

ASSESSMENT *of the* 602 NON-PROFIT DISPOSITION PROGRAM



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ASSESSMENT of the 602 NON-PROFIT DISPOSITION PROGRAM

FINAL REPORT

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U.S. Department of Housing and Urban Development
Office of Policy Development and Research

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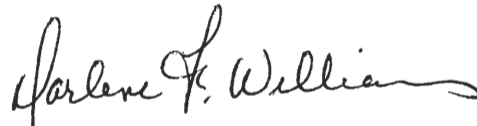
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Foreword

The U.S. Department of Housing and Urban Development (HUD) contracted with Optimal Solutions Group, LLC and Abt Associates, Inc. to conduct evaluative research on a newly initiated iteration of the 602 Non-Profit Disposition Program (602 Program). The research is somewhat unusual, in that its primary thrust was to identify appropriate baseline information and an associated analytic structure for future evaluations of the 602 Program. In addition, the report discusses the near-term progress of the 602 Program in three cities: Baltimore, Maryland; Salt Lake City, Utah; and Rochester, New York.

HUD is committed to increasing homeownership among our nation's low- and moderate-income families. In keeping with this goal, HUD's 602 Nonprofit Property Disposition program sells HUD-held single-family homes at deep discounts to units of general local government and nonprofits. The homes are then rehabilitated and resold, providing homeownership opportunities to low- and moderate-income households, with the concomitant benefit of revitalizing economically troubled urban neighborhoods.

We in HUD's Office of Policy Development and Research (PD&R) hope that this report will provide readers with a general understanding of the operations and potential benefits of the 602 Program. We also hope that the evaluation strategy and accompanying description of the prospective statistical analysis will stimulate interest in HUD programs that foster and expand homeownership, and will underscore PD&R's continuing efforts to study, document and improve these programs.



Darlene F. Williams
Assistant Secretary for
Policy Development and Research

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Executive Summary

Background

The U.S. Department of Housing and Urban Development (HUD) contracted with Optimal Solutions Group, LLC, and Abt Associates, Inc., to evaluate a newly initiated iteration of the 602 Non-Profit Disposition Program (602 Program). This final report describes that evaluative research.

The research at hand is unusual because it seeks, in large part, to identify appropriate baseline information and an associated analytic structure for *future* evaluations of the 602 Program. The revamped program sells HUD-held single-family homes at deep discounts to units of general local government (UGLs) and non-profit organizations (NPs) for rehabilitation and resale. The program's purpose is to provide homeownership opportunities to low- and moderate-income households and to revitalize economically troubled urban spaces.

Under the 602 Program, UGLs and NPs establish an Asset Control Area (ACA) within a larger economically depressed zone that has already been designated for assistance as a HUD Revitalization Area. The participating agency contracts to purchase all HUD-owned single-family homes in the ACA tract. These homes, which were acquired by HUD after borrowers defaulted on HUD-insured mortgage loans, tend to need major repairs. The 602 Program provides guidelines for determining purchase prices paid by UGLs and NPs and provides timeframes for disposal of the properties. Because ACAs play a crucial role in the new iteration of the 602 Program, the program also is known as the Asset Control Area Program (ACA Program).

Research Objectives

A major objective of the 602 Program evaluation process was to assess the effectiveness of near-term programmatic activities. To accomplish this objective, the evaluators were asked to answer questions about how the new program was operating in its early stages (that is, in mid-2005). For example, how were the participating agencies coping with the timeframes and pricing guidelines?

Another major objective of the evaluation process was to prepare the groundwork for a future evaluation that would focus on the long-term programmatic goals of fostering homeownership and neighborhood revitalization. The questions here focused on ways to measure the changes in the economic condition of the ACA. A crucial task was selecting indicators of the economic health of the local housing market. In essence, the evaluators were asked to design a set of outcome measures and then select a mode of statistical analysis that could most productively be applied to a projected indicator database. These activities would enable the evaluators to gauge the 602 Program's progress in accomplishing its goals.

The Evaluation Methodology

To more fully understand the program's operations, the evaluators first studied the contracts between the participating agencies and HUD. These agreements defined the ACA's location and described in detail the program operations at the ACA site and the procedures that the agency would use at the site to meet 602 Program requirements. After examining these documents, the evaluators created a chart describing the process each local ACA agency planned to use as it acquired, refitted, and sold properties formerly owned by HUD.

Next, the evaluators selected three site visit locations from seven ACA sites that were actively participating in the 602 Program when the evaluation was conducted. The three site visit locations were Baltimore, MD, Salt Lake City, UT, and Rochester, NY. (See a companion volume of case studies located at www.huduser.org/publications, for more information). The evaluators used the following criteria to select the site visit locations:

- Absence of other HUD geographically targeted programs (seek clearest cases where ACA Program effects might be observable).
- ACA boundaries were equal to census area boundaries (that is, block groups and census tracts), which would facilitate baseline socioeconomic analyses.
- Size of the ACA (that is, large enough to provide enough data for statistical analyses).
- Expected number of HUD-owned homes in the ACA Program each year (that is, sufficiently large volume of sales for statistical analysis).

