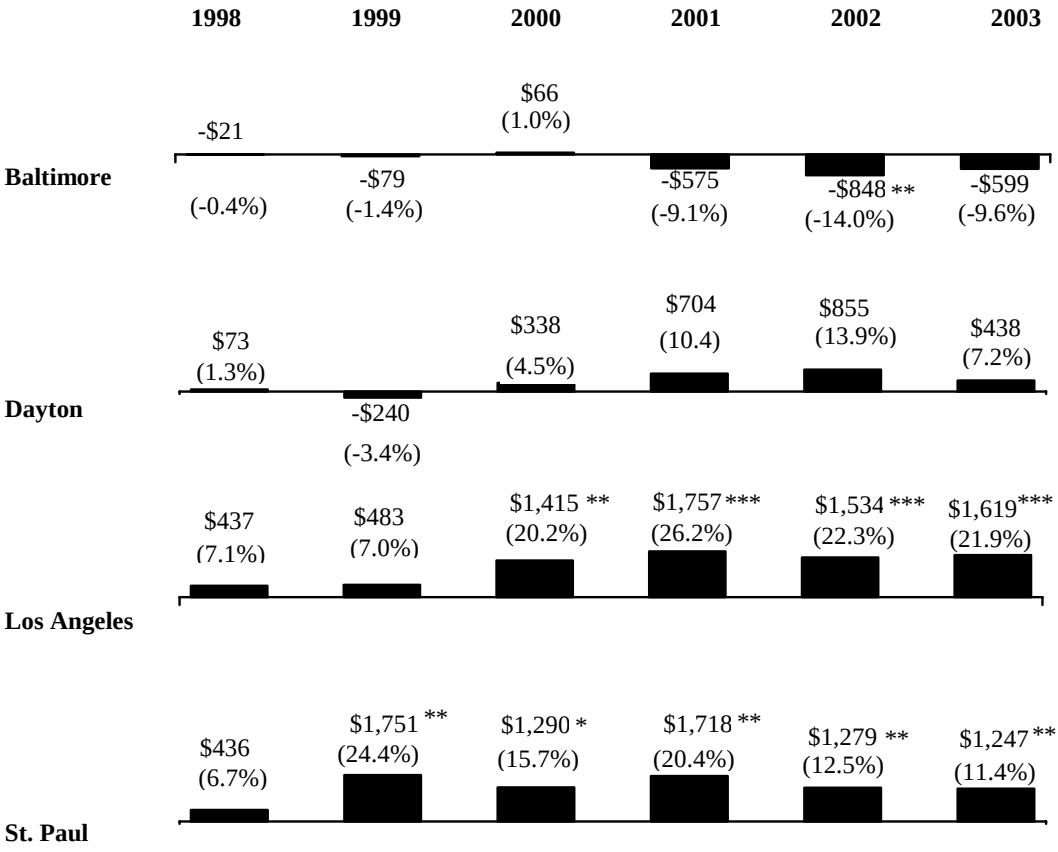
[3] Because of an early, temporary discrepancy between earnings for the Jobs-Plus development and comparison development in Los Angeles (see Panel D of Figure 5.1), all estimates of program impacts on developments presented in this chapter use a truncated baseline period that begins in 1994. The same baseline period is used for all sites, to make their findings comparable. Appendix D presents estimates using the full baseline period, which are similar to those presented in this chapter except for Los Angeles, where they are considerably larger.

[4] The data indicate that HOPE VI in Seattle differentially affected the mobility of employed and nonemployed residents of the Jobs-Plus development, which is consistent with other information obtained from field research at the site.

The Jobs-Plus Demonstration

Figure 5.2

Average Annual Effects of Jobs-Plus on Earnings, by Site (Development-Level Findings)



(continued)

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: All earnings effects are reported in 2003 dollars.

The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; * = 10 percent.

Figure 5.2 (continued)

Sample sizes varied from year to year, ranging from: 264 to 335 in the program group and 519 to 666 in the comparison group in Baltimore; 240 to 314 in the program group and 349 to 500 in the comparison group in Chattanooga; 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

Estimates of the impacts of Jobs-Plus on development-level earnings are not reported for Chattanooga because of the ambiguous relationship between the baseline earnings patterns of its Jobs-Plus and comparison developments.

only the finding for 2002 is statistically significant. Given that Jobs-Plus was implemented weakly in Baltimore and that it produced no earnings effects for individual residents, the most plausible interpretation of the findings is that the program produced no development-level effects in Baltimore. The short-lived development-level earnings loss that was observed probably represents a temporary aberration or population changes that had nothing to do with Jobs-Plus.

Chattanooga's Development-Level Impacts Were Difficult to Estimate

Chattanooga had the second-lowest rate of Jobs-Plus participation as indicated by take-up of the rent-based work incentives; its program devolved to rent incentives only; and it did not increase the earnings of individual public housing residents. Hence, there is no reason to expect program impacts on earnings at the development level. Figure 5.1, Panel B, provides ambiguous findings with respect to this effect.

During the baseline period for which data are available (1994 to 1997), earnings for the Jobs-Plus development were initially much lower than those for the comparison development. However, earnings for the Jobs-Plus development rose much more quickly than those for the comparison development so that they were almost identical when Jobs-Plus was launched in 1998. Subsequently, earnings for both developments fluctuated from quarter to quarter but did not change appreciably, on average.

If one assumes that earnings for the two developments would have been similar without Jobs-Plus (because they were virtually identical when the program began), then one would conclude from the data that Jobs-Plus had no effect on development earnings. If, instead, one assumes that the baseline earnings trajectories for the two sets of developments (which intersect at the point when Jobs-Plus was launched) would have continued without Jobs-Plus, then the data suggest that Jobs-Plus actually reduced future earnings for its development. Given that Jobs-Plus in Chattanooga was ultimately limited to rent incentives only, had relatively low rates of participation, and had no effect on individual earnings, it seems most plausible to conclude that

The Jobs-Plus Demonstration

Table 5.1

Comparison of Individual-Level and Development-Level Effects of Jobs-Plus on Average Annual Earnings from 2000 to 2003, by Site

	Earnings Effect for 1998 Cohort		Earnings Effect for Jobs-Plus Development	
Site	Dollars	Percentage	Dollars	Percentage
Baltimore	-189	-2.7	-489 **	-7.8
Dayton	895 ***	13.0	584	8.8
Los Angeles	1,120 ***	14.8	1,581 ***	22.6
St. Paul	1,492 ***	15.4	1,384 ***	14.6

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: All earnings effects are reported in 2003 dollars.

The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

Sample sizes varied from year to year, ranging from: 264 to 335 in the program group and 519 to 666 in the comparison group in Baltimore; 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

Estimates of the impacts of Jobs-Plus on development-level earnings are not reported for Chattanooga because of the ambiguous relationship between the baseline earnings patterns of its Jobs-Plus and comparison developments.

the program had no development-level effect on earnings. Nevertheless, because of the ambiguity created by the poor and highly variable baseline match in earnings, no estimates are presented for the development-level effects of Jobs-Plus in this site.

Dayton Had Moderate Development-Level Impacts

Dayton had the highest rate of resident mobility (with 48 percent of its 1998 cohort members moving away within two years) and moderate-to-large program impacts on individual residents' earnings. One might then expect the development-level effects of Jobs-Plus in this site to be a diminished version of the effects for individual residents.

This expectation is borne out by Panel C in Figure 5.1. First, note that average earnings for the Jobs-Plus development and the comparison developments in Dayton increased between threefold and fourfold from 1992 to 2000. Thereafter, earnings for both groups declined with the onset of the recession. This decline was more pronounced for the comparison development, however, and thus the Jobs-Plus development exhibited an earnings advantage from 2000 forward. The fact that this earnings advantage is larger than that for the baseline period suggests that Jobs-Plus increased development-level earnings.

Figure 5.2 shows that Jobs-Plus's effects on development-level earnings for Dayton are positive but smaller than those for individual residents (see Chapter 4, Figure 4.4). In addition, the estimated development-level program effects for each year are not statistically significant. It appears then that the individual-level effects of Jobs-Plus in Dayton were translated into development-level effects that were somewhat less pronounced.

Los Angeles Had Large Development-Level Impacts

Resident mobility in Los Angeles was considerably lower than that for any other site (with only 17 percent of its 1998 cohort members moving away within two years). Furthermore, this site experienced one of the largest impacts of Jobs-Plus on individual earnings. Thus, one would expect it to have good prospects for development-level effects.

Once again, the analysis bears out the expectation. Panel D of Figure 5.1 illustrates that earnings for the Jobs-Plus development and the comparison development in Los Angeles increased dramatically from 1992 to 2000, followed by a slowdown as the national economic recession set in. The slowdown was much greater for the comparison development than for the Jobs-Plus development, however, which produced a substantial earnings advantage for the Jobs-Plus development. The fact that this earnings advantage was much greater than that during the baseline period suggests a large positive effect of Jobs-Plus on development-level earnings in Los Angeles.

Correspondingly, Figure 5.2 indicates that the effects of Jobs-Plus on development-level earnings in Los Angeles are consistently large and statistically significant. It appears that the large positive effects of Jobs-Plus on the work levels of public housing residents in this site translated into large positive effects on levels of work in their public housing development.

St. Paul Had Large Development-Level Impacts

St. Paul also had a low level of resident mobility (with only 27 percent of its 1998 cohort members moving away within two years) and large Jobs-Plus impacts on individual earnings. Thus, it too had good prospects for program-induced earnings gains at the development level.

That this occurred can be seen from the findings shown in Panel E of Figure 5.1. First, note that earnings more than tripled from 1994 (when Minnesota's UI wage records became available) to 1998 for the Jobs-Plus development and its comparison development. In addition, the baseline match for these developments was quite good, meaning that future comparisons between them should be valid. Furthermore, unlike the pattern for other sites, average earnings continued to increase for both developments during the national recession. However, the rate of this increase was much greater for the Jobs-Plus development after 1999, when the program's employment services and rent incentives had been implemented. Thus, a clear and consistent earnings advantage was experienced by the Jobs-Plus development from this time forward.

Consistent with this pattern of findings, Figure 5.2 presents a series of large and statistically significant estimated effects of Jobs-Plus on development earnings in St. Paul, beginning in 1999. It seems clear that the program's effect on individual earnings was translated into a development-level effect.

Resident Mobility Reduced Development-Level Impacts

Table 5.1 summarizes the preceding development-level findings and compares them with their individual-level counterparts for the 1998 cohort. To do so, the table presents estimates of the effects of Jobs-Plus on average annual earnings between 2000 and 2003 from both the individual and the development perspectives. These estimates are reported in 2003 dollars and as a percentage of what earnings would have been without the program.

For Dayton, Los Angeles, and St. Paul, there is an intriguing relationship between rates of resident mobility and the degree to which individual program effects translated into development impacts. In Dayton, where 48 percent of the 1998 cohort members moved away within two years, roughly two-thirds of the individual effect of Jobs-Plus on earnings were translated into a development effect. In St. Paul, where 27 percent of the 1998 cohort members moved away within two years, almost all of the individual effect of Jobs-Plus on earnings was translated into a development effect. In Los Angeles, where only 17 percent of the 1998 cohort members moved away within two years, the effect of Jobs-Plus on development earnings was 40 percent larger than the individual effect of the program. These three sites present evidence that resident mobility reduces the extent to which the individual benefits of a place-based employment program translate into benefits for the community. Of course, given the number of

factors that change from period to period at each development and the amount of random error that exists in the data, these findings should be considered suggestive rather than definitive.

Employment Rates for Developments Moved with the Economy

Because Jobs-Plus did not exhibit a clear pattern of individual-level effects on employment rates, a development-level analysis of program effects is not presented for this outcome. However, because of the dramatic changes over time in employment rates that occurred, it is still useful to describe these outcomes for public housing developments in the study. Table 5.2 does so by listing the employment levels for each Jobs-Plus development four years before the program was launched (Quarter 3 of 1994), while it was being launched (Quarter 3 of 1998), and five years after it was launched (Quarter 3 of 2003). These rates are for residents of the Jobs-Plus development in each site who (at the time) were between 21 and 61 years old and were not listed as disabled in records of their public housing authority. Therefore, findings for each point in time represent the experiences of the same places but different people.

Employment rates increased dramatically at all Jobs-Plus developments during the four years before the program was launched, probably due to the unusually strong and sustained economic progress being made nationally. As noted earlier, this type of finding provides strong evidence that when jobs are available, residents of public housing will seek them out and take them. Because of this, employment rates that were in effect when Jobs-Plus got under way were much higher than those indicated by the data used to choose the sites. These high baseline rates of employment came as a surprise to planners of the demonstration program — and may have reduced (though did not eliminate) the margin for it to create further improvement.

As Jobs-Plus got under way and the national economic boom became a national economic recession, employment rates in the Baltimore and Dayton Jobs-Plus developments stopped rising. Hence, the rates were almost exactly the same five years later. In contrast, the development-level employment rates in Los Angeles and St. Paul continued to rise, although at a noticeably slower pace than previously. In no site, however, did earnings or employment reach a tipping point, setting off an acceleration in the pace of change in employment levels within public housing.

The Impact of Jobs-Plus on Welfare in Developments

This section briefly examines the effects of Jobs-Plus on welfare receipt in public housing developments from the three sites for which data on this outcome were obtained: Dayton, Los Angeles, and St. Paul. Given that no program effects on welfare were observed for individuals at these sites, no welfare effects on housing developments were expected. However, examining the patterns of welfare receipt over time in these sites can give a sense of how they

Table 5.2

Quarterly Employment Rates for Working-Age, Nondisabled Residents at Each Jobs-Plus Development

Site	Percentage Employed		
	Quarter 3 1994	Quarter 3 1998	Quarter 3 2003
Baltimore	27	42	43
Chattanooga	52	70	52
Dayton	44	61	62
Los Angeles	35	46	53
St. Paul	24	52	58

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Sample sizes varied from year to year, ranging from: 264 to 335 in the program group and 519 to 666 in the comparison group in Baltimore; 240 to 314 in the program group and 349 to 500 in the comparison group in Chattanooga; 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

changed and of the likely forces that caused these changes to occur. Indeed, some of the findings observed for the Jobs-Plus sites provide evidence about what is likely to be driving the declines in welfare caseloads that have been experienced nationally.

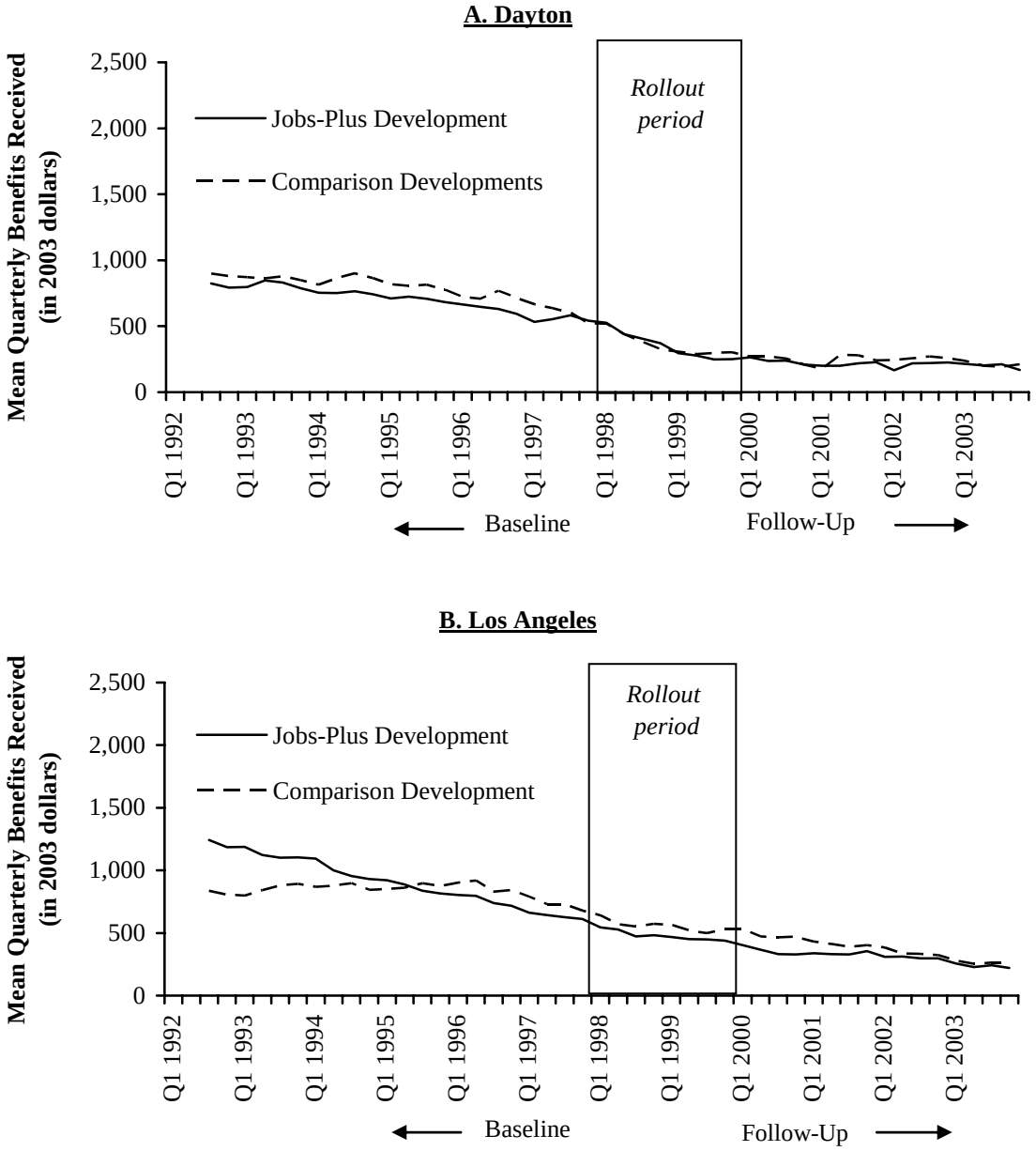
Welfare Payments Declined Precipitously, but Jobs-Plus Had No Impact

Figure 5.3 presents time-series graphs of average quarterly AFDC/TANF payments received by working-age, nondisabled residents of each Jobs-Plus development and its comparison development(s) in the three sites. The most striking finding from these graphs is the dramatic decline in welfare benefits payments that occurred in both the Jobs-Plus developments and their comparison developments starting in 1997 at Dayton and Los Angeles and in 1998 at St. Paul. These precipitous declines mirror those observed by the individual-level analysis in

The Jobs-Plus Demonstration

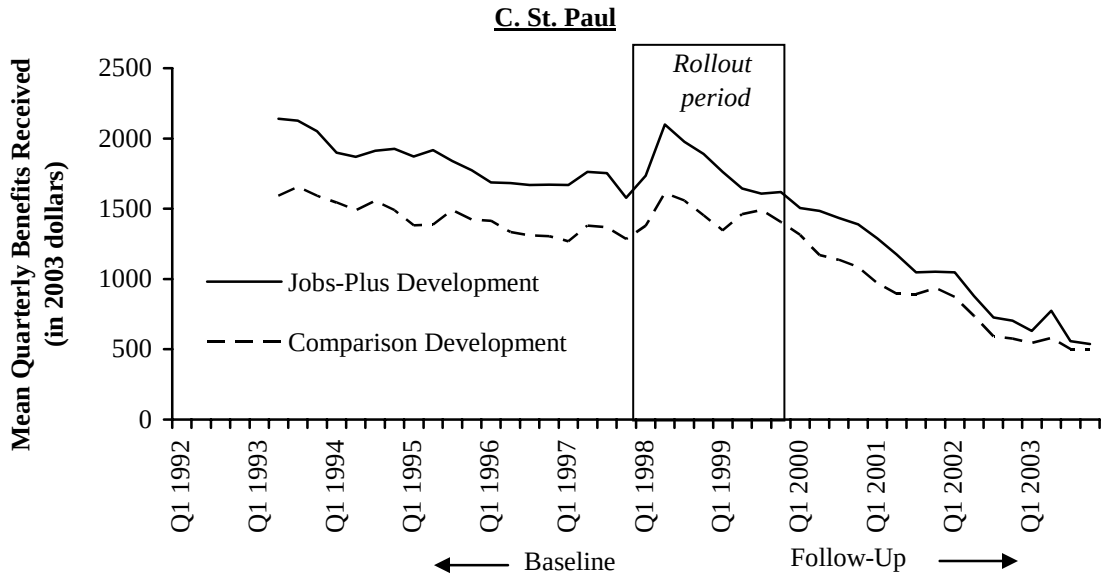
Figure 5.3

Average Quarterly Welfare Benefits Received for the Jobs-Plus Group and Its Comparison Group, by Site (Development-Level Findings)



(continued)

Figure 5.3 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Sample sizes varied from year to year, ranging from: 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

Chapter 4 and experienced by welfare systems throughout the United States. As noted earlier, there is considerable debate about what caused this decline — including hypotheses about the relative roles of the booming U.S. economy, welfare reform (which includes among its many provisions time limits on welfare receipt), and changes in the culture of welfare — but there is no debate that the decline has been sharp and sustained.

As for evidence about the effects of Jobs-Plus on welfare benefits payments, the graphs are more difficult to interpret than are their counterparts for earnings. Nevertheless, the overall impression they convey is one of no apparent Jobs-Plus effects.[5] For example, welfare benefits payments in Dayton were slightly lower for the Jobs-Plus development from about 1992 to 1997 and then almost identical for the Jobs-Plus and comparison developments thereafter. Hence, whatever caused benefits to be the same for the two developments occurred before Jobs-Plus was launched.

In Los Angeles, there was an initial large discrepancy between the levels of welfare benefits payments received by the Jobs-Plus development and comparison development. (This discrepancy is the mirror image of that observed for earnings in Figure 5.1.) However, by 1996, the discrepancy had disappeared, and the level of welfare benefits received by the Jobs-Plus development was slightly less than the level received by the comparison development. This relationship was sustained for a number of years thereafter and then diminished as the overall level of welfare benefits payments for both developments declined to a small fraction of their initial levels. Once again, there is little or no evidence that Jobs-Plus had an effect on welfare benefits received.

For St. Paul, the findings are more difficult to interpret. Throughout the baseline period, average welfare payments for the Jobs-Plus development were much higher than those for the comparison development. Then, in 1998, when Jobs-Plus was launched, average payments for both groups rose abruptly as the state's new welfare program, the Minnesota Family Investment Program (MFIP), was implemented statewide. This program changed major provisions of the welfare system in Minnesota, including its benefit payment structure. Subsequently, welfare payments declined sharply for both the Jobs-Plus development and its comparison development. By the end of the follow-up period, benefit levels were so low for both groups that there was little margin for a difference. To interpret this finding, it is important to also examine corresponding trends in welfare receipt rates for the two developments. Findings in Appendix Figure F.2 demonstrate that receipt rates were almost identical throughout the baseline and follow-up periods. Hence, there is no sign of a program effect on welfare benefits for the Jobs-Plus development in St. Paul.

[5]Because the complex patterns represented by the time series for welfare benefits in Figure 5.3 do not fit an easily identifiable statistical model, numeric estimates of the impacts of Jobs-Plus on welfare receipt are not presented. Nevertheless, the basic conclusion to be drawn from the data is that Jobs-Plus did not affect this outcome for public housing developments, as was also the case for public housing residents.

Welfare Receipt Rates Did Not Always Move with Employment Rates

To complete the present analysis, Table 5.3 lists welfare receipt rates for each Jobs-Plus development in the three sites during Quarter 3 of 1994, 1998, and 2003. First, note the findings for 1994 to 1998, before Jobs-Plus was launched. As can be seen, welfare receipt rates dropped dramatically in all three sites during this four-year period. These fast-falling welfare receipt rates mirror the rapidly rising employment rates in Table 5.2.

Table 5.3

Quarterly Welfare Receipt Rates for Working-Age, Nondisabled Residents at the Jobs-Plus Developments, by Site

	Percentage Receiving AFDC/TANF		
Site	Quarter 3 1994	Quarter 3 1998	Quarter 3 2003
Dayton	66	44	24
Los Angeles	41	28	17
St. Paul	74	65	26

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Sample sizes varied from year to year, ranging from: 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

But consider what happened subsequently. Unlike employment rates, which stopped rising altogether (in Dayton) or continued to rise but more slowly (in Los Angeles and St. Paul), welfare receipt rates continued to plummet from 1998 to 2003. As noted above, there is no evidence that this phenomenon has anything to do with Jobs-Plus. However, its occurrence sheds some interesting light on the likely role played by economic conditions on declining welfare rolls. Specifically, during the period from 1994 to 1998, while the national economy was still

hot, employment rates in the three Jobs-Plus developments rose, and welfare receipt rates fell. This is consistent with the hypothesis that a strong economy reduced welfare receipt (but, as noted, many other forces were at work as well). However, during the period from 1998 to 2003 — which was marked, in part, by a national recession — employment rates stood still or rose slowly, but welfare receipt rates continued to free-fall. Therefore, one must look beyond the economy for an explanation of the later continuing decline in the welfare rolls.

Summary and Conclusions

This chapter demonstrates a consistent relationship between the mobility of public housing residents and the degree to which individual benefits from a placed-based employment program are translated into corresponding benefits for public housing developments: The less the mobility, the greater the degree to which individual program benefits translate into benefits for developments. Thus, the findings illustrate one important way that mobility mediates the linkages between people and place. A next step toward better understanding this complex set of relationships is to consider how changes in employment and welfare receipt in public housing developments do or do not get reflected in other important community outcomes. This issue is explored in Chapter 6.

Chapter 6

Jobs-Plus and Changes in the Quality of Life at Public Housing Developments

The preceding chapters show that Jobs-Plus operated mostly in an environment of rising earnings and employment, even for very economically disadvantaged populations. When the program was implemented well, it was able to improve work outcomes further for many participants. This chapter considers ways in which the growing climate of work among public housing residents might have changed the general quality of life in their housing developments, according to such measures as economic and material well-being, personal safety, residential satisfaction, and child well-being.

The chapter addresses the following questions:

- How did the Jobs-Plus developments change between the year the program began (1998) and the year it ended (2003) on measures of quality of community life and resident well-being?
- How did these changes match up against changes on the same quality-of-life measures in comparison developments?
- Is there evidence that positive effects of Jobs-Plus on residents' work translated into quality-of-life improvements for them and their public housing developments?

In general, the findings show that little change occurred in quality-of-life outcomes for residents of Jobs-Plus developments between the baseline survey and the follow-up survey. Where changes did occur, they usually were no different from those observed for comparison developments. Thus, even though Jobs-Plus increased earnings appreciably when it was implemented well, these changes were not large enough to "transform" the quality of life in public housing.

Expectations for Community Change

The theoretical framework underlying Jobs-Plus builds on work by William Julius Wilson and others who view many of today's problems in high-poverty neighborhoods — crime, welfare dependence, family dissolution, and social disorganization — as fundamental consequences of the disappearance of work. Wilson argues that these problems cannot be solved

without substantially raising the proportion of residents in such neighborhoods who are gainfully employed.[1] Implicit in this argument is the hypothesis that dramatic increases in employment will bring wider improvements in neighborhood quality of life. For reasons explained below, the Jobs-Plus evaluation does not provide a rigorous test of this hypothesis. However, the rich survey data collected for the study make it possible to explore how Jobs-Plus developments changed along important dimensions of community life while the program was being operated. In addition, these data allow one to compare patterns of change for the Jobs-Plus developments with those for comparison developments. Such quantifiable evidence on well-being and quality-of-life measures within public housing is rare.

This analysis relies on resident surveys conducted at the start of Jobs-Plus in 1998 and five years later at the three study sites (Baltimore, Dayton, and St. Paul) where the full version of the 2003 follow-up survey was administered.[2] This chapter examines changes in several major categories of quality-of-life outcomes: economic and material well-being, social capital, personal safety and victimization, neighborhood conditions and residential satisfaction, and child well-being. When considering these findings, it is important to keep in mind the different results for each site, which are explained in detail in earlier chapters:

- **Baltimore.** Jobs-Plus in this site faced a host of implementation and operational problems that compromised the quality of the program and may have contributed to its lack of effects on work outcomes at both the individual and the development levels.

- **Dayton.** Characterized by a fairly strong and well-implemented intervention, Jobs-Plus in this site registered modest to large effects on individual-level earnings, which were muted at the development level because of high rates of resident mobility.

- **St. Paul.** This site's Jobs-Plus program was strong and well implemented, and it produced substantial effects on individual and development earnings. In addition, fewer residents moved away, thus potentially allowing for spillover effects on other aspects of community life.

These three different sites with three different Jobs-Plus experiences are used to explore potential links between changes in work behavior and changes in quality of life within public housing.

---

[1]Wilson, 1996.

[2]Due to cost considerations, a reduced version of the survey was administered to smaller samples in Chattanooga and Los Angeles. See Appendix C for additional details on the Jobs-Plus survey.

Cautions Regarding These Findings

Readers should be cautious when interpreting the results of this analysis of potential spillover effects, for at least three reasons: the level of change in employment and earnings experienced between the surveys is not large enough to provide a strong test of community spillover effects; the research method adopted is not as rigorous as the one used for the analyses in Chapters 4 and 5; and this study is not equipped to analyze the pathways through which any spillover effects might have occurred. Consider each of these reasons in turn.

First, the change in employment and earnings that occurred during the survey analysis period (1998-2003) was not dramatic enough to support a strong test of spillover effects. Table 6.1 illustrates that although there were very large increases in employment and earnings before Jobs-Plus began (1994-1998), changes in these measures were much smaller while the program was under way (1998-2003). For example, note the dramatic jump in employment rates between 1994 and 1998: 15 percentage points in Baltimore, 16 percentage points in Dayton, and 27 percentage points in St. Paul. In stark contrast, employment rates (and earnings) in Baltimore and Dayton rose only very slightly from 1998 to 2003. Hence, one would not expect to observe large changes in quality of life in these sites during that period. At the third site, St. Paul, employment rates rose by 7 percentage points from 1998 to 2003, and average earnings continued to rise substantially, which would lead one to expect at least the possibility of spillover effects on quality-of-life outcomes. But even in St. Paul, the increased amount of work produced by Jobs-Plus probably did not "transform" the housing development into a low-poverty neighborhood, so the ability to link changes in work to improvements in quality of life is limited.

Second, compared with the interrupted time-series analysis used in Chapters 4 and 5 to measure program effects on work and welfare, the analyses presented here are based only on two cross-sectional surveys that were administered to tenants of the developments at two points in time. For the most part, because of resident mobility, different people participated in each survey (see Appendix Table C.1). The absence of long-term trend data on quality-of-life outcomes for residents of these developments limits the ability to attribute changes in community outcomes to Jobs-Plus. Readers should be careful not to draw causal conclusions about the effects of Jobs-Plus on quality of life.

Third, this study cannot adequately measure the pathways through which spillovers might occur within public housing communities. For example, how do spillover mechanisms operate in highly dynamic settings? What types of interactions create a positive environment for promoting spillovers? Among whom? If a critical pathway for achieving positive spillovers is the social network of residents (that is, the people they know in the community and their ties to

The Jobs-Plus Demonstration

Table 6.1

Quarterly Earnings and Employment Rates for the Jobs-Plus Developments at Key Points in Time

Sites	1994	1998	2003
Average earnings in Quarter 3 ($)			
Baltimore	792	1,252	1,357
Dayton	992	1,403	1,606
St. Paul	759	1,838	2,998
Employed in Quarter 3 (%)			
Baltimore	27.3	41.8	43.2
Dayton	44.4	60.8	62.1
St. Paul	24.5	51.9	58.5

SOURCE: MDRC calculations using data from state Unemployment Insurance (UI) wage records.

NOTES: All earnings are reported in 2003 dollars.

neighbors), then resident stability is an important condition for realizing the kind of neighborhood turnaround envisioned by Jobs-Plus. To the extent that public housing developments experience a significant degree of residential turnover (as in Dayton, for example), then such mobility may prevent spillover effects from taking root.[3] Further, if successful program participants move away and lose their ties to the neighborhood, then the neighborhood loses the very people needed to support its improvement.

[3]The implicit theory behind a place-based, self-sufficiency initiative like Jobs-Plus assumes that the following conditions, at a minimum, would need to be met for a program that is effective for individuals to have spillover effects on their immediate community: (1) a significant portion of the eligible target-area residents will be exposed to the program; (2) the eligible residents will stay long enough in the target area to be exposed to all aspects of the program for a significant amount of time; (3) program participants and beneficiaries will stay in the target area long enough to influence neighbors and others in the community; and (4) in the event that target-area residents move out of their original neighborhoods, they will maintain close connections with their former neighbors to continue to provide access to employment information and opportunities.

Measuring Quality-of-Life Changes

The Samples

Baseline and follow-up surveys for Jobs-Plus were administered to household heads who were (1) living in a Jobs-Plus or comparison development at the time of sample selection and survey administration, (2) not identified by the public housing authority as being disabled, and (3) between 21 and 61 years old at the time of sample selection.[4] In Baltimore and Dayton, the baseline survey was conducted in the spring and summer of 1998 and provides a snapshot of the people and developments when Jobs-Plus began; the survey for St. Paul was fielded in 1999, roughly one year after the baseline survey was fielded in the other sites. This chapter refers to this survey as the baseline or the 1998 survey.

A more comprehensive follow-up survey was fielded in three of the six demonstration sites. Thus, these three sites — Baltimore, Dayton, and St. Paul — are the focus of the community change analysis. Only about 30 percent of the sample responded to both the baseline and the follow-up survey. Not surprisingly, given the differences in resident move-out rates, such overlap was highest in St. Paul (39 percent) and lowest in Dayton (19 percent); Baltimore was in the middle with 29 percent.

A total of 611 residents from the Jobs-Plus developments and 621 residents from the comparison developments responded to the baseline survey. Another 513 residents from the Jobs-Plus developments and 689 residents from the comparison developments responded to the follow-up survey. Response rates for the two surveys were over 80 percent. Estimates of changes in community outcomes were based on differences in responses to the two surveys. Appendix C provides more information about the surveys and samples used.

Data on child well-being — in the form of parental responses to survey questions about their children — were collected for children of respondents in two of the three sites: Baltimore and Dayton. A total of 817 children ages 6 to 17 were included in the baseline analysis; another 777 children were included in the follow-up analysis. In both sites, there are more children in the 6-to-11 age range than in the 12-to-17 age group. As a result, the sample for examining outcomes for older children is smaller than the sample for examining outcomes for younger children. Given these smaller samples, the survey findings on child outcomes should be interpreted cautiously.

[4]This definition is consistent with the one used to define cohorts for the impact analyses presented in Chapters 4 and 5.

The Approach to Assessing Change

The analysis proceeded in two stages. The first stage focused on the question "Did the Jobs-Plus developments change over time in any appreciable way on selected measures of quality of life?" Here the emphasis was on understanding the levels or prevalence of selected outcomes at two points in time, 1998 and 2003. The 1998 data paint a picture of the circumstances of residents and the conditions in Jobs-Plus developments at the start of the program. The 2003 data describe the same developments (but not necessarily the same residents) five years later. The differences in these outcomes indicate how developments changed on important measures of community life while Jobs-Plus was under way.

The second stage of the analysis focuses on the relative or differential change between the Jobs-Plus developments and the comparison developments; that is, "How do the changes in the Jobs-Plus developments compare with the changes in the comparison developments?" The net differences in these changes were computed.

While this is a straightforward way to assess change over time, its main limitation is that the change observed can occur for reasons that are unrelated to Jobs-Plus. For example, a recent influx of new residents who have better jobs before moving into the Jobs-Plus developments could cause residents at follow-up to look very different from their baseline counterparts, even in the absence of a Jobs-Plus effect.

Indicators of Change

Table 6.2 lists the survey-based measures used to represent six domains of quality of life in public housing: economic and material well-being, social capital, personal safety and victimization, neighborhood conditions, residential satisfaction, and child well-being. These constructs are measured by a mix of single-item and multi-item scales.

