

MDRC Working Papers on Research Methodology

**Using Place-Based Random Assignment
and Comparative Interrupted
Time-Series Analysis to Evaluate
the Jobs-Plus Employment Program
for Public Housing Residents**

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Abstract

This paper describes a place-based research demonstration program to promote and sustain employment among residents of selected public housing developments in six U.S. cities. Because all eligible residents of the participating public housing developments were free to take part in the program, it was not possible to study its impacts in a classical experiment, with random assignment of individual residents to the program or a control group. Instead, the impact analysis is based on a design that selected matched groups of two or three public housing developments in each participating city and randomly assigned one to the program and the other(s) to a control group. In addition, an 11-year comparative interrupted time-series analysis is being used to strengthen the place-based random assignment design. Preliminary analyses of baseline data suggest that this two-pronged approach will provide credible estimates of program impacts.

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THE POLICY PROBLEM

The Jobs-Plus Community Revitalization Initiative for Public Housing Families is a place-based saturation-level employment demonstration program being tested in six cities across the United States. It was launched primarily to learn important lessons about addressing the problem of geographically concentrated joblessness and poverty. Although it focuses on public housing residents, the process through which the Jobs-Plus intervention was designed and implemented, how it is being evaluated, and certain features of the intervention itself point to a number of general lessons relevant to other community-based initiatives and institutional reforms.

The basic Jobs-Plus model was designed jointly by the Manpower Demonstration Research Corporation (MDRC) and the demonstration's two core funding partners: The Rockefeller Foundation and the U.S. Department of Housing and Urban Development (HUD).¹ MDRC and other experts have provided extensive technical assistance to each participating city on the design and operation of its particular local approach. MDRC is also conducting a comprehensive evaluation of the program's implementation and effectiveness.

The demonstration began in 1996 and will conclude in 2004. Participating sites have been operating the program since 1998. This paper summarizes the theory and policy relevance of the project, the sites' experiences to date in implementing the Jobs-Plus model, and the strategy being used to assess the intervention's effectiveness in improving residents' employment and quality-of-life outcomes and in helping to transform their public housing developments into better places to live. More detail on all of these issues can be found in the collection of evaluation reports and papers on Jobs-Plus that have been completed to date. (See Appendix A for a list.)

Concentrated Joblessness and Poverty

Paul Jargowsky opens his book, *Poverty and Place*, with the sobering observation that:

Every large city in the United States, whether economically vibrant or withering, has areas of extreme poverty, physical decay, and increasing abandonment. Most city residents will go to great lengths to avoid living, working, or even driving through these areas.²

William Julius Wilson, in his book, *When Work Disappears*, writes that: "for the first time in the twentieth century most adults in many inner-city ghetto neighborhoods are not working in a typical week," adding that: "the current levels of joblessness in some neighborhoods are unprecedented."³

¹Other major funders are the U.S. Departments of Health and Human Service and Labor; the Joyce, James Irvine, Surdna, Northwest Area, Annie E. Casey, Stuart, and Washington Mutual Foundations, and BP.

²Jargowsky, 1997, p. 1.

³Wilson, 1996, p. xiii.

Even in good economic times, large cities across the U.S. include neighborhoods plagued by stubbornly high rates of joblessness and marginal employment, as William Dickens makes clear: “With national unemployment rates around 5 percent, it is not uncommon to find neighborhoods where unemployment rates exceed 25 percent.”⁴

The concentration of joblessness and poverty has worsened in recent decades, with the number of high-poverty neighborhoods more than doubling between 1970 and 1990,⁵ a few years prior to commencement of the Jobs-Plus demonstration. During that period, members of racial and ethnic minority groups, especially African-Americans, were most immediately affected by this phenomenon. For example, in 1990, African-Americans made up about 13 percent of the U.S. population but accounted for more than half the population of high-poverty census tracts.⁶ They also accounted for two-thirds of the population of urban census tracts where employment rates were lowest.⁷

Studies cite a host of external factors believed to have contributed to the spread of area-based poverty (although scholars continue to debate their relative importance). These include the decline of well-paying manufacturing jobs in the inner city; the concentration of job growth in suburban areas not well linked to poorer communities by public transportation; the inadequate skills and preparation of inner-city residents for many of the new and better-paying service industry jobs; the flight of middle-class residents from center cities to the suburbs, leaving behind a poorer segment of the population; and the continuing legacy of racial discrimination, which restricts housing choices outside inner-city neighborhoods for minority group members.⁸

A growing body of literature suggests that living in high-poverty neighborhoods may contribute to poor social and economic outcomes for adults and their children (although the evidence is far from conclusive).⁹ For example, Wilson suggests that where high rates of joblessness prevail, young people are cut off from role models and routines of life that can help socialize them for work. In that context, they may be more likely to resort to crime and other antisocial behaviors and to become teen parents. These behaviors, in turn, can diminish prospects for completing school, acquiring skills, and moving into well-paying steady employment.

Wilson and others also point to the likelihood that residents in poor areas are disproportionately isolated from social networks that can help them in the job market. For example, they often have fewer “connections” to people who can tell them about job openings (many of which go unadvertised) or who can serve as effective references by

⁴Dickens, 1999, p. 381. A recent study by HUD reports that 17 percent of central cities in larger metropolitan areas have unemployment rates 50 percent or more above the national unemployment rate, and that in 1995, 32 percent had poverty rates of 20 percent or more (HUD, 1999).

⁵Jargowsky, 1997, p. 30. Some researchers, including Jargowsky, define “high-poverty” neighborhoods or census tracts as those in which at least 40 percent of the population are poor. Others, such as Wilson, 1996, and Turner, 1998, set this threshold at 30 percent.

⁶Jargowsky, 1997, p. 39.

⁷Dickens, 1999, p. 382.

⁸See, for example, Wilson, 1996; Jargowsky, 1997; Dickens, 1999; Levy, 1998.

⁹See Brooks-Gunn, Duncan, and Aber, 1997 and Turner, 1998, for reviews of this literature.

writing a convincing letter of recommendation, “putting in a good word” with an employer, or otherwise interceding on their behalf.¹⁰

Compounding these problems, inner-city residents may also be among the people most deeply affected by the recent sea change in U.S. federal policies for the poor, especially time limits on welfare and other restrictions on access to safety-net benefits. These changes were enacted under the 1996 federal legislation that replaced the U.S. entitlement-based cash welfare system, Aid to Families with Dependent Children (AFDC), with its successor program, Temporary Assistance for Needy Families (TANF).

Extent of the Problem in Public Housing

The problems plaguing inner-city communities are particularly acute in many U.S. public housing developments (estates), which themselves rank among the most economically deprived neighborhoods in the country and are often part of larger neighborhoods with high rates of joblessness and poverty. In fact, around the time when Jobs-Plus was being launched, almost 54 percent of the United States’ 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.¹¹

The population living in public housing has become substantially poorer in recent decades owing to the changing mission of public housing in the United States. Since its inception during the Great Depression, this strand of the nation’s social safety net has evolved from offering transitional shelter for unemployed workers to providing permanent housing for chronically nonemployed and impoverished people. Today, families with working members make up a minority of residents, especially in large inner-city housing developments. Nationally, only about one-third of public housing families with children report wages as their primary source of income, whereas public assistance — including AFDC/TANF payments, state-provided General Assistance (GA), and Supplemental Security Income (SSI) — is the primary source of income for almost 50 percent of residents.¹²

In some cities, public housing residents appear to be among the hardest low-income persons to employ.¹³ Many of them have a poor education and few job skills, meager work-relevant credentials, and an array of personal problems or situations that make it difficult for them to work. Furthermore, although empirical evidence is limited, it is widely believed that the mere circumstance of living in public housing directly impedes work — because of the stigma it casts in the eyes of many employers, the physical

¹⁰Briggs, 1997 and 1998, draws the useful distinction between two dimensions of social capital: “social leverage,” which is about access to information and influence that can help a person get ahead, and “social support,” which can help a person cope with difficult situations — for example, by providing emotional support or a small loan in an emergency.

¹¹Newman and Schnare, 1997.

¹²U.S. Department of Housing and Urban Development, 1998. 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.

¹³Riccio and Orenstein, 2001.

or social separation of residents from parts of the city or region where jobs are more abundant, and the absence of a social environment that promotes and rewards work. In addition, public housing rent rules, under which rent increases as earnings rise, have long been thought to discourage work.

Increasing residents' employment may be critical not only for helping them make progress toward self-sufficiency, but also for ensuring the future viability of public housing as a source of decent, affordable shelter for low-income families. Some observers fear that, over the long term, time limits on welfare benefits that have been imposed by welfare reform policies in the U.S. will leave many residents with less income with which to pay their rent, and that federal budget problems may constrain federal operating subsidies to local public housing authorities (PHAs), making it harder for those authorities to fill the gap left by declining rent revenues. The resulting financial strain could foster a decline in the quality of housing services and living conditions, and perhaps even threaten PHAs' very solvency.¹⁴

Jobs-Plus: A Response to the Problem

Place-based economic self-sufficiency initiatives are an increasingly popular approach for confronting geographically concentrated joblessness and poverty.¹⁵ Jobs-Plus represents one such initiative, targeted toward a group of "low-work/high welfare" public housing developments. To date, such initiatives—inside or outside of public housing—have been modest in scale and scope. Hence, they have not moved large numbers of residents into steady employment.¹⁶ In addition, little has been learned about the effectiveness of these initiatives because the evaluation designs used to study them have not been able to produce convincing estimates of their impacts.¹⁷ Jobs-Plus was launched to help fill this information gap. Its scale, scope and intensity were geared toward producing large impacts the employment, earnings and welfare receipt of public housing residents (with positive "spillover" effects on various quality-of-life outcomes for families and their housing development communities),¹⁸ and its innovative evaluation design was geared toward producing valid and reliable estimates of those impacts.¹⁹

THEORY AND DESIGN OF THE INTERVENTION

As the planners of Jobs-Plus set out to craft a new vision for combating high rates of joblessness and poverty in public housing, they sought to build upon lessons learned from

¹⁴ See, for example, Naparstek, Dooley, and Smith, 1997. However, the U.S. General Accounting Office (1998) reports that the effects of welfare reform on the need for additional operating subsidies for HUD's housing subsidy programs are extremely difficult to forecast and existing empirical estimates vary widely.

¹⁵ Aspen Institute, 1997.

¹⁶ Riccio, 1999a and Newman, 1999.

¹⁷ Hollister and Hill, 1995.

¹⁸ Riccio, 1999a.

¹⁹ Bloom, 1996; Riccio, 1998.

past carefully researched welfare-to-work and other employment programs for low-income populations. In addition, they tried to apply key principles from the growing number of comprehensive community initiatives being launched to improve the quality of life in poor urban neighborhoods. And like all community initiatives, Jobs-Plus hopes to achieve broad improvements in the quality of residents' lives. It differs from the more typical approach, however, in that instead of attempting to achieve a variety of community change goals simultaneously, it focuses on a single goal: improving employment outcomes. This is the driving force around which all program elements are organized. It is hypothesized (drawing on the work of Wilson and others) that by dramatically increasing employment, other improvements in residents' quality of life will follow, such as reductions in poverty and material hardship, crime, substance abuse, and social isolation; increased general satisfaction with living in the community; and improved outcomes for children.

Drawing on Lessons from Past Employment Programs

At the time Jobs-Plus was being designed, employment programs usually included several core features. Typical programs offered job search assistance (that is, instruction and guidance in how to look for work, apply for jobs, and conduct oneself in job interviews); classroom-based education and training; and, to some extent, unpaid work experience or on-the-job training. Case management and subsidies for childcare and transportation to help recipients participate in programs were also common. In addition, most programs operating within the welfare system included participation mandates under which recipients faced possible reductions in their welfare grants if they failed to participate without "good cause."

Careful evaluations found that many such programs increased recipients' earnings, reduced their welfare receipt, and more than paid for themselves. Mandatory welfare-to-work programs offering a mix of job search assistance, education, and training, with a clear and pervasive focus on relatively quick employment, were especially effective. But while their gains were impressive, even the best-performing programs left substantial numbers of recipients on the welfare rolls and did not greatly reduce the problem of high job turnover or the difficulty of moving from low-wage jobs to better-paying jobs.²⁰

A number of subsequent initiatives adopted a broader vision of what it takes to help welfare recipients succeed in the labor market. Recognizing that leaving welfare for work at a low-paying job would not necessarily make recipients better off financially, most states in the U.S., as part of their TANF welfare reforms, have changed the way they calculate welfare grants in order to "make work pay." Specifically, they allow more of a recipient's earnings to be "disregarded" when the amount of the welfare grant is calculated. This means that more recipients are able to continue to receive welfare while working, and thus come out ahead financially by choosing to work. As its designers laid out Jobs-Plus, emerging results from a test in Minnesota of a program that combined such incentives with participation mandates and employment services looked promising, espe-

²⁰See, for example, Bloom et al., 1993; Bloom, 1997; Hamilton et al., 1997; Scrivener et al., 1998; Riccio, Friedlander, and Freedman, 1994.

cially for a subgroup of urban welfare recipients who live in subsidized housing. At 18 months, employment and earnings were higher and poverty rates lower for the program group in comparison to a randomly selected control group.²¹ Other tests of interventions that incorporated financial incentives to “make work pay” were also underway in Canada and Milwaukee, Wisconsin.²² These and other new strategies and their early evaluation results encouraged the designers of Jobs-Plus to incorporate a financial work incentives component into the Jobs-Plus model. But, as discussed below, the Jobs-Plus model goes even further.