To prepare for the site visits, the evaluators gained an understanding of the socioeconomic characteristics of the ACAs by creating Geographic Information System maps of census variables such as population, median household income, percentage of owner-occupied housing units, percentage of vacant housing units, and percentage of households living below the poverty level (presented in the companion case studies volume noted previously). The evaluators also obtained 1999-through-2004 home sales data from a private vendor. This information enabled the evaluators to determine the amount of home sales activity in the study area in recent years. The evaluators also analyzed historical Home Mortgage Disclosure Act data to better understand the status of mortgage applications in the study sites over time.

Site visits were conducted shortly after the baseline analyses were complete. During each of these visits, the evaluators met with the ACA's management and discussed the agency's processes for moving properties through the program. The evaluators discussed the ACA management's reasoning in selecting the ACA boundaries, its justifications for improvements to homes, and its procedures for marketing properties and for targeting potential buyers. The research team also asked managers to clarify the process for conducting required homebuyer counseling.

Findings for the Near Term: Case Studies

The evaluators prepared case studies (see www.huduser.org/publications) for each of the three cities they visited. The evaluators determined that each of the selected sites appeared to have adequate financing for the acquisition and repair of properties and the management of the program as well as sufficient contractors for property repairs and sufficient marketing plans to ensure that 602 Program properties were rehabilitated and sold within required timeframes.

Although each of the sites had processes in place to rehabilitate and sell properties to income-eligible buyers, Rochester's and Salt Lake City's abilities to trigger neighborhood revitalization might have been hampered by the relatively large area included within their ACAs. Therefore, Rochester and Salt Lake City might be successful in providing homeownership opportunities through the rehabilitation and sale of 602 Program properties, but they might be less successful in generating measurable improvements in ACA neighborhood conditions because the properties sold within the ACA were scattered across large areas. Baltimore did not appear to have that problem; the city had a relatively small, compact ACA and had a higher concentration of 602 Program homes.

The evaluators also found that agencies that had purchased homes within the ACA sites were concerned that some of their properties would be sold for less than what they had paid to purchase and rehabilitate them, thereby exposing the participating agencies to potential monetary losses. If losses on resales became commonplace, fewer agencies would be willing to participate in the 602 Program. To prevent this problem, the evaluators recommended several possible changes to the appraisal process that is used for pricing HUD properties for sale to UGLs and NPs. Similarly, the evaluators recommended modifications to 602 Program guidelines for pricing repaired homes for resale.

Findings of Long-Term Impacts: A Recommended Evaluation Strategy

The evaluators sought to develop an evaluation strategy that would provide HUD with an accurate and comprehensive assessment of the 602 Program's long-term effects. The development of the evaluation strategy was grounded in a technical analysis of the measures that might reasonably be expected to accurately gauge gains in homeownership and revitalization within the ACAs. In order to lay the groundwork for a future evaluation of the 602 Program (that is, the evaluation strategy), the evaluators supplemented their knowledge of housing markets and the dynamics of revitalization with information they collected during the site visits and distilled in the case studies.

The evaluators proposed an evaluation strategy that would take into account trends in factors such as home sales, home prices, median income of homebuyers, and crime rates that were present in the ACA and adjacent neighborhoods before the 602 Program was

revamped in 2004 and then would compare deviations from those trends after the 602 Program was well established.

The actual evaluation strategy recommended a number of statistical procedures, ranging from univariate statistics (for example, counts of home sales) to multiple regression equations for estimating revitalization effects. For example, the evaluators suggested using changes in the number of income-eligible first-time homebuyers in the ACA as a measure of the 602 Program's efforts to foster homeownership. This yardstick appears deceptively simple; UGLs and NPs are *not* required to restrict sales to first-time homebuyers, so a distinct effort must be made to collect information about buyers' histories.

To gauge revitalization, the evaluators also proposed using more mathematically complex, multivariate techniques such as a statistical procedure called the Adjusted Interrupted Time Series method. This technique tracks how closely home prices correlate with changes in a wide variety of factors associated with the local housing market and the local quality of life. Positive changes in ACA home prices linked to improved housing conditions in the ACA (for example, improved physical condition of single-family homes, lower proportion of vacant properties, increased proportion of owner-occupied dwellings) and improvements in the quality of life (for example, a reduced crime rate) would suggest that revitalization was occurring.

The report closes with an admonition not to rely solely on quantitative measures to assess the community development aspects of HUD's revamped 602 Program. The authors recommend that future evaluations include qualitative research in the form of ACA case histories. This qualitative component is potentially valuable in the interpretation of statistical findings.