Economic and Material Well-Being

Three measures are used to represent this domain: employment, household income, and an index of material hardship. Together, these measures reflect the economic well-being of public housing residents. A program like Jobs-Plus is expected to increase residents' employment and earnings and, thereby, to increase the income of their households. This, in turn, should reduce the material hardship that is experienced. Thus, to the degree that Jobs-Plus generated positive effects on work in some sites (St. Paul, for example), one might expect residents of the Jobs-Plus development to report fewer material hardships than those living in comparison developments.

Table 6.2

Survey Measures for the Quality-of-Life Change Analysis

Domain	Measure
Economic and material well-being	Percentage of respondents saying they were employed at the time of the survey interview
	Percentage of households with annual income greater than $10,000
	Average material hardship score, based on a six-item hardship index with values ranging from 0 to 6. The items ask respondents if they had experienced any of the following hardships because their household was running low on money: (1) Someone needed to see a doctor, a dentist, or go to the hospital, but didn't go; (2) You borrowed money from family or friends to make ends meet; (3) You decided not to buy something you really needed; (4) You couldn't pay the full amount of the rent; (5) You were evicted or locked out of your home because you could not pay the rent; and (6) You did not have enough food to eat. Each hardship is weighted equally. Higher values on the index reflect more reports of material hardship.
Social capital	Social cohesion score, based on a five-item scale including the following items: (1) People in the development can be trusted; (2) People in the development are willing to help their neighbors; (3) People in the development generally don't get along with each other; (4) People in the development do not share the same values; and (5) People in the development live in a close-knit community. Higher values on the scale reflect greater social cohesion.
	Percentage of respondents reporting access to helping networks in the development
	Percentage of respondents reporting ties to working adults in the development
Personal safety and victimization in housing development	Percentage of respondents saying they feel safe around their public housing unit, during the day and after dark
	Percentage of respondents saying they were subject to violence, robbery, burglary, or threatened with a weapon in the past 12 months

(continued)

Table 6.2 (continued)

Domain	Measure
Problem conditions in housing development	Average problem conditions score, based on a five-item index, with values ranging from 0 to 15. The items include: drinking in public, drug trafficking, gangs causing trouble, guns and gunfire, and outsiders causing trouble. Higher values on the scale mean that more respondents perceived these as big problem conditions in the development.
Satisfaction with housing development	Percentage of respondents rating the development as an excellent, very good, or good place to live
Outcomes for children ages 6 to 11	Percentage of children participating in school-sponsored or outside-school clubs and activities in the last 12 months
	Percentage of children receiving poor grades in the last 12 months
Outcomes for children ages 12 to 17	Percentage of children receiving poor grades in the last 12 months
	Percentage of children ever expelled or suspended from school
	Percentage of children ever in trouble with the police

Social Capital

Researchers have stressed the importance of social capital in creating access to economic opportunity. "Social capital" commonly refers to such factors as residents' social networks, their social isolation or cohesion, and their access to community supports for work. Social networks have been documented to influence individuals' values, aspirations, and preferences and to shape their behavior with respect to work, crime, and education.[5] The designers of Jobs-Plus expected the program to be easier to implement in sites where social capital was greater, because employment-related information, encouragement, and supports could flow (at least partly) through existing networks.

To measure social capital in public housing, the Jobs-Plus surveys included questions about two forms of mutual exchange and connectedness: (1) those that help residents get by on a daily basis — for example, by providing rides, helping with groceries, or providing informal child care; and (2) those that help residents get ahead economically — through job leads, refer-

[5]Galster and Killen, 1995; Briggs, 1998.

ences, and connections to job openings.[6] In neighborhoods with concentrated poverty, both types of exchanges may be limited. In addition, high crime rates can keep people behind their doors, further limiting social exchange.[7]

Social cohesion was measured by survey questions that asked respondents whether their neighbors were willing to help each other, their neighborhood was close-knit, the people in the neighborhood could be trusted, and residents shared common values.[8] Neighborhoods that have a higher degree of social cohesion can better maintain informal social control to regulate the behaviors of residents and thereby achieve public order.[9]

Personal Safety and Victimization

In many cities, public housing projects are located in communities with high rates of crime and abandonment. These unsafe environments instill fear among residents, and the fear experienced by residents is a key reason that they want to move out of public housing. The Moving To Opportunity study, which offers important insights on this front, suggests that living in high-crime neighborhoods takes its toll both emotionally and economically on public housing families, particularly mothers, who adopt safety strategies that keep them from making investments in their own education or training. Further, residents' deep distrust of neighbors and their tendency toward "keeping to themselves" prevent them from seeking informal child care arrangements in their housing developments.[10]

Two measures are used in the analysis to assess whether the Jobs-Plus and comparison developments became safer places to live and raise families: (1) the percentage of respondents saying they feel safe around their housing unit (during the day and after dark) and (2) the percentage of respondents saying they were subject to violence, robbery, or burglary or were threatened with a weapon in the past 12 months. These two measures make it possible to contrast residents' feelings of vulnerability in their housing development with their reported levels of victimization, which past research suggests is quite high.[11]

Problem Conditions in the Development

Environmental disorder (as indicated by graffiti and gangs, for example) can result in feelings by residents that their neighborhood is unsafe. Such disorder might signal that no one

[6]Briggs, 1998.
[7]Kling, Liebman, and Katz, 2001.
[8]Sampson, Raudenbush, and Earls, 1997.
[9]Sampson, Raudenbush, and Earls, 1997.
[10]Kling, Liebman, and Katz, 2001.
[11]Based on a national public housing survey, Zelon (1994) estimates an annual victimization rate of 27.6 percent for public housing households living in family developments.

cares about a neighborhood, making it seem an undesirable place to live or pass through. Research suggests that these negative signals can have profound effects on residents' sense of security, competence, and locus of control.[12]

To measure this construct, survey respondents were asked whether they considered the following to be "pretty big" or "very big" problems in their housing development: drinking in public, drug trafficking, gangs causing trouble, guns and gunfire, and outsiders causing trouble. A problem condition index was created to measure the extent to which residents perceived these problems. Values on the index ranged from 0 to 15, with higher values indicating that residents perceived these as serious problems in their respective developments.

Residential Satisfaction

Survey respondents were asked to rate the desirability of their development as a place to live, on a five-point scale: excellent, very good, good, not so good, and awful. The first three categories were combined to represent a positive rating.

Child Outcomes

Recent experimental evaluations of employment-focused interventions have shown that programs that increase parents' earnings and income can also produce positive effects for their children (at least for younger children between the ages of 6 and 11).[13] Thus, a program like Jobs-Plus may indirectly affect children by increasing parents' income through work. For example, children of working parents might benefit from the increased regularity of their families' routines, the enhanced self-esteem of their parent(s), or the additional income from their parents' jobs. On the other hand, children might be negatively affected if their parents' jobs reduce the amount of time available for care and supervision or unduly increase parental stress.[14] Furthermore, in the context of a place-based program like Jobs-Plus, it is possible that children might be positively influenced by changes in behaviors of other adults in their neighborhood.

Measures of child well-being for the present analysis cover two broad domains: school performance and personal behavior. For younger children (ages 6 to 11), the measures focus on positive and negative school-related outcomes. For older children (ages 12 to 17), the measures focus on school-related outcomes plus behavioral outcomes (such as police involvement). The latter were not examined for younger children because of their low incidence for this group.

[12]Mijanovich and Weitzman, 2003.
[13]Morris and Michalopoulos, 2000; Morris, Forthcoming, 2005.
[14]Morris and Jones, 2002.

Findings on Quality-of-Life Changes

Using the measures described above, this section examines how the quality of life of residents and their families in the Jobs-Plus developments and in the comparison developments changed over time — and how these changes compare across these developments.

Table 6.3 characterizes the nature of change experienced in the Jobs-Plus developments in Baltimore, Dayton, and St. Paul using three broad categories: improved, worsened, and unchanged. Given the small sample sizes in this analysis, changes that are statistically significant are typically found to be large enough in magnitude to be substantively important. Table 6.4 presents the detailed site-by-site estimates of change that support the characterizations.[15] The three categories of change are defined as follows:

- **Improved.** This rating is for outcomes that improved appreciably between 1998 and 2003. To receive the rating, the improvement had to be nontrivial and large enough to achieve statistical significance.[16] For example, Table 6.4 indicates that, in 1998, 60.4 percent of the respondents from the St. Paul Jobs-Plus development were living in households with annual incomes of $10,000 or more. By 2003, 73.8 percent of the households from that site were in this category. The difference of 13 percentage points is statistically significant.

- **Worsened.** This rating is used to indicate that an outcome worsened appreciably between 1998 and 2003 and that the magnitude of change was large enough to achieve statistical significance. Consider how survey respondents in the Baltimore Jobs-Plus development rated their satisfaction with their housing development. Table 6.4 indicates that 58.9 percent of the baseline survey respondents rated their development favorably, whereas only 41.1 percent of the follow-up survey respondents did so. The 17.8 percentage point difference represents an appreciable decline in perceived desirability.

[15]Table 6.4 presents two distinct pieces of information for the three Jobs-Plus developments: (1) 1998 and 2003 outcome levels and (2) estimates of change over time. The *levels* tell us what circumstances were like for residents and the developments at the time each survey was fielded. The *change over time* calculations signal whether conditions or circumstances were getting better or getting worse for these people and places over the course of the demonstration. As a place-based intervention, Jobs-Plus is designed to improve the quality of life of residents in public housing. Since "change" can be either positive or negative, it is important to keep the outcome of interest in mind when evaluating how things changed. For example, on one hand, a decline in material hardship would be considered a change in the positive direction, but a decline in household income, on the other hand, would not be good news for this outcome.

[16]The criterion of statistical significance is used for convenience, to deal with the issue of using different metrics for the different measures in the analysis.

The Jobs-Plus Demonstration

Table 6.3

Summary of Quality-of-Life Changes in the Jobs-Plus Developments from 1998 to 2003

Measure	Jobs-Plus Developments		
	Baltimore	Dayton	St. Paul
Did conditions improve, worsen, or remain the same, according to residents' reports?			
Economic and material well-being			
Currently employed (%)	Unchanged	Unchanged	Improved
Households with annual income of $10,000 or more (%)	Improved	Unchanged	Improved
Average material hardship score	Worsened	Worsened	Unchanged
Social capital			
Average score on Social Cohesion Index	Unchanged	Unchanged	NA
Respondent can rely on someone in the development for help (%)	Unchanged	Unchanged	NA
Some or all of the adults in the development well-known to the respondent have full-time, steady paid work (%)	Improved	Unchanged	NA
Safety and victimization			
Feel "very" or "somewhat" safe being alone, near the unit, during the day or after dark (%)	Unchanged	Unchanged	NA
Victim of violence, robbery, burglary, or threatened with a weapon in the past 12 months (%)	Unchanged	Unchanged	Unchanged
Conditions within development			
Average problem conditions score	Worsened	Worsened	NA
Residential satisfaction			
Development is an "excellent," "very good," or "good" place to live (%)	Worsened	Worsened	Unchanged
Outcomes for children ages 6 to 11			
Participated in school-sponsored or outside-school activities (%)	Unchanged	Improved	NA
Received poor grades (%)	Improved	Unchanged	NA
Outcomes for children ages 12 to 17			
Received poor grades (%)	Unchanged	Improved	NA
Ever suspended or expelled from school (%)	Unchanged	Unchanged	NA
Ever got into trouble with police (%)	Unchanged	Unchanged	NA

SOURCES: MDRC summary based on the Jobs-Plus baseline (1998) and follow-up (2003) surveys.
NOTE: See Table 6.2 for information on measures reported in this table.

The Jobs-Plus Demonstration

Table 6.4

Estimates of Quality-of-Life Changes in the Jobs-Plus Developments from 1998 to 2003

Measure	Baltimore			Dayton			St. Paul[a]		
	1998	2003	Change	1998	2003	Change	1998	2003	Change
Economic and material well-being									
Currently employed (%)	53.2	57.5	4.3	61.0	61.3	0.3	53.6	63.7	10.1 *
Households with annual income of $10,000 or more (%)	21.7	31.4	9.8 **	25.4	28.7	3.3	60.4	73.8	13.4 **
Average material hardship score (ranges from 0 to 6)	2.4	2.8	0.4 **	2.2	2.5	0.3 *	1.5	1.4	-0.1
Social capital									
Average score on the Social Cohesion Index (ranges from 0 to 15)	7.2	6.9	-0.3	6.6	6.4	-0.2	NA	NA	NA
Respondent can rely on someone in the development for help (%)	82.0	78.0	-4.0	76.7	74.4	-2.3	NA	NA	NA
Some or all of the adults in the development well-known to the respondent have full-time, steady paid work (%)	38.5	50.0	11.5 **	45.2	47.3	2.1	NA	NA	NA
Safety and victimization									
Feel "very" or "somewhat" safe being alone, near the unit, during the day or after dark (%)	36.6	35.6	-1.0	46.6	47.5	0.9	NA	NA	NA
Victim of violence, robbery, burglary, or threatened with a weapon in the past 12 months (%)	29.0	29.2	0.2	37.4	40.3	2.9	23.8	21.2	-2.6
Conditions within development									
Average problem conditions score (ranges from 0 to 15)	8.9	10.3	1.4 ***	8.7	10.1	1.4 ***	NA	NA	NA
Residential satisfaction									
Development is an "excellent," "very good," or "good" place to live (%)	58.9	41.1	-17.8 ***	60.4	44.8	-15.7 ***	88.7	87.6	-1.1

(continued)

Table 6.4 (continued)

Measure	Baltimore			Dayton			St. Paul[a]		
	1998	2003	Change	1998	2003	Change	1998	2003	Change
Outcomes for children ages 6 to 11[b]									
Participated in school-sponsored or outside-school activities (%)	64.2	61.6	-2.6	52.3	66.3	13.9 *	NA	NA	NA
Received poor grades (%)	22.9	11.6	-11.3 *	23.4	21.6	-1.8	NA	NA	NA
Outcomes for children ages 12 to 17[c]									
Received poor grades (%)	31.3	28.6	-2.7	41.7	21.4	-20.2 **	NA	NA	NA
Ever suspended or expelled from school (%)	44.8	34.6	-10.2	31.7	33.3	1.7	NA	NA	NA
Ever got into trouble with police (%)	11.9	9.6	-2.3	11.7	14.0	2.4	NA	NA	NA
Sample size	219	219		241	181		151	113	

SOURCES: MDRC calculations using data from the Jobs-Plus baseline (1998) and follow-up (2003) surveys.

NOTES: See Table 6.2 for information on measures reported in this table.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

Actual sample sizes for individual measures may vary as a result of missing data.

[a]Many of the questions included on the core survey instrument were omitted from the St. Paul survey because they could not be translated easily into Hmong, the language spoken by a large majority of residents living in the Jobs-Plus development. The missing items are denoted by "NA" in the table.

[b]The sample sizes for the 1998 child outcome measures for children ages 6 to 11 in Baltimore are 110 in the Jobs-Plus group and 107 in the comparison group. The 2003 sample sizes for Baltimore are 87 in the Jobs-Plus group and 125 in the comparison group. For Dayton, the sample sizes for the 1998 child outcomes measures for children in the 6 to 11 age range are 129 in the Jobs-Plus group and 206 in the comparison group. The 2003 sample sizes are 91 in the Jobs-Plus group and 144 in the comparison group.

[c]The sample sizes for child outcome measures for children ages 12 to 17 vary by site: 67 in the Jobs-Plus group and 54 in the comparison group in Baltimore in 1998; 52 in the Jobs-Plus group and 110 in the comparison group in Baltimore in 2003; 60 in the Jobs-Plus group and 84 in the comparison group in Dayton in 1998; and 57 in the Jobs-Plus group and 111 in the comparison group in Dayton in 2003.

- **Unchanged.** This classification implies that there was very little difference in how a condition was rated by respondents to the baseline and the follow-up surveys.

Overall Finding: Mainly Small or No Changes in Quality of Life

What conclusions can one draw about how the Jobs-Plus developments fared over time with respect to quality of life? Before turning to the details, it is worth noting that the most striking finding emerging from Tables 6.3 and 6.4 is one of little overall change. In Baltimore and Dayton, there is almost no evidence that "things got better." In St. Paul, however, where there is clear evidence that Jobs-Plus increased earnings at both the individual and the development level (see Chapters 4 and 5), there is some evidence of quality-of-life improvements.

St. Paul: Some Small Improvements in Material Quality of Life

On economic outcomes, which are most directly affected by Jobs-Plus, the St. Paul Jobs-Plus development registered moderate improvements between the first and second waves of the survey. For example, Table 6.4 indicates a 10 percentage point increase in the proportion of respondents who were employed at the time of the follow-up survey.[17] In addition, the table indicates a 13 percentage point increase in the proportion of households with annual incomes over $10,000.[18]

However, these gains in employment and income translated into mixed improvements in material well-being, based on survey respondents reports of six types of hardships within the past months:[19] (1) needing to see a doctor or a dentist or to go to the hospital but being unable to afford it, (2) borrowing money from family or friends to make ends meet, (3) deciding not to buy something that was really needed, (4) not being able to pay the full monthly rent, (5) being evicted or locked out because of rent arrears, and (6) not having enough food to eat.[20] Computations not reported in the table indicate that 75 percent of the 1998 survey respondents from St. Paul reported one or more of these hardships, whereas only 66 percent of the 2003 survey respondents did so — a decline of 9 points in the percentage of respondents who reported at least one hardship. However, the average number of hardships experienced (the material hardship index in Table 6.4) changed very little — from 1.5 reported hardships per respondent, on average, in 1998 to 1.4 in 2003.

[17]These levels are based on respondents' self-reported employment status.

[18]This benchmark was not inflation-adjusted across the two surveys.

[19]All respondents in the follow-up survey and most in the baseline survey would have been living in public housing during the reference period.

[20]Survey respondents were asked whether they had experienced each of these hardships during the 12 months before their interview.

To explore this issue further, Figure 6.1 displays the percentage of survey respondents who reported three specific material hardships in 1998 and 2003. For two of the hardships (rent arrears and reliance on others for cash), the Jobs-Plus development in St. Paul experienced a 4 to 5 percentage point increase in incidence. But for the third hardship (inadequate food), there was a 16 percentage point decline. This suggests that as households' incomes increased in St. Paul, families were better able to meet their food-related needs but that they did not attain a degree of economic self-sufficiency to overcome some of the other hardships.

Many of the questions asked on the core survey were omitted from the St. Paul survey instrument because they could not be translated easily into Hmong, the predominant language spoken by residents living in this development. As a result, it was not always possible to get at all the measures of community life that are reported for the other sites. However, it was possible to ask residents whether they had been subjected to a crime in the past 12 months and how they rated their housing development as a place to live. The findings presented in Table 6.4 indicate that victimization rates declined very slightly in this site, from 24 percent to 21 percent. Further, based on accounts of survey respondents (see Figure 6.2), it appears that this development experienced small to modest improvements in the presence of conditions that heighten risk for individuals and families. For example, reports of gangs causing trouble in the development declined by 10 percentage points, from 33 percent in 1998 to 23 percent in 2003, a change statistically significant at the .05 level of significance. Reports of people selling drugs in public also declined over time, from 15 percent in 1998 to 9 percent in 2003, but this change was not statistically significant. Overall, dangerous conditions were far less prevalent in St. Paul Jobs-Plus than in the other two sites and this pattern held true over time.[21]

This picture of the Jobs-Plus development in St. Paul — painted by residents living there in 1998 and 2003 — does not lead one to conclude that the changes experienced were particularly dramatic or transformative. On some measures, such as those that tap aspects of economic well-being or community context, there was some improvement. But on other, broader indicators of residential satisfaction and community life, there was very little change.

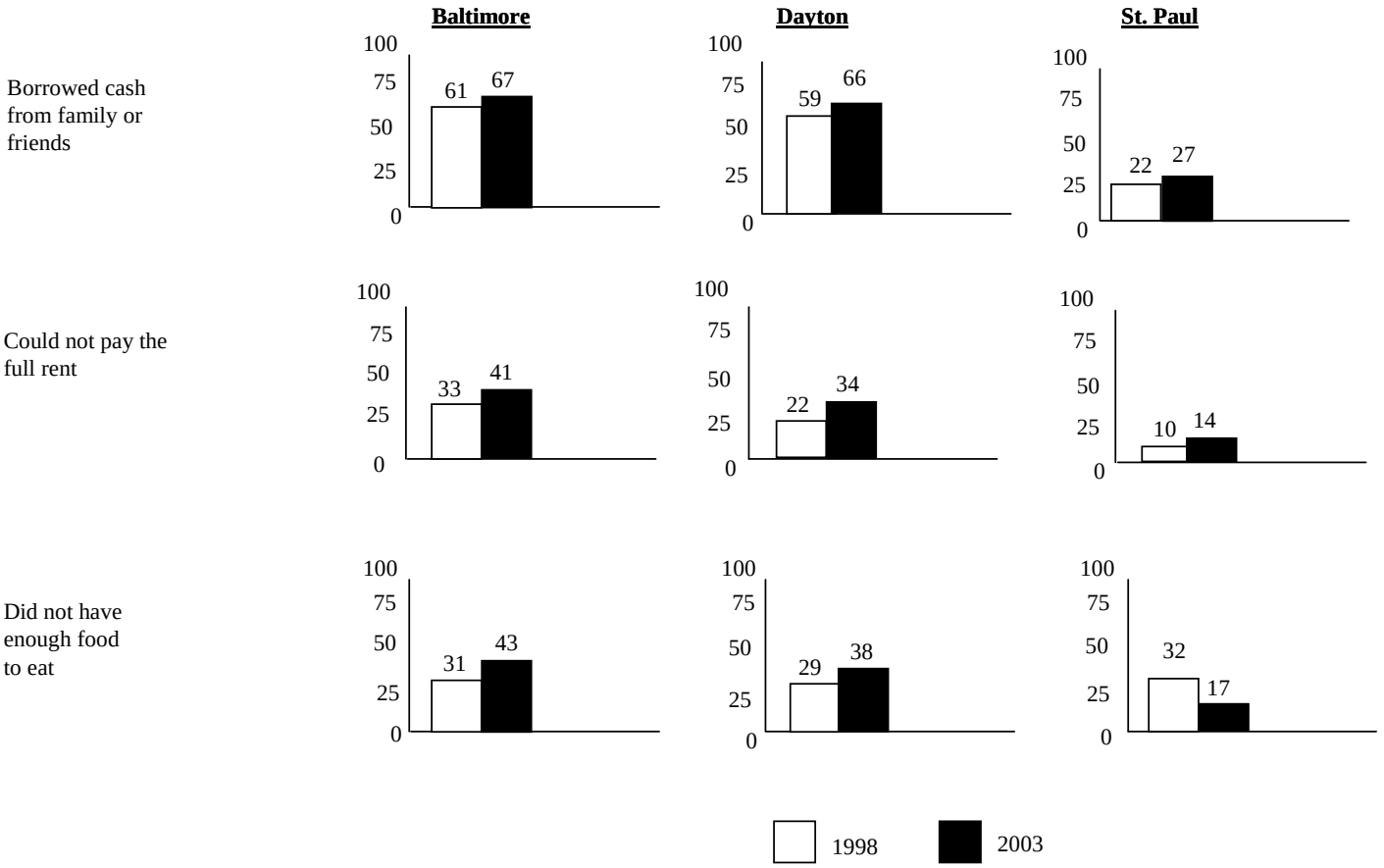
Baltimore and Dayton: Largely Unchanging or Worsening Circumstances

Jobs-Plus in Baltimore had no development-level impacts, and Jobs-Plus in Dayton had moderate development-level impacts. Thus, one would not expect major spillover effects on other community outcomes in these sites. Survey findings appear to confirm this expectation.

[21]There are slight differences in how this question is asked in the three study sites. The Baltimore and Dayton surveys asked respondents to rate how "big" of a problem these various conditions were in their respective developments. Due to translation constraints, the St. Paul survey just asks respondents to indicate whether they perceived these conditions as problems in their respective developments.

Figure 6.1
Changes Over Time on Selected Measures of Material Hardship for Jobs-Plus Residents

The percentage of survey respondents reporting "some" or "a lot" of the following hardships in the past 12 months due to financial constraints

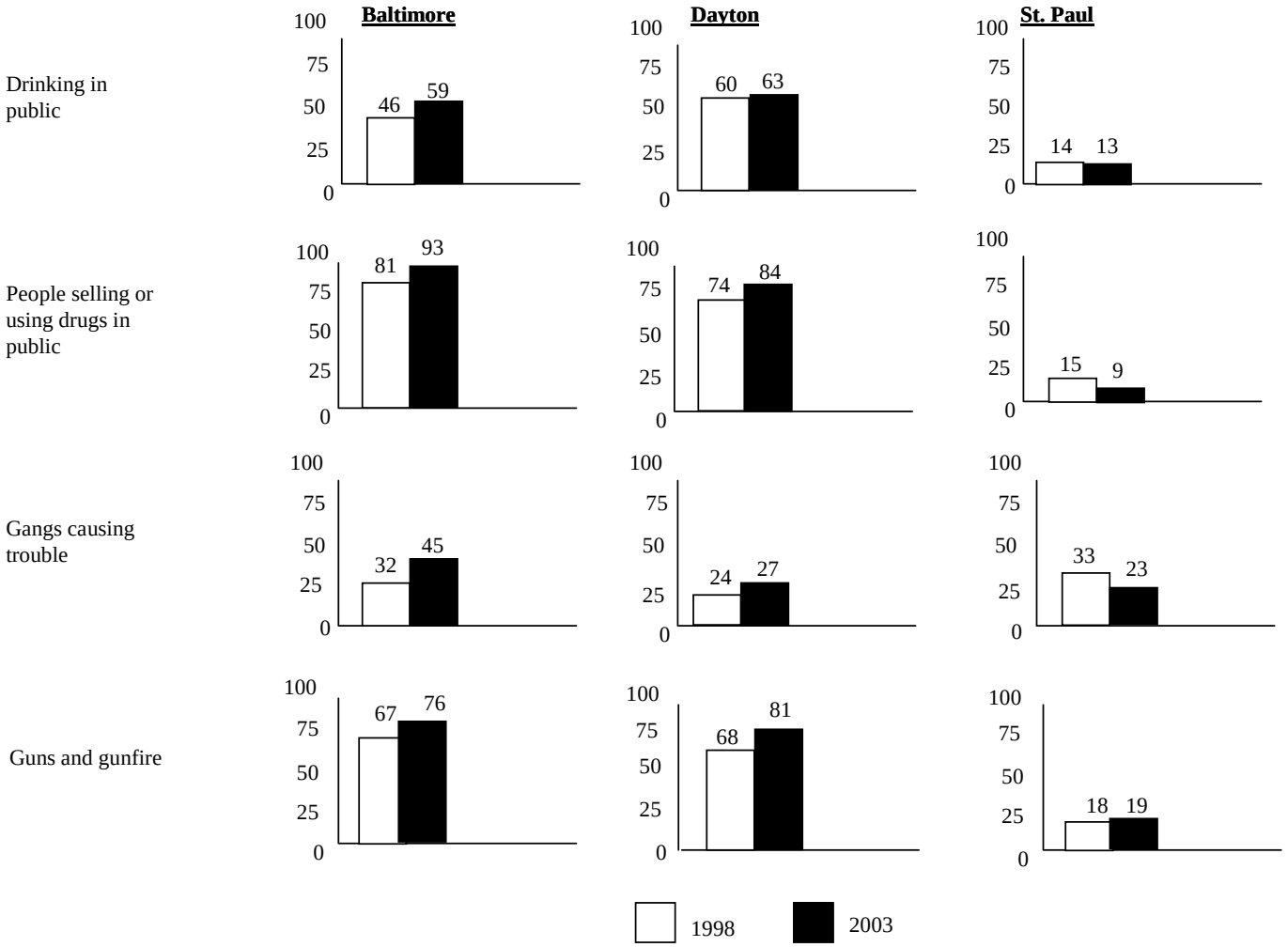


SOURCES: MDRC calculations using data from the Jobs-Plus baseline (1998) and follow-up (2003) surveys.

Figure 6.2

Changes Over Time in Problem Conditions in the Jobs-Plus Developments

The percentage of survey respondents rating the following conditions as "pretty big" or "very big" problems in the development



SOURCES: MDRC calculations using data from the Jobs-Plus baseline (1998) and follow-up (2003) surveys.

Tables 6.3 and 6.4 indicate that, on most of the 15 measures reported, the Jobs-Plus developments in both sites showed little or no improvement between 1998 and 2003. For example, residential satisfaction declined; problem conditions in the developments increased; and material hardship went up (see also Figures 6.1 and 6.2). In addition, there was no notable improvement in the general social climate, victimization rates, or perceptions of personal safety.

With the exception of a few measures, most of the child outcomes remained unchanged. Children in Dayton and Baltimore — the two sites where it was possible to collect survey data on child well-being — registered modest improvements over time in school performance: There was an 11 percentage point decline in the proportion of children ages 6 to 11 in Baltimore who received poor grades, and a 20 percentage point decline in this outcome was observed for older children (ages 12 to 17) in Dayton. Younger children in Dayton were also more likely to participate in school-sponsored or outside-school activities. School suspension rates dropped by 10 percentage points in Baltimore, but the absolute levels of this outcome remained relatively high in both sites. While these generally positive outcomes for younger and older children are encouraging, it is unclear whether these improvements can be linked to Jobs-Plus, particularly in a site like Baltimore, where the program had no effect on parents' work outcomes.

Quality-of-Life Changes in the Jobs-Plus Developments Mirror the Changes in the Comparison Developments

Table 6.5 summarizes how the quality-of-life changes for the Jobs-Plus developments between 1998 and 2003 compare with the same changes for their comparison developments. For each outcome and site, the differences in change over time are classified into one of three categories: same, better, or worse.[22] This table tells a story of strikingly similar changes for the Jobs-Plus and comparison developments. Regardless of the outcome measure, the Jobs-Plus developments and the comparison developments almost always changed by about the same magnitude and in the same direction.

Table 6.6 presents estimates of differences in change between the Jobs-Plus and the comparison developments. Three sets of estimates are presented for each outcome measure: (1) the 1998 and 2003 levels for the Jobs-Plus developments, (2) the 1998 and 2003 levels for the

[22]Again, note that the criterion of statistical significance is used for convenience, to deal with the issue of using different metrics for the different measures in the analysis. In all cases where the changes are statistically significant, they are typically found to be large enough in magnitude to be substantively important.

The Jobs-Plus Demonstration

Table 6.5

Summary of Differences in Changes Over Time in Quality-of-Life Measures: Jobs-Plus Versus Comparison Developments, 1998 to 2003

Measure	Baltimore	Dayton	St. Paul
How did the Jobs-Plus developments change <u>relative</u> to the change in comparison developments? Did they fare the same, better, or worse?			
<u>Economic and material well-being</u>			
Currently employed (%)	Same	Same	Same
Households with annual income of $10,000 or more (%)	Same	Same	Same
Average material hardship score	Same	Same	Same
<u>Social capital</u>			
Average score on the Social Cohesion Index	Same	Same	NA
Respondent can rely on someone in the development for help (%)	Same	Same	NA
Some or all of the adults in the development well-known to the respondent have full-time, steady paid work (%)	Better	Better	NA
<u>Safety and victimization</u>			
Feel "very" or "somewhat" safe being alone, near the unit, during the day or after dark (%)	Same	Better	NA
Victim of violence, robbery, burglary, or threatened with a weapon in the past 12 months (%)	Same	Same	Same
<u>Conditions within development</u>			
Average problem conditions score	Same	Same	NA
<u>Residential satisfaction</u>			
Development is an "excellent," "very good," or "good" place to live (%)	Same	Same	Worse
<u>Outcomes for children ages 6 to 11</u>			
Participated in school-sponsored or outside-school activities (%)	Same	Same	NA
Received poor grades (%)	Better	Same	NA
<u>Outcomes for children ages 12 to 17</u>			
Received poor grades (%)	Same	Same	NA
Ever suspended or expelled from school (%)	Same	Same	NA
Ever got into trouble with police (%)	Same	Same	NA

SOURCES: MDRC calculations using data from the Jobs-Plus baseline (1998) and follow-up (2003) surveys.

NOTE: See Table 6.2 for information on measures reported in this table.

Table 6.6

Estimates of Differences in Changes Over Time in Quality-of-Life Measures: Jobs-Plus Versus Comparison Developments, 1998 to 2003

Measure	Development	Baltimore 1998	Baltimore 2003	Baltimore Change	Dayton 1998	Dayton 2003	Dayton Change	St. Paul[a] 1998	St. Paul[a] 2003	St. Paul[a] Change
Economic and material well-being										
Currently employed (%)	Jobs-Plus	53.2	57.5	4.3	61.0	61.3	0.3	53.6	63.7	10.1 *
	Comparison	51.0	52.2	1.2	61.8	56.9	-4.8	52.1	63.7	11.6 *
	Net Difference			**3.1**			**5.2**			**-1.6**
Households with annual income of $10,000 or more (%)	Jobs-Plus	21.7	31.4	9.8 **	25.4	28.7	3.3	60.4	73.8	13.4 **
	Comparison	21.6	33.0	11.4 ***	28.3	23.9	-4.4	45.1	60.9	15.8 **
	Net Difference			**-1.6**			**7.7**			**-2.4**
Average material hardship score (ranges from 0 to 6)	Jobs-Plus	2.4	2.8	0.4 **	2.2	2.5	0.3 *	1.5	1.4	-0.1
	Comparison	1.8	2.5	0.7 ***	2.2	2.6	0.4 ***	1.7	1.6	-0.1
	Net Difference			**-0.3**			**-0.1**			**0.0**
Social capital										
Average score on the Social Cohesion Index (ranges from 0 to 15)	Jobs-Plus	7.2	6.9	-0.3	6.6	6.4	-0.2	NA	NA	NA
	Comparison	7.8	7.2	-0.6 **	6.3	6.3	0.0	NA	NA	NA
	Net Difference			**0.3**			**-0.3**			**NA**
Respondent can rely on someone in the development for help (%)	Jobs-Plus	82.0	78.0	-4.0	76.7	74.4	-2.3	NA	NA	NA
	Comparison	85.4	78.1	-7.2 **	77.5	72.7	-4.7	NA	NA	NA
	Net Difference			**3.2**			**2.5**			**NA**
Some or all of the adults in the development well-known to the respondent have full-time, steady paid work (%)	Jobs-Plus	38.5	50.0	11.5 **	45.2	47.3	2.1	NA	NA	NA
	Comparison	52.2	50.7	-1.5	41.9	32.8	-9.1 **	NA	NA	NA
	Net Difference			**13.1** **			**11.2** *			**NA**

(continued)

Table 6.6 (continued)

Measure	Development	Baltimore 1998	Baltimore 2003	Baltimore Change	Dayton 1998	Dayton 2003	Dayton Change	St. Paul[a] 1998	St. Paul[a] 2003	St. Paul[a] Change
Safety and victimization										
Feel "very" or "somewhat" safe being alone, near the unit, during the day or after dark (%)	Jobs-Plus	36.6	35.6	-1.0	46.6	47.5	0.9	NA	NA	NA
	Comparison	54.4	50.3	-4.1	56.0	41.8	-14.2 ***	NA	NA	NA
	Net Difference			**3.1**			**15.1** **			**NA**
Victim of violence, robbery, burglary, or threatened with a weapon (%)	Jobs-Plus	29.0	29.2	0.2	37.4	40.3	2.9	23.8	21.2	-2.6
	Comparison	22.1	25.1	3.0	39.1	42.2	3.1	21.0	22.0	1.0
	Net Difference			**-2.8**			**-0.2**			**-3.6**
Average problem conditions score (ranges from 0 to 15)	Jobs-Plus	8.9	10.3	1.4 ***	8.7	10.1	1.4 ***	NA	NA	NA
	Comparison	6.6	8.8	2.1 ***	8.4	9.5	1.1 ***	NA	NA	NA
	Net Difference			**-0.8**			**0.3**			**NA**
Residential satisfaction										
Housing development is an "excellent," "very good," or "good" place to live (%)	Jobs-Plus	58.9	41.1	-17.8 ***	60.4	44.8	-15.7 ***	88.7	87.6	-1.1
	Comparison	58.9	41.1	-17.8 ***	55.9	34.2	-21.8 ***	80.5	94.5	14.0 ***
	Net Difference			**1.6**			**6.1**			**-15.1** **
Outcomes for children ages 6 to 11[b]										
Participated in school-sponsored or outside-school activities (%)	Jobs-Plus	64.2	61.6	-2.6	52.3	66.3	13.9 *	NA	NA	NA
	Comparison	85.8	71.2	-14.6 **	52.7	57.4	4.7	NA	NA	NA
	Net Difference			**12.1**			**9.2**			**NA**
Received poor grades (%)	Jobs-Plus	22.9	11.6	-11.3 *	23.4	21.6	-1.8	NA	NA	NA
	Comparison	17.3	21.1	3.8	26.4	19.0	-7.4	NA	NA	NA
	Net Difference			**-15.1** *			**5.5**			**NA**

(continued)

Table 6.6 (continued)

Measure	Development	Baltimore 1998	Baltimore 2003	Baltimore Change	Dayton 1998	Dayton 2003	Dayton Change	St. Paul[a] 1998	St. Paul[a] 2003	St. Paul[a] Change
Outcomes for children ages 12 to 17[c]										
Received poor grades (%)	Jobs-Plus	31.3	28.6	-2.7	41.7	21.4	-20.2 **	NA	NA	NA
	Comparison	29.2	24.3	-4.9	37.3	32.7	-4.7	NA	NA	NA
	Net Difference			**2.2**			**-15.6**			**NA**
Ever suspended or expelled from school (%)	Jobs-Plus	44.8	34.6	-10.2	31.7	33.3	1.7	NA	NA	NA
	Comparison	31.4	30.9	-0.5	14.7	16.5	1.8	NA	NA	NA
	Net Difference			**-9.7**			**-0.8**			**NA**
Ever got into trouble with police (%)	Jobs-Plus	11.9	9.6	-2.3	11.7	14.0	2.4	NA	NA	NA
	Comparison	3.9	7.3	3.4	0.8	0.0	-0.8	NA	NA	NA
	Net Difference			**-5.7**			**-4.4**			**NA**
Sample size	Jobs-Plus	219	219		241	181		151	113	
	Comparison	215	323		287	275		119	91	

SOURCES: MDRC calculations using data from the Jobs-Plus baseline (1998) and follow-up (2003) surveys.