Drawing on Community-Building Principles

Conceiving of Jobs-Plus as a place-based intervention with the goal not only of changing individuals but also of transforming the communities in which they live, the demonstration’s designers looked for further guidance to the efforts of a growing number of community change initiatives. The last several decades have seen the rise of numerous community efforts to revitalize poor urban neighborhoods and improve their residents’ quality of life. The earliest examples launched in the late 1980s by the Annie E. Casey Foundation (New Futures), Ford Foundation (Neighborhood and Family Initiative), and The Rockefeller Foundation (Community Planning and Action Program) helped inspire the emergence of an estimated 50 foundation-funded projects that have come to be known as “comprehensive community initiatives.”²³ “These initiatives,” one observer notes, “were different from past efforts in rejecting the notion that discrete ‘programs’ were the answer to urban poverty, in favor of a longer-term approach that builds community institutions, social networks, and residents’ self-reliance.”²⁴ Although their goals and tactics differ in the details, these initiatives tend to share a common set of “community-building” principles, which stress local control; collaborative decision making; resident empowerment; building on residents’ and communities’ existing physical, economic, and social assets; and strengthening the capacity of residents and local institutions to promote and sustain positive changes in their communities.²⁵

The community-building focus of these projects drew inspiration from a growing body of research stressing the importance of “social capital” in the life of a community and for the well-being and economic advancement of the people living there. Unlike

²¹Miller et al., 1997; Miller, 1998. For longer-term results from this study, see Knox, Miller, and Genetian, 2000.

²²In Wisconsin, the New Hope Program operated outside the existing public assistance system and was tested on a demonstration basis in two areas of Milwaukee. It included an earnings supplement, childcare subsidies, and affordable health insurance for eligible low-income people taking full-time jobs, and access to a temporary subsidized job for those who could not find full-time work in the unsubsidized labor market. An evaluation of the program found that it had positive effects on the employment, earnings, and income of people who were not working full time when they entered the program, and some positive effects on participants’ children, particularly boys (for example, improved behavior in school and higher educational and occupational expectations; see Bos et al., 1999). For a description and final results of the Canadian experiment, see Michalopoulos et al., 2002.

²³Aspen Institute, 1997; Walsh, 1997.

²⁴Walsh, 1997, p. viii.

²⁵Aspen Institute, 1997; Kingsley, McNeely, and Gibson, 1997; Walsh, 1997.

physical capital (such as factories, equipment, and commercial space) and human capital (such as job skills), social capital “inheres in the structure of relations between actors and among actors.”²⁶ Particularly important from a community perspective are aspects of social capital such as residents’ engagement in formal and informal neighborhood organizations (like churches, sports leagues, and parent-teacher associations), their personal friendship networks within and beyond the neighborhood, and relationships among larger community institutions (e.g., local businesses, schools, and the police).

Robert Putnam popularized the concept of social capital with one study that drew a link between the level of civic engagement and the success of regional government and economic development in Italy, and another study documenting the decline of civic engagement in the United States.²⁷ Other community studies in the United States have found statistical relationships between the levels of certain aspects of social capital and neighborhood outcomes such as crime rates and neighborhood stability.²⁸ And a number of studies highlight the possible link between social networks in poorer communities (for example, where residents have fewer “connections” to people who can help them get jobs) and the lower employment rates and lower-paying jobs among people living there.²⁹

Aware of the potentially powerful role that social networks might play in promoting—or thwarting—economic opportunities for residents of public housing, the Jobs-Plus designers added a third major component, which they called “community support for work.” Although they offered no blueprint specifying what forms this feature of Jobs-Plus should take, they did envision that, among other things, it would include involving the residents themselves in becoming sources of work promotion, encouragement, information, advice, and support to each other. In other words, Jobs-Plus would rely not just on professional caseworkers “doing things” to or for residents; it would also involve neighbors helping neighbors in ways that might improve their employment outcomes.

The planners of Jobs-Plus also saw value in the emphasis that community-building initiatives place on enlisting and empowering community stakeholders in designing, funding, and operating the project. The principles of local collaboration, including resident involvement, call for key stakeholders to share the decisionmaking authority that controls the direction of the initiative, and for residents to play a central role, given their special knowledge of their own communities. But residents must work collaboratively with institutional stakeholders (such as social service agencies, schools, community-based organizations, banks, businesses, hospitals, churches, the mayor’s office, and public housing authorities) that control resources and broader political influence affecting what can be accomplished. More generally, the joint efforts of a variety of institutions and systems, this view holds, can be much more effective than individual systems work-

²⁶Coleman, 1988, p. S98.

²⁷Putnam, 1995.

²⁸See, for example, Sampson, Raudenbush, and Earls, 1997; Tempkin and Rohe, 1998.

²⁹Dickens, 1999, p. 406, comments that “recent studies suggest that about half of all jobs and a larger fraction of good jobs are found through connections,” and that “persons displaced into unemployment represent a double burden. They are no longer a source of information to the community about new jobs. And they are an additional burden to the network providing job referrals. . . . The net effect is that the escape from unemployment takes longer.”

ing independently, and local funding may contribute to a sense of local ownership necessary to sustain such interventions over a long period of time, if they prove successful.

Such collaboration, which has been a key feature of some past urban initiatives sponsored by the U.S. government (for example, the Community Action Program and Model Cities), appears to be enjoying a new prominence. It figures in the U.S. federal government's HOPE VI program, which funds the replacement or reconstruction of deteriorating public housing developments, and the federal Empowerment Zone/Enterprise Communities program, which funds economic revitalization efforts in distressed communities. In each of these initiatives, residents and community groups are to be fully engaged with other community stakeholders in determining what gets done and how it gets done, and the approaches are to reflect more comprehensive visions for sustained community development, not simply housing rehabilitation or economic development.³⁰

The Jobs-Plus Intervention

Based on these lessons from past research and principles of community building, Jobs-Plus was planned to be an unusually comprehensive and intensive community-focused employment intervention.

Its three program components

As indicated in the previous section, the program's designers conceived of a broad, three-component intervention. One component focused on employment-related activities and support services such as instruction in job search skills, education and training, and assistance with childcare and transportation. Some of these services could be offered on site at the public housing developments, but the great diversity in residents' job readiness and service needs also required access to broader networks of existing services. The second main program component involved financial incentives to "make work pay." These comprised mainly new public housing rent rules that reduced the extent to which earnings gains would be offset by rent increases. The program's third component, called community support for work, involved strengthening residents' work-supporting social capital through means such as work-related information-sharing, peer support, and mutual aid among residents.

Its saturation approach

Jobs-Plus is also distinctive because of its attempt to implement all program components at saturation levels. That is, it was to be targeted toward *all* working-age residents living in public housing developments selected to participate in the demonstration. Thus, at the very least, all such residents are to be exposed to new work-promoting "messages" from program staff and neighbors. Furthermore, the families who participate can benefit from the new financial incentives and take advantage of a diverse array of services and supports.

³⁰Kingsley et al., 1997; Naparstek, Dooley, and Smith, 1997.

Providing the components of Jobs-Plus at saturation levels is fundamental to the program's theory of change — the vision of how it is expected to produce unusually large impacts on employment and earnings. According to this theory, targeting the intervention toward the entire working-age population of a public housing development will produce a critical mass of employed residents (reaching a “tipping point”)³¹ whose experiences will generate momentum for change across the development. As these vanguard workers grow in number, their visibility and role-model influence will be enhanced. Their own success will signal to others the feasibility and benefits of working, elevate and strengthen social norms that encourage work, foster the growth of work-supporting social networks, and, ultimately, contribute to still more residents getting and keeping jobs.

Its collaborative process

From the outset, the demonstration's planners decided not to attempt to make detailed design choices centrally. Instead, they chose to leave these decisions to local collaboratives to be formed for this purpose. By requiring that each participating city tap a reservoir of local knowledge, technical expertise, and resources, the planners hoped that what emerged would stand a much greater chance of success than if any single local partner were to design and operate the program alone, or if it were to be designed centrally by the national demonstration team.

Each local collaborative was expected to include a broad group of actors, but four partners were considered to be absolutely essential: 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. Furthermore, 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.

³¹Gladwell, 2000.

IMPLEMENTING THE INTERVENTION

To implement Jobs-Plus required recruiting and choosing a group of eligible, capable, and willing sites (cities), developing and maintaining a collaborative organization at each site, and building each of the three local program components.

MDRC and the project's core funders—the U.S. Department of Housing and Urban Development (HUD) and The Rockefeller Foundation—chose the sites from among a pool of interested and eligible cities. MDRC also deployed special “site representatives” and other experts to provide ongoing operations-related technical assistance to each collaborative to help it plan and implement the specific features of its Jobs-Plus program.

Building local collaboratives and implementing new programs from the ground up are complicated, time-intensive enterprises, and the Jobs-Plus sites' experiences were no exception. It took several years—much longer than had been hoped—for the program to evolve into a mature intervention that reflected the designers' original vision. This long gestation period resulted in part from the slowness of the collaborative decisionmaking process; the challenges of meeting funding, staffing and space demands; and the challenges of designing and integrating all the elements of the complex program model.

Recruiting and Selecting Sites

The planners of Jobs-Plus did not attempt to recruit cities and local housing authorities that, as a group, were nationally representative. Instead, they recruited 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.

Eligibility criteria

Jobs-Plus sites were chosen through a national competition. 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.³² In addition, 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 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.³³ Across the continental United States, 442 housing developments managed by 53 local housing authorities met these criteria.³⁴

³²A saturation strategy targeting all working-age residents would be considerably easier to implement in much smaller settings, but would be less valuable from a policy perspective.

³³The sample-size needs of the demonstration's evaluation design were another consideration.

³⁴This estimate is based on MDRC calculations using 1993 data from HUD's Information Services Division of Public and Indian Housing.

The quality of local PHA management was also important. Because Jobs-Plus was a complex and untried intervention, even the most effective housing authorities would be challenged by it. Thus, an effort was made to screen out PHAs that were having difficulty managing basic housing services.

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 the welfare and job training systems made their commitment essential. Cities also had to show a willingness to include residents as full partners, and existing resident organizations had to have a reasonable capacity to play that role.

Finally, the local partners had to be willing and able to meet the demands of a rigorous research design. In particular, the housing authority had to have at least two—preferably three or more—developments that would qualify for Jobs-Plus, and (as discussed later) MDRC had to be allowed to determine randomly which one of these would be selected to operate the program. One or two of the other developments would become part of a comparison group where research would be conducted but Jobs-Plus would not be operated.

Candidate cities

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 being sought. Attesting to the importance that housing authorities and other city agencies ascribed to the project, positive responses were received from 41 cities.

After several rounds of information-gathering, in-depth site assessments, and internal reviews, The Rockefeller Foundation, HUD, and MDRC chose 15 cities by August 1996 to begin several months of preliminary program planning. During that period, these semifinalists received technical assistance from MDRC and other groups, in anticipation of submitting a formal application for the demonstration.³⁵ Of the 15 semi-finalists, six chose not to continue or were encouraged not to do so.

Jobs-Plus developments

In March 1997, seven cities—Baltimore, Maryland; Chattanooga, Tennessee; Cleveland, Ohio; Dayton, Ohio; Los Angeles, California; St. Paul, Minnesota; and Seattle, Washington—were selected to participate in the demonstration. At that point, the

³⁵MDRC staff and consultants visited each of these 15 cities and also sponsored a cross-site conference attended by key collaborative partners from each city, offering workshops and training sessions to help them think boldly and creatively about their initial program designs. After that conference, the sites were required to submit detailed, written applications in which they described their collaboratives, gave evidence of local funding and resource commitments, and described their early vision of a Jobs-Plus program.

Jobs-Plus and comparison developments were selected randomly from the pool of candidate developments for each city, and the main demonstration planning stage began.

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 team. In addition, Seattle subsequently left the full demonstration because its housing authority received a federal HOPE VI grant to fund major renovations that will displace many residents of its Jobs-Plus development. Seattle continues to run its Jobs-Plus program, but this program is now being evaluated separately from the program in other sites (although there continue to be many points of overlap). In sum, the full Jobs-Plus research demonstration is operating in five of its seven original cities. In four of these cities the program is operating in one public housing development and in the fifth city, Los Angeles, it is operating in two housing developments.