Part 1

Section I. Introduction

The purposes of this study are to assess how well the 602 Non-Profit Disposition Program (602 Program) is being implemented and to recommend to the U.S. Department of Housing and Urban Development (HUD) an evaluation methodology and strategy to be implemented at a later date that measure the extent to which the 602 Program achieved its objectives.

A. Background

Overview

HUD contracted with Optimal Solutions Group, LLC, and Abt Associates, Inc., to evaluate the 602 Program. Revised in 2004 but originally established in 1998, the 602 Program seeks to foster homeownership and, at the same time, revitalize economically disadvantaged neighborhoods. This report describes that evaluative research. The research at hand is relatively unique in that it seeks, in large part, to identify appropriate baseline information and an associated analytic structure for future evaluations of the “new” 602 Program. In addition, the research’s objective was to assess how well the new program was functioning. Specifically, the 602 Program makes HUD-held single-family homes in economically troubled zones, termed Revitalization Areas (RVAs), available for sale to units of general local government (UGLs) and non-profit organizations (NPs) that then renovate the properties and sell them to low- and moderate-income households.

RVAs

RVAs can be viewed as a cornerstone of the 602 Program. An examination of what constitutes an RVA enables one to better understand the underpinnings of the 602 Program. The guidelines for designating an RVA stipulate that the geographic area must meet one of the following three criteria: (1) very low income (that is, the median household income is less than 60 percent of the median household income in the RVA’s metropolitan area or in entire state if the RVA is not located in a metropolitan area), (2) high concentration of eligible assets (namely, a high rate of default or foreclosure for single-family mortgages insured by HUD), or (3) low homeownership rate (namely, a rate substantially below the metropolitan area or state if the RVA is not located in a metropolitan area).

B. Key Elements of the 602 Program

HUD Homes

The Federal Housing Administration (FHA) is part of HUD. The FHA is one of several federal agencies that promote homeownership by insuring mortgages and thereby

encouraging banks to offer home loans to borrowers who may not meet standard underwriting requirements. When a homeowner defaults on a mortgage that is insured by the FHA, HUD pays the unpaid principal loan balance to the lender. After HUD makes such a payment, HUD obtains title to the home, which becomes a “HUD home.” The HUD-held single-family homes that are made available for sale to UGLs and NPs through the 602 Program are drawn from the pool of HUD homes in the local RVA.

Asset Control Areas

In their applications for participation in the 602 Program, UGLs and NPs are required to designate the portion of their local RVA in which they intend to purchase and rehabilitate HUD homes for resale to income-eligible buyers. An applicant may designate the entire RVA or a portion of it. One of the principal reasons, underlying the delineation of a particular Asset Control Area (ACA) from the larger local RVA, is likely to involve the selection of neighborhoods in the RVA where newly renovated houses are judged likely to attract potential buyers. ACAs are such an integral part of the revamped 602 Program that the initials ACA are often used to describe the program (as in ACA Program) and sometimes as shorthand for the participating agency.

Eligible Homebuyers and Subsidies

Under the guidelines of the 602 Program, resales are restricted to households with incomes of less than 115 percent of the area median income. Some participating households, however, have much lower incomes than 115 percent of the area median. Furthermore, as will be discussed in later sections of this volume of the report and in volume II, potential homebuyers are often eligible for a variety of purchase-related subsidies; those subsidies often are beyond those available in the 602 Program. For example, although the 602 Program does not require purchasers to be first-time homebuyers, many indeed are buying their first homes and, as such, are eligible for and do receive other subsidies such as help with their downpayments. Overall, depending on the circumstances, a homebuyer might receive a blend of subsidies from local, state, and federal governments and/or private sources. But, regardless of the circumstances of the actual sale, all 602 Program homebuyers must be certified as having completed homebuyer counseling from a HUD-approved counseling service.

In addition, for the first 5 days that a renovated 602 Program HUD home is on the market, police officers and school teachers are given priority over all other would-be homeowners under HUD’s Officer Next Door and Teacher Next Door Programs (OND/TND Programs). These programs allow law enforcement officers and teachers to purchase HUD properties in RVAs for a 50-percent discount by forgiving a second mortgage on the property after the officer or teacher has resided on the premises for 3 years. The intent of these twin OND/TND Programs is similar: to improve public safety and to strengthen the social fabric of disadvantaged communities.

UGL and NP Discounts on HUD Homes and Resale Guidelines

Participating UGLs and NPs agree to purchase a given number the HUD homes that become available in their ACA. The sales prices of these homes to UGLs and NPs are based on their appraised value. Properties with an appraised value in excess of \$50,000 are priced at 50 percent of the appraised value. HUD properties with an appraised value of between \$25,000 and \$50,000 are priced at \$25,000 less than the appraised value. Properties appraised at less than \$25,000 have a purchase price of \$1.00. The 602 Program mandates that the resale price of the renovated home be the *lesser* of 115 percent of eligible expenses, which include acquisition and development costs (discussed in detail in volume II), or the appraised value of the property after it is rehabilitated.