NOTES: See Table 6.2 for information on measures reported in this table.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

Actual sample sizes for individual measures may vary as a result of missing data.

[a]Many of the questions included on the core survey instrument were omitted from the St. Paul survey because they could not be translated easily into Hmong, the language spoken by a large majority of residents living in the Jobs-Plus development. The missing items are denoted by "NA" in the table.

[b]The sample sizes for the 1998 child outcome measures for children ages 6 to 11 in Baltimore are 110 in the Jobs-Plus group and 107 in the comparison group. The 2003 sample sizes for Baltimore are 87 in the Jobs-Plus group and 125 in the comparison group. For Dayton, the sample sizes for the 1998 child outcomes measures for children in the 6 to 11 age range are 129 in the Jobs-Plus group and 206 in the comparison group. The 2003 sample sizes are 91 in the Jobs-Plus group and 144 in the comparison group.

[c]The sample sizes for child outcome measures for children ages 12 to 17 vary by site: 67 in the Jobs-Plus group and 54 in the comparison group in Baltimore in 1998; 52 in the Jobs-Plus group and 110 in the comparison group in Baltimore in 2003; 60 in the Jobs-Plus group and 84 in the comparison group in Dayton in 1998; and 57 in the Jobs-Plus group and 111 in the comparison group in Dayton in 2003.

comparison developments, and (3) the net difference in change between the Jobs-Plus and comparison developments.[23] The *net difference in change* is calculated by comparing the mean change (1998 to 2003) in a measure for the Jobs-Plus development to the mean change for the comparison developments.

These findings show little support for the spillover hypothesis, because both the Jobs-Plus developments and the comparison developments experienced very similar change trajectories. In most cases, if the Jobs-Plus developments experienced small changes over time, so did the comparison developments. And where the Jobs-Plus developments experienced reasonably large changes, the comparison developments did, too. Even in St. Paul — the one case where it seemed most plausible to expect a link between program effects on earnings and community spillovers effects — there is little evidence of transformative changes caused by the program.

Summary and Conclusions

As a place-based employment intervention, Jobs-Plus was motivated by the vision that dramatic increases in employment and earnings among public housing residents would improve their quality of life and create spillovers that would result in improvements in important aspects of the quality of life in the development. This chapter examines the extent to which such spillover effects materialized in important aspects of community life in three sites that participated in this demonstration. In two of the three sites examined (Baltimore and Dayton), Jobs-Plus did not produce large development-level earnings gains — the fundamental precondition for spillover effects — and so these sites are probably not good cases for assessing the hypothesis of community spillover, thus leaving St. Paul as the best of the three sites for testing this hypothesis. However, even there, the development-level earnings effects of Jobs-Plus were not extraordinary.

[23]In Table 6.6, the net difference in change is shown in bold type to make it stand out from the other estimates reported in the table.

Chapter 7

The Lessons and Implications of Jobs-Plus

This study demonstrates that an employment-focused intervention based in public housing developments can work. Although challenging to implement, Jobs-Plus, when operated well, increased public housing residents' earnings relative to what those earnings would have been without the program. This suggests that the Jobs-Plus strategy can help achieve the resident self-sufficiency objectives of the 1998 federal housing reform law as well as help advance the work-promoting mission of welfare and workforce agencies whose target populations include residents of public housing.

This concluding chapter puts the evaluation findings into a broader context and takes a closer look at a number of policy questions that the findings inspire. For example, what do the data suggest in general about public housing residents' labor force attachment? How do the effects of Jobs-Plus compare with those of other programs? Can a program like Jobs-Plus be effective for different types of public housing residents? Did Jobs-Plus contribute to the goals of welfare reform? Would the program have been more effective if participation in it were mandatory? Did the rent incentives matter? Can Jobs-Plus help build more mixed-income communities within public housing? Can it be replicated and effective on a broader scale? How much does it cost to operate Jobs-Plus, and would replicating it be a good investment? Finally, what lessons from Jobs-Plus apply outside public housing?

How strongly are public housing residents attached to the labor force?

One of the most striking findings from this study has nothing to do with the program's effectiveness. Rather, it is the fact that, in all six of the Jobs-Plus sites, public housing residents in the program and the comparison developments saw their rates of employment and earnings climb sharply over the course of the 1990s, even before the launch of Jobs-Plus in 1998. These rising rates were most likely driven by an improving economy and federal policy reforms, such as welfare reform and the expansion of the Earned Income Tax Credit (EITC). The upward trends leveled off after the expanding economy began to contract with the onset of a national recession in 2001, although they generally did not fall back to their previous lower levels.

The positive trajectories reveal residents' substantial attachment to the formal labor market, even in some of the nation's poorest housing developments and even in the absence of Jobs-Plus. Indeed, the Unemployment Insurance wage records show that, across the Jobs-Plus and comparison developments, from almost 75 percent (in Baltimore) to about 90 percent (in Dayton) of the 1998 cohort of 21- to 61-year-old residents worked in the formal economy at least at some point after Jobs-Plus began. Thus, the majority of residents wanted to — and did

— work, even if their work was not always steady or in high-quality jobs. This responsiveness of public housing residents, who are often thought to be isolated in high-poverty communities from broader economic opportunities, exceeded what the program's designers had anticipated.

The impressive growth in residents' quarterly employment rates before Jobs-Plus even began reduced the margin for the program to make further improvement. Still, there remained some room for improvement. Although Jobs-Plus appears to have raised employment rates, larger effects might have been possible. To achieve them, the sites would have had to reach the minority of residents who, despite the program's best efforts, remained outside of the formal labor market.[1]

How large are Jobs-Plus's earnings impacts relative to those of other employment interventions?

The effects of Jobs-Plus on residents' earnings were substantial, sustained, and statistically significant. How does this accomplishment stack up against what other programs have achieved? With a dearth of impact studies in the housing and community development fields to serve as benchmarks, it is instructive to consider how Jobs-Plus's impacts compare with those of employment initiatives outside public housing. Such a comparison suggests that *when Jobs-Plus was well implemented, its earnings impacts are at the high end of those found across a large collection of important employment interventions that have been subjected to random assignment evaluations.*

Table 7.1 presents results of 30 different interventions evaluated by MDRC using random assignment research designs. Most of these studies evaluated welfare-to-work and other welfare reform initiatives, but a few operated outside the welfare system and served a broader low-income population. Most of the interventions offered employment and training services; most included a participation mandate; and two included a time limit on cash assistance. Some of the interventions also offered financial incentives to help increase the net income that participants would realize by taking a low-wage job.[2] The table orders the interventions according to the size of their average annual impacts on earnings measured over a three-year follow-up period starting from the point of random assignment. It divides the entire set of interventions into three tiers of 10 each, listing those with larger impacts first. To facilitate comparisons, the table includes in the top panel the impacts of Jobs-Plus during the first three years of the four years of follow-up subsequent to the program rollout period.

[1] An analysis of the baseline survey of residents found that health-related problems were a substantial employment barrier among residents who had not recently worked (Martinez, 2002).

[2] These incentives usually took the form of enhanced earnings disregards that allowed employed welfare recipients to keep more of their grants (which, otherwise, would have been reduced in proportion to their increase in earnings). In other cases, the incentives took the form of direct wage subsidies.

The Jobs-Plus Demonstration

Table 7.1

Summary of Impacts on Earnings of Welfare-to-Work and Other Employment Interventions

Program	Year 1 ($)	Year 2 ($)	Year 3 ($)	Average for Years 1-3 ($)	Percentage Change (%)
Jobs-Plus					
All sites combined	461 ***	619 **	440 **	507	6.3
Stronger implementation sites	714 **	1,135 ***	1,171 ***	1,007	12.3
GAIN Riverside	1,516 ***	1,744 ***	1,360 ***	1,540	63.3
GAIN Butte	1,023 **	1,594 ***	1,700 ***	1,439	64.6
NEWWS Portland	824 ***	1,477 ***	1,634 ***	1,312	35.5
SSP Plus	1,011 ***	1,198 ***	1,209 ***	1,139	50.9
L.A. Jobs-First GAIN	900 ***	1,009 ***	NA	954	27.7
SSP Plus Comparison	658 ***	1,182 ***	886 **	908	39.4
MFIP	745 ***	991 ***	654 *	797	21.7
SSP	502 ***	1,077 ***	744 ***	774	29.4
GAIN San Diego	456 **	912 ***	860 ***	743	21.3
Jobs First	359 **	990 ***	837 ***	728	12.5
NEWWS Riverside LFA	881 ***	690 ***	473 **	682	23.8
FTP	229	743 ***	1,049 ***	673	17.6
SWIM	458 **	894 ***	646 **	666	20.1
New Hope	1,060 **	109	798	656	9.6
GAIN Alameda	265	650 *	962 **	625	27.1
NEWWS Atlanta LFA	442 ***	578 ***	582 **	534	15.4
NEWWS Grand Rapids LFA	513 ***	482 **	393	463	14.9
NEWWS Grand Rapids HCD	211	697 ***	472 *	460	12.9
NEWWS Detroit	141	480 **	693 ***	438	12.8
WRP	440 **	173	659 *	424	13.0
NEWWS Columbus Integrated	64	596 ***	499 **	386	7.7
Project Independence	466 ***	296 **	NA	381	13.5
NEWWS Riverside HCD	295 *	249	571 ***	371	17.9
NEWWS Atlanta HCD	85	429 **	534 **	349	9.0
NEWWS Columbus Traditional	142	482 **	395	340	7.0
GAIN Tulare	-253	126	794 **	222	6.7
GAIN Los Angeles	-17	159	189	110	4.9
NEWWS Oklahoma City	94	152	28	91	4.1
WRP Incentives Only	214	6	-79	47	3.1
MFIP Incentives Only	227	-229	-219	-74	0.0

(continued)

Table 7.1 (continued)

SOURCE: MDRC calculations using information presented in Bloom and Michalopoulos (2001).

NOTES: Findings are reported in 2003 dollars. Impact estimates are the differences in earnings between sample members randomly assigned to a program or control group in each study. Results are for all sample members who had ever received welfare prior to random assignment.

"Year 1" refers to the four quarters after the calendar quarter of random assignment.

Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; and * = 10 percent.

Outcomes indicated as NA were not measured.

"Percentage Change" refers to the impact estimate divided by the control group mean. It is estimated here as the average of the percentage changes for Years 1, 2, and 3. If Year 3 earnings were not measured, the mean earnings and the percentage change for that program were calculated using the data from Years 1 and 2.

The acronyms are spelled out in alphabetical order: FTP refers to the Family Transition Program; GAIN refers to Greater Avenues for Independence; HCD refers to Human Capital Development; LFA refers to Labor Force Attachment; MFIP refers to the Minnesota Family Investment Program; NEWWS refers to the National Evaluation of Welfare-to-Work Strategies; SSP refers to the Self-Sufficiency Project; SWIM refers to the Saturation Work Initiative Model; and WRP refers to the Welfare Restructuring Project.

The table shows that the earnings impacts produced by the *top* tier of interventions ranged from $728 per year for the Connecticut Jobs First program to $1,540 per year for the Riverside, California, GAIN program. (All impact estimates were inflation-adjusted to 2003 dollars.) The Jobs-Plus results averaged together for the three stronger implementation sites (Dayton, Los Angeles, and St. Paul) fall well within that range; in fact, at $1,007 per year across the first three years after the program rollout period, they fall within the upper half of that top tier.[3] When all six Jobs-Plus sites are included, the average annual earnings impacts rank in the middle of all the interventions listed in the table.[4]

As an alternative benchmark, the Jobs-Plus results were compared with the findings of a meta-analysis applied to 31 impact analyses conducted by a number of research organizations on 15 different voluntary employment and training programs for a wide variety of disadvantaged groups (not just welfare recipients). This comparison shows, again, that the Jobs-Plus re-

[3]When the even-larger fourth-year results are included, the average annual impacts of the stronger implementation sites climb to $1,141, as reported in Chapter 4.

[4]The Jobs-Plus results are also noteworthy because they are averaged over the full target population in the developments, which included numerous residents who had only the most fleeting connection to the program, and even some who undoubtedly remained oblivious to it. In the other studies cited above, most sample members at least had to come forward and register for the program before they became part of the research, and many were subject to tangible financial penalties for failing to participate without good cause. Thus, it is not unreasonable to speculate that the impacts of Jobs-Plus on residents who actively sought the program's assistance may have been larger than the averages presented in this report for the entire target population.

sults for the stronger implementation sites were within the range of effects produced by the programs in that study that had statistically significant impacts on earnings.[5]

The effectiveness of Jobs-Plus stands in marked contrast to the *absence* of labor market effects (at least in the short term) from an alternative approach that sought to improve public housing residents' self-sufficiency through residential mobility strategies — that is, by offering residents special rent vouchers to subsidize their rent in the private housing market in low-poverty neighborhoods. Theoretically, the rent vouchers would allow residents to move to areas where more jobs are available and, perhaps, to become part of community-based social networks with a better flow of information about job opportunities and more supportive of work. As mentioned in Chapter 1, the U.S. Department of Housing and Urban Development's (HUD's) Moving To Opportunity demonstration tested this idea. This initiative aimed to achieve a broad range of quality-of-life improvements — including but not limited to better work-related outcomes — by helping public housing residents move to areas where poverty rates were less than 10 percent. The interim results have shown no impacts on residents' employment or earnings within the first four years of follow-up. It may be that mobility strategies like these take more time to make a difference on employment, and perhaps the demonstration's longer-term findings, when they become available, will reveal positive effects. Or it may be that mobility strategies are unlikely *by themselves* to produce effects on work outcomes. If so, perhaps they would be more likely to produce such effects if, like Jobs-Plus, they included explicit assistance to help residents find, adapt to, or prepare for work, and extra financial incentives to do so.

Can a voluntary employment program like Jobs-Plus be effective for public housing residents with very different backgrounds?

Findings in Chapter 4 indicate that when Jobs-Plus was implemented relatively well, it markedly increased the earnings of many different subgroups of residents. For example, it substantially increased the earnings of men as well as women, which belies the common perception that voluntary employment programs are not effective for men. In addition, Jobs-Plus produced large earnings gains for residents who were native-born, as well as for those who were immigrants from different parts of the world, including Mexico and Central America and Southeast Asia. Given the recent and projected growth of immigrant populations in the United States and the salience of immigration in the current policy debate, this latter finding seems particularly relevant. Furthermore, Jobs-Plus was effective for public housing residents who were receiving welfare as well as for those who were not, although the program produced much larger impacts for the latter group. Thus, findings from the demonstration project provide important information for future employment programs in general, as well as for welfare-to-work programs in particular.

[5]Greenberg, Michalopoulos, and Robins, 2002.

Did Jobs-Plus contribute to the goals of welfare reform?

Recognizing that many public housing residents were also welfare recipients, the designers of Jobs-Plus hoped that the program could contribute to the work-promoting objectives of welfare reform by helping such residents succeed in the labor market. How well did it do? As the subgroup analysis in Chapter 4 shows, *Jobs-Plus did aid the cause of welfare reform by improving the earnings of residents who were welfare recipients at the time the program was launched.* In the stronger implementation sites, it increased this subgroup's earnings during the four years after the rollout of Jobs-Plus by $761 per year — an 11 percent gain.[6]

How does this impact compare with estimates from studies unrelated to Jobs-Plus that have examined the consequences of welfare reform for public housing residents who were receiving welfare? Although only a rough comparison is possible, the magnitude of Jobs-Plus's effect for the welfare subgroup is well within the range of a composite earnings impact estimate ($719 per year, not inflation-adjusted) that is based on the results of six different random assignment estimates of the earnings effects of welfare reform initiatives on public housing residents.[7] It is important to recall from Chapter 3 that many residents of the comparison developments in the Jobs-Plus evaluation similarly may have been involved in welfare reform interventions. If so, and if those interventions affected their earnings, one can speculate that Jobs-Plus's earnings impacts for the welfare subgroup reflected "added value" above and beyond any effects of welfare reform itself. In other words, those who had access to Jobs-Plus's package of rent incentives and on-site assistance and supports may have earned more than they otherwise would have earned as a result of the time limits, participation mandates, and financial incentives of welfare reform alone.

These findings imply that Jobs-Plus offers welfare agencies a way to further an important part of their own mission — helping Temporary Assistance for Needy Families (TANF) recipients succeed in the labor market — for the portion of their population who live in public housing. More generally, the results suggest that welfare agencies may do well to align their own welfare-to-work efforts with the on-site strategies of public housing authorities. This could include colocating some of their own staff at the housing developments (even on a part-time basis), where they might be able to engage residents who are TANF recipients more easily and to interact with common purpose with other on-site staff. Welfare agencies might also consider requiring that their own frontline staff — whether located at the welfare agency or a housing

[6]Program impacts on welfare receipt rates and benefit levels were not estimated for subgroups of the study sample. However, in the three sites where data on welfare outcomes were available for the full sample, no impacts on these outcomes were evident. As noted, receipt of welfare fell dramatically over the course of the demonstration for both the program group and the comparison group.

[7]See Verma and Riccio, 2003, Table 6.1. The six relevant estimates in that table were converted to annual earnings impacts and averaged together, with each estimate weighted equally.

development — help market the work-based rent incentives already available to public housing TANF recipients under current federal housing law (see below), along with any other special work incentives that the local housing authority makes available.

Would Jobs-Plus have been more effective if participation were mandatory?

Among its recommendations for reforming the nation's housing assistance programs, the federally appointed Millennial Housing Commission proposed in 2002 that, over time, eligibility for housing assistance be linked to residents' compliance with work requirements — when appropriate employment services and supports are available.[8] This idea is inspired by welfare-to-work programs that make receipt of a full welfare grant conditional upon a parent's compliance with rules requiring him or her to work or prepare for work. Jobs-Plus had no such mandates per se. As a voluntary program, residents could ignore Jobs-Plus without worrying that they would put their rent subsidy at risk.

It is impossible to say from the evidence available in this study whether Jobs-Plus would have been even more successful had it established a participation mandate or whether the often-substantial investment and administrative burden necessary to enforce such mandates would be worth the cost. However, it is noteworthy that, even in the absence of a formal work requirement linked to housing assistance, a large majority of residents across the six developments (reaching 76 percent for the 2000 cohort) became formally attached to Jobs-Plus by enrolling in the program or by living in a household participating in its rent incentives component. The resident survey data also showed that most household heads at the development — whether or not they were participating in Jobs-Plus — were involved in at least some activities related to employment and self-sufficiency at the time they were interviewed. For example, even in the absence of a mandate, 80 percent of the program group said that they were currently working or currently participating in a formal work-related activity (such as job search assistance, education, or training) or had looked for a job within the prior four weeks (Table 3.4).

It is also important to understand that residents who were welfare recipients were subject to their welfare department's TANF participation requirements. In fact, in order to encour-

[8]The Millennial Housing Commission's report states: "The MHC recommends that federal housing assistance programs encourage and facilitate expanded economic opportunity, recognizing that the working-age families living in assisted housing, like other able-bodied people, have an obligation to contribute to society as well as accept its help. Thus, MHC supports provision of the necessary services and supports to enable these families to find employment that will enable them to become self-sufficient and, when such services are available, directly or through non-housing agencies, to accompany them with realistic work requirements. The Millennial Housing Commission thus recommends that, over time, the housing assistance system require residents who are not elderly or disabled to work as a condition of receiving aid" (2002, p. 56).

age TANF recipients to join the Jobs-Plus program, nearly all the sites were able to forge an agreement with the local welfare departments to allow residents on welfare to satisfy their TANF obligations by participating in Jobs-Plus.[9] Consequently, such residents — if they chose this route — could be sanctioned (that is, have their grants reduced or terminated) by the welfare agency for failing to participate in Jobs-Plus. Moreover, according to federal rules, sanctioned recipients would not see their public housing rents reduced despite their lower income. Thus, at least for public housing residents who were TANF recipients, existing participation mandates that were imposed by the welfare system may have been a further inducement to take part in Jobs-Plus (in addition to the program's rent incentives, on-site employment assistance, and other features).

Finally, it is useful to recall that while Jobs-Plus in the stronger implementation sites had positive earnings impacts on the welfare subgroup, its effects were even larger for the non-welfare subgroup. The latter group, which faced no participation obligations, experienced average earnings gains of $1,654 per year, representing an 18 percent increase.

Did the Jobs-Plus rent incentives matter?

For many years, proponents of helping public housing residents become more self-sufficient have claimed that it is critical to reduce the implicit tax imposed on residents' earnings by federal policies that raise their rent when their income grows. The rent incentives created for Jobs-Plus are among the most ambitious attempts ever to change those policies. Did they work? Although it is not possible to answer this question with certainty, circumstantial evidence suggests that they did.

Rent reform was one of a variety of innovations implemented as part of the overall Jobs-Plus package, and the evaluation's research design is not suitable for disentangling the independent influence of each of the program's features. However, *patterns in the data suggest that the Jobs-Plus rent incentives were a crucial ingredient in the program's effects on earnings.* For example, the two sites where use of the rent incentives was lowest (Baltimore and Chattanooga) were the only sites to produce no impacts on earnings. In contrast, the first two sites to introduce the incentives (St. Paul and Seattle) showed the earliest evidence of earnings impacts. In addition, in one site (Dayton), where the 2000 cohort used the rent incentives at double the rate of the 1998 cohort (60 percent versus 30 percent), annual earnings impacts were noticeably larger for the later cohort ($1,189 versus $895).

Qualitative data on residents' reactions to the rent incentives are also important to consider. They suggest that the incentives may have had little to do with convincing persistently

[9] See Kato and Riccio, 2001.

nonemployed residents to begin working, perhaps because most residents had already shown an interest in working and many of those who were not working had major barriers — such as health problems — that rent incentives could not "fix." Instead, incentives may have worked by encouraging those who were employed or who would have worked even without the incentives to hold onto their jobs longer or to seek reemployment quickly after losing a job.[10]

The circumstantial evidence that Jobs-Plus's rent incentives may have played a critical role in generating the program's earnings impacts makes it plausible to conclude that the narrower incentives already available under current rent rules (established by the 1998 federal housing law) may also hold the potential to boost the earnings of qualifying residents. Even if the scope and depth of those existing incentives stayed the same, perhaps simply marketing them to residents more systematically and more aggressively might enhance their effectiveness, as the Jobs-Plus experience suggests.

As important as they were, the rent incentives did not stand alone in Jobs-Plus. Despite their obvious value, the incentives needed to be marketed aggressively to residents. Educating residents about what the incentives entailed proved to be a formidable task that, to be done well, called on the collective efforts of the Jobs-Plus staff, resident outreach workers, community coaches, and housing authority property managers. But thanks to the communication and marketing efforts, rent incentives became a critical "hook" that excited many residents about Jobs-Plus and drew them to the program. The lure of the incentives also resulted in many residents' getting other forms of assistance, such as individualized job coaching, help with transportation costs, referrals for other education or training or social services, and sometimes just ongoing informal encouragement and support from the program.[11] Although it cannot be proved, the fact that the incentives were heavily bound up with other program services may mean that the combination of elements offered by Jobs-Plus, not the incentives alone, may have been the main source of the program's impacts (as postulated by the theory lying behind the multicomponent Jobs-Plus model). Findings from a number of welfare-to-work evaluations point to a similar conclusion — that incentives *plus* services may make a bigger difference than incentives alone.[12]

---

[10]Gardenhire-Crooks, 2004. It is interesting to consider that, because of the quarterly nature of the UI data on which employment impacts were estimated, any effect that Jobs-Plus had with respect to shortening residents' spells of nonemployment from three months or more to less than three months could not be detected. However, such effects, if they did exist, would have contributed to the evaluation's estimated impacts of Jobs-Plus on residents' average earnings. This may be one reason why Jobs-Plus's earnings impacts are larger than its measured effects on employment rates.

[11]Kato, 2003a; Liebow et al., 2004.

[12]In this regard, it is worth considering the findings of evaluations of two programs listed in Table 7.1: the Minnesota Family Investment Program (MFIP) and Canada's Self-Sufficiency Project (SSP). Both provide evidence that financial incentives can promote higher earnings and employment retention. Yet, in the MFIP study, the incentives component had little independent effect. Overall, the evaluation found that MFIP was more effec-

(continued)

Can Jobs-Plus help public housing developments become more mixed-income communities?

The designers of Jobs-Plus envisioned the program not only as means for helping individual residents succeed in the labor market (knowing that many who benefited from it would leave public housing) but also as a strategy to help broaden the income mix within public housing itself. The latter goal took on greater urgency with the advent of welfare reform in the mid-1990s. At that time, many housing authorities and policymakers were growing increasingly worried about the implications for public housing of imposing time limits on welfare benefit payments. They feared that, by reducing the welfare income of many of their residents, time limits would worsen the growing concentration of poverty and its attendant social problems in public housing. They also worried that residents would have more trouble paying their rent and that rent revenues would fall sharply. This would increase the amount of housing subsidies that those tenants would need, at just the time when federal operating subsidies — monies that HUD paid to housing authorities to cover the gap between total rent revenue and operating costs — were under increasing strain. Work offered a potential alternative. If residents could *earn* more money while living in public housing, they could eventually pay more of the true cost of their housing out of those earnings. This would help compensate for a loss of welfare income. Thus, it was hoped that by focusing on work, Jobs-Plus could, in time, help housing authorities address this looming financial threat.

The development-level impact analysis presented in Chapter 5 shows that residents' earnings rose steadily in both the Jobs-Plus and the comparison developments even before Jobs-Plus began, thanks to the tail end of a booming economy and, perhaps, to other policy reforms. However, in the stronger implementation sites, Jobs-Plus increased average earnings year to year within the developments to even higher levels — that is, beyond what those earnings would have been without the program. These impacts are important because they signal that a housing-based self-sufficiency initiative can help improve the earnings of existing tenants. This means that housing authorities have more options than simply trying to recruit people who have jobs and higher incomes to move into public housing (which, itself, may be a considerable challenge).

---

tive when it included the full package of incentives and welfare-to-work services and participation requirements (Miller et al., 2002). Results from the SSP evaluation indicate that the effects of its wage supplements on earnings were more enduring when they were combined with voluntary work-related services (Michalopoulos et al., 2002), although the incentives alone also had a large independent effect. These two sets of findings add weight to the conclusion that the Jobs-Plus incentives probably did make an important contribution to the program's effectiveness and also that the incentives were probably not the only thing that mattered.

To be sure, the improvements caused by Jobs-Plus were not dramatic or transformative.[13] In addition, this evaluation did not attempt to determine the net economic gain or loss to the housing authority of operating a Jobs-Plus program (see below). Nonetheless, the program's effects on development-level earnings were large, especially in sites with lower move-out rates, which saw the improvement in their tenants' earnings in some years exceed 20 percent. The results demonstrate that Jobs-Plus can at least play a supporting role in achieving the broader policy goal of building more mixed-income public housing, as called for by 1998 federal housing law.

Can Jobs-Plus be effective if operated on a broader scale?

The finding that Jobs-Plus worked in four different sites — Dayton, Los Angeles, St. Paul, and Seattle (until the residents were relocated under HOPE VI) — suggests that *the Jobs-Plus model, if properly implemented, holds the potential to work in a variety of settings.* Although the number of sites is small, they cover larger and smaller cities that also varied in the tightness of their housing and labor markets. The sites also served very different types of public housing tenants. As previously explained, these included a largely African-American single-mother population (Dayton), a heavily Latino and Southeast Asian population (Los Angeles), a population with a large number of Hmong refugees (St. Paul), and a highly ethnically diverse population in Seattle that included many immigrants and refugees from different East African nations as well as Southeast Asia. The evidence of positive effects across all these settings suggests that Jobs-Plus is a potentially "robust" intervention, not one that works only under highly selective circumstances or for a distinctive set of residents who are unusually predisposed to benefit from the program. The subgroup findings reinforce this conclusion, showing that Jobs-Plus had positive earnings impacts for a variety of tenant subgroups. These included residents with more prior employment and those with less prior employment, those with more prior welfare receipt and those with less prior welfare receipt, and those with longer tenures in public housing and those with briefer tenures.

Given all the difficulties that the demonstration sites experienced in putting the Jobs-Plus model into practice, is it reasonable to expect that the model could be implemented properly on a broader scale outside the context of a demonstration project? The evidence suggests that, in fact, it would be feasible, with the adequate funding and support, to replicate the model. Four of the six Jobs-Plus sites were eventually able to get all program components into place, build functioning service partnerships with other agencies, implement fundamental rent reforms that helped make work pay, build a cadre of residents to reach out to others, and attract a majority of working-age residents to take advantage of at least some of what the program had to offer.

[13]There is also no evidence within either the program or the comparison developments over the period of data collection of a *geometric* rise that might suggest the occurrence of a "tipping-point" phenomenon, as hypothesized in Chapter 1.

Of course, for the Jobs-Plus model to work on a broader scale, dedicated and qualified personnel are needed to staff it, like any good program. Although the program model is complex, it is not so complicated as to require staff with such specialized training that finding suitable candidates would be unusually difficult outside the context of a special demonstration project. Indeed, it is reassuring that most of the staff hired for Jobs-Plus at the successful demonstration sites were selected through the normal recruitment and hiring channels operated by the housing authorities and their key partners. It is also noteworthy that the service providers used by Jobs-Plus in the most effective sites were not of a difficult-to-replicate quality; rather, the program drew largely on existing services and service providers available in the local community.

Still, the challenges of implementing the Jobs-Plus model should not be underestimated. The demonstration's sponsors also made a considerable investment in technical assistance, which MDRC either provided directly (often with difficulty) or coordinated, to help the sites design and implement their programs. Many obstacles were encountered along the way to building solid programs. To some extent, these obstacles were the inevitable consequence of the "learning by doing" process inherent in new demonstration projects. The prospects for successful replication might thus be enhanced if new sites heed the many important lessons learned from the demonstration, which might help them avoid — or navigate better — some of the pitfalls or challenges that they are likely to encounter along the way.[14] Replication might be further enhanced if a qualified intermediary organization or HUD itself were available to provide technical assistance in this process. In addition, housing authorities hoping to replicate Jobs-Plus might also find it advantageous to subcontract the day-to-day, on-site operational responsibilities to an experienced employment and training provider rather than build and staff a new program entirely from scratch. Still, housing management staff would need to maintain a close operational partnership with the program, as suggested next.

What would the replication of Jobs-Plus require of housing authorities?

It goes almost without saying that *the housing authority's sustained commitment to the program, as part of a broader collaborative effort, is critical to any successful replication of Jobs-Plus.* Although Jobs-Plus was originally envisioned as a joint endeavor of local interagency and resident collaboratives, the housing authority must provide the glue that keeps such partnerships together and that supervises and holds the Jobs-Plus staff accountable for high performance.[15] Other agencies may help fund, support, and provide critical services to the program, but they are unlikely to want to assume the kind of shared governance role over Jobs-Plus that

[14]These lessons have been described in MDRC's earlier reports on the implementation of Jobs-Plus. See, for example, Bloom, 2000; Gardenhire-Crooks, 2004; Kato, 2003a, 2003b, 2004; Kato and Riccio, 2001; Liebow, 2004; Miller and Riccio, 2002; and Riccio, 1999.

[15]Kato and Riccio, 2001.

was originally attempted in the collaboratives. Thus, more streamlined collaborative relationships and decision-making strategies than were attempted in the demonstration, with strong leadership and accountability provided by the housing authority, may be advantageous in any replication effort. Moreover, the commitment of senior housing authority officials outside a special demonstration project would undoubtedly be enhanced if federal laws and regulations required that housing management assume responsibilities for ensuring that residents have access to and take advantage of work-related services — and if appropriate funds were available to make these added responsibilities feasible to embrace.

Assistance from the housing management staff is critical to the day-to-day operations of the program. In particular, replication would be enhanced when housing management staff are partners with Jobs-Plus in marketing the rent incentives and promoting a strong message about work and about how the program can help residents succeed in the labor market. Indeed, the housing authority and its property management staff could publicize to tenants a message that assistance with employment "comes with tenancy" in public housing. This would represent a commitment to a broader mission for housing authorities beyond their already vital one of providing decent, well-managed housing. But it is also a mission that would be feasible for them to take on, especially with the right community partners and funding.

Housing authorities seeking to replicate Jobs-Plus would also do well to involve resident representatives in planning and operating Jobs-Plus. Residents can help establish the legitimacy of the program by helping agency-based planners understand what may or may not appeal to their fellow tenants. Using residents as outreach workers (for instance, as part of a community support for work component or as regular paid staff) can help Jobs-Plus become a pervasive and widely known source of employment support throughout a housing development. At the same time, it is important not to let worthy support for resident "empowerment" result in assigning critical program management or line staff functions (for example, case management roles) to residents who are not adequately prepared or trained for those responsibilities, as occurred early on in some Jobs-Plus sites.

What does it cost to operate a Jobs-Plus program?

Although the Jobs-Plus evaluation did not include a detailed cost analysis, it is possible to put the cost of operating Jobs-Plus into some perspective, showing the scale of investment that this type of intervention may require on the part of housing authorities and their partner agencies.[16] (Recall that the demonstration's sponsors viewed Jobs-Plus as more than just a housing authority and HUD initiative and that, in keeping with the principle of collaboration, the

[16]These estimates are based on budget information submitted to MDRC by the Jobs-Plus sites.

local welfare and workforce agencies — the target groups of which include many public housing residents — would share the burden of funding it.)