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

Census data from 1990 indicate that the areas in which the Jobs-Plus developments are located are similar to those featured in the literature on high-poverty communities. As shown in Table 1, these are primarily census tracts populated by people of color. They are also tracts in which a high proportion of households are headed by single parents, many are living in poverty, and large numbers of adults do not have a high school diploma. Five of the seven developments are located in census tracts with poverty rates ranging from 49 to 74 percent, which is well above the 30 or 40 percent threshold commonly used to designate "high-poverty" areas.

Table 2 briefly describes the types of households that were living in the Jobs-Plus developments the sites were selected. As can be seen, they mirror the demographic composition of the neighborhoods in which they are located. In addition, they comprise mainly female-headed households, with one adult member, plus several children. Perhaps most striking, however, is the very low percentages (15 percent to 25 percent) of households receiving income from wages and the very high percentages (69 percent to 93 percent) receiving income from welfare (according to local PHA records).

Table 1

**Selected 1990 Characteristics of the Census Tracts
in Which the Jobs-Plus Housing Developments Are Located**

| Characteristic | Baltimore | Chattanooga | Dayton | Los Angeles | | St. Paul | Seattle |
|------------------------------------|------------------|----------------------------|--------------------------|--------------------|--------------------------|-------------------|------------------|
| | Gilmor Homes | Harriet Tubman Homes | DeSoto Bass Courts | Imperial Courts | William Mead Homes | Mt. Airy Homes | Rainier Vista |
| Race/Ethnicity (%) | | | | | | | |
| Black, non-Hisp. | 98 | 97 | 97 | 62 | 34 | 10 | 19 |
| White, non-Hisp. | 0 | 3 | 1 | 1 | 18 | 17 | 25 |
| Hispanic | 1 | 0 | 1 | 37 | 42 | 3 | 4 |
| Asian | 0 | 0 | 2 | 0 | 5 | 69 | 50 |
| Single-parent households (%) | 43 | 62 | 52 | 58 | 37 | 36 | 21 |
| Adult high school graduates (%) | 53 | 49 | 58 | 37 | 59 | 34 | 71 |
| Household poverty rate (%) | 24 | 58 | 52 | 59 | 49 | 74 | 20 |
| Unemployment rate (%) | 18 | 19 | 26 | 27 | 10 | 26 | 6 |

SOURCE: Tabulations for MDRC by the Center for Urban Research of the City University of New York, using the Atlas Select CD, a collection of 1990 census data.

NOTES: The sample in each city includes residents of the census tract in which the Jobs-Plus development is located. Distributions may not total 100 percent because of rounding. Before rounding, the zero percentages ranged from 0.1 to 0.4 percent. Adult high school graduate rates are for persons age 25 or older.

Table 2

**Selected Characteristics of Household Heads and Households
in the Jobs-Plus Housing Developments
When the Sites Were Selected**

| Characteristic | Baltimore | Chattanooga | Dayton | Los Angeles | | St. Paul | Seattle |
|-------------------------------------|------------------|----------------------------|--------------------------|--------------------|--------------------------|-------------------|------------------|
| | Gilmor Homes | Harriet Tubman Homes | DeSoto Bass Courts | Imperial Courts | William Mead Homes | Mt. Airy Homes | Rainier Vista |
| <u>Household Heads</u> | | | | | | | |
| Race/Ethnicity (%) ^a | | | | | | | |
| Black, non-Hisp. | 99 | 94 | 98 | 78 | 6 | 24 | 42 |
| White, non-Hisp. | 0 | 3 | 1 | 2 | 1 | 5 | 12 |
| Hispanic | 0 | 3 | 0 | 20 | 80 | 3 | 0 |
| Asian | 0 | 0 | 0 | 0 | 13 | 65 | 43 |
| Female (%) | 79 | 85 | 88 | 89 | 60 | 65 | 74 |
| Elderly (%) ^b | 16 | 12 | 8 | 8 | 15 | 8 | 16 |
| Disabled (%) | 30 | 27 | 22 | 16 | 17 | 27 | 31 |
| <u>Households</u> | | | | | | | |
| Adults (%) | | | | | | | |
| One | 83 | 89 | 89 | 71 | 44 | 46 | 63 |
| Two or more | 17 | 11 | 11 | 29 | 56 | 54 | 37 |
| Children (%) | | | | | | | |
| None | 56 | 35 | 32 | 23 | 34 | 10 | 34 |
| One | 22 | 22 | 29 | 25 | 20 | 13 | 29 |
| Two | 14 | 23 | 22 | 25 | 21 | 17 | 18 |
| Three or more | 8 | 20 | 17 | 27 | 24 | 59 | 18 |
| Any income in past year from (%) | | | | | | | |
| Wages | 25 | 20 | 19 | 15 | 42 | 16 | 20 |
| AFDC | 46 | 73 | 56 | 70 | 46 | na ^d | 52 |
| Welfare ^c | 85 | 90 | 82 | 93 | 75 | 87 | 85 |

SOURCES: Findings for the characteristics of household heads and the composition of households were obtained from MDRC calculations based on data from tenant rosters provided by housing authorities in October 1997. Findings for household income sources were obtained from housing authority data reported to MDRC in 1996 as part of their Jobs-Plus application.

NOTES: Distributions may not total 100 percent because of rounding.

^aDistribution may not total 100 because other groups are not reported.

^bPersons 62 years of age or older.

^cIncludes Aid to Families with Dependent Children (AFDC), state General Assistance (GA) payments, and Supplemental Security Income (SSI).

^dInformation not available.

Launching and Supporting the Local Collaboratives

All sites included the four mandated Jobs-Plus partners in their collaboratives: the local public housing authority, the welfare department, the workforce development agency, and public housing residents.³⁶ They also included other local actors such as community foundations, nonprofit social service and employment and training providers, substance abuse treatment agencies, childcare agencies, and transportation agencies. Although selection of the lead partner was left to each local collaborative, all sites chose their housing authority. The degree to which the housing authority has been the “driving force” behind the initiative has varied across sites, however.

In each site, some of these partners had worked together before, but rarely, if ever, had they all joined forces in pursuit of such an ambitious employment goal. Thus, how well the partnerships would function was uncertain. As it turned out, collaboration for Jobs-Plus has been a long and bumpy journey, with many challenges and setbacks. Early on, some partners left the collaboratives, seeing no concrete role for their organizations. Others continued but expressed frustration at the slow pace of progress. Moreover, as a relatively small demonstration project, Jobs-Plus has had difficulty competing in some cities for the attention of senior agency officials who also have to contend with other local policy and administrative priorities.

These problems (among others) contributed to the slow implementation of Jobs-Plus. Indeed, it took the collaboratives until the year 2000 or later to get elements of all three program components in place—several years after the sites were selected for the demonstration.

Despite these difficulties, the collaboratives persevered and made important (if uneven) progress in jointly funding and shaping the Jobs-Plus program and in coordinating services across agencies. The partners’ enduring commitment to this initiative can be traced largely to their converging interests in helping to increase employment among low-income people—many of whom live in public housing—particularly in the wake of welfare reform, which ended the entitlement to cash assistance.

Collective decisionmaking

The collaboratives initially structured themselves as formal governance bodies for making authoritative decisions over Jobs-Plus. In practice, the degree to which this occurred depended on the local housing authority’s willingness to share decisionmaking, the other partners’ desire to play a governing role, and the project director’s commitment to shared decisionmaking. Particularly during the program’s design phase, formal governance was important in giving “low-power” stakeholders like the residents and community-based organizations an authoritative voice alongside large public agencies in developing key aspects of the program. As the emphasis shifted from design to implementation and ongoing development issues, strategic and operational decisions for Jobs-Plus increasingly shifted from the collaborative to the project director and staff in each site.

³⁶This section draws heavily on Kato and Riccio, 2001, which provides a detailed analysis of the process of collaboration in Jobs-Plus and offers guidance on this topic for other initiatives.

The extent to which the partners now play a formal governance role varies across the sites. But even where this role has been curtailed, the partners in all sites have continued to exert influence over Jobs-Plus in other ways, such as by providing ideas, expertise, and strategic advice through collaborative meetings that have come to be used as opportunities for interagency networking and information-sharing; through staff contributed by partner agencies to Jobs-Plus; and through informal interactions with the project director.

Involving residents as partners

Residents were much more than “token” partners, but ensuring that they were involved in productive ways was a complex effort. Resident leaders had a particularly important role in identifying the service needs of their community and proposing useful service approaches that were not obvious to professional staff operating under agency views of “what can be done.” Such leaders’ active support was critical in fostering residents’ trust and participation in the program. Involving residents effectively, however, challenged the collaboratives to overcome considerable social and political obstacles. The barriers that residents faced to their broad, productive engagement varied across sites and included such factors as the exclusive professional culture of the agency representatives on the collaborative, entrenched resident leadership, adversarial relations with the housing authority, and the residents’ need for greater technical expertise in order to advise an employment program. Thus, while it is feasible and critical to engage residents as collaborative partners, making that happen requires the support of the institutional partners, certain skills and values on the part of the project director, and resident capacity-building efforts that develop specific leadership and management skills for performing well-defined roles in the program.

Integrating services across providers

The collaboratives in a number of sites took actions that improved the ways in which many different agencies worked together to deliver their services to residents of public housing. Although interagency service coordination for Jobs-Plus falls short of constituting a seamless, well-integrated network of services, the collaboratives helped to make changes in standard intake procedures and restructured the roles of frontline workers in key agencies to generate a more sensible division of labor among staff in jointly serving Jobs-Plus participants. The goal is to avoid placing duplicative—or contradictory—demands on residents. Joint staff training, better data-sharing, and building direct relationships among frontline staff across agencies also helped to coordinate services, construct sensible service plans, and monitor residents’ progress across services provided by a network of agencies.

Meeting the Challenges of Funding, Staffing, and Space

The long gestation period experienced by Jobs-Plus was due not only to the inevitable complications involved in building new collaborative forms of decisionmaking and designing specific local strategies for a complex intervention, but also by the need to solve fundamental problems of infrastructure facing any new program. This includes

identifying resources to fund the program, defining and filling staff positions to operate it, and arranging for space in which to locate it.

As previously mentioned, the designers of Jobs-Plus believed that the program would stand a better chance of being expanded and institutionalized after the demonstration if it were funded during the demonstration with mainstream resources that local housing, welfare, and workforce agencies controlled. It was anticipated that these collaborating agencies would be more likely to feel a sense of ownership and commitment to the program if they were investing their own resources in it. For the most part, these partners did make good on these funding commitments, and the bulk of resources to pay for Jobs-Plus services is coming from core public systems. At the same time, most of the resources represent “in-kind” rather than cash contributions. For example, a number of these agencies outstationed staff to work at the Jobs-Plus offices. The public housing authorities are also dedicating some of their existing staff to the program. Jobs-Plus also makes use of “slots” in existing programs operated by partner agencies.

It has been more difficult for sites to obtain flexible funds needed to pay for new staff positions or special services that fall outside the usual offerings of participating agencies. To help address this problem, the demonstration’s funders provided each site with \$200,000 for the period of the demonstration. In some cases, foundations and public agencies have provided additional small, flexible grants. For example, the U.S. Department of Labor has awarded small matching grants to the local workforce development agencies in each of the demonstration cities to help them help Jobs-Plus hire job developers (staff who find jobs for clients). The sites also sought and won national, competitively awarded public grants, which they are dedicating fully or in part to Jobs-Plus. In addition, HUD is providing extra dollars to cover the costs of rent reductions instituted as part of the Jobs-Plus financial incentives component.

The efforts to secure these funds partly explain why it took the sites two years or more to get a full complement of staff in place. The slow-moving hiring procedures of the housing authorities exacerbated these delays. After staff were brought on board, further time was needed to clarify their roles and program procedures.

Acquiring locations for a Jobs-Plus office at each participating development also contributed to delays in implementing the program. In some sites, creating these spaces—which would serve as on-site “employment centers” that provided a convenient place for program staff and residents to meet, and for residents to meet among themselves—involved adapting and reconfiguring space in existing community centers. In others, apartment units were remodeled into office space. Negotiating for these spaces and the resources to make them suitable for Jobs-Plus required considerable staff attention. However, it was universally accepted by the sites that, as a place-based initiative, Jobs-Plus must have a strong physical presence, which was essential to helping staff to feel like and be seen as a vital part of the community they were serving.

The Emerging Shape of the Program

Designing and implementing a new package of job search, education, training, and support services for all working-age residents in a housing development would have been challenge enough. However, adding the two other components of Jobs-Plus — financial work incentives and community supports for work — increased the challenge several-fold.