Drawing on the experience of the three stronger implementation sites (which came closest to implementing the full vision of Jobs-Plus), one very rough estimate suggests that the immediate budgetary cost of operating the *on-site features of the program* (including the rent incentives) could, under some circumstances, amount to approximately $150 per targeted resident in any given month. If all else were equal, this would imply that a housing authority with, say, 250 eligible, working-age residents may need an annual budget in the vicinity of $450,000 per year to provide the on-site services and rent incentives — although, for reasons discussed below, this may represent a high-end estimate. Note that about 35 percent ($158,000) of the estimated annual budget would be spent on rent incentives, while about 65 percent ($292,000) would be required for all other budgeted expenditures associated with the program.[17]

The actual added cost to government may, however, be considerably lower. Chapter 3 notes that, even in the absence of Jobs-Plus, housing authorities would have spent money on alternative self-sufficiency services and rent incentives, as evidenced by the fact that they did so for numerous residents of the comparison developments in the demonstration sites. Consequently, the *incremental* investment necessary to operate the on-site features of Jobs-Plus would be less than the above gross cost estimate. How much less would depend on what other employment-related services and incentives were already being provided. For purposes of illustration, suppose that the combination of alternative services and rent incentives under the 1998 housing law cost about 20 percent of the investment made for Jobs-Plus and that these expenditures (or the services they provided) would be redirected to Jobs-Plus.[18] That would mean that the *extra* on-site cost of Jobs-Plus would be about $120 per resident per month in any given month, yielding a total annual program budget of roughly $360,000. If the cost of alternative services amounted to 40 percent of Jobs-Plus costs, then the net additional investment for Jobs-Plus would fall to $90 per targeted resident per month, for a total budget of $270,000 per year.

A number of factors could make the on-site operating costs of a Jobs-Plus program higher or lower than those estimated here. One crucial driver of costs is a development's move-out rate. The costs of serving newer tenants is likely to exceed the costs of serving other tenants, assuming

[17]It is not possible with the data available for this evaluation to estimate the total average cost over time of providing on-site services and rent incentives specifically to members of the 1998 cohort for comparison with the program's estimated impact on that group.

[18]By way of comparison, data from a comprehensive evaluation of 10 welfare-to-work programs across the country indicate that government expenditures on services per person in the control group equaled 51 percent of the expenditures per program group member (see Hamilton et al., 2001, Table 13.4). Also, by way of comparison, the survey data in Table 3.4 indicate that, across the five survey sites, the comparison group's rate of participation in services obtained through the housing authority or at the housing developments was 44 percent of the program group's rate (13.4/30.5 = 43.9).

that, in general, residents who stay will eventually reduce their involvement in the program. Consequently, other things being equal, the sustained costs of operating a Jobs-Plus program are likely to be lower where resident turnover is lower. Costs might also be lower if the program were operated more efficiently as an ongoing program than it was as a new demonstration project with a protracted design and trial-and-error period or if the program were operated across more developments in a city, thereby creating substantial administrative economies of scale.

Is Jobs-Plus a good financial investment?

This question cannot be answered by the present evaluation, which was not designed to include a benefit-cost analysis. Such an analysis would have allowed a comparison of Jobs-Plus net impacts — for example, its value added — to its *net* costs. However, as noted above, only rough estimates of gross costs are available, and readers should resist the temptation to compare gross costs ("apples") to net impacts ("oranges"). As a result, it is impossible to calculate a rate of return on the government's investment (or on the specific investments made by housing authorities — using HUD funds and rent revenues — and their welfare and workforce agency partners).[19]

For the same reason, it is not possible to estimate the precise dollar value of the net economic gain or loss to residents in the Jobs-Plus study sample. However, based on the findings in Chapter 4, it is reasonable to expect that, over time, residents in the Jobs-Plus developments came out ahead financially.

Recall that Jobs-Plus's positive effects on residents' earnings were substantial and enduring, even after many residents moved out of public housing (at which point the program's on-site investment in them ended). For example, in the three stronger implementation sites, Jobs-Plus had positive earnings impacts during each of the four years following the rollout of the program. These effects averaged $1,141 per resident per year, accumulating to $4,563 per resident over the four-year period. (It is important to remember that these estimates are averaged over all targeted residents, whether or not they participated in Jobs-Plus and whether or not they worked. Hence, the effects on those who became involved in the program and worked are undoubtedly larger.)

Trends in the program's earnings impacts also indicate that Jobs-Plus's effects continued past the end of data collection. Furthermore, Jobs-Plus did not produce any reductions in resi-

[19]To measure this return on investment would require knowing, among other things, (1) the costs of in-kind services and activities provided by local housing authorities and their partner organizations; (2) the costs of employment-related services provided to sample members by organizations that were not part of Jobs-Plus and thus outside of its accounting system; (3) the costs of income transfer payments (for example, TANF, food stamps, and EITCs) made by government organizations to sample members; and (4) the effects of Jobs-Plus on earnings for a number of years beyond the present follow-up period.

dents' welfare income, and many residents benefited from the extra money they obtained through the program's rent incentives. For example, data show that, over the first one-and-a-half to two years of participation in the rent incentives program, households in the 1998 cohort in the three stronger implementation sites saved more than $170 per month in rent.[20] (This equates to over $2,000, on average, for households participating in the program for a year.) Some Jobs-Plus participants may have also benefited from increased use of the EITC, and many got program help with work-related costs (for example, transportation and child care).[21] All these factors support a conclusion that Jobs-Plus was likely to be financially beneficial from the perspective of residents.

Are the lessons of Jobs-Plus relevant outside public housing?

Many lessons from Jobs-Plus could help efforts to improve the labor market experiences of low-income populations who are not living in public housing. For example, although the place-based elements of Jobs-Plus would not be directly relevant, the sites' experience with implementing new forms of rent-based work incentives and combining these with services focused on work may hold lessons relevant to strengthening the operation of HUD's Family Self-Sufficiency program, which is largely directed toward recipients of portable Section 8 rent vouchers, which subsidize rents in the private housing market. In addition, some of sites' day-to-day operating experiences — for example, in coordinating employment-related services through the housing authority in cooperation with other local agencies and in recruiting highly diverse groups of people into a voluntary employment program connected with the housing authority — may also be informative for that program.

For a broader range of community initiatives, which are extremely difficult to evaluate, the findings of Jobs-Plus are important because they offer rare and convincing evidence that a place-based intervention can improve the earnings of very low-income residents under certain conditions. At the same time, the Jobs-Plus findings caution that the degree to which individual-level effects on employment outcomes will translate into community-level effects will depend to an important extent on residents' move-out rates. Furthermore, it may take much bigger effects on employment and earnings rates than were observed in Jobs-Plus developments (on top of the more striking improvements that had already occurred) in order for such effects to lead to

[20]These estimates are based on data collected from housing authority records available through the end of 2002 for households taking part in the rent incentives program. The savings use traditional HUD rent rules (which calculate rent as 30 percent of adjusted income) as a benchmark. By site, the participating households saved the following amounts in rent per month, over the following average number of months: Dayton, $228 over 20 months; Los Angeles, $96 over 19 months; and St. Paul, $192 over 27 months. These estimates do not include any additional savings that the households may have enjoyed from other features of the Jobs-Plus incentives plans in some sites, such as rent credits for employment retention.

[21]For detailed examples of how residents can improve their net income after rent by taking advantage of other available financial work supports in addition to the Jobs-Plus rent incentives, see Miller and Riccio (2002).

improvements in other dimensions of the community or neighborhood quality of life. Because the truly big changes in employment rates took place before Jobs-Plus began (and, hence, prior to the administration of the study's baseline survey), this evaluation does not offer a good test of whether big employment increases in a community can spark very large improvements in the quality of neighborhood life.

Finally, Jobs-Plus holds many practical lessons for constructing and operating labor market interventions. In particular, the experiences of the six sites speak directly to the challenges and opportunities of using "places" as the focus of and platform for a work-promoting intervention, including the opportunities to interact with and influence residents informally, where they live, in contrast to the more typical "by-appointment" staff-participant interactions in many employment programs. The sites' experiences also point to productive strategies (and cautions about unproductive approaches) for building partnerships among multiple agencies — including welfare, workforce, and social services agencies — to address the employment needs of low-income populations and for involving local residents in that process.

Appendix A

Supplementary Tables for Chapter 2

The Jobs-Plus Demonstration

Appendix Table A.1

Selected Population Characteristics of the Census Tracts in Which the Jobs-Plus and Comparison Developments Are Located (2000 Census)

	Baltimore		Chattanooga		Dayton		Los Angeles		St. Paul		Seattle	
Characteristic	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison
Race/ethnicity (%)												
Black, non-Hispanic	98	83	96	81	98	71	1	5	22	18	6	26
White, non-Hispanic	1	10	2	15	1	25	2	4	13	35	82	35
Hispanic	0	2	1	3	0	1	46	87	5	6	6	7
Asian	0	4	0	1	0	0	49	2	62	37	8	25
Foreign born (%)	1	5	1	3	0	0	62	40	48	28	26	25
Households headed by a single parent (%)	36	23	46	18	29	33	22	26	27	24	16	9
High school graduates, among persons age 25 or older (%)	45	53	55	54	63	64	34	35	49	64	77	70
Median family income[a] ($)	19,071	16,532	10,451	18,420	20,565	14,516	20,821	19,500	20,219	22,141	51,307	31,472
Poverty rate (%)	43	51	62	46	41	49	37	41	54	43	16	33
Unemployment rate (%)	21	16	20	13	23	11	19	8	8	5	4	7
Total population in each tract	3,363	3,401	2,431	8,022	3,169	3,511	3,276	3,262	1,918	5,581	5,943	9,687

SOURCES: MDRC calculations using data from the U.S. Bureau of the Census, Census 2000 Summary Files 1 and 3.

NOTE: [a]Dollar amounts are not inflation-adjusted.

Appendix Table A.2

Selected Housing Characteristics of the Census Tracts in Which the Jobs-Plus and Comparison Developments Are Located (2000 Census)

	Baltimore		Chattanooga		Dayton		Los Angeles		St. Paul		Seattle	
Characteristic	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison
Rental vacancy rate (%)	16	3	3	9	14	24	3	2	0	1	5	5
Median household gross rent ($)	255	199	207	234	188	310	435	360	197	501	566	505
Fair market rent (FMR)[a] ($)	643	643	513	513	549	549	766	766	684	684	772	772
Homeownership rate[b] (%)	31	12	24	14	42	22	8	25	1	38	66	28
Median value of owner-occupied houses ($)	45,800	NA	52,900	58,600	58,000	44,550	142,900	144,900	NA	80,600	218,900	NA
Housing stability[c] (%)	58	49	61	47	58	45	62	54	54	51	48	33
Total population in each tract	3,363	3,401	2,431	8,022	3,169	3,511	3,276	3,262	1,918	5,581	5,943	9,687

SOURCES: U.S. Department of Housing and Urban Development, http://www.huduser.org/datasets/fmr/FMRHIST.xls, data extracted on October 4, 2002; Census 2000 Summary Files 1 and 3; and MDRC calculations.

NOTES: [a]The FMRs are gross rent estimates; they include shelter rent and the cost of utilities, except telephone. FMRs listed are for two-bedroom apartments. The geographical unit they cover is the metropolitan area, so the FMR is the same in the Jobs-Plus and comparison developments in each city.

[b]This is the rate of owner-occupied housing.

[c]Housing stability was calculated by dividing the number of people living in a MSA/PMSA in the same house five years earlier by the total census tract population for the year 2000.

Appendix Table A.3

Selected Characteristics of Targeted Residents Aged 21 to 61 Living in the Jobs-Plus Development or Its Comparison Development(s) in 1998, by Site

	Baltimore		Chattanooga		Dayton		Los Angeles		St. Paul		Seattle	
Characteristic	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison	Jobs-Plus	Comparison
Race/ethnicity (%)												
White (non-Hispanic)	0	1	4	3	1	9	1	2	3	9	8	7
Black (non-Hispanic)	99	99	94	95	97	89	6	9	21	24	32	33
Hispanic	1	0	2	2	0	0	79	81	4	2	0	3
Asian/Pacific Islander	0	0	0	0	0	0	12	2	56	61	28	38
Other	0	0	0	0	0	0	0	0	0	1	14	8
Missing	0	0	0	0	2	1	1	7	16	3	19	11
Household head (%)	91	88	93	93	93	91	57	67	66	73	70	66
Female (%)	81	83	91	90	86	81	65	70	66	70	71	73
Age (%)												
21-24 years	13	11	27	23	26	27	12	10	13	18	12	13
25-34 years	33	33	38	39	42	36	28	33	40	42	33	29
35-61 years	55	56	35	38	32	37	59	58	47	39	55	58
Average age (years)	37	37	32	33	32	32	39	38	36	33	37	37
Lived in a household with (%):												
Two or more adults	16	24	15	14	14	19	74	62	67	52	54	54
No children	45	40	17	26	27	28	26	21	5	9	23	27
Children ages												
0-5 years	25	26	44	43	47	43	29	35	56	56	42	35
6-17 years	44	51	64	51	48	50	63	72	88	69	62	56
Sample size	367	649	282	513	351	608	513	443	312	245	434	349

(continued)

Appendix Table A.3 (continued)

SOURCE: MDRC calculations using data from public housing authority records.

NOTES: This sample includes all residents of each public housing development in October 1998 who were between 21 and 61 years old and not listed as disabled on public housing authority records. These residents are referred to as the "1998 cohort" in this report.

Because of missing data on these records, the sample size for each characteristic may vary.

In Baltimore, Chattanooga, and Dayton, which had two comparison developments each, the numbers presented here represent equally weighted averages for both developments.

Appendix B

Supplementary Tables for Chapter 3

The Jobs-Plus Demonstration

Appendix Table B.1

Baltimore: Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Developments

Program Feature	Jobs-Plus Development *Gilmor Homes*	Comparison Developments *Perkins Homes and Somerset Courts*
Housing and Neighborhood	Development includes 571 units in low-rise buildings in Sandtown-Winchester neighborhood of West Baltimore. City's most distressed area. High incidence of property and violent crimes, including drug trafficking. Resident drug use major barrier to employment. Few neighborhood jobs. BWI Airport jobs as shuttle drivers and security personnel dried up after 9/11.	Development includes 688 and 257 units in Perkins and Somerset, respectively. Both are low-rise buildings in East Baltimore, surrounded by extensive real estate development, tourism, and business investment. Perkins Homes in East Harbor Empowerment Zone, near Oriole Park at Camden Yards, Johns Hopkins and Mercy Hospitals. Somerset Courts is walking distance to Inner Harbor. Drugs and crime a bigger problem in Perkins than Somerset.
Demographics	Predominantly African-American single mothers as household heads. Sizable minority of disabled and seniors.	Predominantly African-American single mothers as household heads.

(continued)

Appendix Table B.1 (continued)

Employment-Related Services	On-site individualized intake, assessment, and case management. Job search and job readiness assistance are available either from Jobs-Plus staff or through referrals to such partner agencies as Eden Jobs and Goodwill Industries. Until January 2002, Jobs-Plus offered on-site driver's education linked to the auto-purchasing program of a partner agency. A satellite office of the Vision for Health Consortium (VHC) of public and private health organizations offered on-site health assessments and substance abuse treatment referrals until it closed, in September 2002. TANF recipients had an on-site caseworker from Work Matters — a welfare-to-work program of the local housing authority and the WIA agency — until June 2001, when the caseworker was reassigned to a downtown office. TANF recipients were redirected to downtown welfare offices (and away from Jobs-Plus) for employment services.	Only one on-site social worker per development. Employment assistance through off-site referrals. Housing authority-sponsored training and job programs (construction, lawn care, security) require drug and alcohol screenings and GED, limiting participation.
Rent Incentives	Implemented in November 2000, the rent incentives plan at Gilmor Homes reduces the percentage of adjusted income that is used to calculate working families' rent (from the traditional 30 percent to 20 percent). Half the reduced rent is deposited in a non-interest-bearing escrow account for each month that residents work during a consecutive 12-month period. At the end of each annual cycle, the savings are rebated to residents. However, residents who were not employed for 30 days or more during any 12-month cycle forfeited the savings accumulated during that period.	Began implementing the rent incentives of the Quality Housing and Work Responsibility Act (QHWRA) in late 2003.
Community Support for Work	In 2001, Jobs-Plus trained residents to be court captains, who help circulate information about services and job openings and recruit participants for such activities as the on-site driver's education class, a workshop on the Earned Income Tax Credit (EITC), and the rent incentives program.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

Appendix Table B.2

Chattanooga:
Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Developments

Program Feature	Jobs-Plus Development *Harriet Tubman Homes*	Comparison Developments *College Hill Courts and Emma Wheeler Homes*
Housing and Neighborhood	Development includes 423 low-rise apartment units in East Chattanooga, 3 miles northeast of downtown Chattanooga. Located near train yard and industrial area. Since August 2002, all Chattanooga public housing developments under private management.	College Hill Courts includes 497 low-rise apartment units; Emma Wheeler Homes includes 340 units. College Hill Courts in West Chattanooga, near downtown Chattanooga and adjacent to several public transportation lines and major roadways. Emma Wheeler Homes farther away from downtown. In 2001, temporary relocation of Emma Wheeler Homes residents under way for HOPE VI renovation.
Demographics	Predominantly African-American single mothers as household heads, along with 100 units for elderly and disabled. Beginning first quarter 2001, influx of McCallie Homes residents displaced by HOPE VI renovations, who were described as "hard to place" in jobs.	Predominantly African-American single mothers as household heads.

(continued)

Appendix Table B.2 (continued)

Employment-Related Services	Jobs-Plus was reconstituted between June 2000 and June 2002, in attempt to improve service delivery. Offered residents on-site intake, assessment, and job readiness assistance. Those who were deemed job-ready were referred to a job coach, who divided her time between Jobs-Plus and the Southeast Tennessee Career Center, where she helped residents use job search services. Education and training as well as support services available, largely through referrals to off-site providers. However, Hamilton County Board of Education provided on-site GED preparation and computer literacy classes, and Academy of Allied Health offered several cycles of certified nurse assistant training. Other on-site programs included Family Neighborhood Center, which provided job training, a food pantry, and after-school programs. Enduring operational difficulties led to a termination of formal Jobs-Plus services in June 2002.	Emma Wheeler Homes had after-school tutorial program in aging YMCA community center, and adult GED and computer classes at elementary school next door. In contrast, College Hill Courts had extensive multiagency resource center under management of Westside Community Development Corporation, with employment, training, education, and social services (including child care, health clinic, and 12-step residential drug treatment facility), and resident-operated catering service and coin-operated laundry. Additional health/fitness center built in 2002.
Rent Incentives	Implemented in November 2000, Chattanooga's financial incentives plan involves a two-step rent schedule for households with working members. Step 1 calculates rents at 10 percent of countable income (for 16 months), and Step 2 calculates rents at 20 percent (for the remaining time of the demonstration). This is the only Jobs-Plus component that has been formally offered in Chattanooga since June 2002.	Began implementing QHWRA rent incentives in 2000.
Community Support for Work	Jobs-Plus became a financial-incentives-only program before it could fully implement this component.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

The Jobs-Plus Demonstration

Appendix Table B.3

Dayton:
Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Developments

Program Feature	Jobs-Plus Development *DeSoto Bass Courts*	Comparison Developments *Arlington Courts and Parkside Homes*
Housing and Neighborhood	Development had 382 row-house apartment units about 4 miles southwest of downtown Dayton in low-income residential neighborhood. (128 units of original development demolished in mid-2002 to increase open space.) Few employment opportunities in walking distance. Crime and substance abuse significant problems.	Arlington Courts includes 314 row-house apartment units. Parkside Homes includes 518 units. Arlington Courts in West Dayton, Parkside Homes in North Dayton toward airport. Both in low-income residential areas, although Arlington Courts in proximity to retail shopping center, grocery store, and fast-food establishments. Crime and substance abuse significant problems.
Demographics	Predominantly African-American single mothers as household heads.	Predominantly African-American single mothers as household heads. Parkside Homes includes Caucasian residents from Appalachian areas.

(continued)

Appendix Table B.3 (continued)

Employment-Related Services	Jobs-Plus offers residents on-site intake, assessment, case management, and job readiness and job search assistance as well as job retention follow-up. To conduct independent job search, residents have on-line access at Jobs-Plus to the Job Center's database of job openings, and they are referred to the Job Center and to off-site partners for most education, training, and support services. Jobs-Plus has also hosted several cycles of on-site job trainings, including cash-register training sponsored by Walgreen's drugstore chain and workshops on household management and income tax preparation. In 2002, Jobs-Plus partnered with RETS Tech to recruit participants for its heating, ventilation, air-conditioning, and refrigeration (HVACR) training program, and it provided case management follow-up to ensure training completion. The program also received housing authority funding to offer employment and substance abuse assistance to noncustodial fathers of children who live at DeSoto Bass Courts, even when the fathers were not on the lease.	No sizable community centers or on-site employment services at Arlington Courts and Parkside Homes. Caseworkers of Sankofa, the nonprofit arm of housing authority entrusted with resident services, located off-site at central office. Some after-school activities on-site for children and youth.
Rent Incentives	Implemented in May 2000, Dayton's financial incentives plan eliminates income-based rent calculations and replaces them with a two-step, flat-rent approach. Jobs-Plus's flat rents are set at a rate lower than what most households with full-time workers would pay if their rent remained income-based. During Step 1, which begins on enrollment, rents are set for one year at about one-third the normal market-based flat rent for a given unit size. During Step 2, rent increases are limited to about one-half the normal flat rent for a similar unit, for the remainder of the demonstration.	Began implementing QHWRA rent incentives in 2000.
Community Support for Work	Jobs-Plus in Dayton trained residents to be building captains, who distribute information about the program's services and about job openings and who recruit participants. Jobs developer and other staff also made efforts to reach residents with employment information and assistance at community events, such as the well-attended basketball tournaments and family picnics organized in partnership with the community-based Men of Standards.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

The Jobs-Plus Demonstration

Appendix Table B.4

Los Angeles:
Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Development

Program Feature	Jobs-Plus Development *William Mead Homes*	Comparison Development *Dana Strand Village*
Housing and Neighborhood	Development includes 414 low-rise apartments in Boyle Heights neighborhood of East Los Angeles. Older but well-maintained. Downtown Los Angeles to north and Chinatown southwest. County prison nearby. Surrounded by light industrial area with poultry processing plant, UPS warehouse, and wholesale food and Asian import distributors. Problems with substance abuse, drug dealing, other crimes, and gangs somewhat less than in comparison development.	Development consisted of 384 low-rise housing units. Between May 2002 and August 2003, households gradually moved off-site to make way for HOPE VI construction. In residential Wilmington neighborhood of South Bay area. Proximity to airports, Los Angeles and Long Beach ports, petroleum refineries, beaches, amusement parks, and shopping malls, with jobs in food/drinking establishments, construction, janitorial services, warehouses, retail stores, repair shops, laundries, medical services, security firms, and airport shuttle services. Problems with substance abuse, drug dealing, other crimes, and gangs.
Demographics	Predominantly Hispanics of Mexican and Central American origin, with minority of Southeast Asians and blacks. Many households with two or more adults including male household heads. Immigrant-related barriers to employment include limited English proficiency and, for some, lack of legal right to work in the United States.	Predominantly Hispanics of Mexican and Central American origin. Many households with two or more adults including male household heads. Immigrant-related barriers to employment include limited English proficiency and, for some, lack of legal right to work in the United States.

(continued)

Appendix Table B.4 (continued)

Employment-Related Services	On-site job preparation and job search assistance are available for individuals and groups. The housing authority designated Jobs-Plus as the "portal" for its Career Service Centers (CSCs), and Jobs-Plus publicized CSC services and boosted take-up by helping residents complete applications for CSC education and training opportunities. Collaborative partners help Jobs-Plus provide services through collocated staff or off-site referrals. On-site at both housing developments are an employment caseworker from the welfare agency and a job developer from the Employment Development Department. East Los Angeles Women's Center provides domestic violence counseling, and the East Los Angeles Skills Center offers GED classes for Spanish speakers.	Few on-site services. Computer Learning Center (CLC) programs in self-directed keyboarding training, GED and ESL software geared toward youth. Support groups for adults dealing with substance abuse or domestic violence. HOPE VI support services primarily for helping residents file Section 8 paperwork and find alternate housing.
Rent Incentives	Implemented in June 2000, Phase 1 of Los Angeles's plan either froze the rent of participating households for 18 months (if the current rent was less than the Jobs-Plus flat rent) or reduced it to the proposed flat rent (if the current rent was higher than the flat rent). During Phase 2, which began in February 2002, participating households paid the flat rent.	Began implementing QHWRA rent incentives in 2001.
Community Support for Work	Beginning in November 2000, Jobs-Plus recruited approximately ten community coaches and trained them on economic development and community organizing to help circulate Jobs-Plus information and recruit program participants. Coaches subsequently played a key role in developing services, including on-site GED classes for Spanish speakers. Coaches also work closely with their resident councils to sponsor community events. Of all the sites, Los Angeles was most successful in implementing this Jobs-Plus component. Strong commitment to resident empowerment through leadership development and civic participation.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

The Jobs-Plus Demonstration

Appendix Table B.5

St. Paul:
Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Development

Program Feature	Jobs-Plus Development *Mt. Airy Homes*	Comparison Development *Roosevelt Homes*
Housing and Neighborhood	Development includes 298 suburban townhouses, renovated 1993 to 1996, and 152 senior high-rise units. Safe, well guarded by housing authority's police unit. In Thomas-Dale neighborhood, near hospital and medical complex, downtown St. Paul businesses, and state and city government offices.	Development includes 314 suburban townhouse units. Indistinguishable from middle-class residential surroundings in Greater Eastside neighborhood. Safe, well guarded by housing authority's police unit.
Demographics	Predominantly residents of Southeast Asian origin, mostly Hmong. Recent influx of East African and Mexican immigrants. Language- and immigrant-related barriers to outreach, service delivery, and employment, such as limited English proficiency and post-traumatic stress disorder.	Predominantly residents of Southeast Asian origin, mostly Hmong, although more African-American residents than Mt. Airy Homes. Recent influx of East African and Mexican immigrants. Language- and immigrant-related barriers to outreach, service delivery, and employment, such as limited English proficiency and post-traumatic stress disorder.

(continued)

Appendix Table B.5 (continued)

Employment-Related Services	Spacious community center for program offices and activities. On-site assistance with job readiness, job search, and job retention. ESL and U.S. citizenship classes, GED instruction, Head Start program, after-school and summer activities for children and youth. Referrals to local schools and agencies for such services as postsecondary education, driver's education. Services for foreign-born residents (such as Hmong Women's Support Group for mental health and cultural conflict issues) provided by Hmong- and Spanish-speaking Jobs-Plus staff and partnerships with refugee organizations. Collocated employment counselor, financial eligibility worker, and intensive case manager from welfare agency for TANF recipients.	Community center provides employment assistance through St. Paul Public School's Support for Training and Employment Program (including job readiness, job search, computer classes, and skills training) as well as GED and ESL classes, Head Start and after-school and summer activities for children and youth, and full-service medical clinic.
Rent Incentives	First Jobs-Plus site to implement rent incentives, in November 1998. Struggled with unexpected delays in HUD's agreeing to cover potential losses to housing authority's rent revenues incurred by permitting working households to keep more earnings. St. Paul's plan provides one month's free rent for enrolling in Jobs-Plus. During Year 1, 100 percent of a household's earned income is disregarded in calculation of monthly rent. In Years 2 through 5, rent calculations are based on the flat-rent model and are graduated to reflect a percentage (after utility adjustments) of the housing authority's ceiling rents, ranging from 45 percent in Year 2 to 90 percent in Year 5. Annual free month's rent if employed 12 continuous months, plus $25 per month of deferred rent credit for each month of employment. Rent reductions during periods of unemployment. Strong management office support in recruiting, orienting, and enrolling households as well as administering incentives.	Began implementing QHWRA rent incentives in 1999.
Community Support for Work	In 2000, residents who speak the languages of the most numerous ethnic groups at Mt. Airy Homes, under the direction of a Vista worker, recruited to help Jobs-Plus as *community outreach workers* to publicize program activities and job opportunities, recruit participants, and relay resident concerns to the staff.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

The Jobs-Plus Demonstration

Appendix Table B.6

Seattle:
Comparison of Local Context, Services, and Incentives at the Jobs-Plus Development and Its Comparison Development

Program Feature	Jobs-Plus Development *Rainier Vista Garden Community*	Comparison Development *Yesler Terrace*
Housing and Neighborhood	Development includes 481 one-story duplex apartment units in Rainier Valley, 5 miles southeast of Seattle's city center. Surrounded by recent commercial and retail development, near large public park and expensive waterfront property. In 1999, awarded HOPE VI redevelopment funding, and temporary relocation of residents began in 2001 (although some residents only moved to other side of development).	Development includes almost 700 apartment units in 93 wooden frame buildings, with community center. On steep hill, across from Seattle University, near Seattle's downtown and International District, Harborview medical complex, Seattle Central Community College, which are sources of social and health services and jobs for Yesler Terrace residents.
Demographics	Ethnically diverse with African- and Caucasian-American residents living alongside immigrants from East Africa, Southeast Asia, and Latin America. Majority female-headed households. Language- and immigrant-related barriers to outreach, service delivery, and employment, such as limited English proficiency and post-traumatic stress disorder.	Similar to Rainier Vista demographic profile, but with more senior and disabled residents.
Employment-Related Services	Jobs-Plus at Rainier Vista became HOPE-Plus, offering employment and support services and community-building assistance as part of the HOPE VI community and supportive services component. Once enrolled in HOPE-Plus, residents undergo intake and assessment with job coach. Participants with limited English proficiency work with job coach who is fluent in their language, and can enroll in ESL classes offered by Refugee Women's Alliance, a collaborating organization that serves immigrants. Residents have access to help with résumé preparation, job search, job retention, and career advancement, and instruction about workplace expectations and comportment.	Employment services for Seattle Housing Authority residents with children and on welfare at least 30 months through Job Connection, U.S. Department of Labor-funded welfare-to-work program. If ineligible for Job Connection, residents referred to the Seattle Jobs Initiative's local for-profit contractor, TRAC Associates. TRAC office mile away, paid on success in placing clients into jobs paying $8 or more per hour. Support service agencies on-site or nearby through Neighborhood House, Horn of Africa Services, Asian Counseling and Referral Services, and

(continued)

Appendix Table B.6 (continued)

Employment-Related Services (continued)	Support services for work are wide-ranging, including help with child care and transportation and filing immigration-related papers, Workshops available for filing income tax returns, business start-up, homeownership, financial management, and household budgeting skills. The job developer works with local employers to find suitable positions for residents.	International District Housing Alliance. On-site Head Start center and youth programs and computer learning center supported by Seattle Parks and Recreation Department. Until 2001, Seattle-King County Public Health Department operated on-site health clinic. New community recreation center scheduled for fall 2004 opening. In general, much less intensive on-site assistance than at Rainier Vista.
Rent Incentives	Implemented in September 1999, Seattle's plan is based on series of steps in which rent levels gradually increased to market rate. In Step 1, rents of working households were frozen at current level. In Steps 2 through 4, rent increased every two years until equaling 100 percent of market rate for given apartment size (for instance, Step 2, 40 percent of market rate; Step 3, 75 percent of market rate). Housing authority diverted portion of monthly rent payment to interest-bearing escrow account that resident could access to pay for education, business start-up, or homeownership. Any Rainier Vista adult resident in good standing was eligible to enroll until March 2001, including elderly and disabled, as well as those who were already working. Seattle Housing Authority assigned senior staff person on-site at Rainier Vista to administer the program.	In 2000, implemented authority-wide rent incentives program under federal Moving to Work demonstration. Uses a system of gradually increasing ceiling rents. The ceiling establishes maximum rent for successive two-year periods. First two years of employment, rent ceiling $260 per month. Second two years, rent ceiling is $390. Third and final rent ceiling sets household rent at 100 percent of fair market value of unit. Any time working residents paying at least $390 in monthly rent, portion of difference between $350 and rent actually paying is contributed to savings account by housing authority. Savings available to household upon moving from public housing.
Community Support for Work	Residents who spoke languages of ethnic groups at Rainier Vista hired and trained as *resident outreach and orientation specialists* to publicize Jobs-Plus services and job opportunities and recruit participants. Also, Community Shares program permitted residents to contribute services (for instance, attending meetings, serving on committees, providing transportation) in return for credits that could be exchanged for $50 rent reduction or material resources, such as a computer.	No formal efforts to engage residents in promoting employment services and job opportunities to other residents.

The Jobs-Plus Demonstration

Appendix Table B.7

Move-Out Rates for the 1998 Cohort

Site and Development	Percentage Moving Out Within: One Year	Two Years	Three Years	Four Years
Baltimore				
Jobs-Plus development	30	41	51	65
Comparison developments	21	29	35	46
Chattanooga				
Jobs-Plus development	26	36	52	63
Comparison developments	27	40	59	71
Dayton				
Jobs-Plus development	35	48	58	67
Comparison developments	44	54	67	72
Los Angeles				
Jobs-Plus development	9	17	22	27
Comparison development	15	24	30	46
St. Paul				
Jobs-Plus development	14	27	38	51
Comparison development	31	39	49	56
Seattle				
Jobs-Plus development	11	18	31	52
Comparison development	16	28	37	43
All sites combined				
Jobs-Plus developments	21	31	42	54
Comparison developments	26	36	46	56

SOURCE: MDRC calculations using data from housing authority tenant (50058) records.

NOTES: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The follow-up period for calculating the move-out rates began in October 1998.

The Jobs-Plus Demonstration

Appendix Table B.8

Rates of Participation in Various Jobs-Plus Activities Among Jobs-Plus Enrollees Who Lived in the Developments Between 1998 and 2000

Participation Measure (%)	Baltimore	Chattanooga	Dayton	Los Angeles	St. Paul	Seattle	All Developments Combined
Of those enrolled[a]							
Ever oriented or assessed	72	99	94	82	100	NA	NA
Ever referred to a job	41	24	65	60	43	NA	NA
Ever referred to or participated in:							
Job club/search	40	30	30	30	19	19	28
English as a Second Language (ESL) course	0	0	0	23	12	5	7
Adult Basic Education (ABE)	5	18	16	4	16	1	10
Postsecondary education	0	1	3	9	4	0	3
Vocational training	5	9	5	18	32	3	12
Work experience	0	1	3	26	3	6	7
Life-skills training	21	16	8	13	49	4	18
Any of the above activities[b]	48	47	46	70	83	31	54
Any of the above activities or referred to a job	60	49	76	80	83	NA	70
Sample size	58	98	63	39	134	256	648

(continued)

Appendix Table B.8 (continued)

SOURCES: MDRC calculations using data from Jobs-Plus case files and housing authority tenant (50058) records.

NOTES: The target sample includes all nondisabled residents aged 18 to 61 living in a household headed by a nondisabled resident between ages 18 and 61.

Participation measures were adjusted based on the findings of an effort undertaken to confirm the accuracy of data collected from the Jobs-Plus case files. This effort involved randomly selecting approximately 20 enrollees from each Jobs-Plus development. Jobs-Plus staff reviewed the collected data to see if any information had been missed about enrollees' service use.

In the averages for all developments combined, the results for each housing development are weighted equally.

[a]Basic information about the characteristics of Jobs-Plus enrollees at the time of enrollment was collected for all Jobs-Plus enrollees. This table includes additional information on participation in Jobs-Plus activities that was collected for a random subsample of enrollees.

[b]Does not include orientation or assessment.

The Jobs-Plus Demonstration

Appendix Table B.9
2003 Follow-Up Survey (Household Heads)

Use of Services and Incentives by Residents of the Jobs-Plus Developments and Their Comparison Developments, by Site (Excluding Seattle)

Baltimore

Measure (%)	Jobs-Plus Development	Comparison Developments	Difference
Participation and service use			
Participated in any employment-related activity within prior 12 months with help from:			
Any program/agency	52.0	40.1	11.9 ***
Housing authority or any program at development	29.1	13.2	15.9 ***
Within prior 12 months, participated in:			
Any job search activity	41.1	29.6	11.5 ***
Any education or training activity	34.6	32.9	1.7
Received any ancillary or social services within prior 12 months with help from:			
Any program/agency	32.0	33.7	-1.7
Housing authority or any program at development	16.8	8.9	7.9 ***
Financial incentives			
Heard of rent-based work incentives	46.9	20.4	26.4 ***
Currently using rent-based work incentives	20.1	11.9	8.2 **
Currently using rent-based work incentives *(among currently working residents only)* [a]	*28.5*	*16.2*	*NA*
Heard of EITC [b]	69.8	53.2	16.6 ***
Was encouraged to use EITC by housing authority or any program at development	17.7	7.0	10.7 ***
Used EITC during prior year	24.2	19.6	4.6
Services and incentives			
Participated in any employment-related services within prior 12 months, or currently using rent-based work incentives	41.0	30.6	10.4 **
Overall current self-sufficiency efforts			
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	69.9	64.1	5.8
Sample size	203	303	

(continued)

Appendix Table B.9 (continued)

Chattanooga

Measure (%)	Jobs-Plus Development	Comparison Developments	Difference
Participation and service use			
Participated in any employment-related activity within prior 12 months with help from:			
Any program/agency	65.2	39.7	25.5 ***
Housing authority or any program at development	29.4	10.5	18.8 ***
Within prior 12 months, participated in:			
Any job search activity	48.1	23.7	24.4 ***
Any education or training activity	45.2	25.5	19.7 ***
Received any ancillary or social services within prior 12 months with help from:			
Any program/agency	57.0	47.0	10.0
Housing authority or any program at development	25.0	12.6	12.4 **
Financial incentives			
Heard of rent-based work incentives	74.4	55.9	18.5 **
Currently using rent-based work incentives	49.8	21.9	27.9 ***
Currently using rent-based work incentives *(among currently working residents only)*[a]	*53.3*	*28.3*	*NA*
Heard of EITC[b]	58.8	52.5	6.3
Was encouraged to use EITC by housing authority or any program at development	8.1	2.6	5.5
Used EITC during prior year	30.0	20.7	9.3
Services and incentives			
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	65.8	40.3	25.5 ***
Overall current self-sufficiency efforts			
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	81.7	69.5	12.2 *
Sample size	86	83	

(continued)

Appendix Table B.9 (continued)

Dayton

Measure (%)	Jobs-Plus Development	Comparison Developments	Difference	
Participation and service use				
Participated in any employment-related activity within prior 12 months with help from:				
Any program/agency	58.6	53.1	5.5	
Housing authority or any program at development	30.8	8.8	21.9	***
Within prior 12 months, participated in:				
Any job search activity	47.0	39.6	7.4	
Any education or training activity	49.1	44.4	4.7	
Received any ancillary or social services within prior 12 months with help from:				
Any program/agency	43.9	38.0	5.9	
Housing authority or any program at development	25.2	7.0	18.2	***
Financial incentives				
Heard of rent-based work incentives	64.1	41.2	22.9	***
Currently using rent-based work incentives	49.7	26.6	23.1	***
Currently using rent-based work incentives *(among currently working residents only)* [a]	*56.0*	*34.9*	*NA*	
Heard of EITC [b]	70.9	69.3	1.6	
Was encouraged to use EITC by housing authority or any program at development	12.0	3.8	8.2	***
Used EITC during prior year	35.4	29.0	6.3	
Services and incentives				
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	64.0	46.6	17.4	***
Overall current self-sufficiency efforts				
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	77.2	66.3	11.0	**
Sample size	181	275		

(continued)

Appendix Table B.9 (continued)

Los Angeles

Measure (%)	Jobs-Plus Development	Comparison Development	Difference	
Participation and service use				
Participated in any employment-related activity within prior 12 months with help from:				
Any program/agency	48.1	39.5	8.5	
Housing authority or any program at development	23.4	7.4	16.0	**
Within prior 12 months, participated in:				
Any job search activity	19.3	1.0	18.3	***
Any education or training activity	42.6	38.9	3.8	
Received any ancillary or social services within prior 12 months with help from:				
Any program/agency	51.4	45.2	6.2	
Housing authority or any program at development	32.5	16.7	15.9	*
Financial incentives				
Heard of rent-based work incentives	52.5	35.6	16.9	*
Currently using rent-based work incentives	47.9	30.8	17.1	*
Currently using rent-based work incentives *(among currently working residents only)*[a]	*51.2*	*35.2*	*NA*	
Heard of EITC[b]	24.8	21.3	3.4	
Was encouraged to use EITC by housing authority or any program at development	10.4	7.5	2.9	
Used EITC during prior year	5.6	7.6	-2.0	
Services and incentives				
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	64.0	51.1	13.0	
Overall current self-sufficiency efforts				
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	89.4	87.5	1.8	
Sample size	85	56		

(continued)

Appendix Table B.9 (continued)

St. Paul

Measure (%)	Jobs-Plus Development	Comparison Development	Difference
Participation and service use			
Participated in any employment-related activity within prior 12 months with help from:			
Any program/agency	59.6	52.4	7.2
Housing authority or any program at development	40.2	25.9	14.3 **
Within prior 12 months, participated in:			
Any job search activity	41.2	32.3	8.9
Any education or training activity	45.2	47.1	-1.9
Received any ancillary or social services within prior 12 months with help from:			
Any program/agency	70.0	49.3	20.7 ***
Housing authority or any program at development	48.3	8.2	40.1 ***
Financial incentives			
Heard of rent-based work incentives	78.7	49.5	29.2 ***
Currently using rent-based work incentives	55.3	28.5	26.8 ***
Currently using rent-based work incentives *(among currently working residents only)* [a]	*72.8*	*42.2*	*NA*
Heard of EITC [b]	NA	NA	NA
Was encouraged to use EITC by housing authority or any program at development	14.5	10.5	4.0
Used EITC during prior year	66.1	54.1	12.0
Services and incentives			
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	70.6	56.3	14.3 **
Overall current self-sufficiency efforts			
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	90.2	83.6	6.5
Sample size	113	91	

(continued)

Appendix Table B.9 (continued)

SOURCE: MDRC calculations using data from the 2003 follow-up survey.

NOTES: Estimates of program-comparison development differences control for various background characteristics of respondents.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]Because the calculations for this measure exclude respondents who were not working at the time of the interview, rather than all respondents, no differences in take-up rates between the Jobs-Plus and comparison developments are computed.

[b]Respondents in St. Paul were not asked this survey question.

The Jobs-Plus Demonstration

Appendix Table B.10
2003 Follow-Up Survey (Household Heads)

Use of Services and Incentives by Residents of the Jobs-Plus Developments and Their Comparison Developments in the Three Stronger Implementation Sites Combined: Welfare Subsample

Measure (%)	Jobs-Plus Developments	Comparison Developments	Difference	
Participation and service use				
Participated in any employment-related activity within prior 12 months with help from:				
Any program/agency	72.0	64.3	7.7	
Housing authority or any program at development	42.1	17.2	25.0	***
Within prior 12 months, participated in:				
Any job search activity	54.5	41.3	13.2	**
Any education or training activity	56.1	53.8	2.3	
Received any ancillary or social services within prior 12 months with help from:				
Any program/agency	70.2	49.3	20.9	***
Housing authority or any program at development	49.4	10.1	39.3	***
Financial incentives				
Heard of rent-based work incentives	66.2	40.9	25.3	***
Currently using rent-based work incentives	46.9	19.5	27.4	***
Currently using rent-based work incentives *(among currently working residents only)*[a]	*60.4*	*33.0*	*NA*	
Heard of EITC[b]	70.8	60.1	10.7	
Was encouraged to use EITC by housing authority or any program at development	14.5	5.7	8.8	**
Used EITC during prior year	42.7	31.6	11.2	*
Services and incentives				
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	72.0	47.3	24.7	***
Overall current self-sufficiency efforts				
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	83.2	71.7	11.5	**
Sample size	133	150		

(continued)

Appendix Table B.10 (continued)

SOURCE: MDRC calculations using data from the 2003 follow-up survey.

NOTES: Estimates of program-comparison development differences control for various background characteristics of respondents.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]Because the calculations for this measure exclude respondents who were not working at the time of the interview, rather than all respondents, no differences in take-up rates between the Jobs-Plus and comparison developments are computed.

[b]Respondents in St. Paul were not asked this survey question.

The Jobs-Plus Demonstration

Appendix Table B.11
2003 Follow-Up Survey (Household Heads)

Use of Services and Incentives by Residents of the Jobs-Plus Developments and Their Comparison Developments in the Three Stronger Implementation Sites Combined: Nonwelfare Subsample

Measure (%)	Jobs-Plus Developments	Comparison Developments	Difference
Participation and service use			
Participated in any employment-related activity within prior 12 months with help from:			
Any program/agency	49.2	42.1	7.1
Housing authority or any program at development	27.3	12.0	15.3 ***
Within prior 12 months, participated in:			
Any job search activity	32.3	22.3	10.0 **
Any education or training activity	41.6	39.4	2.1
Received any ancillary or social services within prior 12 months with help from:			
Any program/agency	47.0	42.2	4.8
Housing authority or any program at development	27.8	10.6	17.2 ***
Financial incentives			
Heard of rent-based work incentives	70.7	44.9	25.8 ***
Currently using rent-based work incentives	57.0	34.5	22.5 ***
Currently using rent-based work incentives *(among currently working residents only)*[a]	*64.5*	*40.6*	*NA*
Heard of EITC[b]	53.6	55.4	-1.8
Was encouraged to use EITC by housing authority or any program at development	10.0	7.0	2.9
Used EITC during prior year	39.0	33.3	5.7
Services and incentives			
Participated in any employment-related activities within prior 12 months or currently using rent-based work incentives	65.8	53.0	12.8 ***
Overall current self-sufficiency efforts			
Currently participating in any work-related activity, currently working, or looked for work within the past four weeks	85.1	80.0	5.2
Sample size	246	272	

(continued)

Appendix Table B.11 (continued)

SOURCE: MDRC calculations using data from the 2003 follow-up survey.

NOTES: Estimates of program-comparison development differences control for various background characteristics of respondents.

Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

[a]Because the calculations for this measure exclude respondents who were not working at the time of the interview, rather than all respondents, no differences in take-up rates between the Jobs-Plus and comparison developments are computed.

[b]Respondents in St. Paul were not asked this survey question.

Appendix C

Baseline and Follow-Up Surveys of Residents

This appendix describes the two surveys of residents that were conducted for the Jobs-Plus evaluation: a *baseline survey,* fielded near the start of Jobs-Plus, and a *follow-up survey,* fielded during the final year of its operation. Chapters 2, 3, and 6 draw on findings from one or both of these surveys to describe the participation of residents in Jobs-Plus and other employment-related activities and to describe how residents' living conditions and the conditions in their housing developments changed over time. The sections that follow describe how samples were selected for the two surveys, present the survey response rates, and compare the background characteristics of respondents from the Jobs-Plus developments and from the comparison developments.

The Surveys

The baseline and follow-up surveys for Jobs-Plus provide two waves of repeated cross-sectional data on people living in the Jobs-Plus developments and their comparison developments.[1] The pre-Jobs-Plus picture is captured by the baseline survey, which was a 45-minute interview with a sample of eligible household heads. In five of the six sites — Baltimore, Dayton, Chattanooga, Los Angeles, and Seattle — the baseline survey was conducted in the spring and summer of 1998. In St. Paul, the survey was conducted in 1999.[2]

The follow-up survey of eligible household heads from each housing development was conducted during the summer of 2003, roughly five years into the demonstration. A full follow-up survey was conducted in three sites — Baltimore, Dayton, and St. Paul — using the same procedures that were used to administer the baseline survey. Due to cost considerations, a reduced version of the survey — or "mini-survey" — was administered to smaller samples in Chattanooga and Los Angeles. No follow-up survey was conducted in Seattle because that site was withdrawn from the Jobs-Plus demonstration when it launched a HOPE VI renovation in the Jobs-Plus development.

Comprehensive baseline and follow-up survey data are therefore available for Baltimore, Dayton, and St. Paul. As a result, the community change analysis in Chapter 6 focuses on these three sites. The mini-survey, administered in Los Angeles and Chattanooga, focused only on respondents' participation in Jobs-Plus or in other employment-related activities plus their receipt of ancillary services, such as transportation payments, child care assistance, and payments for books, tools, or uniforms (which was also examined by the full follow-up survey). This information is used in Chapter 3 to examine the services received by residents of the Jobs-Plus and comparison developments.

---

[1]Residents who were interviewed for the baseline survey and then moved out of their developments were not followed up.

[2]It took longer to develop and launch the baseline survey in St. Paul, given the need to select a specialized survey contractor and to develop a survey that could be administered in Hmong as well as in English.

Each survey attempted to interview a sample of working-age, nondisabled household heads who were identified from the records of their local public housing authority. Where the household head was not available or could not speak any language in which the survey was conducted, another adult in the household was interviewed, if possible. Interviews were conducted mainly by phone using a Computer Assisted Telephone Interviewing (CATI) system.[3] For sample members who could not be reached by phone, the survey contractor used trackers with cell phones to enable sample members to call the survey telephone center in order to be interviewed.

The surveys were administered in English, Spanish, and Hmong.[4] They were first developed in English and then were translated into the other two languages. Care was taken to ensure the accuracy and precision of the translations.

The surveys covered a wide variety of topics to gauge and explain sites' success or failure in implementing Jobs-Plus and to assess the effects of the program on a range of individual and community outcomes. Survey modules are listed below, with a brief description of their content. The baseline survey and the full follow-up survey contained all the modules listed. The mini-survey focused mainly on the first module.

- **Education, training, program participation, and program experiences.** This module of the baseline survey focused on residents' readiness for work when Jobs-Plus was being launched. It asked questions about education and job-related training received before Jobs-Plus began. This module of the follow-up survey asked questions about residents' knowledge and/or use of the opportunities provided by Jobs-Plus or other local programs in three core areas: employment and training activities and related support services, financial incentives to work, and community support for work.

- **Work and employment.** This module focused on residents' current or recent employment, job characteristics, benefits available through work, and job-seeking behaviors. It also asked about residents' preferences for work and their access to information about work both inside and outside the community.

- **Material well-being and income.** This module asked about residents' economic and material circumstances. Questions examined the sources of residents' household income, the total amount of this income, the material hardships encountered by residents, and their satisfaction with their standard of living.

---

[3]In St. Paul, given the large number of non-English-speaking sample members, the survey contractor for the site used paper-and-pencil interviews (PAPI).

[4]The Battelle Centers for Public Health Research and Evaluation conducted the baseline and follow-up surveys at all sites except St. Paul, where the surveys were conducted by the Wilder Research Center.

- **Health and well-being.** This module asked about mental and physical health issues that might affect residents' abilities to obtain and retain work. It also asked about residents' medical insurance coverage, interpersonal difficulties, perceived neighborhood safety, and past criminal convictions.

- **Community life.** This module asked about residents' perceptions of life and conditions in their housing developments. It attempted to document the social context that might affect — and be affected by — the implementation of Jobs-Plus. The module asked residents about how long they had lived in their development, how they would rate it as a place to live, their perceptions of problem conditions in the development, and the degree of social cohesion that existed among their neighbors. The module also asked about participation in neighborhood activities and attachment to various social networks.

- **Children.** This module collected data on children who lived in respondents' households. Some questions were asked about young children ages 6 to 11, and other questions were asked about older children ages 12 to 17. Questions examined children's school and nonschool activities; their rewards and recognitions; and behavioral problems that they experienced, such as school suspensions or expulsions. The St. Paul survey included very few questions in this module because of the inability to translate many of the ideas into concepts that were meaningful to Hmong respondents.

- **Background characteristics.** This module of both surveys asked about residents' demographic characteristics, country of origin, public housing history, and legal status with respect to employment in the United States.

Sample Sizes

The baseline and follow-up surveys in all sites were administered to randomly selected heads of households who were (1) living in a Jobs-Plus or comparison development at the time of sample selection and survey administration,[5] (2) not identified by the public housing authority as being disabled, and (3) between ages 21 and 61 when they were sampled. Hence, respondents were persons who were eligible to participate in Jobs-Plus and who were capable of reporting on the quality of life in their housing development.

[5]Sample members who were interviewed for the baseline survey had to be living in the development at the point of sample selection (October 1997) and six months later, when the interviews began. To be eligible for the follow-up survey, people had to have lived in the development for at least a year. In other words, to be in the eligible sample, they had to show up on the October 2001 and October 2002 housing authority records. Of course, they also had to be living in the development at the time of the interview.

The October 1997 housing authority records were used to identify the baseline survey sample. Applying the above selection criteria to these records yielded a sampling frame of 3,841 eligible persons. For each site, a random sample of approximately 330 persons was selected from the Jobs-Plus development, and a random sample of approximately 330 persons was selected from the comparison development/s. For sites with two comparison developments, the comparison sample was split evenly between them.[6]

The October 2002 housing authority records were used to identify the follow-up survey sample. These records yielded a sampling frame of 2,435 eligible persons. A random sample of approximately 685 persons was selected from the Jobs-Plus developments, and 828 were selected from the comparison developments.

Appendix Table C.1 presents the sample sizes for the Jobs-Plus group and the comparison group in the baseline and follow-up surveys, by site. The first two columns in the table list the sample size for each survey. The third column lists the number of persons who were interviewed for both surveys (the "overlapping subsample"). And the rightmost column reports the size of the overlapping subsample as a percentage of the size of the baseline sample.

The table reflects two main findings. First it indicates that the overlap between the baseline sample and the follow-up sample is quite small in all sites. Thus, findings from the two surveys reflect not only changes in conditions that occurred within developments over time but also changes in the persons who reported on these conditions. Second, the degree of overlap between the baseline and follow-up samples varies substantially across sites and developments: from a low of 5.3 percent for the comparison developments in Chattanooga to a high of 41.7 percent for the Jobs-Plus development in St. Paul. This variation in overlap reflects (imperfectly) the variation in resident mobility across sites.[7]

Response Rates

Appendix Table C.2 presents survey response rates for the Jobs-Plus and comparison developments from each site. The first column in the table presents response rates for the baseline survey. The second column presents response rates for the full follow-up survey. And the rightmost column presents response rates for the mini follow-up survey.

Response rates for the baseline survey are substantial overall, averaging 87.5 percent for the Jobs-Plus developments and 79.6 percent for the comparison developments. Thus, in general, there is not much room for response bias to create artificial differences in results for the Jobs-Plus developments and comparison developments. However, there is appreciable variation

[6] At developments with fewer than 330 eligible respondents, all of them were included in the sample.

[7] As Table 3.2 indicates, move-out rates were highest in Baltimore, Chattanooga, and Dayton and considerably lower in Los Angeles and St. Paul.

The Jobs-Plus Demonstration

Appendix Table C.1

Baseline and Follow-Up Survey Sample Sizes, by Site

Site and Development	Sample Size		Respondents to Both Surveys	
	Baseline Survey	Follow-Up Survey	Number	Percentage[a]
Baltimore				
Jobs-Plus development	219	219	57	26.0
Comparison developments	215	323	70	32.6
Chattanooga[b]				
Jobs-Plus development	220	87	23	10.5
Comparison developments	225	83	12	5.3
Dayton				
Jobs-Plus development	241	181	48	19.9
Comparison developments	287	275	51	17.8
Los Angeles[b]				
Jobs-Plus development	237	85	33	13.9
Comparison development	179	56	17	9.5
St. Paul				
Jobs-Plus development	151	113	63	41.7
Comparison development	119	91	42	35.3
Totals for Jobs-Plus developments	1,068	685	224	22.4
Totals for comparison developments	1,025	828	192	20.1

SOURCES: MDRC calculations using data from the baseline and follow-up surveys.

NOTES: No follow-up survey was conducted in Seattle because that site was withdrawn from the Jobs-Plus demonstration when it launched a HOPE VI renovation in the Jobs-Plus development.

[a]The number of respondents to both surveys as a percentage of the number of baseline respondents.

[b]Due to resource limitations, a much briefer follow-up survey was administered to a smaller sample of residents in Chattanooga and Los Angeles.

in response rates across sites — ranging from a high of 91.6 percent for the Jobs-Plus development in Dayton to a low of 67.8 percent for the comparison development in Los Angeles. Furthermore, the response rates for both the Jobs-Plus development and the comparison development in Los Angeles are noticeably lower than the rates for their counterparts in other sites. Hence, the margin for response bias in the baseline survey is greatest for Los Angeles. Lastly, note that the response rate for the Jobs-Plus sample is somewhat greater than the rate

The Jobs-Plus Demonstration

Appendix Table C.2

Jobs-Plus Baseline and Follow-Up Survey Response Rates, by Development, for the Eligible Fielded Sample

Site and Development	Baseline Survey	Full Follow-Up Survey	Mini Follow-Up Survey
Baltimore			
Jobs-Plus development	86.6	89.4	NA
Comparison developments	76.8	80.5	NA
Chattanooga[a]			
Jobs-Plus development	89.4	NA	54.7
Comparison developments	75.5	NA	52.9
Dayton			
Jobs-Plus development	91.6	86.6	NA
Comparison developments	87.8	94.2	NA
Los Angeles[a]			
Jobs-Plus development	79.0	NA	77.3
Comparison development	67.8	NA	57.1
St. Paul			
Jobs-Plus development	91.0	95.8	NA
Comparison development	90.2	88.3	NA
Total response rate for Jobs-Plus developments	87.5	90.6	66.0
Total response rate for comparison developments	79.6	87.7	55.0

SOURCES: MDRC calculations using data from the baseline and follow-up surveys.

NOTES: No follow-up survey was conducted in Seattle because that site was withdrawn from the Jobs-Plus demonstration when it launched a HOPE VI renovation in the Jobs-Plus development.

[a]Due to resource limitations, a much briefer follow-up survey was administered to residents in Chattanooga and Los Angeles.

for the comparison sample at all sites. In sites where response rates are high overall, this is not likely to be a problem. But it could be problematic in Los Angeles, and so caution should be used when interpreting survey results for this site.

Response rates for the full follow-up survey in Baltimore, Dayton, and St. Paul are very high overall, averaging 90.6 percent for the Jobs-Plus developments and 87.7 percent for the comparison developments. Furthermore, they are very high at all sites, and there is no consistent

pattern between response rates for the Jobs-Plus sample and for the comparison sample. Hence, there is little margin for response bias to influence the findings of this survey.

Response rates for the mini follow-up survey are relatively low, averaging 53.8 percent in Chattanooga and 67.2 percent in Los Angeles. In addition, they are generally low for all developments at both sites. Thus, there is a substantial margin for response bias to influence results from this survey. On the other hand, there is little difference (and no consistent pattern in the differences) between response rates for the Jobs-Plus samples and the comparison samples. Thus, the response rates themselves do not provide evidence of differential response bias. Nevertheless, extra caution is in order when interpreting the follow-up survey results, particularly for Los Angeles and Chattanooga.

The Comparability of Survey Respondents from the Jobs-Plus Developments and the Comparison Developments

Table C.3 compares selected background characteristics of respondents to the baseline survey and respondents to the follow-up survey from both the Jobs-Plus development and the comparison development/s at each site. Ideally, there would be no differences among respondents to either survey, and thus — at least with respect to the characteristics that were observed and reported — the Jobs-Plus sample and the comparison sample for both surveys would be comparable. Any differences observed, however, must reflect a mix of two factors: (1) true differences in the average characteristics of eligible residents from the Jobs-Plus development and the comparison development/s (differences in their sampling frames) and (2) differences produced by differential response bias. For the present analysis, the most relevant consideration is the extent to which the *Jobs-Plus sample and the comparison sample are, in fact, alike,* regardless of what might cause differences between them. Thus, instead of separately examining the two potential sources of differences, Table C.3 focuses directly on the joint results, by site.

The first two columns in Table C.3 describe the characteristics of baseline survey respondents from the Jobs-Plus development and the comparison development/s, respectively. The third column indicates whether the difference in each characteristic for the two groups of respondents is statistically significant. The three right-hand columns report corresponding information for the follow-up survey respondents. The sizes of the survey samples are reported in the bottom row of each panel in the table.

From a scan of the many results in the table, it appears that the survey samples for the Jobs-Plus developments are reasonably comparable to the samples for the comparison developments. There are some isolated instances of sizable differences, and a number of differences are large enough to be statistically significant. On balance, however, from this simple set of comparisons, there does not appear to be strong evidence of noncomparability between the survey respondents from the Jobs-Plus developments and those from the comparison developments.

Appendix Table C.3

Differences Between Survey Respondents in the Jobs-Plus and Comparison Developments, by Selected Background Characteristics

Baltimore

Characteristic	Baseline Survey			Follow-Up Survey		
	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]
Female (%)	91.3	83.3	**	89.6	88.1	
Race/ethnicity (%)			NA			NA
White	0.0	0.9		0.0	0.3	
Black	99.5	99.1		99.1	99.7	
Hispanic						
Asian						
Other	0.5	0.0		0.9	0.0	
Average age (in years)	36.4	39.1	***	36.6	39.0	**
Years in development (%)			***			***
Less than 2	2.3	3.7		7.3	9.3	
2-5	23.7	11.2		54.8	39.3	
6-9	47.9	49.8		18.7	23.5	
10 or more	26.0	35.3		19.2	27.9	
Number of adults in household (%)						**
1	89.5	84.7		95.7	89.9	
2 or more	10.5	15.3		4.3	10.1	
Number of children in household (%)						*
0	34.2	40.9		53.6	56.8	
1	26.5	21.4		26.6	18.8	
2 or more	39.3	37.7		19.8	24.4	
Sample size	219	215		219	323	

(continued)

Appendix Table C.3 (continued)

Chattanooga

Characteristic	Baseline Survey			Follow-Up Survey		
	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]
Female (%)	97.3	96.4		87.4	90.4	
Race/ethnicity (%)						NA
White	2.7	2.2		3.5	1.2	
Black	94.5	95.5		96.5	98.8	
Hispanic	2.7	2.2				
Asian						
Other						
Average age (in years)	30.5	32.2	*	33.3	36.5	*
Years in development (%)						NA
Less than 2	2.7	1.8		0.0	1.2	
2-5	30.9	31.6		56.3	62.7	
6-9	41.8	50.2		20.7	19.3	
10 or more	24.5	16.4		23.0	16.9	
Number of adults in household (%)						
1	92.7	95.1		90.7	94.0	
2 or more	7.3	4.9		9.3	6.0	
Number of children in household (%)						
0	9.5	15.1		29.1	44.6	
1	26.8	27.1		26.7	21.7	
2 or more	63.6	57.8		44.2	33.7	
Sample size	220	225		87	83	

(continued)

Appendix Table C.3 (continued)

Dayton

Characteristic	Baseline Survey			Follow-Up Survey		
	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]
Female (%)	92.1	89.9		90.1	85.1	
Race/ethnicity (%)			NA			NA
White	0.4	7.8		0.0	7.4	
Black	99.2	91.1		100.0	91.9	
Hispanic	0.4	0.4		0.0	0.4	
Asian	0.0	0.4				
Other	0.0	0.4		0.0	0.4	
Average age (in years)	29.6	30.0		32.4	32.2	
Years in development (%)						
Less than 2	2.5	4.2		13.3	19.3	
2-5	44.4	46.7		49.2	43.3	
6-9	39.8	34.8		24.9	24.0	
10 or more	13.3	14.3		12.7	13.5	
Number of adults in household (%)			*			
1	94.2	89.5		91.2	88.0	
2 or more	5.8	10.5		8.8	12.0	
Number of children in household (%)						**
0	18.7	20.6		30.4	22.9	
1	33.6	26.8		30.9	25.5	
2 or more	47.7	52.6		38.7	51.6	
Sample size	241	287		181	275	

(continued)

Appendix Table C.3 (continued)

Los Angeles

Characteristic	Baseline Survey			Follow-Up Survey		
	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]
Female (%)	95.4	91.6		68.2	57.1	
Race/ethnicity (%)			NA			NA
White	1.7	2.4		2.4	0.0	
Black	7.2	11.2		8.3	12.5	
Hispanic	81.4	84.7		86.9	87.5	
Asian	9.3	1.8		2.4	0.0	
Other	0.4	0.0				
Average age (in years)	40.2	38.4	*	45.5	41.5	**
Years in development (%)			NA			
Less than 2	0.4	1.1				
2-5	12.7	15.6		24.7	32.1	
6-9	46.4	53.1		30.6	37.5	
10 or more	40.5	30.2		44.7	30.4	
Number of adults in household (%)			**			
1	45.6	57.0		45.9	50.0	
2 or more	54.4	43.0		54.1	50.0	
Number of children in household (%)			***			*
0	24.9	22.9		28.2	12.5	
1	27.8	16.2		23.5	21.4	
2 or more	47.3	60.9		48.2	66.1	
Sample size	237	179		85	56	

(continued)

Appendix Table C.3 (continued)

St. Paul

Characteristic	Baseline Survey			Follow-Up Survey		
	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]	Jobs-Plus Respondents	Comparison Respondents	Significance of Difference[a]
Female (%)	70.2	78.2		73.5	82.4	
Race/ethnicity (%)			**			**
White	2.4	11.1		4.2	9.3	
Black	29.8	35.9		38.5	54.7	
Hispanic	6.5	3.4		9.4	4.7	
Asian	60.5	48.7		46.9	29.1	
Other	0.8	0.9		1.0	2.3	
Average age (in years)	35.0	31.8	***	36.5	32.1	***
Years in development (%)			NA			
Less than 2	0.7	4.2				
2-5	29.8	42.0		49.6	61.5	
6-9	52.3	41.2		39.8	27.5	
10 or more	17.2	12.6		10.6	11.0	
Number of adults in household (%)			***			***
1	47.7	69.7		52.2	71.4	
2 or more	52.3	30.3		47.8	28.6	
Number of children in household (%)			NA			NA
0	1.3	5.0		1.8	5.5	
1	6.0	31.9		10.6	26.4	
2 or more	92.7	63.0		87.6	68.1	
Sample size	151	119		113	91	

(continued)

Appendix Table C.3 (continued)

SOURCES: MDRC calculations using baseline and follow-up surveys.

NOTES: A chi-square test was applied to differences between the groups in distributions of characteristics. A two-tailed t-test was applied to differences between means for the groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

Missing values are not included in individual variable distributions.

Distributions may not add to 100 percent because of rounding.

[a]The significance of the difference between Jobs-Plus respondents and comparison respondents.

Appendix D

Estimating the Impacts of Jobs-Plus on Work and Welfare

This appendix presents a step-by-step discussion of how the impacts of Jobs-Plus on work and welfare were estimated. These estimates were based on outcome data covering a six-year baseline period before Jobs-Plus was launched and a six-year follow-up period after the program was launched.

The Analytical Perspectives and Measures

A central feature of the evaluation of Jobs-Plus is its focus on program effectiveness from two perspectives. One perspective, which is referred to as the "individual perspective," focuses on individual public housing residents (people). The other perspective, which is referred to as the "development perspective," focuses on public housing developments (place).

The individual perspective relates to a particular group of persons who were living in Jobs-Plus developments at a specific point in time. Thus, it examines the experiences over time of a given cohort of residents. From this perspective, the Jobs-Plus evaluation addresses the question "How did the program affect the future experiences of its target group members, regardless of whether they moved away or stayed in place?"

The housing development perspective relates to varying groups of persons who were living in Jobs-Plus developments at different points in time. Thus, it focuses on a series of consecutive, partly overlapping cohorts of residents. From this perspective, the Jobs-Plus evaluation addresses the question "How did the program affect the future conditions in its target developments, regardless of who stayed in place, moved away, or moved in?"

The distinction between these two perspectives is central to any evaluation of a place-based initiative, because sample members can enter and leave its target area. For example, students can move into or out of schools that are implementing a whole-school reform; families can move into or out of communities that are implementing a health education program; and employees can move into or out of firms that are implementing a worker retention program.[1] In these ways, mobility drives a conceptual and operational wedge between people and place.

Several steps were taken when formulating the Jobs-Plus evaluation to account for this phenomenon. The first step was to define a target group that would provide the core sample for estimates of program impacts from the *individual perspective.* This group, which is referred to as the "1998 cohort," comprises all working-age, nondisabled persons who lived in a Jobs-Plus development or a comparison development in October 1998 — when the program was launched.

[1]Bloom, Ham, Melton, and O'Brien (2001) address this issue in the context of a whole-school reform. Murray et al. (1994) address it in the context of a community health program. MDRC is currently addressing the issue in the context of a firm-based retention program for low-wage workers; no reports on this project are yet available.

The 1998 cohort includes all residents who were between 21 and 61 years of age at the time and were not listed as disabled by their local housing authority. By tracking these persons backward in time through data from state and local administrative records, it was possible to learn about their work and welfare experiences during the six-year Jobs-Plus baseline period, from 1992 through 1997. By following them forward in time, it was possible to learn about their work and welfare experiences during the six-year Jobs-Plus follow-up period, from 1998 through 2003.

Because it took several years for Jobs-Plus to implement its three program components — employment services, financial incentives, and community support for work — many of the 1998 cohort members had moved away from their housing developments before this was accomplished. For example, between 17 percent (in Los Angeles) and 48 percent (in Dayton) had moved away within two years. Hence, their exposure to the program was limited, and estimates of its impacts for them might understate the effects of exposure to the full program.

To address this issue, the analysis of program effects was repeated for the cohort of working-age, nondisabled adults who were living in a Jobs-Plus development or a comparison development in October 2000 (the "2000 cohort"). Some members of this cohort were also members of the 1998 cohort, but many had moved into their Jobs-Plus development or comparison development between 1998 and 2000. The main reason for using the 2000 cohort to estimate the effects of Jobs-Plus is that these residents had an opportunity to be exposed to the complete program (at least in sites that completed the program's implementation). The primary weakness of using the 2000 cohort is that Jobs-Plus might have influenced this group's composition through effects on residents' mobility.[2] Hence, findings for the 2000 cohort are used mainly to test the sensitivity of findings for the 1998 cohort.

The next step in the formulation of the analysis of program effects was to make it operational from the *development perspective*. To do so, an extensive search was conducted of local housing authority records to identify all working-age, nondisabled residents who lived in each Jobs-Plus development and comparison development during each calendar quarter from 1992 through 2003.[3] To make this massive data acquisition process more manageable, it proceeded as follows. First, a complete list was developed of working-age, nondisabled residents for October of each year.[4] Everyone on each October list was considered to be a fourth-quarter resident of the housing development for that year. In addition, everyone on each October list

[2]In other words, the composition of the 2000 cohort could be endogenous.

[3]To simplify the identification of residents in the sample during early baseline years (for which data from local public housing authorities were especially limited and difficult to obtain), only persons were included who lived in a household headed by a working-age, nondisabled person. Thus, a few able-bodied, working-age persons who lived in a household headed by an elderly person or by a person listed as disabled by the public housing authority were omitted from the development-level impact analyses.

[4]Persons who were residents for more than one of these years were on more than one October list.

was assumed to be a resident during the preceding quarter (Quarter 3 of the same year) and the following quarter (Quarter 1 of the next year). To identify residents for the second calendar quarter of each year, the "difference was split" between the two October lists that bracket the quarter.[5] Administrative records from state and local agencies were then used to obtain data on the work and welfare experiences of each quarter-specific group of residents.

From both the individual and the development perspectives, estimates of the effects of Jobs-Plus are reported for each site in the study. These site-specific estimates provide *six replications* of the analysis, which strengthen it considerably by helping to rule out alternative explanations of program effects that are observed. If a consistent pattern of positive effects is observed across most sites (which is the case), it is most plausible that Jobs-Plus — rather than separate, idiosyncratic, site-specific factors — caused these effects.