Employment-related activities and services

The sites vary considerably in the specific kinds of employment-related services they offer and in the kinds of education and training providers they utilize. However, across the sites residents have tended to want and have been given assistance by Jobs-Plus to try to find work as quickly as possible. Individualized job search guidance is a core program feature at all sites. Some sites have also provided or referred residents to group-based job clubs, which teach job-hunting and interviewing techniques. Instruction (directly or through referral to other organizations) is also offered in “soft” employment skills, such as understanding employers’ expectations and appropriate workplace behavior. In addition, sites are trying to make job listings easily available to residents, such as by providing access to computers in Jobs-Plus resource centers to help residents search for jobs posted on the Internet.

To supplement residents’ individual job-search efforts, local programs offer assistance from professional job developers that identify employers who are looking for workers in positions for which Jobs-Plus participants would be suitable. They also try to generate special employment opportunities by encouraging employers to recruit from the Jobs-Plus program when future vacancies occur.

Although Jobs-Plus encourages quick employment, it also helps residents participate in education and training activities — in ways that do not keep them out of the labor market for long. Higher priority is thus given to short-term training, and to combining work with education or training concurrently (for example, working during the day and attending classes at night or on weekends). Because this is easier to do if training is located at the Jobs-Plus development, some programs are offering part-time, on-site basic education classes outside normal business hours.

In addition, Jobs-Plus offers a broad range of support services to help residents participate in program activities as well as find and keep jobs. Most common among these services are childcare, transportation, substance abuse treatment, and domestic abuse assistance.

Financial incentives to make work pay

To encourage residents to take jobs and remain employed, Jobs-Plus includes new rent policies that limit how much residents’ rent will increase when their incomes rise. Under traditional rent policies, residents must pay 30 percent of their household’s countable income in rent, up to a maximum amount tied to the cost of operating public housing. Under Jobs-Plus, residents pay less of their overall income in rent. Depending on how many people are induced by Jobs-Plus to work, it is possible for the housing authority to lose revenues as a result of the program. Recognizing that few housing authorities

would be willing to take this risk, HUD agreed to hold them harmless for any extra costs that resulted from approved new Jobs-Plus rent policies.³⁷

Current Jobs-Plus incentive packages center primarily on two main strategies, with different sites taking different approaches: (1) flat rents, which specify a fixed rental payment regardless of earnings, and (2) reductions in the percentage of income to be paid in rent.³⁸ Residents must participate in other Jobs-Plus activities in order to qualify for these rent benefits.³⁹

Another important feature of the Jobs-Plus work incentives approach is a concerted effort by sites to educate their residents about the other financial programs for low-income working families and individuals that exist under current law (such as earnings disregards available under TANF, assistance with the cost of childcare and Medicaid that welfare recipients can continue to receive after leaving welfare, childcare disregards under public housing rent rules, and the Earned Income Tax Credit, or EITC). Each site has developed a strategy to help residents take advantage of these incentives in addition to those available through Jobs-Plus.

Community support for work

As noted earlier, the third main component of Jobs-Plus is an explicit attempt to increase “community support for work.” Because this concept is imprecise and means different things to different people, it was no surprise that sites chose to implement the other two program components first. However, as those components began to take shape, it became possible to link community support for work to them. Two basic approaches were used to do so: (1) strengthening residents’ social networks, and (2) changing institutional conditions that were creating barriers to employment.

Residents’ social networks can become sources of information about work opportunities, sources of help in understanding work incentives, and sources of encouragement to work and assistance in solving practical, personal, or interpersonal problems. Toward this end, the sites have focused on the establishment of a network of resident “community coaches.” These residents, who function as outreach workers, engage in a process of “neighbor-to-neighbor” information-sharing and support that is focused explicitly on work. This includes disseminating throughout the development information about concrete job openings and about opportunities available through the Jobs-Plus program. As a way to focus the community coaches’ efforts specifically on employment-related activities, sites have been encouraged to adopt a new job-related outreach “campaign” each

³⁷Issues arose however, between HUD and the U.S. Congressional committee that oversees its departmental budget over how to cover these costs (though not over the “hold-harmless” concept), leading to several months of negotiations and, consequently, delays in sites’ ability to implement their incentive plans. The funding problem was eventually solved, and a final agreement between Congress and HUD was reached in May 1999.

³⁸Miller and Riccio, 2002, provide a detailed description of the incentive package offered by each site.

³⁹Public housing rent reform continues to be of great interest in the U.S. For example, the federal Quality Housing and Work Responsibility Act of 1998 requires local housing authorities to introduce certain new rent policies that are more favorable for working families. Hence, the Jobs-Plus experience with rent incentives is directly relevant to housing policy more broadly.

month—for example, on promoting rent incentives, on-site employer recruitments, or information on the EITC. These campaigns have now become the centerpiece of community outreach activities. This work supplements other efforts at the developments, including community-wide events such as job fairs, health fairs, and holiday and back-to-school events that all sites continue to sponsor as a way of fostering a stronger sense of community among residents. In one site, the community coaches have also spearheaded efforts to organize basic education classes at the development, and they recruit other residents to participate in those classes and provide childcare for those who need it while the classes are in session.

In all sites, the combined efforts of Jobs-Plus staff and resident outreach workers have helped to create an environment within the participating public housing communities in which work is strongly promoted and “messages,” at least, about employment-related assistance and opportunities abound. Qualitative evidence from the evaluation’s ongoing implementation research suggests that knowledge about Jobs-Plus as a place to go to get help with one’s employment needs is widespread among the tenant population in each development—an important achievement given the neighborhood-saturation focus of the intervention.

DESIGN AND IMPLEMENTATION OF THE IMPACT EVALUATION

Given the complex, multifaceted nature of the Jobs-Plus intervention and its implementation, there is no single simple evaluation strategy capable of measuring its impacts. Thus, we are: (1) estimating program impacts from two different perspectives—that of individual public housing residents and that of the developments in which they live (people and place); (2) basing these estimates on an evaluation strategy that combines two complementary approaches—random assignment of housing developments plus a comparative interrupted time-series analysis; and (3) relying on two main sources of outcome data—surveys of housing residents’ attitudes, perceptions and experiences plus government administrative records on their employment, earnings and welfare receipt.

Measuring Impacts from Two Perspectives: People and Place

A central feature of the Jobs-Plus evaluation design is its focus on impacts from two different perspectives: (1) with respect to specific individual public housing residents (people), and (2) with respect to specific 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 focuses on a single resident cohort. From this perspective, the Jobs-Plus impact analysis will address the question: “How did the demonstration program affect the future experiences of its target individuals, whether or not they moved away?”

The housing development perspective relates to groups of different persons who were living in Jobs-Plus developments at different points in time. Thus, it focuses on a series of consecutive, partly overlapping resident cohorts. From this perspective, the Jobs-Plus impact analysis will address the question: “How did the demonstration program affect conditions in its target developments, given that different people were living there at different times?”

The distinction between these two perspectives is key to any evaluation of a place-based initiative because sample members can move into and out of its target area. For example, students can move into and out of schools that are implementing whole-school reforms; families can move into and out of communities that are implementing health education programs; and employees can move into and out of firms that are implementing worker retention programs.⁴⁰ In these ways, mobility drives a conceptual and operational wedge between people and place. For example, during 1998, when Jobs-Plus was being launched, between 13 percent and 36 percent of the working-age, nondisabled household heads moved out of its program developments.⁴¹

Randomly Assigning Housing Developments: An Approach to Measuring Average Impacts Across Sites

In the field of employment and training research, random assignment experiments are now widely regarded as the best way to estimate program impacts. In the words of one prominent researcher, this approach is “a bit like the nectar of the gods: once you’ve had a taste of the pure stuff it is hard to settle for the flawed alternatives.”⁴² However, Jobs-Plus is not a program to which individuals or households can be assigned randomly. Instead, it is a place-based initiative to which all eligible residents of participating public housing developments may be exposed and in which all eligible residents can take part if they desire.

It was possible, however, to select an approximately matched group of two or three candidate housing developments for each Jobs-Plus site, and then randomly choose (using computer-generated random numbers) the development that would launch the intervention. The remaining developments could thus serve as a comparison group. As noted earlier, 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 ethical and fair. In addition, 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.

⁴⁰See Bloom, forthcoming, and Bloom, Bos and Lee, 1999, with respect to evaluating whole-school reforms. See Murray et. al., 1994, with respect to evaluating a health education initiative. Lastly, note that MDRC is currently evaluating an employer-based worker retention program in Cleveland, Ohio, but written documentation on the project is not yet available.

⁴¹Verma, 2002a, Figure 1.

⁴²Hollister and Hill, 1995, p. 134.

Table 3 lists the Jobs-Plus and comparison developments for each site. As can be seen, four sites have a randomly selected Jobs-Plus development plus two comparison developments; one site has a randomly selected Jobs-Plus development plus one comparison development; and one site (Los Angeles) has two Jobs-Plus developments, one of which has no comparison development (the findings for this Jobs-Plus development will not be combined with those for the others).

It thus will be possible to estimate impacts for each site by comparing outcomes for its Jobs-Plus and pooled comparison groups. In addition, it will be possible to pool these impact estimates across sites by taking their average. For both types of impact estimates, random assignment of Jobs-Plus and comparison developments protects against the possibility of “stacking the deck” by consciously or inadvertently choosing Jobs-Plus developments that are more likely or less likely than others to improve their future outcomes without the intervention. Other than this protection (which is not trivial), site-specific impact estimates are nonexperimental or quasiexperimental, and thus subject to the methodological threats inherent in such designs.

Table 3
Jobs-Plus and Comparison Housing Developments, by Site

| Site | Jobs-Plus Development(s) | Comparison Development(s) |
|-------------|---------------------------------|-------------------------------------|
| Baltimore | Gilmor Homes | Perkins Courts Somerset Courts |
| Chattanooga | Harriet Tubman | College Hill Emma Wheeler |
| Dayton | DeSoto Bass | Arlington Courts Parkside Courts |
| St. Paul | Mount Airy | McDonough Roosevelt |
| Seattle | Rainier Vista | Yesler Courts |
| Los Angeles | William Mead Imperial Courts | Dana Strand None |

NOTE: Cleveland, which is no longer in the demonstration, had one randomly selected Jobs-Plus development (Woodhill Homes) plus two comparison developments (Garden Valley and Riverside Park). Imperial Courts, in Los Angeles, was chosen to implement a Jobs-Plus program, but did not have a randomly assigned comparison development.

Random assignment of housing developments can produce unbiased (internally valid) estimates of average impacts pooled across the demonstration sites. This means that the long-run expected value of the impact estimator (a theoretical property) equals the “true” average value of the impacts. At the same time, this type of random assignment of groups (often referred to as “cluster” random assignment) produces impact estimates

that have less statistical power—and, thus, greater uncertainty—than those based on individual random assignment of the same number of persons.

Although these theoretical properties are well documented,⁴³ just how much statistical power is lost when moving from individual-level to group-level random assignment is an empirical question. This loss of power depends on three factors: (1) the degree to which individual outcomes vary within versus across groups (measured by their intra-class correlation); (2) the number of groups being randomly assigned (fewer groups produce less power); and (3) the extent to which the variance of the outcome within and across groups is reduced by statistical controls for preexisting individual-level or group-level characteristics. Bloom, Bos and Lee provide a detailed empirical analysis of these conditions for the random assignment of schools and find that:

If a good measure of past individual or school performance is available, it might be possible to detect a 3- to 6-percentile improvement in average student performance with cluster assignment of 40 schools . . . (half to the program group and half to the control group) . . . and 60 students per school (2,400 students overall). This implies an effect size of roughly 0.10 to 0.20, which by most existing standards suggests adequate statistical power.⁴⁴

In addition, they find that school-level measures of past student performance are almost as effective as individual-level measures with respect to statistical power.

The Jobs-Plus impact analysis will have six program developments and ten comparison developments (including Seattle for parts of the follow-up period). This small number suggests that impact estimates based on simple or regression-adjusted outcome contrasts for the Jobs-Plus and comparison groups may have limited statistical power. On the other hand, there are many hundreds of sample members for each development and hence, the overall sample of individuals is quite large. This suggests potentially higher statistical power. Furthermore, baseline and follow-up data are available for certain outcome measures, which will make it possible to control statistically for preexisting variation within and between developments. This suggests potentially greater statistical power. One final factor, which also suggests greater statistical power, is that developments were approximately matched and blocked by city before they were randomly assigned. This eliminates city-level outcome differences from subsequent impact estimates and thereby increases statistical power.

The degree to which future outcomes will vary within and across developments (their intraclass correlation) is not yet known. As noted above, this factor has a major influence on the degree to which randomly assigning groups instead of individuals reduces the statistical power of program impact estimates. Even more importantly, given the finding of Bloom, Bos and Lee, is the extent to which individual-level and development-level baseline characteristics can reduce the unexplained (random) variation in outcomes within and across housing developments. In other words, what really counts is the “conditional” intra-class correlation after statistical controls for baseline covariates have been

⁴³Raudenbush, 1997, presents a clear exposition of these properties.