A second important benefit of having site-specific findings is that they make it possible to compare program effects for each site with what is learned from field research about how the Jobs-Plus program unfolded, what participation in the program was like, what factors influenced the program's evolution and performance, and what the situation was like at comparison developments. As with most demonstration programs, the different Jobs-Plus sites had very different stories to tell in these regards.

For each site and perspective, estimates of the effects of Jobs-Plus are reported separately for each follow-up year. This makes it possible to compare how impacts evolved over time with how the program unfolded over time — which is especially important, given the multiyear gestation period of Jobs-Plus and its highly variable site-specific implementation experience.

For each site, perspective, and follow-up year, estimates of the effects of Jobs-Plus are reported for two measures of work (earnings and employment rates) and two measures of welfare (benefit payments and benefit receipt rates). Historical data on earnings and employment rates were obtained from the administrative records of state Unemployment Insurance agencies. These data are reported quarterly by employers to all states and cover well over 90 percent of the jobs in the formal labor market.[6]

From these data, a time series was created of average (mean) quarterly earnings and quarterly employment rates for each program group and comparison group. Earnings are reported in constant 2003 dollars, and quarterly employment rates are defined as the percentage of sample members who had at least one dollar of reported earnings in a given quarter. Estimates of impacts on average annual earnings provide a comprehensive summary of the effects of Jobs-

[5]The analysis includes all persons who were on both of the October lists plus a random sample of half the persons who were only on the earlier list and half the persons who were only on the later list.

[6]Kornfeld and Bloom, 1999.

Plus on how many sample members were employed, how much they worked when they were employed, and how much they were paid for the work that they did. Estimates of the effects of Jobs-Plus on average quarterly employment rates for each year indicate how the program changed the mix of work and nonwork.

The welfare-related measures that were constructed are average (mean) annual benefits payments received and average quarterly benefit receipt rates. These measures are based on monthly welfare receipt data (for AFDC or TANF) obtained from the administrative records of state and local agencies. This type of information has been used to evaluate many welfare and employment programs. Estimates of program effects on average annual welfare benefits are reported in constant 2003 dollars. Estimates of program effects on average quarterly welfare receipt rates are reported as the percentage of sample members who received at least one dollar of benefits during a given quarter.[7]

Estimates of the effects of Jobs-Plus on average annual benefits received provide a comprehensive summary of the program's effects on how many target group members relied on welfare during a year, how long they relied on it when they did, and how much they received when they were drawing benefits. Estimates of the effects of Jobs-Plus on mean quarterly welfare receipt rates indicate how the program changed the mix of welfare and nonwelfare.

The Estimation Approach

For each perspective, site, and outcome measure, a "short comparative interrupted time-series analysis" was used to estimate the effect of Jobs-Plus.[8] This rather lengthy name accurately reflects the approach's essential ingredients, which are outlined below.

Comparing Outcome Levels

The starting point of the analysis is a graph of *mean quarterly outcomes* for the Jobs-Plus program group and its comparison group. Panel A of Appendix Figure D.1 illustrates such a graph for quarterly earnings in Los Angeles. This graph tells virtually the whole story of the analysis of program effects because "what you see is what you get."

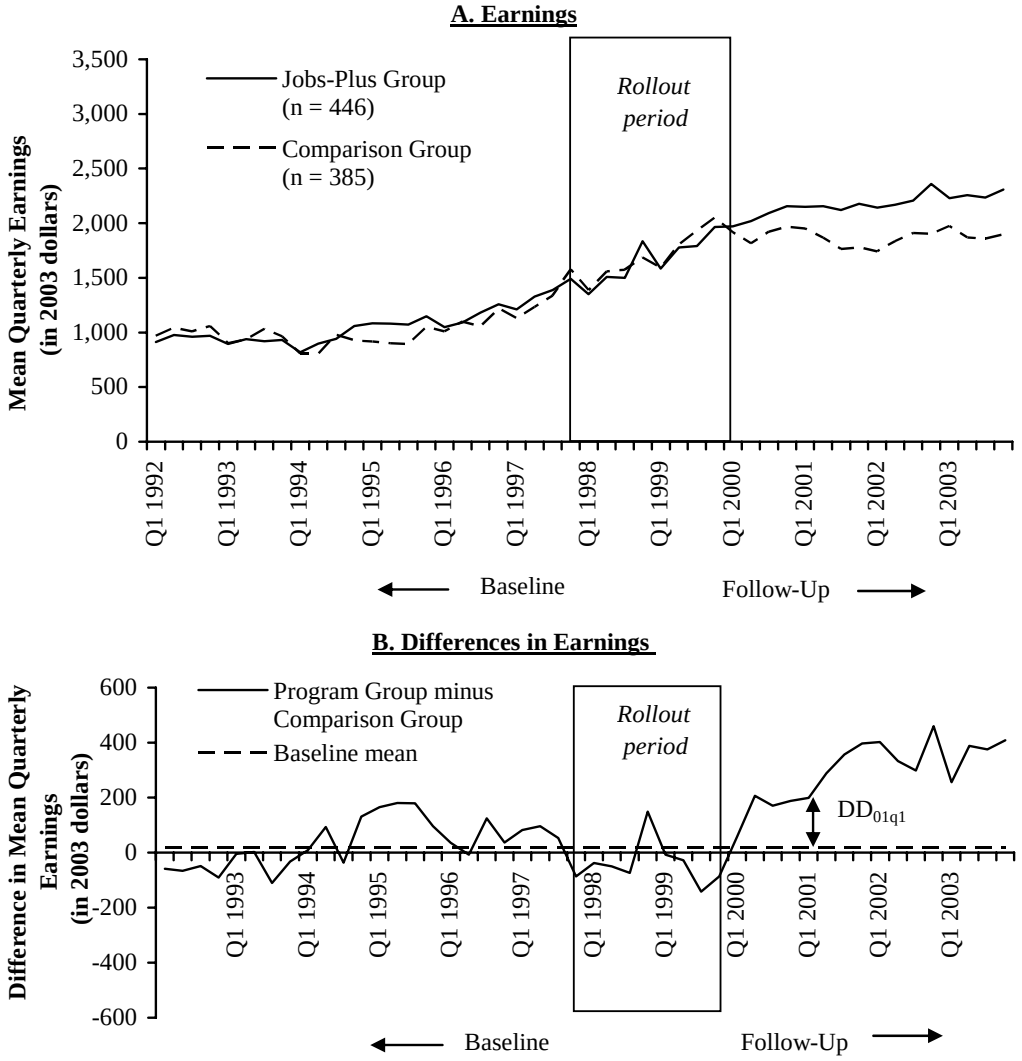
[7]Monthly welfare data were collapsed into quarterly welfare receipt rates to simplify this analysis and to make it comparable to the analysis of quarterly employment rates.

[8]Short interrupted time-series analysis applies methods like random-growth models that are used to analyze panel data (Greene, 1999). Shadish, Cook, and Campbell (2002, pp. 198-203) distinguish short interrupted time-series analysis from traditional time-series analyses that estimate ARIMA models with transfer functions from lengthy time-series data. Bloom (1999) explores some of the properties of short interrupted time-series analysis of student achievement. Bloom (2003) provides a detailed discussion of the approach.

The Jobs-Plus Demonstration

Appendix Figure D.1

Average Quarterly Earnings and Differences in Average Quarterly Earnings for the Jobs-Plus Group and Its Comparison Group in Los Angeles (1998 Cohort)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

DD_{01q1} is the deviation in Quarter 1of 2001 from the baseline mean difference.

First note the baseline trends. As can be seen, average earnings for both the Jobs-Plus group and its comparison group rose steadily throughout the baseline period. This pattern was observed at all sites in the study. Because the baseline period was a time of sustained and substantial economic growth, these earnings trends are consistent with the hypothesis that a "rising tide lifts all [or most] boats."

A second key feature of the baseline trends is their remarkable match. Not only are the groups' initial baseline earnings levels similar, but so are their patterns of change over time, even in the midst of a dynamic period of rapid economic growth. This lengthy and close baseline match held for earnings and employment rates at all six sites in the study. Thus, if subsequent differences in earnings materialized, it would be plausible to infer that they were caused by Jobs-Plus, not by preexisting differences. From the individual perspective, the baseline match for earnings and employment outcomes for the Jobs-Plus group and its comparison group was excellent at all six sites.

The match was also quite good for work outcomes from the development perspective, although these findings contained more random error over time ("noise") because they represent changes in people as well as changes in outcomes for a given group. In addition, there were some anomalies in the development-level matches at several sites during the earliest baseline years. This probably represents error in the identification of early residents, since the data used for identifying residents were maintained less well by local public housing authorities and were more difficult to obtain for early years than for later years. Because of these anomalies, estimates of the effects of Jobs-Plus on development-level earnings and employment rates were based on a truncated baseline period that began in 1994 (described below). Sensitivity tests that reestimated these program effects using data for the full baseline period indicate that truncating the baseline did not change the basic story of the findings.

The pattern of baseline outcomes was very different for welfare outcomes, and the baseline match for these outcomes was much less good than the match for earnings and employment. Thus, as described in Chapters 4 and 5, analyses of the effects of Jobs-Plus on welfare outcomes were purely graphical and did not use the statistical method described in this appendix for estimating program effects on earnings and employment rates.

Now consider the follow-up experiences illustrated by Panel A of Appendix Figure D.1. First note that mean quarterly earnings for the Jobs-Plus group and the comparison group remained very similar during the first two years after the program was launched in Los Angeles. This is consistent with the fact that it took several years to implement all three core components of Jobs-Plus. Soon thereafter, however, earnings for the Jobs-Plus group jumped well above those for the comparison group. This large relative improvement was sustained throughout the

remainder of the follow-up period. Given the high-quality baseline match, this subsequent large and sustained follow-up divergence strongly suggests that Jobs-Plus *caused* a pronounced and prolonged increase in the earnings of its target group members from this site.

Tracking Outcome Differences

Panel B of Appendix Figure D.1 presents an alternative way to view the story in Panel A. This view, which is the basis for the present statistical analysis of the effects of Jobs-Plus, is expressed in terms of *quarterly differences in mean earnings* for the program group and comparison group in Los Angeles. Starting in 1992 and continuing through 2003, this difference — the vertical distance between the earnings levels in Panel A — was computed for each quarter. These quarterly differences were then graphed in Panel B.

When examining the figure, it is useful to start with the baseline period. Note that quarterly differences in mean earnings fluctuate randomly around a constant value — the overall baseline mean, which is illustrated by a dashed horizontal line. This illustrates that the baseline earnings trends for the Jobs-Plus group and comparison group are approximately parallel to each other.[9] Next note that the mean value of the baseline earnings differences is close to zero and that quarterly values fluctuate slightly around this mean. This illustrates that the two baseline earnings trends are consistently close together.

Now consider the follow-up period. During the first two follow-up years, quarterly earnings differences did not vary substantially or systematically from their baseline mean. This indicates that Jobs-Plus had little or no impact on earnings during the first two follow-up years — when the program was first being implemented. Subsequently, however, the earnings difference jumped well above its baseline mean value and remained there for the rest of the follow-up period. This indicates that Jobs-Plus had a large, sustained positive impact on earnings after the program was fully implemented.

Panel B illustrates graphically how statistical estimates of the effect of Jobs-Plus were obtained for a given follow-up quarter. This estimate is equal to the observed difference between the earnings difference for that quarter and the mean earnings difference for the baseline period. This "difference in differences" for Quarter 1 of 2001 is illustrated by the vertical distance DD_{01q1} in the figure.

A more general way to formulate the situation in Panel B is to think of it as an interrupted time-series analysis of quarterly earnings differences. From the observed baseline earn-

[9] One benefit of viewing the situation through outcome differences is that, regardless of the shapes of the groups' baseline trends, their differences will vary randomly around a constant value if their trends are parallel. This point is demonstrated below; see "The Statistical Method."

ings differences, one can model the baseline trend in these differences. This trend was a random fluctuation around a constant baseline mean for all Jobs-Plus sites and was modeled as such. If, instead, the baseline trend had been one of systematically rising earnings differences or systematically falling earnings differences, then it could have been modeled as a linear or nonlinear function of time. This model is the first part of the interrupted time-series analysis. Note that before using a baseline mean, model sensitivity tests were conducted to determine whether there was a linear or quadratic trend or seasonality in the baseline earnings differences for the Jobs-Plus sites (see "The Statistical Method," on page 232); there were none for earnings and employment rates for the 1998 cohort.

The second part of the analysis projects the baseline model into the follow-up period to predict what quarterly earnings differences would have been if Jobs-Plus had not been launched. The baseline mean difference was used to estimate this counterfactual difference for each site, as is illustrated in Panel B by the extension of the dashed horizontal line into the follow-up period.

The third and final part of the interrupted time-series analysis is to compute the *deviation* from the projected baseline trend for each follow-up quarter. These deviations reflect how Jobs-Plus interrupted the time series of quarterly earnings differences; hence, the name "interrupted time-series analysis." The interruption provides estimates of the effect of Job-Plus. Hence, the procedure used to estimate the effect of Jobs-Plus is based on "deviations in differences."[10]

Specifying the Statistical Model

Equations D.1 and D.2, which specify a baseline mean model for an interrupted time series of quarterly outcome differences, represent the statistical model used to estimate the quarterly effects of Jobs-Plus. The dependent variable in Equation D.1 is the program and comparison outcome difference, $\Delta \bar{Y}_t$, for each quarter. The independent variables are a series of binary

[10]Earlier presentations of the analysis of program effects that was planned for Jobs-Plus (Bloom and Riccio, 2002; Bloom, 1996) are formulated in a way that is different from but equivalent to the current formulation under a broad range of conditions. The earlier formulation is based on two separate interrupted time-series analyses of mean quarterly earnings levels. The first analysis — for the Jobs-Plus group — measures its deviation from its baseline trend for each follow-up quarter. This represents how the earnings trajectory for the program group changed (or did not) after Jobs-Plus was launched. The second analysis — for the comparison group — measures its deviation from its baseline trend for each follow-up quarter. This predicts how the earnings trajectory for the Jobs-Plus group would (or would not) have changed if Jobs-Plus had not been launched. The effects of Jobs-Plus are estimated as the difference for each follow-up quarter between its deviations from trend for the Jobs-Plus group and for the comparison group. This "difference in deviations" represents the change in mean earnings that was caused by Jobs-Plus. If the functional forms of the underlying trends for the two groups are the same and they are linear in their parameters, then the two formulations yield the same impact estimate. In other words, the *deviation in differences equals the difference in deviations*.

(zero/one) indicators, F_{mt}, which identify each follow-up quarter. The error term, $\Delta \bar{e}_t$, has a first-order autoregressive distribution (Equation D.2).

$$\Delta \bar{Y}_t = \Delta \bar{a} + \sum_m \Delta \bar{g}_m F_{mt} + \Delta \bar{e}_t \qquad \text{(D.1)}$$

and

$$\Delta \bar{e}_t = \rho \Delta \bar{e}_{t-1} + \Delta \bar{\upsilon}_t \qquad \text{(D.2)}$$

where:

$\Delta \bar{Y}_t$ = the difference in mean earnings for the program group and comparison group in quarter t

F_{mt} = one if quarter t is follow-up quarter m and zero otherwise

$\Delta \bar{e}_t$, $\Delta \bar{e}_{t-1}$ = error terms with a first-order autoregressive distribution

$\Delta \bar{\upsilon}_t$ = a random error term

The intercept, $\Delta \bar{a}$, in Equation D.1 equals the baseline mean outcome difference for the program group and comparison group, which is represented by the dashed horizontal line in Panel B. The coefficients, $\Delta \bar{g}_m$, equal the deviation of the outcome difference for each follow-up quarter from the baseline mean outcome difference, which is represented by the vertical distance DD_{01q1} for the first quarter of 2001 in Panel B. The value of this coefficient equals the impact estimate for the follow-up quarter that it represents. The standard error for this coefficient is the standard error for the quarterly impact estimate.

The preceding model was estimated for each Jobs-Plus site and outcome using measures of quarterly differences in mean earnings and employment rates. This type of analysis was conducted from the perspective of public housing residents and from the perspective of public housing developments.

Estimating Quarterly Program Effects

Using maximum likelihood methods to estimate the statistical model in Equations D.1 and D.2 from data for the earnings differences in Panel B of Appendix Figure D.1 yields the

quarterly findings for program effects in Appendix Table D.1.[11] First consider the baseline findings. The estimated value of $19 for the intercept in Equation D.1 equals the mean quarterly earnings difference for the baseline period. This is an extremely small difference relative to the earnings levels for the two groups, which range from about $1,000 to $1,500 per quarter. The estimated value of $36 for the standard error of the intercept indicates that the baseline earnings difference for the two groups did not vary much from quarter to quarter. These two findings from the statistical analysis indicate not only that the earnings levels of the two groups in the example were close together, on average, but also that they were consistently close together.

Now consider the findings for the follow-up period. The estimated coefficient for each follow-up quarter equals its observed deviation from the mean earnings difference for the baseline period. This is the measure of the effect of Jobs-Plus on earnings for each quarter. The standard error for this estimate is related to its statistical significance. Note that quarterly program effect estimates for the first two follow-up years are small both absolutely and relative to their standard errors. Hence, they are inconsequential and not at all statistically significant. Subsequently, however, these estimates are much larger in absolute terms and generally between two and four times the size of their standard errors. Hence, they are consequential and highly statistically significant. These findings provide a quantitative way to tell the qualitative story in the graphs.

Lastly, note the findings for the first-order serial correlation coefficient. Its value of –0.61 is fairly large. And the fact that it is many times the size of its standard error of 0.18 indicates that it is highly statistically significant. Thus, it represents an important element of the model.

Computing Annual Program Effects

To reduce the number of findings to be reported and interpreted, the quarterly estimates in Appendix Table D.1 were cumulated into the annual estimates in Appendix Table D.2. The first column in the new table lists estimates of the effects of Jobs-Plus on average earnings for each follow-up year. These were obtained by summing the relevant quarterly follow-up coefficients.[12] Thus, for example, the annual estimate in Appendix Table D.2 for 1998 equals the sum of the quarterly follow-up coefficients in Appendix Table D.1 for 1998 (any apparent inconsistencies are due to rounding). The second column in Appendix Table D.2 lists the estimated standard error for each annual estimate based on the estimated variances and covariances for its quarterly follow-up coefficients — as described below in this appendix. The third column in the table lists the initial p-value implied by each impact estimate and its standard error. The fourth

[11]These estimates were obtained using SAS PROC AUTOREG.

[12]To compute annual program effects on earnings, the quarterly estimates were summed. To compute annual effects on employment rates, the quarterly estimates were averaged. Standard errors of the annual estimates were calculated accordingly.

The Jobs-Plus Demonstration

Appendix Table D.1

Parameters of the Outcome Difference Model for the Example in Appendix Figure D.1

Parameter	Point Estimate (dollars)	Standard Error (dollars)
Intercept	19	36
Coefficient for the follow-up quarter		
1998 Q1	7	78
1998 Q2	-30	93
1998 Q3	-69	98
1998 Q4	144	99
1999 Q1	-19	100
1999 Q2	-42	100
1999 Q3	-158	100
1999 Q4	-104	100
2000 Q1	39	100
2000 Q2	188	100
2000 Q3	152	100
2000 Q4	169	100
2001 Q1	180	100
2001 Q2	270	100
2001 Q3	338	100
2001 Q4	378	100
2002 Q1	383	100
2002 Q2	314	100
2002 Q3	279	100
2002 Q4	440	100
2003 Q1	237	100
2003 Q2	369	100
2003 Q3	356	100
2003 Q4	390	100
Serial correlation coefficient (first order)	-0.61	0.18

The Jobs-Plus Demonstration

Appendix Table D.2

Annual Impact Estimates of Jobs-Plus for the Example in Appendix Figure D.1

Follow-Up Year	Point Estimate	Standard Error	Initial P-Value	Bonferroni-Adjusted P-Value
1998	51	290.71	0.861	0.861
1999	-323	321.62	0.327	0.654
2000	548	321.63	0.103	0.308
2001	1,165	321.57	0.002	0.006
2002	1,415	321.55	0.000	0.001
2003	1,351	321.55	0.000	0.002
2000-2003	1,120	228.00	0.000	

NOTE: Rounding obscures the relationships between the initial and adjusted p-values.

and final column lists each p-value after it was adjusted using a "layered Bonferroni" approach to account for the "multiple testing" problem created by the presence of six annual impact estimates (described below). For assessing the statistical significance of these annual impact estimates, only the adjusted p-values are reported.

The findings in Appendix Table D.2 tell a striking story about program effects on earnings that are delayed for two years but that then become substantial, sustained, and statistically significant. This is precisely the impression conveyed by the earnings graphs in Appendix Figure D.1. A summary of these findings for the period from 2000 to 2003, after Jobs-Plus was implemented, was computed by averaging the annual findings for this period and computing the standard error accordingly.[13] This finding indicates that, on average, for the 1998 cohort in Los Angeles, Jobs-Plus increased average earnings by $1,120 per year during the period.

Choosing Comparison Groups

A final key feature of the analysis of Jobs-Plus effects is how comparison groups were chosen. This process had three phases. The first phase involved constructing a matched group of two or three candidate housing developments from each Jobs-Plus site and using computer-

[13]The standard error of the overall average accounted for the interdependencies among the quarterly estimates for the period.

generated random numbers to choose one program development and one or two potential comparison developments from each pair or triplet.[14] This process made it impossible to "stack the deck" by consciously or inadvertently choosing program developments that were more likely or less likely than others to improve on their own. Four sites (Baltimore, Chattanooga, Dayton, and St. Paul) each had two potential comparison developments, and two sites (Los Angeles and Seattle) each had one potential comparison development.

The next phase of the process was to further check each comparison development to ensure that it was similar enough to the Jobs-Plus development at baseline to provide an adequate benchmark for making future comparisons. This assessment used the results of a baseline survey that was administered to a sample of household heads from five sites in 1998 and one site (St. Paul) in 1999. These results indicated that the characteristics of residents and developments were quite similar for each program group and its comparison group. Hence, at baseline, all potential comparison developments were judged to provide an adequate benchmark for their Jobs-Plus development.

The last phase of the selection process was to ensure that nothing had occurred in a comparison development during the follow-up period that would invalidate its use for estimating the effects of Jobs-Plus. This assessment, which was based on field research, scrutinized each local situation in a systematic search for any compelling reasons to believe that a comparison development would not provide a "fair test" of Jobs-Plus. Potential reasons included, among others: (1) a major disruption in the public housing development (like that caused by a HOPE VI renovation that displaces many residents), (2) a major economic shock to the local low-wage labor market (like that caused by the opening or closing of a large employer of low-wage workers in the immediate vicinity), or (3) a major competing employment program operating in or through the comparison development that would compromise its ability to emulate the counterfactual for Jobs-Plus.

Although not stated explicitly in a written protocol, the decision rules for choosing comparison developments were established at the outset of the Jobs-Plus project. Only if a compelling reason were found for dropping a comparison development would this be done. If this occurred for a site with two initial comparison developments, the analysis of Jobs-Plus's effects would be based on outcomes for the remaining development. If this occurred for a site with one initial comparison development, that site would have no analysis of the effects of Jobs-

[14]As noted in Chapter 1, the ability for MDRC to make this choice randomly was an eligibility requirement for each site, and all 15 cities that became semifinalists accepted this requirement. Although explaining the need for the requirement took considerable time and effort, it was generally recognized that Jobs-Plus represented a scarce resource whose allocation by lottery was quite ethical. Furthermore, anecdotal evidence suggests that at least some local residents felt that random selection of the participating housing development would be fairer than selection by the public housing authority — which was not always trusted.

Plus. For sites with two comparison developments that remained in contention, comparison group outcomes would be computed as an equally weighted average of those for the two comparison developments.

Only one "smoking gun" was identified at a comparison development, and so only one was considered to be invalid and thus excluded from the analysis. This occurred in St. Paul, where, at one comparison development, a major employment program plus a series of related social services described in Appendix Box D.1 were instituted on-site in response to a tragic event that had occurred there. This left three sites (Baltimore, Chattanooga, and Dayton) with two valid comparison developments each and three sites (Los Angeles, St. Paul, and Seattle) with one valid comparison development each.

Combining Sites

The example in this appendix illustrates how the effects of Jobs-Plus were estimated for a single site. To summarize findings across sites, it was necessary to combine their data. This was done in a way that reflected the broad variation in the implementation experiences of the sites, maintained an ability to graphically examine the combined findings for the baseline and follow-up periods, and was as simple as possible. To properly reflect implementation experiences, the findings for sites were combined two different ways. First, all six sites were combined to address the question "What is the average effect of Jobs-Plus for all versions of the program that are implemented?" Second, the three "stronger implementation sites" — Dayton, Los Angeles, and St. Paul — were combined to address the question "What is the average effect of Jobs-Plus when it is implemented relatively well?" Findings were presented both ways to address both questions.

To facilitate a graphical analysis of the time series of combined outcomes and to keep the analysis as simple as possible, the quarterly data for sites were combined by taking their mean across sites, with each site being weighted equally. In this way, a composite time series was created for the Jobs-Plus groups and for the comparison groups. The combined analysis of the effects of Jobs-Plus was conducted from the two composite time series.

Conducting Sensitivity Tests

Several tests were conducted to see how sensitive estimates of the effects of Jobs-Plus were to decisions about how they were obtained. One test assessed the importance of excluding the invalid comparison development in St. Paul, which had an extensive on-site employment program. Estimates in the present report exclude that development and indicate that Jobs-Plus

Appendix Box D.1

Employment-Related Services at McDonough Homes in St. Paul*

Working residents at McDonough Homes have a wide array of services available to help them secure and retain employment and access benefits for working-poor families. Most of these services can be accessed through McDonough's large and spacious community center, which was completed in 1997 and houses multiple office suites, rooms for meetings and classes, and athletic facilities.

Employment services at the center are provided primarily by the Support for Training and Employment Program (STEP) of St. Paul Public Schools. STEP offers vocational training, job preparation (for example, help with résumé writing, filling out applications, and job interviews), job search assistance, and referrals to off-site training and educational opportunities. These services are available on both an individualized and group basis. STEP also offers English as a Second Language (ESL) and adult basic education (ABE) classes. Two STEP employment counselors are available four days a week, as are two part-time bilingual assistants, two part-time computer teachers, and three ESL teachers. Residents also have the use of a computer room with ten computers and a job resource room with two phone cubicles, more computers, and information about job opportunities, job search, and education and training programs. The computers have Office 2000 software, Microsoft 98, a résumé-maker, and access to the Internet and job listings on the Minnesota Career Information System (MCIS).

Welfare recipients at McDonough Homes can also get employment assistance from Evenstart, which is funded by the Minnesota Family Investment Program (MFIP), the state's welfare program. Evenstart offers job preparation and family counseling to MFIP clients who are having trouble transitioning to work. Welfare recipients can also have their cases assigned to one of two MFIP employment counselors who are stationed conveniently at the center. MFIP counselors and Evenstart staff are working together to help stabilize the employment of hard-to-employ welfare recipients facing lifetime limits on their benefits. Finally, the Sisters of St. Joseph operate MORE (McDonough Organization for Respect and Equality) in an adjacent building, which offers ESL and citizenship classes as well advocacy services.

For working parents who need help caring for their children during the workday, the community center offers options for all age levels. Head Start has three classrooms for preschoolers, and Growing Places provides all-day care for children ages 2 $^1/_2$ to 5 years old. Rec Check provides after-school care for school-age children. The center also qualifies as a full-service recreation center of the St. Paul Parks and Recreation Department. Youths have access to two full-size gyms, including several basketball courts. There are 4-H programs for children ages 13 and younger and for teenagers. The center has a staff of teen counselors, an active Boy Scout troop, and a Youth Cares girls' group; the sheriff department's Youth Literacy Program provides after-school tutoring.

*This account was written by Linda Yuriko Kato of MDRC.

(continued)

Appendix Box D.1 (continued)

Residents of McDonough Homes also have convenient access at the community center to benefits that can help the working poor sustain their families on low-wage jobs without employer-provided benefits. For instance, qualified families can get food vouchers at the office of the Women, Infants, and Children (WIC) program. And all residents can get medical and mental health care from the West Side Health Clinic, which is a full-scale clinic occupying a sizable area in the center. The clinic staff include several full-time public health nurses as well as a physician who is available four days a week and a social worker who has a counseling degree and visits once a week.

It is also important to emphasize that the community center at McDonough Homes is unusual in having a general manager and overall coordinator of its services. The center benefits immensely from the administrative direction and coordination of its manager, who has held this position since the center opened. He is the person who has the "big picture" of the residents' needs and the availability of services at the center to address them, as well as extensive knowledge of and relationships with other service providers in the St. Paul-Minneapolis area. The manager describes himself as a "social services networker" who operates like a "spider" in building cooperative links among the various service providers that are colocated at McDonough Homes, and between them and other providers in the area. His coordinating role helps to promote service integration and reduce duplication of efforts at the center. At the same time, he acts as a liaison between the on-site providers and the housing management office. For instance, as a housing authority employee, he is privy to otherwise difficult-to-acquire information about residents' job losses or domestic problems that can undercut their employment, which the residents and security police report to the management office and which he then relays to the appropriate providers to address. And the residents usually turn to him first as the center's familiar and trusted point person to steer them in the right direction for help. "Part of my job," he says, "is trying to reduce the number of hoops people have to jump through, and piggybacking some services onto the same caseworker." The manager works with the residents, the providers, and the management office to regularly assess the community's needs and to ensure that the center's services are appropriate and responsive to those needs.

Finally, McDonough Homes offers residents the security of being able to go to work knowing that their homes and families will be safe during their absence. McDonough is the headquarters of ACOP (A Community Outreach Policing program), which is funded by the housing authority in St. Paul to promote safety in its developments. The sizable and prominent presence of the police at McDonough — with a fleet of patrol cars parked in front of the community center — has enhanced the peace and security of the development to the point where its crime rates are comparable to those of St. Paul's affluent neighborhoods.

increased average annual earnings from 2000 to 2003 for the 1998 cohort in St. Paul by $1,492 per year. Alternative estimates that include the development indicate a $909 gain. Both estimates suggest that the program produced large earnings gains, and both gains are highly statistically significant. The implications of this difference for estimates of the effects of Jobs-Plus for the combined sample of stronger implementation sites are even less pronounced. The estimate of program effects on average annual earnings from 2000 to 2003 was $1,141 without the invalid comparison development and $1,013 with it.

A second sensitivity test of the comparison group strategy that was conducted was to repeat estimates of the effects for each site that had two valid comparison developments — Baltimore, Chattanooga, and Dayton — using one of its comparison developments at a time. For Baltimore and Chattanooga, these tests produced the same results for both comparison developments: No effects of Jobs-Plus were found using either one. For Dayton, estimates based on one comparison development indicated very large positive program effects, whereas estimates based on the other comparison development indicated little or no effects. As planned from the outset of the project, however, the mean for the two valid comparison developments was used to estimate the effects of Jobs-Plus for these three sites, since doing so uses all the best information that is available.

A third sensitivity test was conducted to assess the influence of truncating the early part of the baseline earnings history for estimates of program effects on housing developments — to account for some aberrations that exist in the early data for Los Angeles, in particular, and for Baltimore, to a lesser extent. To do so, estimates of program effects were obtained both for the truncated baseline period, from 1994 to 1997 (which is used for findings in the present report), and for the full baseline period, from 1992 to 1997, in those sites where the development-level analysis was conducted and full baseline data exist: Baltimore, Dayton, and Los Angeles. Estimates of program effects on average earnings from 2000 to 2003 for the truncated baseline versus the full baseline, respectively, were –$489 versus –$306 for Baltimore; $584 versus $367 for Dayton; and $1,581 versus $2,161 for Los Angeles. Hence, only in Los Angeles did truncating the baseline make much difference, and doing so in this case reduced the estimated effect of Jobs-Plus on development-level earnings.

The Statistical Method

This final section describes in somewhat more detail the statistical method used to estimate the effects of Jobs-Plus. The method:

- Has a simple graphical interpretation
- Focuses on the effects of Jobs-Plus for each follow-up year separately, which is a transparent and flexible way to tell how the story unfolds

- Eliminates the need to specify functional forms for outcome patterns during the follow-up period and reduces the need to specify functional forms for baseline outcome patterns
- Takes advantage of the remarkable degree to which quarterly baseline outcomes for each site's Jobs-Plus group and comparison group are consistently close together
- Can be derived from a wide range of multilevel models that represent the time paths of outcomes for individuals nested within groups
- Accounts for the multiple testing problem produced by estimating a separate program effect for each follow-up year
- Accounts for serial correlation that can exist among individual outcomes over time

Developing the Method

The method can be developed in a series of six steps:

1. Specify a fairly general model of individual quarterly outcomes.
2. Aggregate the individual model into one for the mean quarterly outcomes of a Jobs-Plus group or a comparison group.
3. Subtract the mean quarterly outcome model for the comparison group from that for the Jobs-Plus group to produce a model of their outcome differences.
4. Simplify the model of quarterly outcome differences to one with a constant value, which applies whenever the baseline trends of the Jobs-Plus group and comparison group are parallel to each other.
5. Cumulate estimates of quarterly program effects into estimates of annual program effects to reduce the number of estimates.
6. Adjust the statistical significance level of each annual impact estimate to account for the fact that there are six of them.

Step 1: Specify the Individual Outcome Model

Start with a model of quarterly outcomes for an individual i. This model, presented in Equations D.3 and D.4, comprises a quadratic, seasonal, and serially correlated baseline trend plus a series of quarterly deviations from this trend for a multiyear follow-up period. The dis-

cussion which follows holds for other functional forms that are linear in their parameters, such as higher-order polynomials.

$$Y_{it} = a_i + b_i t + c_i t^2 + \sum_k d_{ki} S_{kt} + \sum_m g_{mi} F_{mt} + e_{it} \quad \text{(D.3)}$$

and

$$e_{it} = \rho e_{i(t-1)} + v_{it} \quad \text{(D.4)}$$

where:

Y_{it} = the outcome for individual i in quarter t

t = a counter for time that increments by a value of one for each calendar quarter

S_{kt} = one if quarter t is in season k and zero otherwise

F_{mt} = one if quarter t is the m^{th} follow-up quarter and zero otherwise

The coefficient g_{mi} represents the individual's deviation from his or her baseline trend during follow-up quarter m. A separate deviation from trend is included for each follow-up quarter to ensure that no follow-up information is used to estimate baseline parameters. This is because an indicator variable for a single data point removes that point from the rest of the analysis.[15]

Step 2: Derive the Group Mean Model

The corresponding model of mean quarterly outcomes for a group j in Equations D.5 and D.6 can be derived by taking the mean of the individual models for the group's members.

$$\bar{Y}_{jt} = \bar{a}_j + \bar{b}_j t + \bar{c}_j t^2 + \sum_k \bar{d}_{kj} S_{kt} + \sum_m \bar{g}_{mj} F_{mt} + \bar{e}_{jt} \quad \text{(D.5)}$$

and

$$\bar{e}_{jt} = \rho \bar{e}_{j(t-1)} + \bar{v}_{jt} \quad \text{(D.6)}$$

where:

$\bar{a}_j, \bar{b}_j, \bar{c}_j, \bar{d}_{kj}$ *and* $\bar{g}_{mj}$ = the mean intercept, slope, acceleration, seasonality, and quarterly follow-up deviation for group j

[15]If, instead, an indicator variable had been specified for each follow-up year, quarterly variation in the outcome within follow-up years would have been incorporated into estimates of the baseline parameters.