⁴⁴Bloom, Bos and Lee, 1999, p. 464.

applied. Thus, it is not yet clear just how much statistical power will exist for pooled estimates of Jobs-Plus impacts based solely on the random assignment of developments.

Comparative Interrupted Time-Series Analysis: An Approach to Measuring Site-Specific Impacts

To produce rigorous site-level estimates of Jobs-Plus impacts (and thereby further enhance corresponding pooled estimates), we are implementing a comparative interrupted time-series analysis. Interrupted time-series analysis is a quasiexperimental design that has been used successfully to evaluate programs in many fields.⁴⁵ It is based on multiple baseline observations of an outcome before a program is launched plus one or more follow-up observations after the program is launched. Our application of the approach will proceed in two steps: (1) we will measure the extent to which the follow-up outcome measure (for example, the employment rate) in a Jobs-Plus development deviates from its baseline trend; and (2) we will compare the observed deviation from trend in the Jobs-Plus development with its counterpart for the comparison group. The first step in this process addresses the question: “To what extent was there an improvement in the experiences of residents at the program development?” The second step addresses the question: “To what extent did Jobs-Plus improve these experiences?”

Estimating the Jobs-Plus deviation from trend

The simplest interrupted time-series analysis involves a single Jobs-Plus development with multiple periods of data before and after the intervention was launched. This analysis can be applied to numerous outcome measures such as employment rates, mean earnings and welfare receipt rates. Figure 1 illustrates how to use the analysis to estimate shifts in the percentage of residents employed.

With at least six years of baseline data on this measure, it is possible to fit a pre-Jobs-Plus baseline trend line. A linear trend may be adequate for many outcomes, but a curvilinear trend can be fit, under some conditions, if the curvature of the baseline pattern is pronounced. Extrapolation of the baseline trend provides the best available estimate of what the outcome would have been without any major economic or policy changes.⁴⁶

The deviation from the baseline trend in the first year after Jobs-Plus begins (line D_1 in the figure) provides an estimate of the “shift” in the outcome for that that year. Deviations from trend in subsequent years (lines D_2 through D_5) provide corresponding estimates of the shifts for these years. Estimating the shift for each follow-up year provides an easy way to describe the pattern of unpredicted change over time (whether it is con-

⁴⁵Shadish, Cook and Campbell, 2002, provide a comprehensive review of the interrupted time-series literature. Campbell and Stanley, 1966, and Cook and Campbell, 1979, are perhaps the most widely read sources about the approach. Bloom, 2002, forthcoming, describes how to use it to measure the impacts of whole-school reforms on student performance.

⁴⁶This implies that the best predictor of future behavior is long-term past behavior, which is the case for many outcomes.

stant, it decays, or it grows). One can then average these estimates to summarize them for the follow-up period.⁴⁷

For example, the hypothetical results in the bottom panel of Figure 1 indicate that there was a 3-point increase in the percentage of residents who were employed in the first year after Jobs-Plus began (i.e., year seven of the data collection period), a 7-point increase in the second year, and so on, ending with a 17-point increase in the fifth year after the program began. Hence, the outcome was about 11 percentage points higher than predicted, on average, during the following period.

The following regression model can be used to estimate the shifts in the figure:

$$Y_t = \alpha + B_0t + B_1P_t + e_t \quad (1)$$

Where:

Y_t = the value of the outcome variable in year t ,

P_t = one if year t is after Jobs-Plus began and zero otherwise,

t = the year,

e_t = a random error term,

B_0 = the slope of the baseline trend,

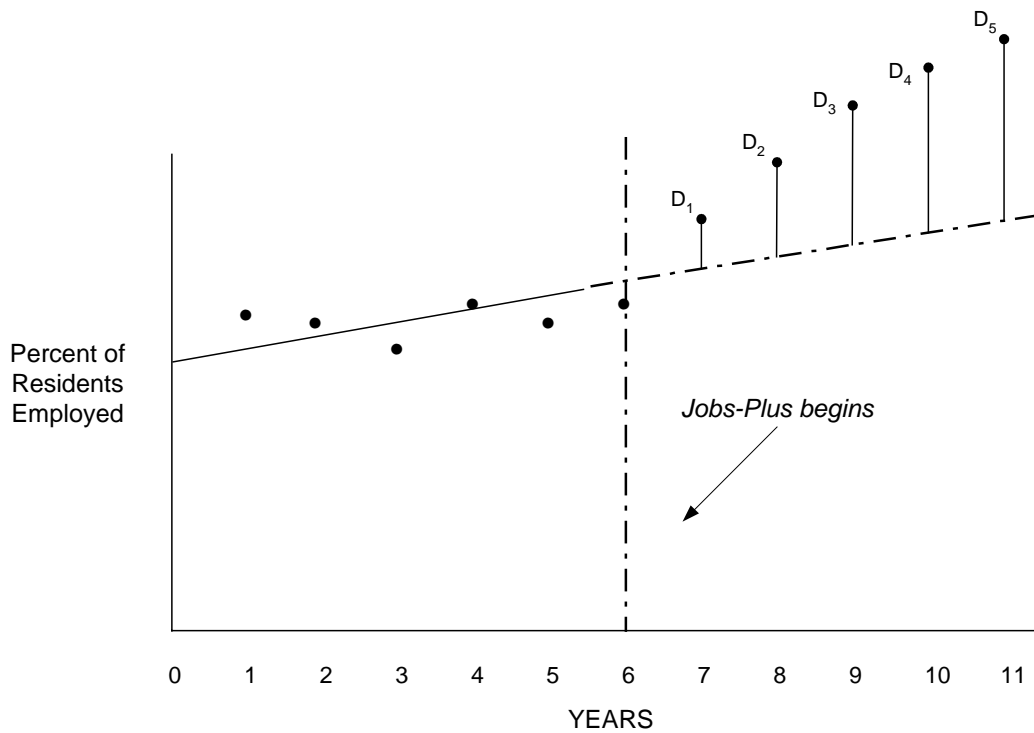
B_1 = the deviation from trend after Jobs-Plus began,

α = the intercept of the baseline trend.

If only years zero through seven are included in the analysis, the coefficient, B_1 , equals the deviation from trend in year seven (line D_1 , in the figure), and the t -statistic for this coefficient provides a test of its statistical significance. To include all five follow-up years in the analysis and allow each to have a separate deviation from trend, one can replace P with a separate dummy variable for each year. The coefficient for each dummy variable equals the deviation from trend for the year that it represents (lines D_1 through D_5), and the t -statistic for each coefficient provides a test of its statistical significance.

⁴⁷If there are at least three follow-up observations, it is possible, in theory, to estimate the impact of the program on the intercept and slope of the original trend-line. We do not take this approach, however, because it does not focus on the actual annual impacts and, hence, is more difficult to interpret.

Figure 1
 Illustration of an Interrupted Time-Series Analysis
 for a Single Jobs-Plus Development



Results During the Follow-up Period

| Year | Predicted Outcome (percent) | Actual Outcome (percent) | Deviation from Trend (percentage-points) |
|------|--------------------------------|-----------------------------|---|
| 7 | 51 | 54 | + 3 |
| 8 | 53 | 60 | + 7 |
| 9 | 56 | 68 | + 12 |
| 10 | 55 | 70 | + 15 |
| 11 | 57 | 74 | + 17 |

For an interrupted time-series analysis to be most effective there must be a stable baseline trend and a pronounced deviation from this trend. The more stable the baseline trend is (the less the points vary around the trend-line), the more confidence one can place in the forecast or extrapolation for the follow-up period. The larger and more abrupt the deviation from trend is, the easier it will be to identify.

Comparing the Jobs-Plus and comparison group deviations from trend

A logical extension of the preceding approach is to conduct a separate interrupted time-series analysis for the comparison group where Jobs-Plus was not implemented (pooling the samples of residents for the two comparison developments for each site where there are two). Figure 2 illustrates how this time-series analysis can be used to produce estimates of the impacts of Jobs-Plus (the shift in outcomes that it caused). The approach is applicable regardless of how the comparison development was chosen (with or without random assignment and/or matching).

The top panel of Figure 2 repeats the time-series analysis for the hypothetical Jobs-Plus development in Figure 1. The bottom panel presents findings during the same period for its comparison group. The interrupted time-series analysis for the comparison group yields deviations from trend in years 7, 8 and 9 equal to E_1 , E_2 and E_3 , respectively. If the comparison group and the Jobs-Plus development were chosen from the same local environment, then the comparison group's deviation from its trend provides an estimate of what the deviation from trend would have been for the Jobs-Plus development without Jobs-Plus (the counterfactual for our impact estimates). Hence, $D_t - E_t$ provides an estimate of the impact of Jobs-Plus in year t . The variance of this difference equals the sum of the variances of D_t and E_t .⁴⁸ Thus, one can readily test the statistical significance of the difference.

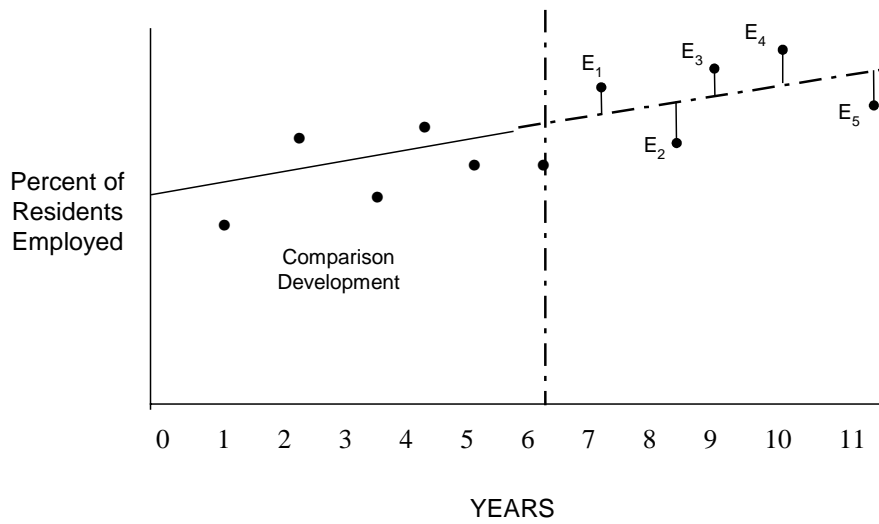
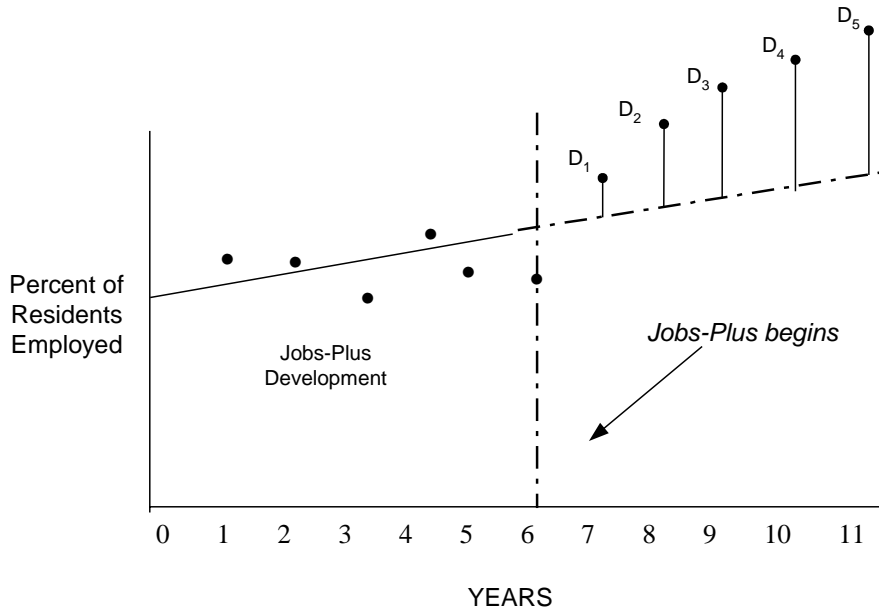
The slow implementation of Jobs-Plus described in earlier sections of this paper—particularly the fact that not all features of the program model were in place until several years after site selection—means that an immediate deviation from the baseline employment trend in the Jobs-Plus developments is unlikely. It is thus fortunate that the follow-up period for the impact evaluation will extend a full five years after program operations began. However, impacts are likely to emerge gradually over time, rather than abruptly. This will make it difficult for the interrupted time-series analysis to clearly identify them because they may not reflect pronounced deviations from the baseline trend. Nevertheless, if these impacts are experienced at all or most of the Jobs-Plus sites, pooling site-specific findings will improve our chances of accurately detecting them.

Pooling site-specific findings

Once site-specific impact estimates have been obtained using the preceding approach, we will pool them across sites by taking their mean. This will produce estimates of the average Jobs-Plus impact for the study sites. These core evaluation findings will have the combined methodological protection of the random assignment of housing developments (which produces unbiased impact estimates), and the comparative interrupted time-series analysis (which provides further protection against bias and most likely also increases statistical power).