Step 3: Derive the Group Difference Model

A corresponding model of the difference in mean quarterly outcomes in Equations D.7 and D.8 for a program group and a comparison group can be obtained by taking the difference between their mean outcome models.

$$\Delta \bar{Y}_t = \Delta \bar{a} + \Delta \bar{b} t + \Delta \bar{c} t^2 + \sum_k \Delta \bar{d}_k S_k + \sum_m \Delta \bar{g}_m F_m + \Delta e_t \quad \text{(D.7)}$$

and

$$\Delta \bar{e}_t = \rho \Delta \bar{e}_{t-1} + \Delta \bar{\upsilon}_t \quad \text{(D.8)}$$

where:

$\Delta \bar{a}, \Delta \bar{b}, \Delta \bar{c}, \Delta \bar{d}_k \text{ and } \Delta \bar{g}_m$ = the difference in the mean intercepts, slopes, acceleration, seasonality, and quarterly follow-up deviations for the two groups

This finding illustrates that individual models, which are additive in their parameters, imply a model for group differences in mean outcomes whose parameters equal the differences in the group means of their individual parameter values.

Step 4: Simplify the Group Difference Model

The model of program and comparison group quarterly outcome differences can be simplified to take advantage of the fact that the baseline trends for the Jobs-Plus group and comparison group are approximately parallel to each other. This simplification yields Equations D.9 and D.10.

$$\Delta \bar{Y}_t = \Delta \bar{a} + \sum_m \Delta \bar{g}_m F_{mt} + \Delta \bar{e}_t \quad \text{(D.9)}$$

and

$$\Delta \bar{e}_t = \rho \Delta \bar{e}_{t-1} + \Delta \bar{\upsilon}_t \quad \text{(D.10)}$$

This model is the core of the statistical analysis of the effects of Jobs-Plus on residents' work. For each outcome and site, tests were conducted to determine whether the model applies[16] by (1) visually inspecting the baseline trends for the Jobs-Plus group and comparison group to make sure they look parallel and (2) examining the size and statistical significance of the estimated slope, acceleration, and seasonality parameters to make sure that they can be omitted. For analyses of earn-

[16]Because of the very large number of estimates involved, it was not feasible to check the validity of the simplified model for every combination of subgroup, outcome, and site. Instead, the model was checked for the full sample for each major outcome for every site.

ings and employment impacts for the 1998 cohort, this was the case at all sites. Therefore, all these findings are based on maximum likelihood estimates of Equations D.9 and D.10.

Step 5: Cumulate Quarterly Estimates into Annual Estimates

Estimates of annual program effects were created by summing or averaging estimates of quarterly program effects obtained from Step 4 and computing standard errors accordingly. For example, the estimate of program effects on mean earnings for follow-up Year 1 (1998) was obtained by summing estimates of program effects for the first four follow-up quarters. Hence,

$$\Delta \bar{g}_I = \Delta \bar{g}_1 + \Delta \bar{g}_2 + \Delta \bar{g}_3 + \Delta \bar{g}_4 \tag{D.11}$$

and

$$SE(\Delta \bar{g}_I) = \sqrt{\sum_{m=1}^{4} VAR(\Delta \bar{g}_m) - \sum_{n \neq m m \neq n}^{4} \sum^{4} COV(\Delta \bar{g}_m \Delta \bar{g}_n)} \tag{D.12}$$

Correspondingly, the estimate of program effects on mean quarterly employment rates for 1998 is obtained by *averaging* estimates of program effects for the first four follow-up quarters. (Dividing Equations D.11 and D.12 by 4 yields the proper expressions for computing these annual estimates and their standard errors.)

Step 6: Adjust for Multiple Testing

The statistical significance (p-value) of each annual estimate for a given analysis was adjusted to account for the fact that six such estimates are obtained (one for each follow-up year). For this purpose, a layered Bonferroni approach was used. This approach multiplies the p-value for the annual program effect estimate that is most statistically significant (has the smallest p-value) by the number of annual estimates reported for the site and outcome. The p-value for the next most significant annual impact is then multiplied by one less than the number of annual estimates, and so on. This approach provides a conservative test of the statistical significance of each annual estimate. It is conservative in the sense that it may understate "true" significance somewhat. Hence, if the adjusted p-value of the impact estimate is statistically significant at conventional levels, this provides strong evidence of statistical significance. But if the adjusted p-value is not statistically significant, this could result from the adjustment's being too conservative. The statistical properties of the approach used to account for multiple testing are judged to be quite good.[17]

[17]Darlington, 1990.

Appendix E

Supplementary Table and Figures for Chapter 4

The Jobs-Plus Demonstration

Appendix Table E.1

Characteristics of the Current or Most Recent Job Among Follow-Up Survey Respondents in the Jobs-Plus Developments

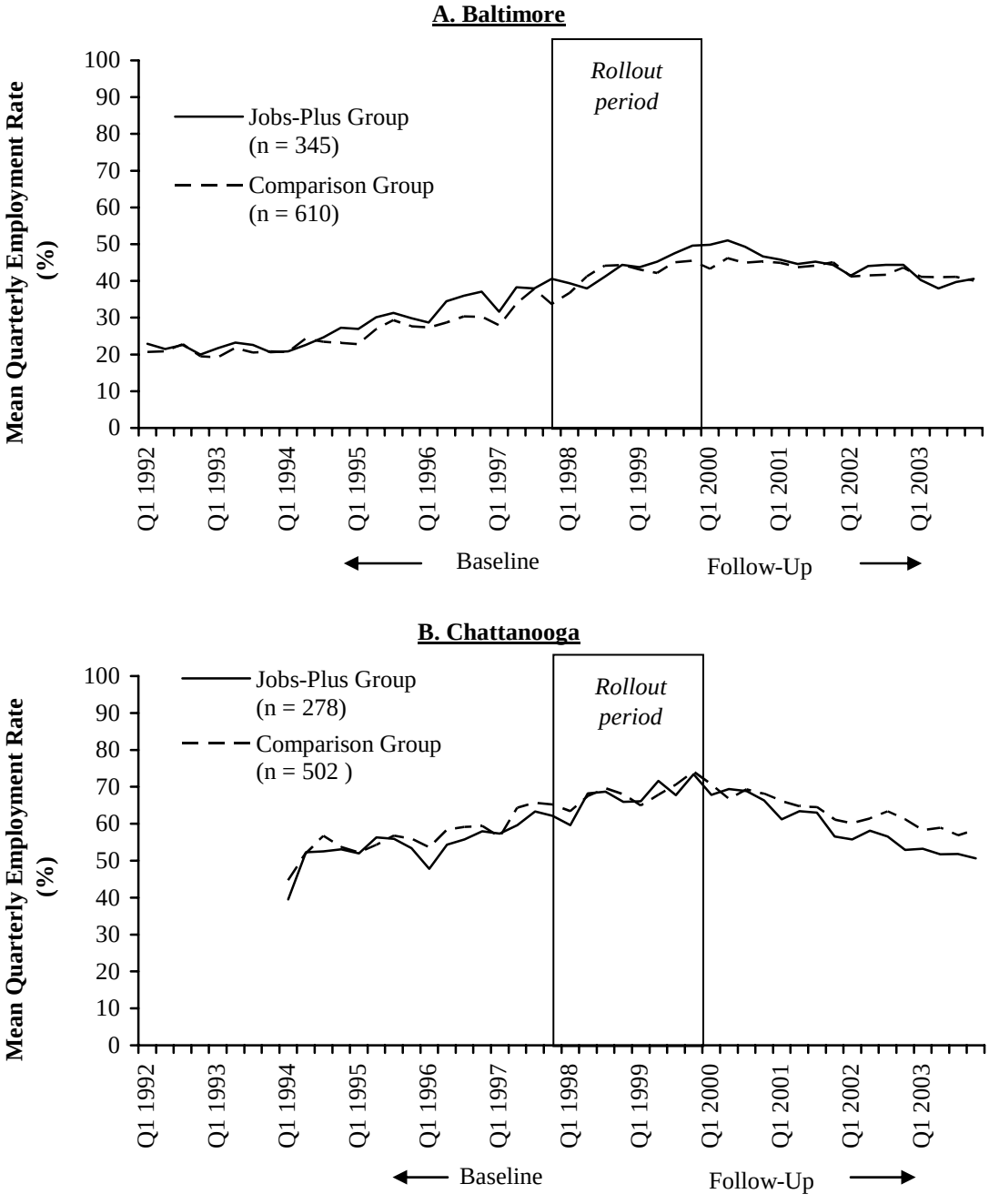
Characteristic	Baltimore	Dayton	St. Paul
Among those employed within the last 12 months:			
Average hours worked per week	29.0	29.4	35.2
Distribution of hours worked (%)			
1-19 hours	18.4	17.0	4.7
20-29 hours	21.5	25.5	16.3
30-39 hours	24.7	21.3	25.6
40+ hours	34.2	35.5	53.5
Average hourly wage ($)	8.8	8.6	10.6
Distribution of hourly wage (%)			
$1-$5.15	6.9	9.2	1.2
$5.15-$7.75	29.9	43.3	13.4
More than $7.75	63.2	47.5	85.4
Employer-provided benefits (%)			
Any benefits	46.1	60.0	70.9
Health plan for self	37.4	45.3	44.2
Health plan for children	29.6	35.0	29.1
Paid sick days	32.9	28.5	57.0
Paid vacation days	39.4	47.5	60.5
Perceived job-related risks (%)			
Health or safety risk	32.9	45.0	NA
Poor job security	24.7	23.0	NA
Constantly changing hours	50.0	55.4	NA
Sample size	159	141	86

SOURCES: MDRC calculations using data from Jobs-Plus follow-up surveys.

The Jobs-Plus Demonstration

Appendix Figure E.1

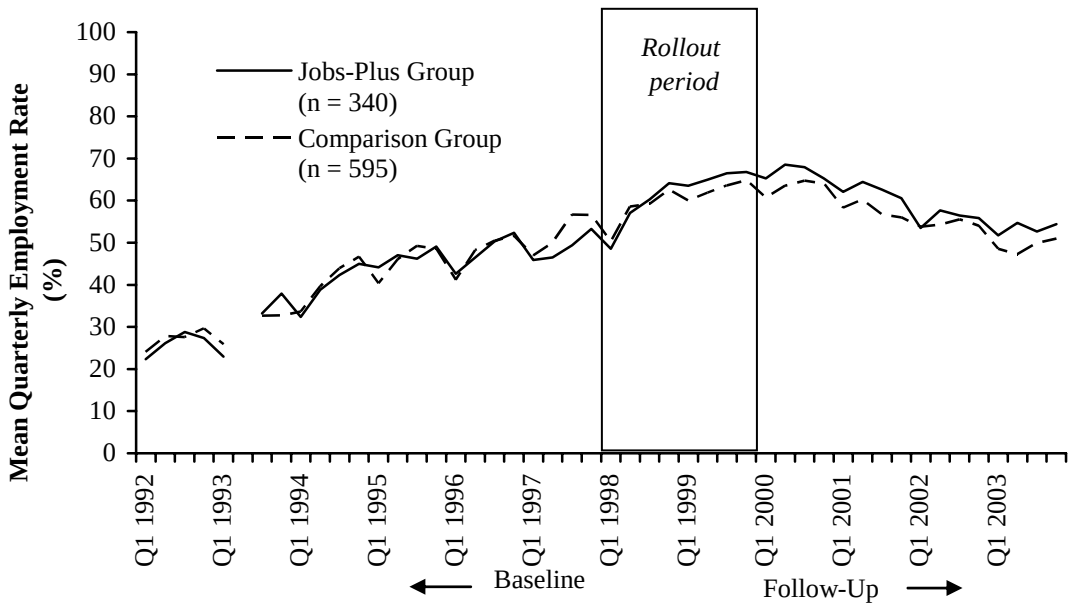
Average Quarterly Employment Rates for the Jobs-Plus Group and Its Comparison Group, by Site (1998 Cohort)



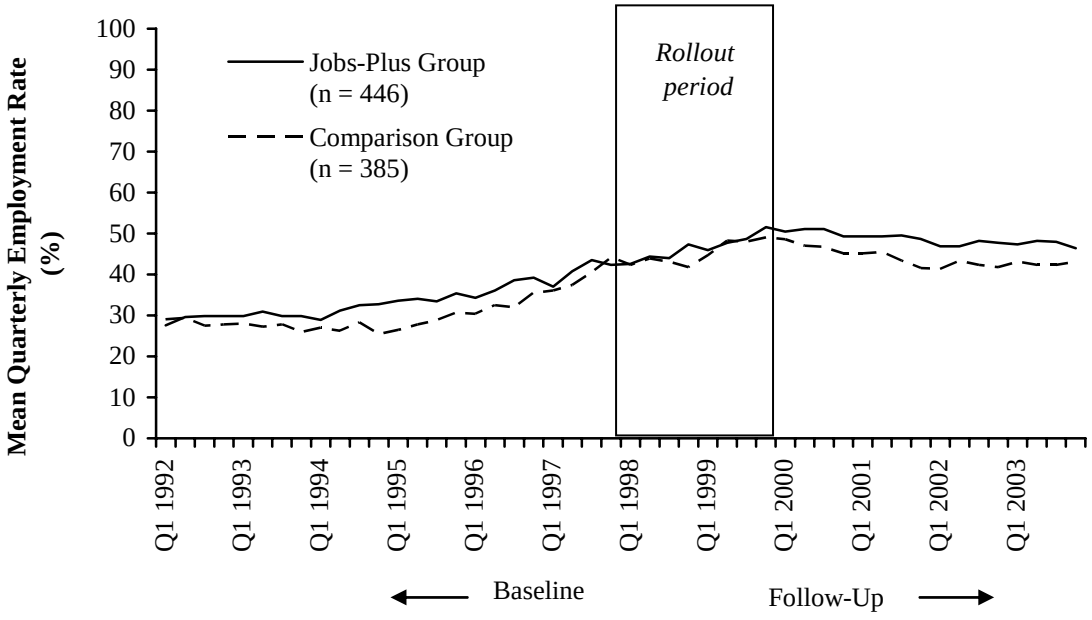
(continued)

Appendix Figure E.1 (continued)

C. Dayton[a]

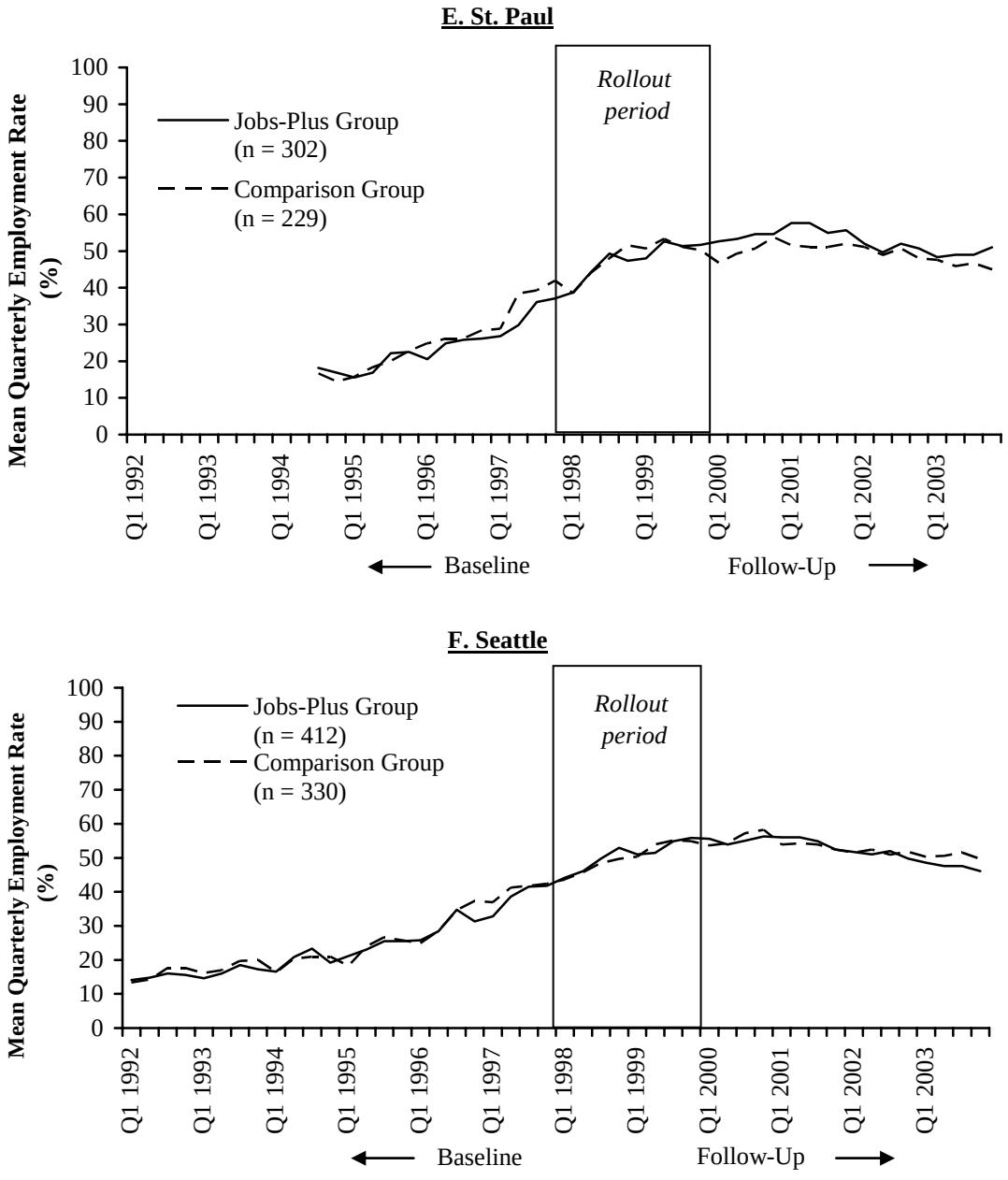


D. Los Angeles



(continued)

Appendix Figure E.1 (continued)



(continued)

Appendix Figure E.1 (continued)

SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

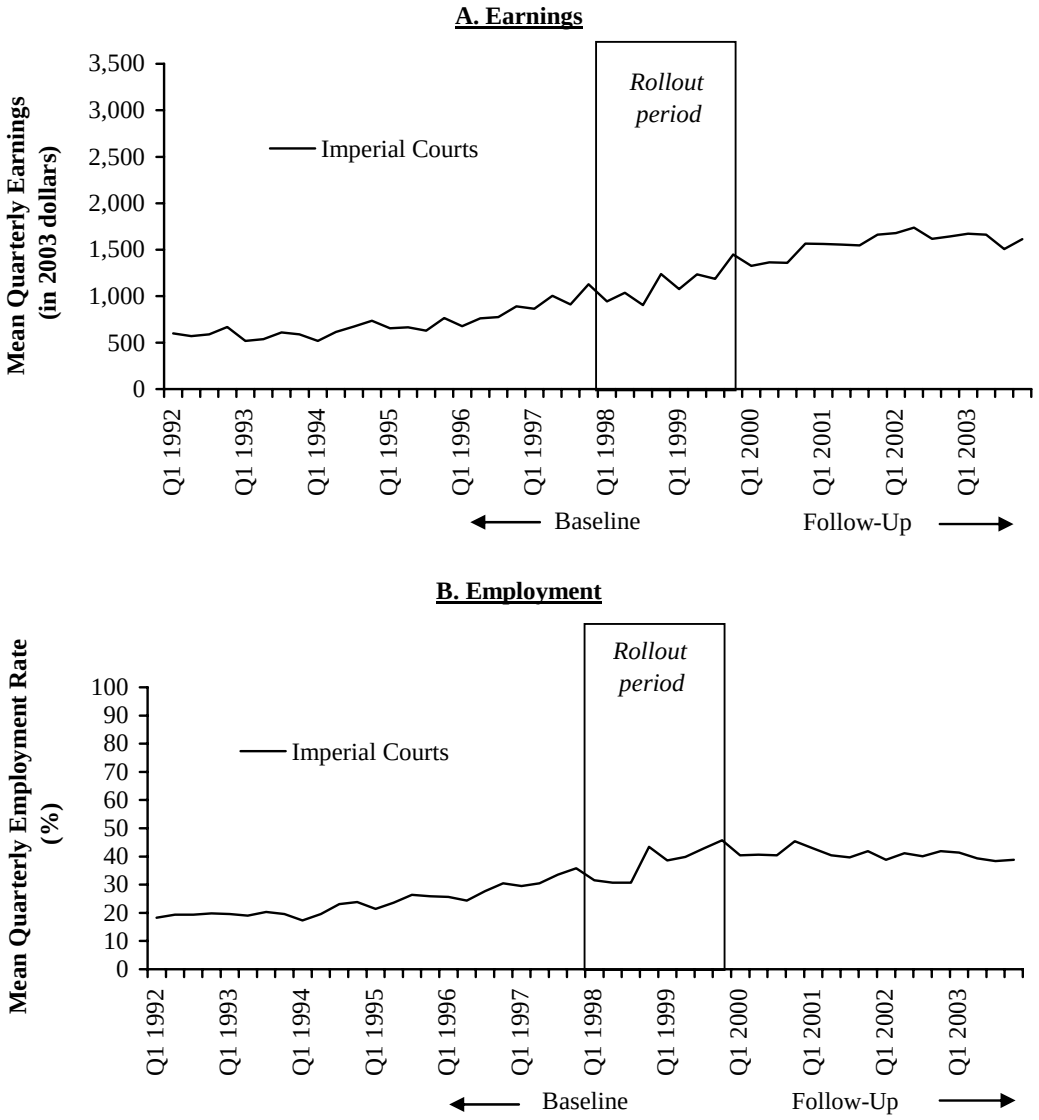
NOTES: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

The Jobs-Plus Demonstration

Appendix Figure E.2

Average Quarterly Earnings and Employment Rates for the Jobs-Plus Group (1998 Cohort in Imperial Courts, Los Angeles)



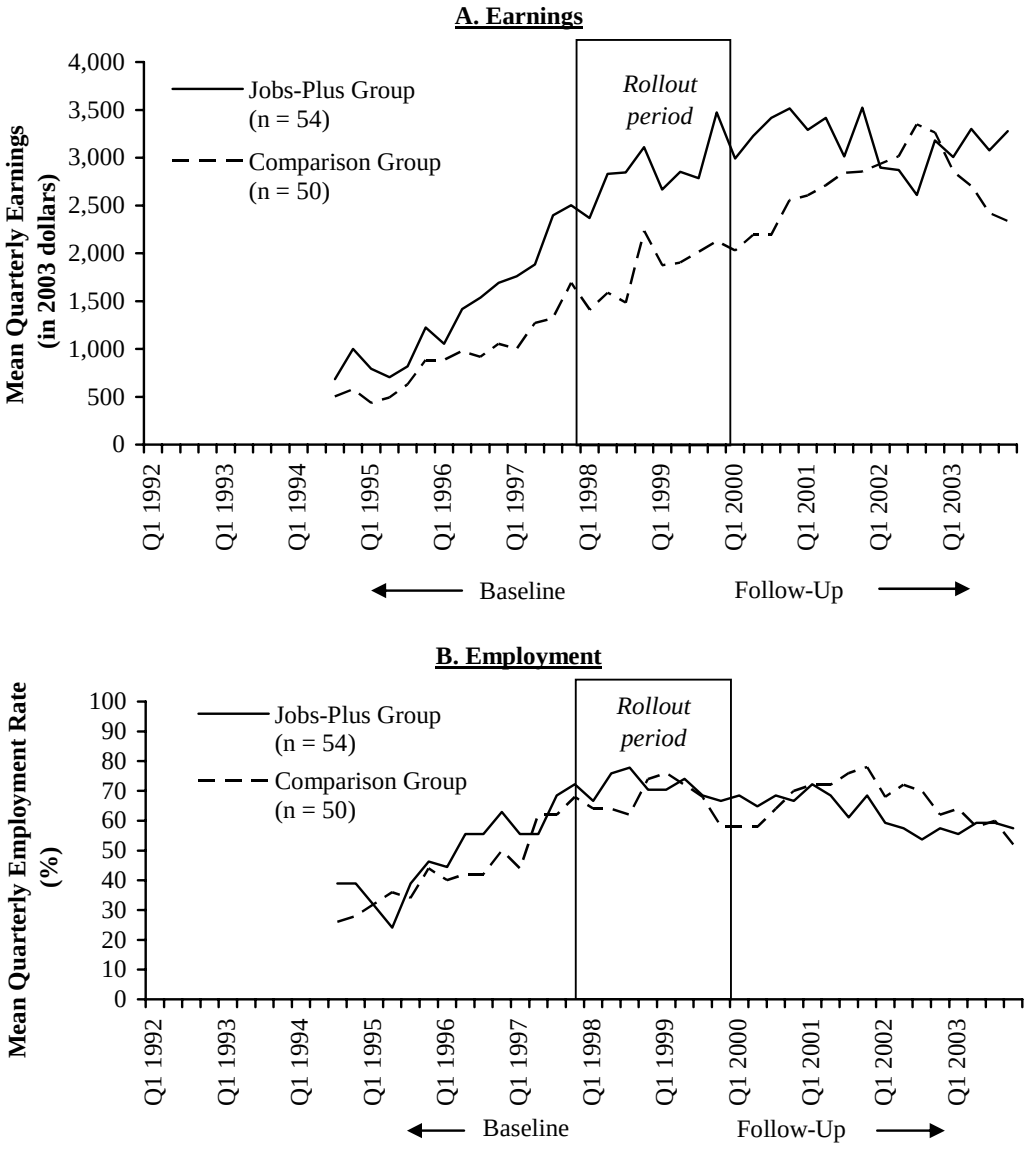
SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The Jobs-Plus Demonstration

Appendix Figure E.3

Average Quarterly Earnings and Employment Rates for the Jobs-Plus Group and Its Comparison Group (Black, Non-Hispanic Women in the 1998 Cohort from St. Paul)



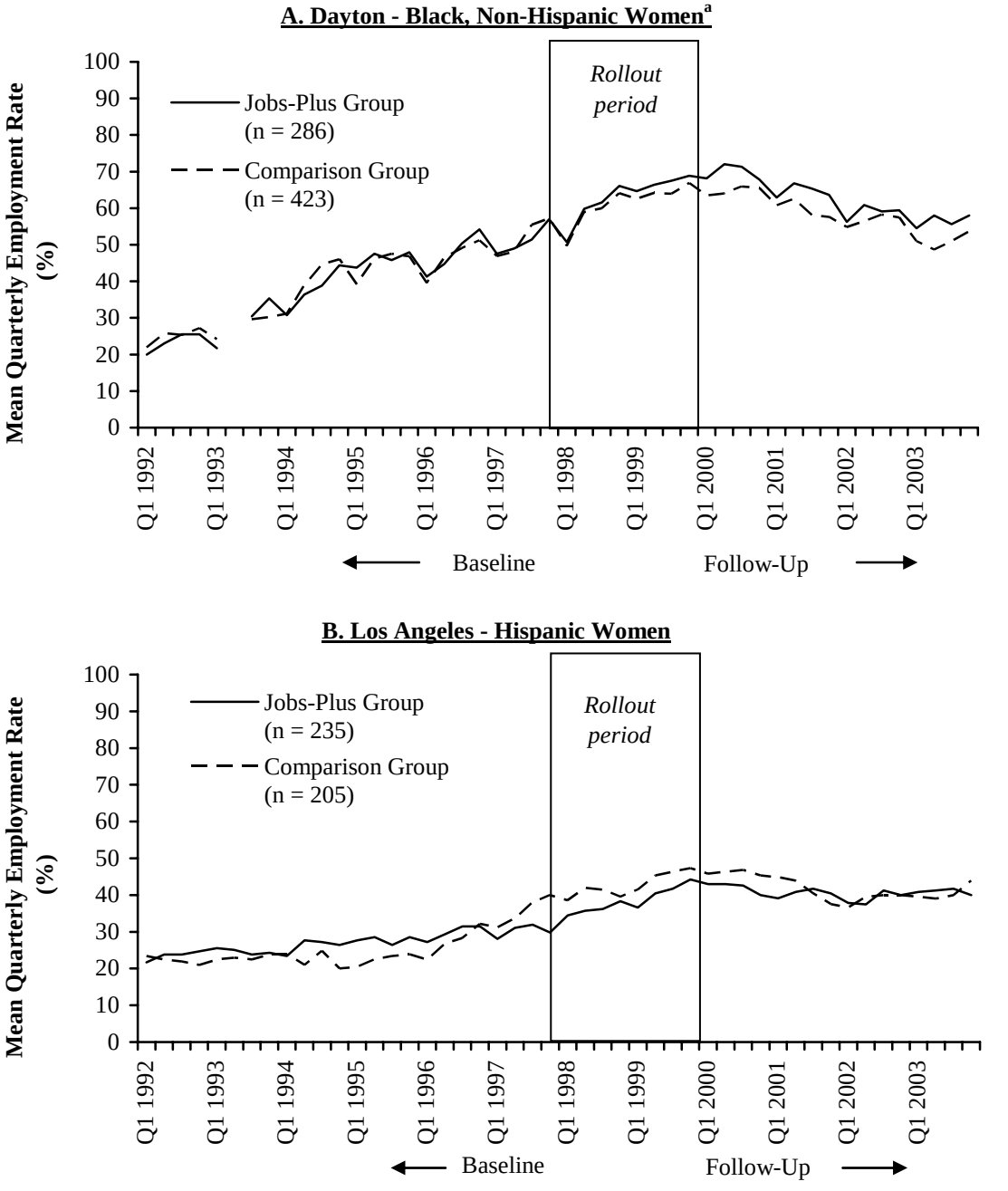
SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

The Jobs-Plus Demonstration

Appendix Figure E.4

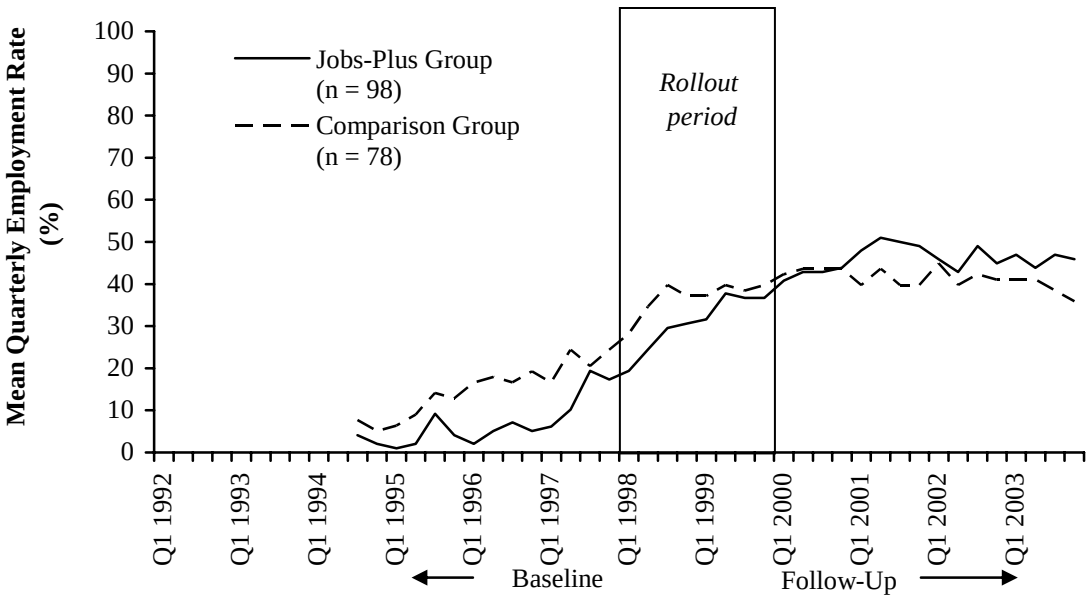
Average Quarterly Employment Rates for the Jobs-Plus Group and Its Comparison Group, for the Largest Demographic Subgroups in the Stronger Implementation Sites (1998 Cohort)



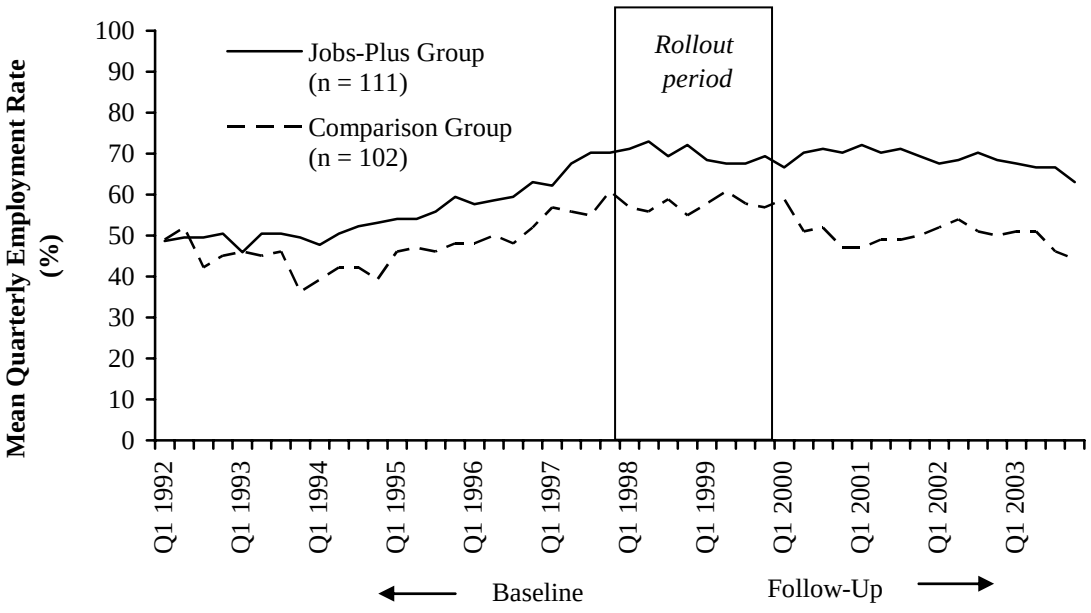
(continued)

Appendix Figure E.4 (continued)

C. St. Paul - Southeast Asian Women

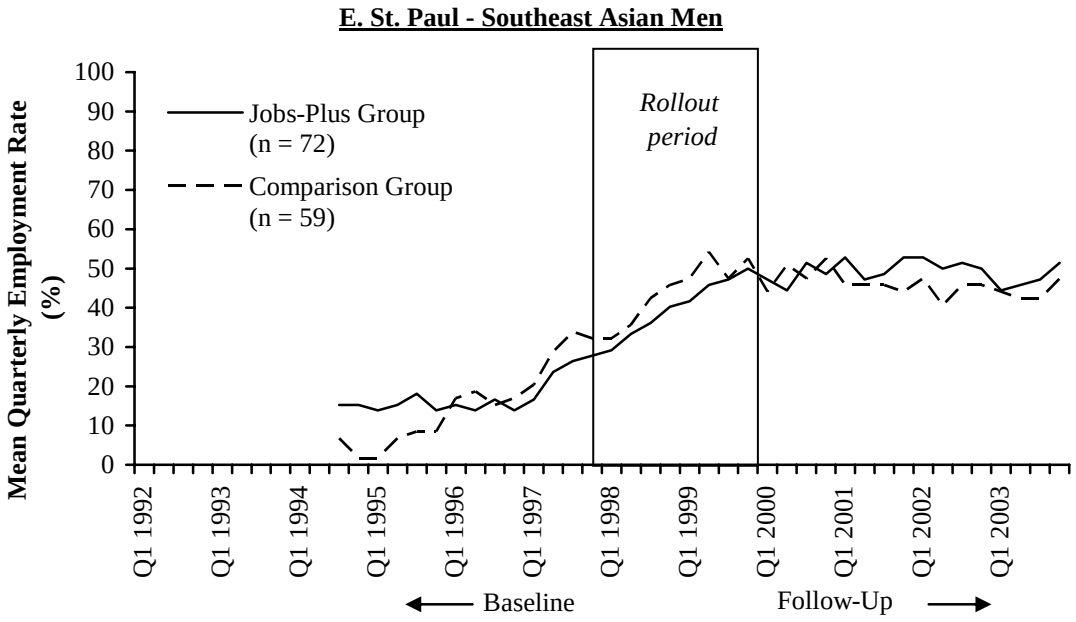


D. Los Angeles - Hispanic Men



(continued)

Appendix Figure E.4 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTE: The 1998 cohort includes all residents of a Jobs-Plus development or a comparison development in October 1998 who were between 21 and 61 years old and were not listed as disabled by their public housing authority.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

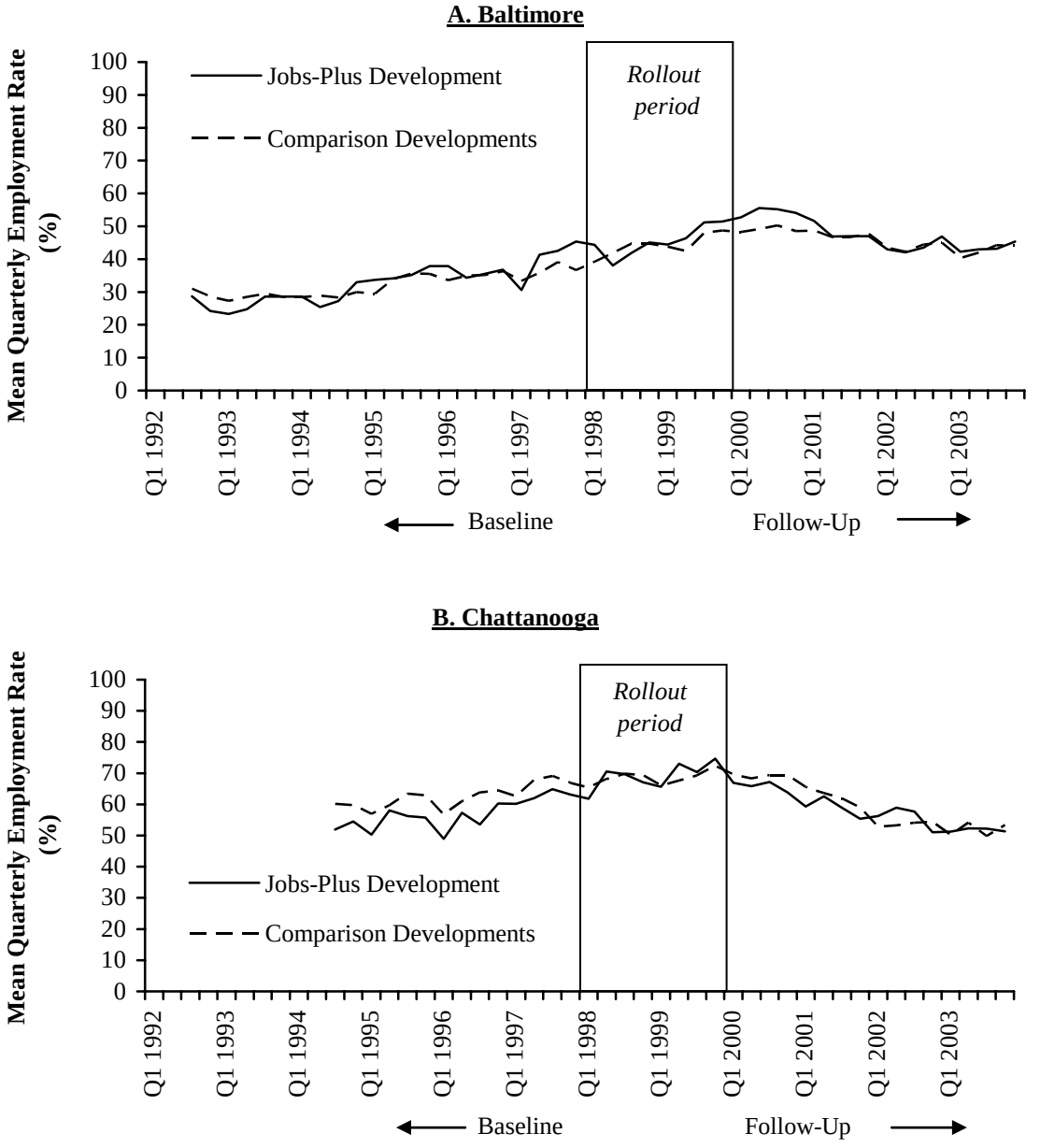
Appendix F

Supplementary Figures for Chapter 5

The Jobs-Plus Demonstration

Appendix Figure F.1

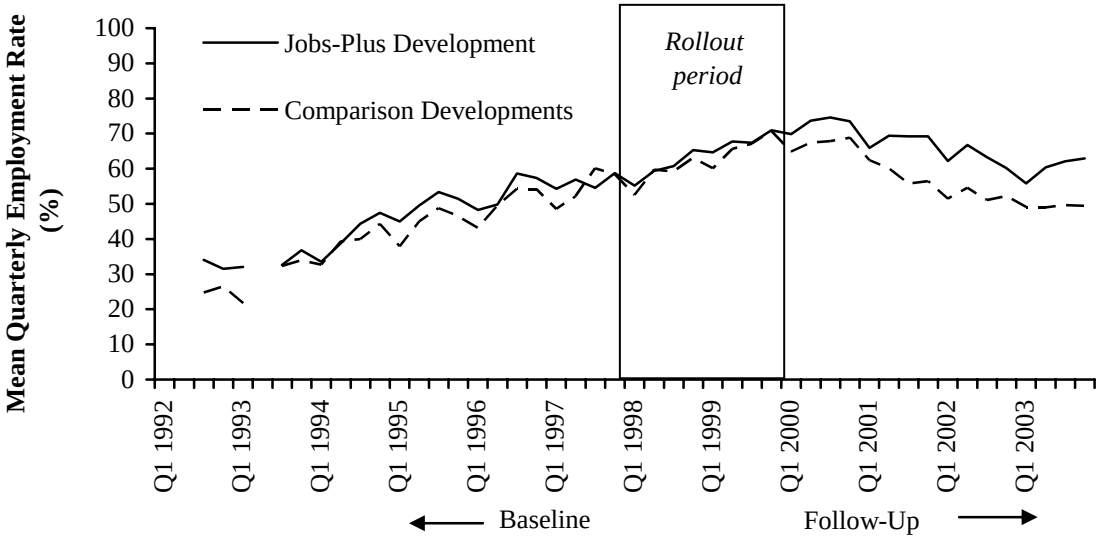
Average Quarterly Employment Rates for the Jobs-Plus Group and Its Comparison Group, by Site (Development-Level Findings)



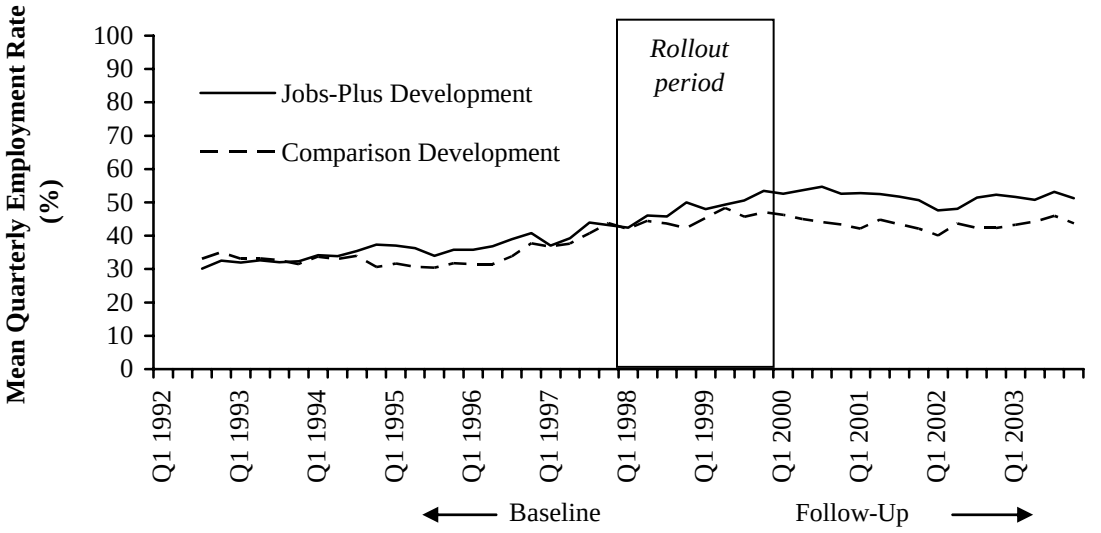
(continued)

Appendix Figure F.1 (continued)

C. Dayton[a]

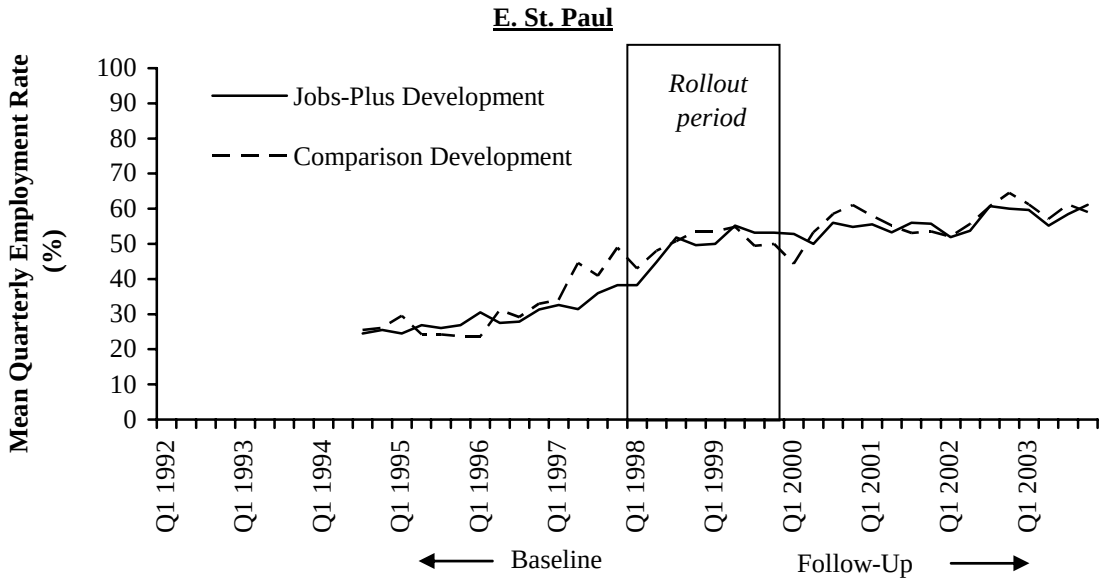


D. Los Angeles



(continued)

Appendix Figure F.1 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state Unemployment Insurance (UI) wage records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

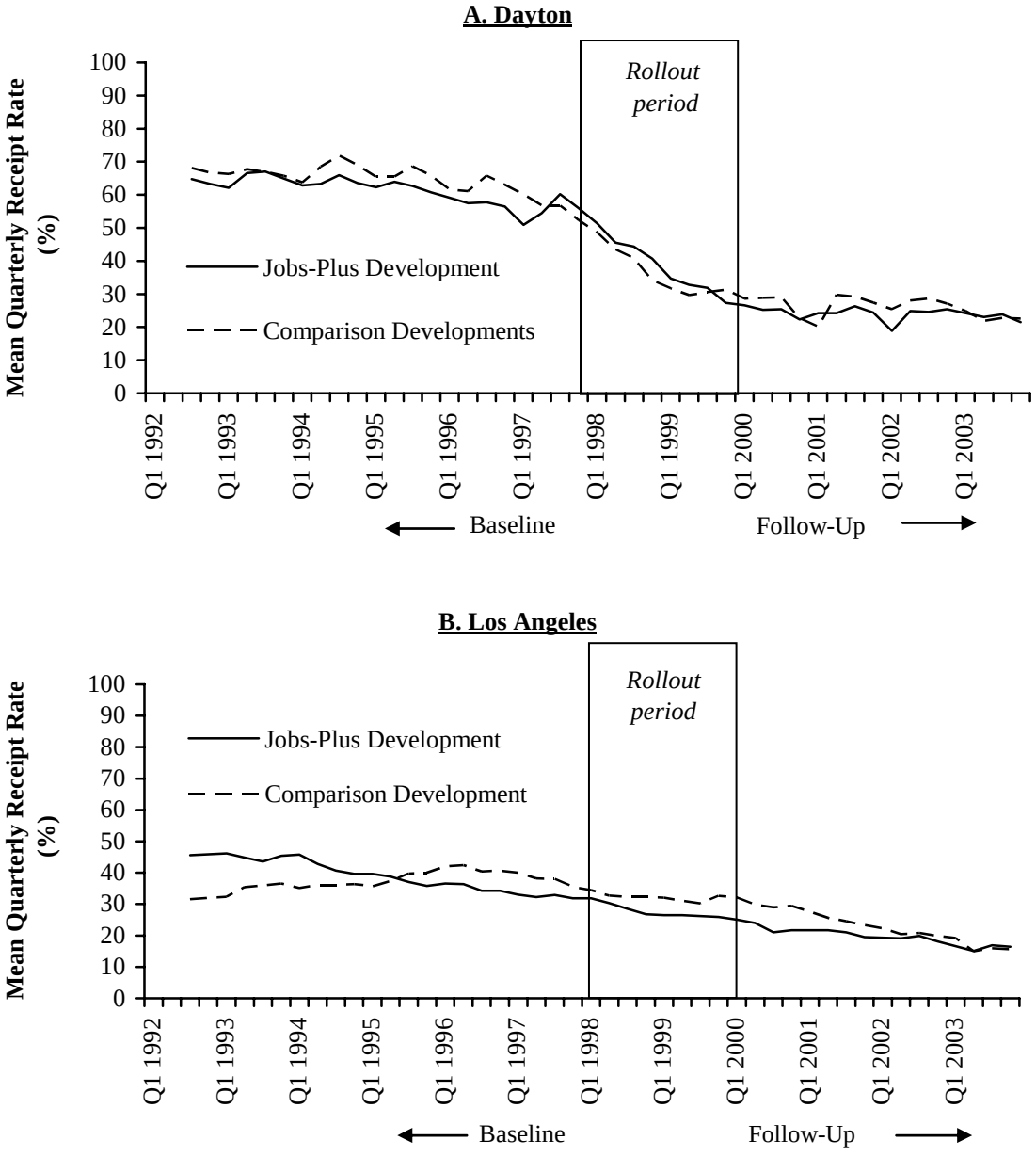
Sample sizes varied from year to year ranging from: 264 to 335 in the program group and 519 to 666 in the comparison group in Baltimore; 240 to 314 in the program group and 349 to 500 in the comparison group in Chattanooga; 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

[a]Unemployment Insurance (UI) wage data for the second quarter of 1993 were not available for Dayton.

The Jobs-Plus Demonstration

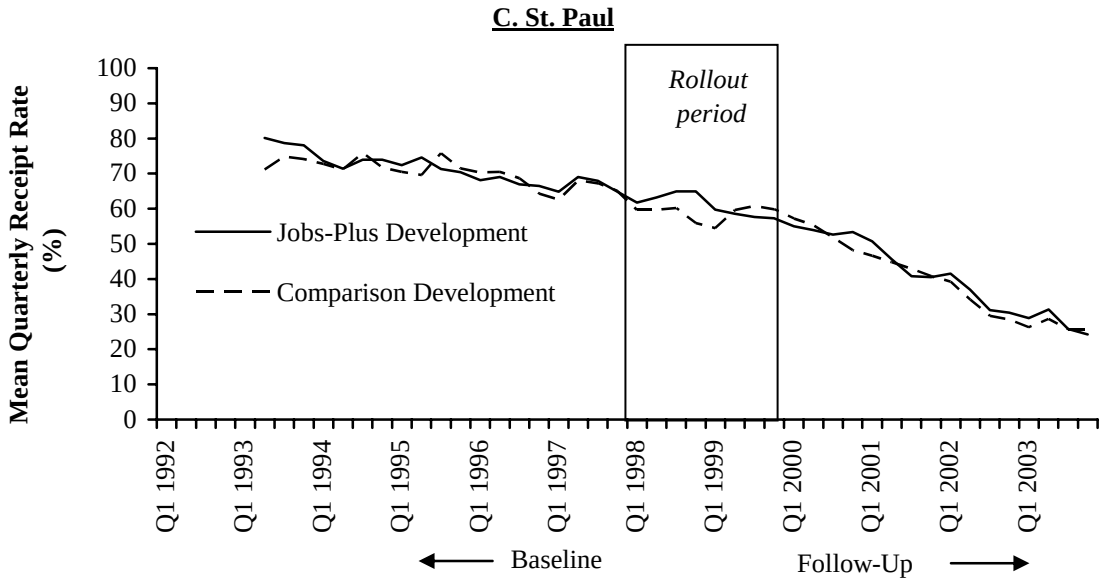
Appendix Figure F.2

Average Quarterly Welfare Receipt Rates for the Jobs-Plus Group and Its Comparison Group, by Site (Development-Level Findings)



(continued)

Appendix Figure F.2 (continued)



SOURCES: MDRC calculations using data from housing authority tenant (50058) records and state AFDC/TANF records.

NOTES: The development-level samples include all nondisabled residents aged 21 to 61 in each year. To facilitate data collection, given the complexity of local housing authority records, only persons living in a household headed by a nondisabled resident between the ages of 21 and 61 were included in these samples.

Sample sizes varied from year to year ranging from: 256 to 346 in the program group and 400 to 628 in the comparison group in Dayton; 356 to 466 in the program group and 294 to 387 in the comparison group in Los Angeles; and 192 to 289 in the program group and 149 to 211 in the comparison group in St. Paul.

References

Abravanel, Martin D., Robin E. Smith, Margery A. Turner, Elizabeth Cove, Laura Harris, and Carlos Martinez. 2004. *A Summary Assessment of HUD's "Moving to Work" Demonstration.* Washington, DC: Urban Institute.

Ashenfelter, Orley. 1978. "Estimating the Effect of Training Programs on Earnings." *Review of Economics and Statistics* 63 (February): 47-57.

Aspen Institute Round Table on Comprehensive Community Initiatives for Children and Families. 1997. *Voices from the Field: Learning from the Early Work of Comprehensive Community Initiatives.* Washington, DC: Aspen Institute.

Barnow, Burt S. 1987. "The Impact of CETA Programs on Earnings: A Review of the Literature." *Journal of Human Resources* 22 (Spring): 157-193.

Bloom, Howard S. 1984. "Estimating the Effect of Job-Training Programs, Using Longitudinal Data: Ashenfelter's Findings Reconsidered." *Journal of Human Resources*, 19, 4: 544-556.

Bloom, Howard S. 1996. *Building a Convincing Test of a Public Housing Employment Program Using Non-Experimental Methods: Planning for the Jobs-Plus Demonstration.* New York: MDRC.

Bloom, Howard S. 1999. *Estimating Program Impacts on Student Achievement Using "Short" Interrupted Time Series.* New York: MDRC.

Bloom, Howard S. 2003. "Using 'Short' Interrupted Time-Series Analysis to Measure the Impacts of Whole-School Reforms: With Applications to a Study of Accelerated Schools." *Evaluation Review* 27, 1: 3-49.

Bloom, Howard S., Sandra Ham, Laura Melton, and Julieanne O'Brien. 2001. *Evaluating the Accelerated Schools Approach: A Look at Early Implementation and Impacts on Student Achievement in Eight Elementary Schools.* New York. MDRC.

Bloom, Howard S., and Maureen A. McLaughlin. 1982. *CETA Training Programs: Do They Work for Adults?* Washington DC: U.S. Congressional Budget Office and National Commission for Employment Policy.

Bloom, Howard S., Larry L. Orr, George Cave, Stephen H. Bell, Fred Doolittle, and Winston Lin. 1997. "The Benefits and Costs of JTPA Programs: Key Findings from the National JTPA Study." *Journal of Human Resources* 32, 3: 549-576.

Bloom, Howard S., and James A. Riccio. 2002. *Using Place-Based Random Assignment and Comparative Interrupted Time-Series Analysis to Evaluate the Jobs-Plus Employment Program for Public Housing Residents.* New York: MDRC.

Bloom, Susan Philipson, with Susan Blank (eds.). 2000. *Jobs-Plus Site-by-Site: An Early Look at Program Implementation.* New York: MDRC.

Bogdon, Amy S. 1999. "What Can We Learn from Previous Housing-Based Self-Sufficiency Programs?" In Sandra J. Newman (ed.), *The Home Front.* Washington, DC: Urban Institute Press.

Bowie, Stan L. 2003. "Jobs-Plus in Chattanooga." Pages 37-59 in Linda Yuriko Kato, *Jobs-Plus Site-by-Site: Key Features of Mature Employment Programs in Seven Public Housing Communities.* New York: MDRC.

Briggs, Xavier de Souza. 1998. "Brown Kids in White Suburbs: Housing Mobility and the Many Faces of Social Capital." *Housing Policy Debate* 9, 1: 177-221. Washington, DC: Fannie Mae Foundation.

Council of Large Public Housing Authorities. 2004. "Quick Facts." Web site: www.clpha.org.

Darlington, Richard B. 1990. "The Bonferroni Method." Pages 250-255 in *Regression and Linear Models.* New York: McGraw-Hill.

Dickens, William T. 1999. "Rebuilding Urban Labor Markets: What Community Development Can Accomplish." In Ronald F. Ferguson and William T. Dickens (eds.), *Urban Problems and Community Development.* Washington, DC: Brookings Institution Press.

Galster, George C., and Sean P. Killen. 1995. "The Geography of Metropolitan Opportunity: A Reconnaissance and Conceptual Framework." *Housing Policy Debate* 6, 1: 7-43.

Gardenhire-Crooks, Alissa, with Susan Blank and James A. Riccio. 2004. *Implementing Financial Work Incentives in Public Housing: Lessons from the Jobs-Plus Demonstration.* New York: MDRC.

Gladwell, Malcolm. 2000. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little Brown.

Greenberg, David H., Charles Michalopoulos, and Philip L. Robins. 2001. *A Meta-Analysis of Government Sponsored Training Programs.* Baltimore, MD: University of Maryland.

Greene, William H. 1999. *Econometric Analysis*, 4th ed. Upper Saddle River, NJ: Prentice-Hall.

Hall, Robert, Martin Feldstein, Ben Bernanke, Jeffrey Frankel, Robert Gordon, and Victor Zarnowitz. 2004. "The Business-Cycle Peak of March 2001." National Bureau of Economic Research Web site: http://www.nber.org/cycles/november2001/recessnov.html.

Hamilton, Gayle, Stephen Freedman, Lisa Gennetian, Charles Michalopoulos, Johanna Walter, Diana Adams-Ciardullo, Anna Gassman-Pines, Sharon McGroder, Martha Zaslow, Surjeet Ahluwalia, and Jennifer Brooks, with Electra Small and Bryan Ricchetti. 2001. *National Evaluation of Welfare-to-Work Strategies: How Effective Are Different Welfare-to-Work Approaches? Five-Year Adult and Child Impacts for Eleven Programs.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Deputy Secretary Planning and Evaluation Service and Office of Vocational and Adult Education.

Hollister, Robinson G., and Jennifer Hill. 1995. "Problems in the Evaluation of Community-Wide Initiatives." In James P. Connell et al. (eds.), *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts.* Washington, DC: Aspen Institute.

Jargowsky, Paul A. 1997. *Poverty and Place: Ghettos, Barrios, and the American City.* New York: Russell Sage Foundation.

Kato, Linda Yuriko. 2002. *The Special Challenges of Offering Employment Programs in Culturally Diverse Communities: The Jobs-Plus Experience in Public Housing Developments.* New York. MDRC.

Kato, Linda Yuriko. 2003a. *Participating in a Place-Based Employment Initiative: Lessons from the Jobs-Plus Demonstration in Public Housing.* New York: MDRC.

Kato, Linda Yuriko, with Stan L. Bowie, Alissa Gardenhire-Crooks, Linda Kaljee, Edward B. Liebow, Jennifer Miller, Gabrielle O'Malley, and Elinor Robinson. 2003b. *Jobs-Plus Site-by Site: Key Features of Mature Employment Programs in Seven Public Housing Communities.* New York: MDRC.

Kato, Linda Yuriko. 2004. *Mobilizing Resident Networks in Public Housing: Implementing the Community Support for Work Component of Jobs-Plus.* New York: MDRC.

Kato, Linda Yuriko, and James A. Riccio, with Jennifer Dodge. 2001. *Building New Partnerships for Employment: Collaboration Among Agencies and Public Housing Residents in the Jobs-Plus Demonstration.* New York: MDRC.

Katz, Bruce, and Margery A. Turner. 2004. *Rethinking Local Affordable Housing Strategies: Lessons from 70 Years of Policy and Practice.* Washington, DC: Brookings Institution.

Khadduri, Jill, Mark Shroder, and Barry Steffen. 2003. "Can Housing Assistance Support Welfare Reform?" In Barbara Sard and Amy S. Bogdon (eds.), *A Place to Live, A Means to Work: How Housing Assistance Can Strengthen Welfare Policy.* Washington, DC: Fannie Mae Foundation.

Kleit, Rachel Garshick, and William M. Rohe. 2005. "Using Public Housing to Achieve Self-Sufficiency: Can We Predict Success?" *Housing Studies* 20, 1: 81-105.

Kling, Jeffrey R., Jeffrey B. Liebman, and Lawrence F. Katz. 2001. "Fear in the Ghetto and Its Ramifications for Parents." *Policy Briefs* 3, 10. Chicago: Joint Center for Poverty Research.

Kornfeld, Robert, and Howard S. Bloom. 1999. "Measuring Program Impacts on Earnings and Employment: Do Unemployment Insurance Wage Reports from Employers Agree with Surveys of Individuals?" *Journal of Labor Economics* 17, 1: 168-197.

Liebow, Edward B., Carolina Katz Reid, Gabrielle E. O'Malley, Scott Marsh, and Susan Blank. 2004. *Resident Participation in Seattle's Jobs-Plus Program.* Seattle: Environmental Health and Social Policy Center.

Martinez, John. 2002. *The Employment Experiences of Public Housing Residents: Findings from the Jobs-Plus Baseline Survey.* New York: MDRC.

Massey, Douglas S., and Nancy Denton. 1993. *American Apartheid: Segregation and the Making of the Underclass.* Cambridge, MA: Harvard University Press.

MDRC. 1980. *Summary and Findings of the National Supported Work Demonstration.* Cambridge, MA: Ballinger.

Michalopoulos, Charles, Doug Tattrie, Cynthia Miller, Philips K. Robins, Pamela Morris, David Gyarmati, Cindy Redcross, Kelly Foley, and Reuben Ford. 2002. *Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients.* Ottawa: Social Research and Demonstration Corporation.

Mijanovich, Tod, and Beth C. Weitzman. 2003. "Which 'Broken Windows' Matter? School, Neighborhood, and Family Characteristics Associated with Youths' Feelings of Unsafety." *Journal of Urban Health* 80: 400-415.

Millennial Housing Commission. 2002. *Meeting Our Nation's Housing Challenges.* A Report to Congress. Washington DC: U.S. Government Printing Office.

Miller, Cynthia, Virginia Knox, Lisa A. Gennetian, Martey Dodoo, Jo Anna Hunter, and Cindy Redcross. 2002. *Reforming Welfare and Rewarding Work: Final Report on the Minnesota Family Investment Program.* New York: MDRC.

Miller, Cynthia, and James A. Riccio. 2002. *Making Work Pay for Public Housing Residents: Financial-Incentive Designs at Six Jobs-Plus Demonstration Sites.* New York: MDRC.

Morris, Pamela. Forthcoming, 2005. "Effects of Welfare and Work Policies on Preschoolers and School-Age Children: New Findings on Policy Experiments Conducted in the 1990s." *Social Policy Report* (Spring).

Morris, Pamela, and Stephanie Jones. 2002. *Children in Public Housing Developments: An Examination of the Children at the Beginning of the Jobs-Plus Demonstration.* New York: MDRC.

Morris, Pamela, and Charles Michalopoulos. 2000. *The Self-Sufficiency Project at 36 Months: Effects on Children of a Program That Increased Parental Employment and Income.* Ottawa: Social Research and Demonstration Corporation.

Murray, D. M., P. J. Hannan, D. R. Jacobs, P. J. McGovern, L. Schmid, W. L. Baker, and C. Gray. 1994. "Assessing Intervention Effects in the Minnesota Heart Health Program." *American Journal of Epidemiology* 139, 1: 91-103.

Naparstek, Arthur J., Dennis Dooley, and Robin Smith. 1997. *Community Building in Public Housing: Ties That Bind People and Their Communities.* Washington, DC: U.S. Department of Housing and Urban Development.

Newman, Sandra J. (ed). 1999. *The Home Front.* Washington, DC: Urban Institute Press.

Newman, Sandra J., and Ann B. Schnare. 1997. "'…And a Suitable Living Environment': The Failure of Housing Programs to Deliver on Neighborhood Quality." *Housing Policy Debate* 8, 4: 703-741.

Orr, Larry, Judith D. Feins, Robin Jacob, Erik Beecroft, Lisa Sanbonmatsu, Lawrence F. Katz, Jeffrey B. Liebman, and Jeffrey R. Kling. 2003. *Moving To Opportunity Interim Impacts Evaluation.* Washington, DC: U.S. Department of Housing and Urban Development.

Popkin, Susan J., Bruce Katz, Mary K. Cunningham, Karen D. Brown, Jeremy Gustafson, and Margery A. Turner. 2004. *A Decade of Hope VI: Research Findings and Policy Challenges.* Washington, DC: Urban Institute.

Reardon, Christopher (ed.). 2001. *In the Driver's Seat: Five Local Directors Reflect on Their Time at the Helm of the National Bridges to Work Demonstration.* Philadelphia: Public/Private Ventures.

Riccio, James A. 1999. *Mobilizing Public Housing Communities for Work: Origins and Early Accomplishments of the Jobs-Plus Demonstration.* New York: MDRC.

Riccio, James, and Alan Orenstein. 2003. "Are Welfare Recipients in Public Housing Really Harder to Employ?" In Barbara Sard and Amy S. Bogdon (eds.), *A Place to Live, A Means to Work: How Housing Assistance Can Strengthen Welfare Policy.* Washington, DC: Fannie Mae Foundation.

Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277: 918-924.

Sard, Barbara. 2000. "The Importance of Issues at the Intersection of Housing and Welfare Reform for Legal Services Work." Washington, DC: Center on Budget and Policy Priorities.

Sard, Barbara, and Amy S. Bogdon. 2003. "What Has Changed, What Have We Learned, and What Don't We Know?" In Barbara Sard and Amy S. Bogdon (eds.), *A Place to Live, A Means to Work: How Housing Assistance Can Strengthen Welfare Policy.* Washington, DC: Fannie Mae Foundation.

Shadish, William R., Thomas D. Cook, and Donald T. Campbell. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference.* Boston: Houghton Mifflin.

Stoloff, Jennifer A. 2001. *Public Housing and Paid Work: Help or Hindrance?* Dissertation. Chapel Hill: University of North Carolina.

U.S. Department of Housing and Urban Development. 1999. Quality Housing and Work Responsibility Act of 1998; Initial Guidance; Notice. *Federal Register* 64, 32.

U.S. Department of Housing and Urban Development. 2000. *Resident Characteristics Report* (September). Washington, DC: U.S. Department of Housing and Urban Development. Web site: https://pic.hud.gov/servlet.

U.S. Department of Housing and Urban Development. 2004. "New Facts About Households Assisted by HUD's Housing Programs." *Recent Research Report* (October). Washington, DC: U.S. Department of Housing and Urban Development.

Verma, Nandita. 2003. *Staying or Leaving: Lessons from Jobs-Plus about the Mobility of Public Housing Residents and Their Implications for Place-Based Initiatives.* New York: MDRC.

Verma, Nandita, and James A. Riccio. 2003. *Housing Assistance and the Effects of Welfare Reform: Evidence from Connecticut and Minnesota.* MDRC. Prepared for the Office of Policy Development and Research, U.S. Department of Housing and Urban Development. Washington, DC: U.S. Department of Housing and Urban Development.

Wilson, William Julius. 1996. *When Work Disappears: The World of the New Urban Poor.* New York: Knopf.

Zelon, Harvey. 1994. *Survey of Public Housing Residents: Crime and Crime Prevention in Public Housing.* Research Triangle Park, NC: Research Triangle Institute.

EARLIER MDRC PUBLICATIONS ON THE JOBS-PLUS INITIATIVE

Resident Participation in Seattle's Jobs-Plus Program
2004. Edward Liebow, Carolina Katz Reid, Gabrielle O'Malley, Scott Marsh, Susan Blank

Implementing Financial Work Incentives in Public Housing
Lessons from the Jobs-Plus Demonstration
2004. Alissa Gardenhire-Crooks

Mobilizing Resident Networks in Public Housing
Implementing the Community Support for Work Component of Jobs-Plus
2004. Linda Yuriko Kato

Participating in a Place-Based Employment Initiative
Lessons from the Jobs-Plus Demonstration in Public Housing
2003. Linda Yuriko Kato

Jobs-Plus Site-by-Site
Key Features of Mature Employment Programs in Seven Public Housing Communities
2003. Linda Yuriko Kato

Staying or Leaving
Lessons from Jobs-Plus About the Mobility of Public Housing Residents and Their Implications for Place-Based Initiatives
2003. Nandita Verma

Making Work Pay for Public Housing Residents
Financial-Incentive Designs at Six Jobs-Plus Demonstration Sites
2002. Cynthia Miller, James Riccio

The Special Challenges of Offering Employment Programs in Culturally Diverse Communities
The Jobs-Plus Experience in Public Housing Developments
2002. Linda Yuriko Kato

The Employment Experiences of Public Housing Residents
Findings from the Jobs-Plus Baseline Survey
2002. John Martinez

Note: A complete publications list is available from MDRC and on its Web site (www.mdrc.org), from which copies of reports can also be downloaded.

Children in Public Housing Developments
An Examination of the Children at the Beginning of the Jobs-Plus Demonstration
2002. Pamela Morris, Stephanie Jones

Building New Partnerships for Employment
Collaboration Among Agencies and Public Housing Residents in the Jobs-Plus Demonstration
2001. Linda Yuriko Kato, James Riccio

Jobs-Plus Site-by-Site
An Early Look at Program Implementation
2000. Edited by Susan Philipson Bloom

Mobilizing Public Housing Communities for Work
Origins and Early Accomplishments of the Jobs-Plus Demonstration
1999. James Riccio

Building a Convincing Test of a Public Housing Employment Program
Using Non-Experimental Methods
Planning for the Jobs-Plus Demonstration
1999. Howard Bloom

About MDRC

MDRC is a nonprofit, nonpartisan social policy research organization. We are dedicated to learning what works to improve the well-being of low-income people. Through our research and the active communication of our findings, we seek to enhance the effectiveness of social policies and programs. MDRC was founded in 1974 and is located in New York City and Oakland, California.

MDRC's current projects focus on welfare and economic security, education, and employment and community initiatives. Complementing our evaluations of a wide range of welfare reforms are new studies of supports for the working poor and emerging analyses of how programs affect children's development and their families' well-being. In the field of education, we are testing reforms aimed at improving the performance of public schools, especially in urban areas. Finally, our community projects are using innovative approaches to increase employment in low-income neighborhoods.

Our projects are a mix of demonstrations — field tests of promising program models — and evaluations of government and community initiatives, and we employ a wide range of methods to determine a program's effects, including large-scale studies, surveys, case studies, and ethnographies of individuals and families. We share the findings and lessons from our work — including best practices for program operators — with a broad audience within the policy and practitioner community, as well as the general public and the media.

Over the past quarter century, MDRC has worked in almost every state, all of the nation's largest cities, and Canada. We conduct our projects in partnership with state and local governments, the federal government, public school systems, community organizations, and numerous private philanthropies.