⁴⁸This simple formulation is possible because the two developments comprise independent samples.

Figure 2
 Illustration of an Interrupted Time-Series Analysis
 for a Jobs-Plus Development and a Comparison Development
 During the Jobs-Plus Baseline Period



Data Sources

Given the focus of Jobs-Plus on resident employment, the primary outcomes for its impact analysis will be employment, earnings, and welfare receipt. For each of these outcomes, a comparative interrupted time-series analysis will be used to estimate program impacts. For this purpose, quarterly data on employment and earnings will be obtained from the administrative records of state Unemployment Insurance (UI) agencies for a baseline period of roughly six years before Jobs-Plus was launched and a follow-up period of roughly five years thereafter. These data, which are reported quarterly by employers in all states to their state unemployment insurance agency, cover well over 90 percent of all jobs in the formal labor market and have been found in past research to provide adequate information for measuring program impacts.⁴⁹ In addition, monthly data on the receipt of AFDC/TANF payments and food stamps during the same period will be obtained from the administrative records of state and local welfare agencies. This type of data has been used for many past evaluations of welfare-to-work and employment programs and is generally thought to be accurate and complete.

Local PHA records will be used to obtain a limited set of background characteristics on residents, such as age, gender, race/ethnicity, how long they have lived in their current development, whether they move from it subsequently, and whether their household is receiving welfare. This information will be used to construct selected subgroups for the impact analysis. We refer to information obtained from UI wage records, welfare payments records, and local PHA records as administrative data.

In addition to this information, a baseline survey has been conducted and a follow-up survey will be conducted in the Jobs-Plus and comparison developments. Information from the surveys includes measures of: (1) community life, (2) outcomes and activities for children, (3) residents' employment and the characteristics of their jobs, (4) family income and material well-being, (5) individual physical and mental health, (6) individual background characteristics and, (7) individual participation in education, training and employment-related activities.

The baseline survey was administered in the spring and summer of 1998 to a representative sample of household heads living in the Jobs-Plus and comparison developments. The follow-up survey will be administered in 2003 to a representative sample of household heads who live in these developments at that time. Hence, the survey data will provide a comparative before-after analysis from the housing development perspective.⁵⁰

⁴⁹Kornfeld and Bloom, 1999.

⁵⁰The original survey sampling plan had a longitudinal component that would have followed up baseline survey respondents who moved away. This component was dropped, however, because so many baseline respondents moved before Jobs-Plus began and thus before they could be meaningfully exposed to it.

PRELIMINARY ASSESSMENT OF THE IMPACT EVALUATION STRATEGY

Although the impact evaluation is still in progress and final judgments about its methodology cannot yet be made, it is possible at this time to offer a brief preliminary assessment using data from the baseline survey and UI wage records.

Evidence from the Baseline Survey

Perhaps the single most important key to the success of our future Jobs-Plus impact estimates is the initial comparability of the Jobs-Plus and comparison samples. One important source of information to assess this comparability is the baseline survey conducted at all of the housing developments in our sample. Early tabulations of these findings are quite promising, indicating that the Jobs-Plus and comparison samples are similar in many important ways.⁵¹

Table 4 illustrates this similarity for the overall pooled sample of sites. Given the focus of Jobs-Plus on promoting resident employment, the table lists comparisons in terms of employment-related baseline characteristics.

The first column in the table reports the mean value of each characteristic for the six housing developments that were randomly assigned to the Jobs-Plus program (including Seattle).⁵² Each value in the column is the mean of the corresponding means for the six Jobs-Plus developments. The second column in the table reports each characteristic for the pooled comparison group. Each value in this column is the mean of the corresponding means for the six local comparison groups.⁵³

On average, it appears that the Jobs-Plus group and comparison group are quite comparable in terms of baseline characteristics related to their likely future labor market success. The percentage of sample members that were employed full time when the baseline survey was administered is identical for the two groups (43 percent); the percentage of the two groups whose household had received Food Stamps during the previous 12 months was almost identical (67 percent versus 66 percent); and the percentage whose household had received welfare during the past 12 months was very similar (51 percent to 49 percent). In terms of education level, a key factor related to future job market success, the two groups look quite similar (40 percent versus 42 percent had a high school diploma).

⁵¹Manpower Demonstration Research Corporation, 1999, Volumes I and II.

⁵²Hence, only the randomly assigned Jobs-Plus development in Los Angeles was included.

⁵³The comparison group mean for each site with two comparison developments is the simple mean of the reported means for each comparison development.

Table 4**Selected Mean Baseline Characteristics of Heads of Household
for the Pooled Sample of Jobs-Plus and Comparison Developments**

| Characteristic | Jobs-Plus De- velopments | Comparison Developments |
|---|-------------------------------------|------------------------------------|
| Currently employed full time (30+ hours per week) (%) | | |
| Yes | 43 | 43 |
| No | 57 | 57 |
| Household received Food Stamps during past 12 months (%) | | |
| Yes | 67 | 66 |
| No | 32 | 33 |
| Household received welfare during past 12 months (%) | | |
| Yes | 51 | 49 |
| No | 49 | 51 |
| Educational attainment (%) | | |
| GED certificate | 13 | 15 |
| High school diploma | 40 | 42 |
| Neither | 48 | 43 |

SOURCE: MDRC calculations from baseline survey data for each housing development that was randomly assigned at the six sites in the Jobs-Plus sample (including Seattle).

NOTES: Distributions may not total 100 percent because of rounding.

Evidence from UI Wage Records

Baseline data from UI wage records are currently available for three Jobs-Plus sites: Baltimore, Dayton, and Los Angeles. Thus, it is possible to compare the baseline employment and earnings trends for their Jobs-Plus and comparison groups from the individual perspective and the housing development perspective. In addition, it is possible to compare the baseline trends for their corresponding pooled Jobs-Plus and comparison groups. To keep the discussion brief, we focus only on employment trends. Corresponding results for earnings (not reported) yield virtually the same results.

Baseline experience from the individual perspective

As noted earlier, measuring Jobs-Plus impacts from the individual perspective addresses the question: “How did the program affect the future experiences of a specific group of people who were living in a program development at a particular time?” This requires observing the experience of the same persons over time, regardless of where

they live. Thus, to estimate impacts on employment and earnings from the individual perspective requires: choosing a cohort of residents to track backward and forward in time; acquiring their quarterly UI wage records to do so; constructing their baseline and follow-up histories; measuring the follow-up deviation from their baseline trend; and comparing this deviation for the Jobs-Plus and comparison samples.

For our current analysis we chose a cohort of individuals who were: (1) recorded by their local housing authority as living in a Jobs-Plus or comparison development during October 1998, (2) not identified by housing authority records as being disabled, and (3) between 21 and 61 years of age in October 1998.

This 1998 cohort was chosen because Jobs-Plus began program operations (in varying degrees) at each site during the middle to latter part of the year. Disabled persons were excluded from the analysis because their employment problems are often far more extreme than those of nondisabled persons and they are not included in the main target group for Jobs-Plus. Persons over 61 years of age were excluded because they would reach retirement age soon after the follow-up period for the analysis began. Lastly, persons under 21 years of age were excluded because they were teenagers during most of the Jobs-Plus baseline period and, thus, much of their employment history is not relevant to their future labor market success.

Based on this definition, there were 349, 334, and 379 members of the 1998 cohort from the Baltimore, Dayton and Los Angeles Jobs-Plus developments, respectively. In addition, there were 539, 582, and 453 cohort members from each of their comparison groups (the pooled sample for the two comparison developments for each site).

The pattern of employment over time for the 1998 cohort is described in terms of its quarterly employment rates. These rates were computed using data from state UI wage records. Each sample member was considered employed during a quarter if his or her UI wage records indicated that he or she had received some earnings during that quarter. If no earnings were recorded for the quarter the sample member was considered not employed. A quarterly employment rate was thus computed for a group as the percentage of its members with some UI-reported earnings for the quarter.

Figure 3 presents the quarterly employment histories of the 1998 Jobs-Plus cohort and comparison cohort from Baltimore, Dayton, and Los Angeles for a baseline period that begins in the first quarter of 1992 and ends in the latter part of 1998 (the exact final quarter to be included in the baseline period for our impact analysis will vary somewhat by site).⁵⁴ Figure 4 presents corresponding findings for the pooled groups from the three sites. Several striking results emerge from the figures.

Employment rates rose dramatically for all of the groups during their baseline period. In Baltimore, these rates increased from about 20 percent to 40 percent; in Dayton they increased from about 30 percent to 60 percent; and in Los Angeles they increased from about 30 percent to 45 percent.

⁵⁴UI wage records were not available for Quarter 3 of 1993 in Dayton.

Figure 3
Quarterly Percentage Employed During the Jobs-Plus Baseline Period
for Nondisabled Adults, Ages 21-61,
from the 1998 Cohort of the Program and Comparison Developments

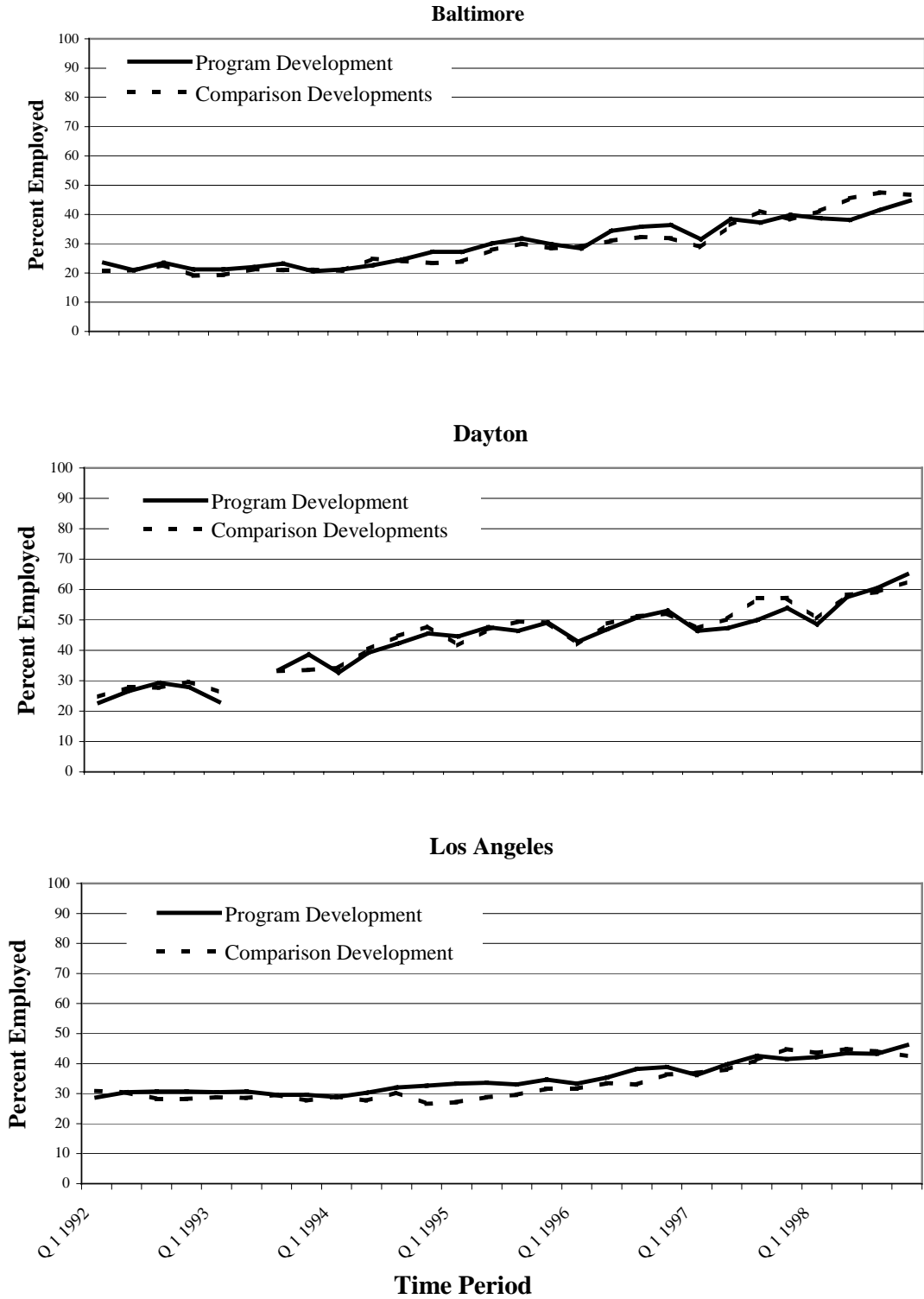
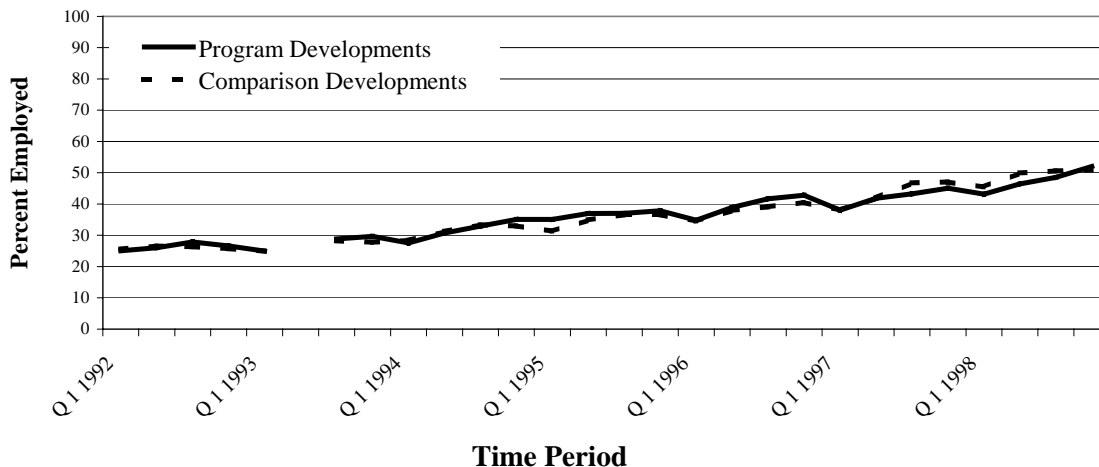


Figure 4
Quarterly Percentage Employed During the Jobs-Plus Baseline Period
for Nondisabled Adults, Ages 21-61,
from the 1998 Cohort of the Baltimore, Dayton, and Los Angeles Program
and Comparison Developments (Pooled)



One likely explanation for part of this shift is that many public housing residents—just like many other Americans—probably responded positively to the many jobs created by the strong US economy. This challenges existing negative stereotypes about public housing residents being unwilling to work.

Other pieces of the explanation may lie in the increased work incentives for persons with limited skills and experience produced by major changes in federal policy. Perhaps most important among these incentives is the Earned Income Tax Credit, which increased from a small income supplement program in the early 1990s to one providing over \$30 billion to low-income workers in 2000 (Blank and Schmidt, 2001).

Another potential explanatory factor is welfare reform, which began during the early 1990s with special state programs made possible by waivers of federal welfare regulations and culminated in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. As noted earlier, this new legislation replaced the existing federal welfare program, AFDC, with a radically different program, TANF, which contains many provisions designed to stimulate employment among welfare recipients.

A further potential work incentive for persons with limited skills and job experience was produced by legislated increases in the federal minimum wage rate from \$4.25 in 1992 to \$4.75 in October 1996 to \$5.15 in September 1997.

The Jobs-Plus and comparison groups are matched very well. For each site, the baseline histories for the Jobs-Plus group and the comparison group are very similar. In fact, they practically “sit on top of each other.” In very few quarters is there a noticeable difference between their employment rates, and in even fewer quarters is the difference statistically significant (results of these significance tests are not shown).

This finding is consistent with previous results from Bloom and Glispie, 1999, for the Cleveland Jobs-Plus site, which as noted earlier, had participated in the initial phase of the demonstration. Therefore, in all four sites studied to date, the baseline employment histories of the Jobs-Plus and comparison groups are matched very well.

Furthermore, the Jobs-Plus and comparison group match should be even tighter for analyses that pool findings across sites—the primary focus of our impact analysis. This is because pooled results benefit directly from the statistical properties of random assignment. Figure 4 presents such a pooled analysis of quarterly employment rates for the 1998 cohort from Baltimore, Dayton and Los Angeles. As can be seen, its baseline trend is even more stable than that for a single site, because of the larger sample for the pooled analysis. In addition, the baseline trends for the Jobs-Plus and comparison groups are even more similar to each other for the pooled analysis, because random differences for any single site tend to be offset by countervailing differences at other sites.

The pronounced increase in employment rates experienced by public housing residents reduced the margin for Jobs-Plus to “make a difference” in this outcome, although considerable room for improvement still remained when Jobs-Plus was launched. Because employment rates for public housing residents had been rising rapidly for some time before Jobs-Plus began, the margin for it to increase these rates had diminished appreciably. This situation was most pronounced in Dayton, where employment rates had reached 60 percent by the time Jobs-Plus program operations had gotten underway. It was less pronounced in Baltimore and Los Angeles.

Baseline experience from the housing development perspective

As noted earlier, measuring Jobs-Plus impacts from the housing development perspective addresses the question: “How did the program affect conditions in its target developments?” To answer this question requires comparing the experiences of persons who were living in the Jobs-Plus and comparison developments each quarter. Thus, to accomplish this task involves: determining who lived in each development each quarter, acquiring residents’ UI wage records, using these wage records to compute baseline and follow-up employment rates for the Jobs-Plus and comparison developments, and comparing their follow-up deviations from their baseline trends.

For each year, we define an annual resident cohort for a housing development as the persons who lived there during October. Thus, we start with knowledge of who was living in the development during the fourth calendar quarter. We did not, however, collect separate information about who lived in a development each quarter because of the high cost of doing so. Instead, we assumed that the residents known to be present during the fourth quarter of each year were also present during the immediately adjacent quarters.

Thus, for example, we defined the first annual cohort to comprise residents in October of 1992 (during quarter four) and assigned this same group to quarter three of 1992 (the immediately preceding quarter) and quarter one of 1993 (the immediate succeeding quarter). We defined the next annual cohort as residents in October 1993, and assigned this group to its immediately adjacent quarters, and so on.

Given the high rate of mobility exhibited by public housing residents, it seemed too strong to assume that the same residents who were present during the fourth quarter were also present during the second quarter of each year. Therefore, we do not present findings for the second quarter of each year. Lastly, note that, for reasons discussed earlier, we only focus on nondisabled persons who were between 21 and 61 years old (in October).

Figure 5 illustrates the baseline pattern of quarterly employment rates for the Jobs-Plus and comparison developments from each site, and Figure 6 illustrates the composite results for the pooled sites. To help distinguish this analysis from its counterpart for the individual perspective, we present it as a time-series of bar graphs instead of a line graph. The black bars in each figure represent quarterly employment rates for a Jobs-Plus development; the white bars represent corresponding findings for its pooled comparison developments.

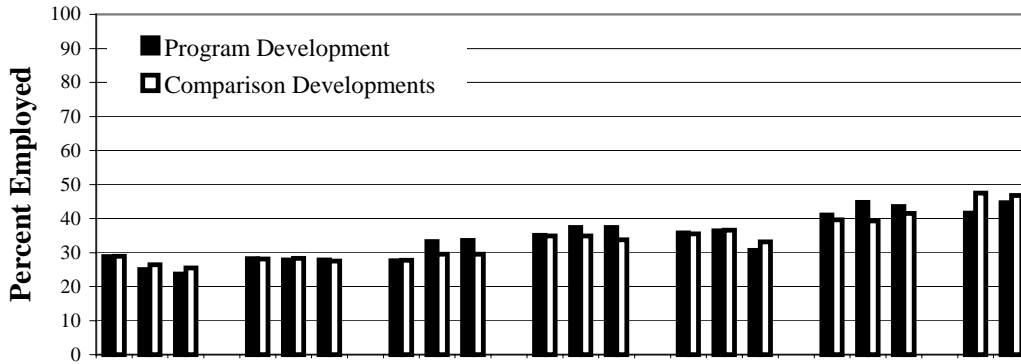
These findings indicate that employment conditions in each development changed over time in a way that was very similar to the results presented earlier for individual members of the 1998 cohort. Basically: (1) employment rates for all groups increased throughout the baseline period, (2) the baseline trends were virtually the same for the Jobs-Plus and comparison groups, especially for the pooled sites, and (3) employment rates were higher than expected when Jobs-Plus began program operations.

Thus, from the housing development perspective it appears that: (1) employment conditions in public housing developments have improved substantially in response to the strong U.S. economy and recent major changes in federal policy, (2) there is a good match between the employment conditions of the Jobs-Plus and comparison developments, and (3) the margin for Jobs-Plus to make a difference diminished somewhat over the baseline period but still remained when the program was launched.

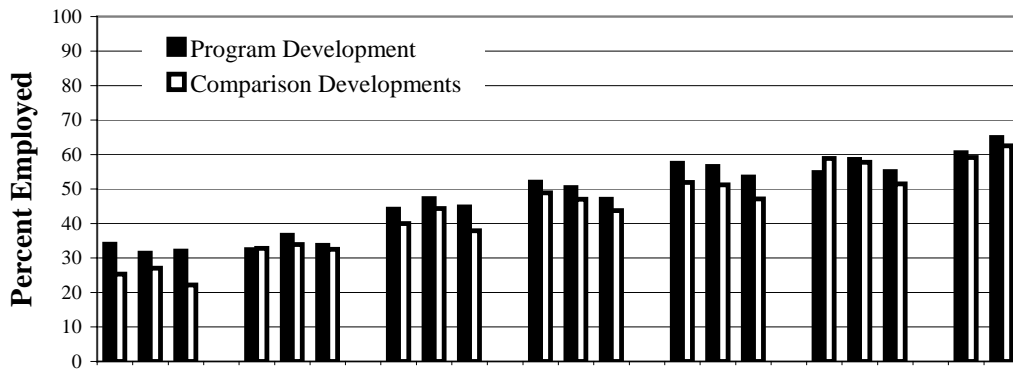
It should also be noted that the baseline employment trends evident in the administrative records data bode well for the survey analysis that will be conducted as part of the development-level impact study. As previously indicated, the survey data will permit only a “before-after” comparison of outcomes across developments, not a comparative interrupted time-series analysis, to estimate Jobs-Plus impacts on survey-based measures. However, the striking comparability of the pre-program employment trends across the program and comparison developments reinforces the conclusion that this simpler “before-after” impact analysis is likely to be unbiased.

Figure 5
Quarterly Percentage Employed During the Jobs-Plus Baseline Period
for Nondisabled Adults, Ages 21-61,
Who Were Residents (at the Time) of the
Program and Comparison Developments

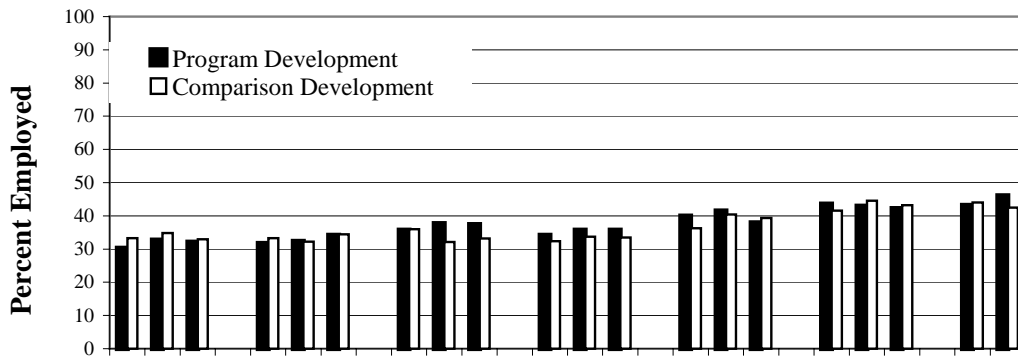
Baltimore



Dayton

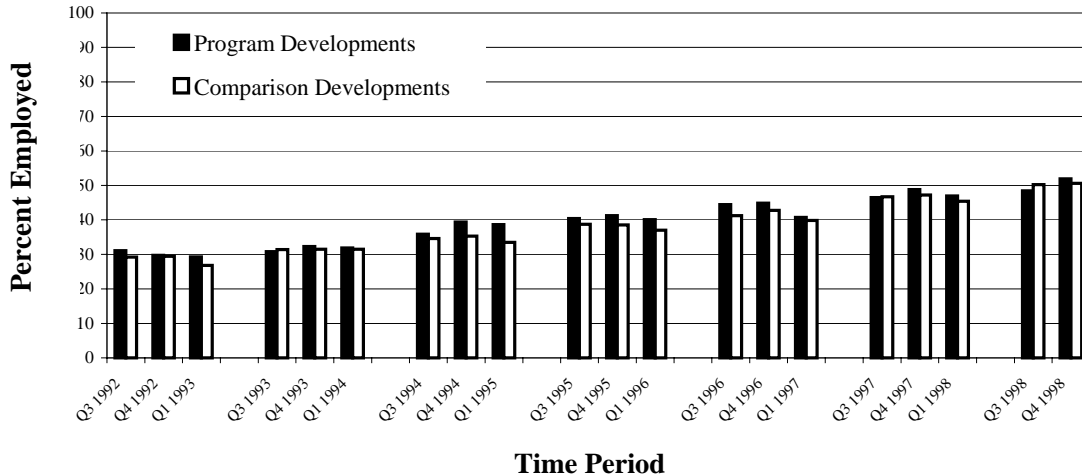


Los Angeles



Time Period

Figure 6
Quarterly Percentage Employed During the Jobs-Plus Baseline Period
for Nondisabled Adults, Ages 21-61,
Who Were Residents (at the Time)
of the Baltimore, Dayton, and Los Angeles Program and Comparison Developments (Pooled)



CONCLUDING THOUGHTS

To date, Jobs-Plus program operations have been launched in six U.S. cities (counting Seattle) and its research design has been maintained in the field for almost six years. For all sites, a comprehensive baseline survey has been conducted; quarterly UI wage records are being collected;⁵⁵ extensive field research on program implementation has been conducted; and a number of project reports and papers have been produced (see Appendix A). Over the next two years, as the project approaches its conclusion, we will conduct a follow-up survey, obtain time-series data from state administrative records on the welfare receipt of sample members, finalize the collection of UI wage records on employment and earnings for the project follow-up period, and complete our field research on program implementation. These efforts will result in a report on shorter-term impact findings (merged with implementation findings) in mid-2003 and a final project report with longer-term impact results in mid-2004.

From our experiences with Jobs-Plus we have learned a number of important lessons about using place-based random assignment to evaluate a comprehensive community initiative. In addition, our baseline findings have uncovered a puzzle that has intriguing methodological implications. We conclude this paper with a brief discussion of these issues.

⁵⁵Due to state restrictions on the release of UI wage records for individuals in Tennessee it was not possible to obtain them for the Chattanooga Jobs-Plus site. After lengthy negotiations, however, it now appears that we will soon get this information in the form of averages for small groups of roughly 10 persons each. This information will make it possible to conduct almost all of our planned analyses from these data.

Lessons Learned About Place-Based Random Assignment

From our experience using place-based random assignment to measure the impacts of Jobs-Plus we have learned that:

- ***It was possible to put such a research design into effect.*** When Jobs-Plus was being planned, it was not at all clear whether random assignment of public housing developments would be possible. However, given the widely acknowledged importance of the policy problem being addressed, there was a strong desire by many potential sites to participate in the initiative, even with its research requirements. As noted earlier, 41 of the 50 cities contacted about Jobs-Plus stated an interest in participating, and all 15 of the cities chosen to submit a project application expressed a willingness to abide by its research requirements. Thus, it was possible to conduct place-based random assignment in the seven cities chosen to launch the initiative (including Cleveland, which left the project for reasons unrelated to random assignment).
- ***It was necessary (and possible) to keep the research design in place for a number of years.*** Given the many difficulties and delays confronted when implementing Jobs-Plus (a common feature of all comprehensive community initiatives), it took a number of years for the program to materialize in full form. Thus, it was necessary to maintain the Jobs-Plus research design in the field for the past six years; and it will remain necessary to do so for another year in order to complete our evaluation.
- ***A sustained and intensive effort was required to keep the research design in place and to maintain its integrity.*** Fending off threats (often successfully and sometimes not) to the existence or integrity of the Jobs-Plus program and its research design was a full-time, long-term job that required constant vigilance and rapid response. This, in turn, required the organizational capacity and resources to keep abreast of what was happening in the field; provide the technical assistance necessary for sites to design, launch, and operate their programs within the constraints of the Jobs-Plus research design; interact frequently and effectively with local decisionmakers; and contend in real time with a wide range of anticipated and unanticipated problems.
- ***Where feasible, embedding a comparative interrupted time-series analysis within a place-based random assignment design can improve estimates of program impacts appreciably.*** These improvements can manifest themselves in at least three ways. First, adding an interrupted time-series component makes it possible to produce rigorous site-specific impact estimates, which is not possible with place-based random assignment alone. Second (and relatedly), since the time-series component improves the impact estimate for each site, it also improves the pooled impact estimate for all sites. This feature is particularly important for evaluations with a small number of sites where the strength of random assignment is limited by the small number of units randomized. Third, the time-series component makes it possible to bridge the

methodological gap between people and place. This gap, which is created by residential mobility, is a major problem for all evaluations of place-based initiatives.⁵⁶ However, by framing an interrupted time-series analysis from two different perspectives (for specific individuals over time and for specific places over time) one can obtain a rich understanding of program impacts.

An Intriguing Puzzle

In concluding our paper, it is impossible to ignore the striking, unanticipated, and currently inexplicable finding that, for each of the Jobs-Plus sites examined in the present paper (Baltimore, Dayton and Los Angeles) and for a former site examined previously (Cleveland),⁵⁷ the baseline employment and earnings trends for the Jobs-Plus and comparison groups are almost the same. This finding held both from the perspective of individual public housing residents and that of whole public housing developments. In addition, it was consistent for a long period of time—seven years. Furthermore, it reflects a period of dramatic change in the U.S. economy and in federal policies with respect to low-income persons. For all of these reasons, the matches that we observe seem too good to be true.

As a first step toward trying to explain these “matches made in heaven,” it is useful to consider factors that are *not likely* to have produced them. Of most relevance to the present discussion is that place-based random assignment is probably not responsible. This procedure had very little influence at the site level for Jobs-Plus because of the small numbers of units randomized at this level (two or three housing developments per site). In fact, given the high degree of similarity among developments at each site, it seems to make almost no difference which ones were chosen for Jobs-Plus or the comparison group and whether they were chosen with or without random assignment.

A second factor that probably was *not responsible* for the close matches we observed was the process used to construct them. This process was very simple given the limited information available and the small numbers of eligible housing developments to work with at each site. Thus, sophisticated matching procedures were neither warranted nor feasible. All that we did to choose a pool of eligible housing developments (as described earlier) was to use simple thresholds based on their size, employment rates and welfare receipt rates plus PHA judgments about their likely suitability for conducting a Jobs-Plus program. And all that we did to choose among each site’s pool of eligible developments to construct a triplet or pair for random assignment was to apply limited judgments about the comparability of their residents’ background characteristics.

While at this point it is unclear what produced the striking matches that we observed, we offer a couple of hypotheses for consideration. First, our findings may have occurred simply by chance (they merely represent good luck). If this is the case, then we

⁵⁶Mobility also creates major problems for the programs themselves, since it limits the potential exposure of their target populations.

⁵⁷Bloom and Glispie, 1999.

may begin to see different results when corresponding data for the remaining three Jobs-Plus sites—St. Paul, Chattanooga and Seattle—become available.

A second hypothesis is that our study population—able-bodied working-age adults who live in public housing—is especially homogenous within a given city. Although the labor market success of public housing residents may vary widely across cities (reflecting differences in their local economic conditions and PHA tenant selection policies), they may vary far less across developments within cities. If this is the case, we may continue to see close matches between the Jobs-Plus and comparison groups when data for our three remaining sites become available.

In closing, we would like to briefly compare the preceding Jobs-Plus implications for geographic matching (with or without place-based random assignment) with those from two MDRC methodological studies—one just completed and another just getting underway. The first study focused on welfare-to-work programs. It sought to determine (among many other things) how well welfare recipients from one set of local welfare offices in a city serve as a nonexperimental comparison group for recipients from other offices in the same city.⁵⁸ Using a wide range of statistical and econometric matching and modeling procedures, it was found that welfare recipients from one part of a city did not usually make a good comparison group for those from another part of the city. Furthermore, and more troubling, it was impossible to predict whether or when such a comparison group would or would not work. All of these findings were based on the use of random assignment experiments in all sites, which made it possible to judge how well each nonexperimental comparison group was working relative to what was known from the experimental evidence.

Findings from this study directly conflict with those from Jobs-Plus, even though the relevant populations and institutional situations from both studies share important common features. First of all, both study populations are defined narrowly in terms of receiving a particular form of public assistance (public housing for Jobs-Plus and welfare payments for welfare-to-work programs). Hence, they are arguably more homogeneous than a general population of low-income persons. Secondly, comparison groups for both studies were chosen on a geographic basis within a given city (through public housing developments for Jobs-Plus and through local welfare offices for welfare-to-work programs). These two similarities make it doubly difficult to understand why the two studies yield such divergent implications for geographically based comparison groups.

A second, more limited point of reference is a small-scale pilot study being conducted by MDRC to assess the extent to which low-income neighborhoods (of three to five census tracts each) that are matched on poverty-related factors at one point in time remain well matched subsequently.⁵⁹ This research is being conducted as part of our planning for a next generation of community studies. Its goal is to assess *empirically* the likely internal validity of nonexperimental matched neighborhood designs for measuring

⁵⁸Bloom, Michalopoulos, Hill and Lei, 2002. This study also examined the effectiveness of comparison groups constructed in many ways other than on the basis of local welfare offices in the same city.

⁵⁹Verma, 2002b. This analysis is based on data obtained for MDRC's four-city comprehensive Project on Devolution and Urban Change.

labor market impacts. Preliminary unpublished findings based on data for Cleveland suggest that at least in one city for one outcome using one neighborhood matching procedure for one time period, neighborhoods that are similar at baseline remain similar for at least four years thereafter. These findings are consistent with those for Jobs-Plus.

In conclusion, based on all of the information that we could readily bring to bear, the striking baseline comparability observed for the Jobs-Plus program groups and the comparison groups represents an intriguing puzzle that has supporting and conflicting research precedents and important implications for future evaluations of place-based initiatives.

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APPENDIX A

JOBS-PLUS PAPERS AND REPORTS

COMPLETED TO DATE (all published by MDRC unless otherwise noted)

Program Implementation Studies

- *Mobilizing Public Housing Communities for Work: Origins and Early Accomplishments of the Jobs-Plus Demonstration.* James A. Riccio. 1999.
- *Jobs-Plus Site-by-Site: An Early Look at Program Implementation.* Edited by Susan Philipson Bloom with Susan Blank. 2000.
- *Building New Partnerships for Employment.* Linda Y. Kato and James A. Riccio, with Jennifer Dodge. 2001.
- *Making Work Pay for Public Housing Residents: Financial-Incentive Designs at Six Jobs-plus Demonstration Sites.* Cynthia Miller and James A. Riccio. 2002.
- *The Special Challenges of Offering Employment Programs in Culturally Diverse Communities: The Jobs-Plus Experience in Public Housing Developments.* Linda Y. Kato. 2002.
- *The Employment Experiences of Public Housing Residents: Findings from the Jobs-Plus Baseline Survey.* John Martinez. 2002.

Policy Briefs

- *Welfare, Housing, and Employment.* Susan Blank and James A. Riccio. 2001.
- *Promoting Employment in Public Housing Communities.* Steven Bliss and James A. Riccio. 2001.
- *Making Work Pay for Public Housing Residents.* James A. Riccio and Steven Bliss. 2002.

Baseline Survey Data Books

- A set of separately bound site-by-site and cross-site booklets with tables showing frequency distributions of resident responses to most items in the baseline survey. 1999.

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APPENDIX A (continued)

COMPLETED TO DATE (continued)

Research Design Papers

- *A Research Framework for Evaluating Jobs-Plus, a Saturation and Place-Based Employment Initiative for Public Housing Residents.* 1998. James A. Riccio.
- *Building a Convincing Test of a Public Housing Employment Program Using Non-Experimental Methods: Planning for the Jobs-Plus Demonstration.* 1999. Howard Bloom.
- *The Feasibility of Using Interrupted Time-Series Analysis to Measure Jobs-Plus Impacts on Employment and Earnings: Preliminary Findings for Cleveland and Dayton.* 1999. Howard Bloom and Benjamin Glispie.

Other Publications Related to Jobs-Plus

- *Are Public Housing Residents Really Harder to Employ?* 2001. James A. Riccio and Alan Orenstein. Washington, D.C.: Fannie Mae Foundation.
- “Lessons from Welfare-to-Work Experiments and Their Implications for Housing-Based Self-Sufficiency Programs.” 1999. James A. Riccio. In *The Home Front: Implications of Welfare Reform for Housing* (Sandra Newman, ed.). Washington, D.C.: Urban Institute Press.
- “Combating Concentrated Joblessness in the Inner-City.” James A. Riccio. August 2000. Prepared for a HUD Conference, *Bridging the Divide*, December 13-14, 1999, Washington, D.C. (To be published in a forthcoming HUD volume of papers from this conference.)

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APPENDIX A

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IN PROGRESS

The Circumstances of Children Living in Public Housing Prior to the Start of Jobs-Plus (late 2002).

Staying or Leaving: A Study of Residents' Decisions to Remain in or Move Out of Jobs-Plus Public Housing Developments (late 2002).

Jobs-Plus Site-by-Site: Key Features of Six Mature Jobs-Plus Programs (late 2002).

Residents' patterns of participation in Jobs-Plus (early 2003).

Implementation and use of financial incentives (early 2003).

PLANNED

Implementation of community support for work (mid 2003).

Interim impact and implementation report (mid 2003).

Final impact and implementation report: (mid 2004).