C. An Overview of How the 602 Program Conveys HUD Homes to Homebuyers

After an FHA-insured property in an ACA is involved in foreclosure and is purchased by HUD, its subsequent appraisal and sale to a UGL or NP is arranged by a management and marketing (M&M) contractor in HUD's employ. First, the M&M contractor sends the UGL or NP a designation notice which identifies one or more HUD homes in the ACA that are now available for purchase, giving the appraised value of each. Appraisals are subject to appeal, and the 602 Program participant may request a new appraisal for a particular property. The UGL or NP has its staff or a contractor visit each property and prepare a scope of work that details required repairs. An appeal of the original appraisal may be triggered by the projected cost of repairs. If the appraised value of the property is too high relative to the need for extensive, costly rehabilitation, then the aforementioned limits on the resale price may effectively block the participating agency from recouping its costs. After the appraisal process is completed for a particular property, the M&M contractor sends an acquisition notice with the purchase price to the participating agency.

602 Program guidelines require that 85 percent of the HUD homes be purchased within 45 days of the UGL's or NP's receipt of an acquisition notice; 100 percent of HUD homes must be purchased within 60 days. After purchase, the UGL or NP arranges for a contractor to renovate the property and subsequently has the "rehabbed" home inspected and certified for occupancy. With respect to rehabilitation and resale, three out of four homes must be renovated and sold within 12 months; the remainder of the homes must be conveyed to eligible homebuyers within 18 months of the date the property was formally transferred to the participating UGL or NP.

The UGL or NP is responsible for marketing the property. For the first 5 days that the property is on the market, offers from police officers and teachers have priority under the OND/TND Programs described earlier. As will be noted in the following sections of this volume and more fully described in the companion case studies volume, approaches to marketing, providing buyer incentives, and financing the resale vary across participating agencies.

Section II. Case Studies

By June 2005, HUD had executed ACA agreements with organizations in seven locations as part of the revamped version of the 602 Program:

- Enterprise Home Ownership Partners, Inc. (Los Angeles, CA).
- City of Rochester and Rochester Housing Development Fund Corporation (Rochester, NY).
- St. Ambrose Housing Aid Center, Inc. (Baltimore, MD).
- City of Reading and Our City Reading (Reading, PA).
- NHS Redevelopment Corporation (Chicago, IL).
- Hispanic Housing Development Corporation (Chicago, IL).
- Community Development Corporation of Utah (Salt Lake City, UT).¹

As stated earlier, the purposes of this study are to assess how well the 602 Program is being implemented and to recommend to HUD an evaluation methodology and strategy to be implemented at a later date that measures the extent to which the 602 Program achieved its objectives.

Case studies were the primary component of this evaluation's data collection methodology. The early assessment of the 602 Program's implementation and the recommendations for the formulation of a longer term evaluation strategy were based on analyses of ACA Programs operated by St. Ambrose Housing Aid Center, Inc., (St. Ambrose); Community Development Corporation of Utah (CDCU); and the city of Rochester/Rochester Housing Development Fund Corporation. Henceforth, these three organizations will be referred to as study-site participants. These organizations were chosen in consultation with HUD based on a set of criteria that included the total number of units that are to be purchased by an ACA participant, the size of the ACA, and the presence of other community development programs within the ACA.

Each study-site participant had already operated and managed other affordable homeownership development initiatives before applying for the 602 Program. The city of Rochester participated in a previous version of the 602 Program that was in place between 2001 and 2003. With respect to prior experience with homeownership initiatives, St. Ambrose, under a HUD program that offered homes to NPs for \$1.00 each, had rehabilitated and sold homes across Baltimore. Lastly, the Salt Lake City-based CDCU's most recent experience in an affordable homeownership production was the Neighborhood Homeownership Program, under which it had constructed new homes on land created by subdividing lots for homes it purchased to repair and sell to low-income families.

¹ Salt Lake County, Utah, includes Salt Lake City. The Community Development Corporation of Utah's Asset Control Area includes other jurisdictions within Salt Lake County.

Two of the three study-site participants (St. Ambrose and CDCU) are non-profit affordable housing developers. The other study-site participant is a partnership between the city of Rochester and a non-profit community development financial institution: the Rochester Housing Development Fund Corporation (RHDFC). This partnership provides the city of Rochester with access to additional funds that RHDFC can raise, thus supplementing the 602 Program’s subsidy and permitting the partnership to make up (where necessary) the difference between acquisition and rehabilitation expenses and the proceeds realized from property sales. Exhibit 1 provides a summary of the three study-site participants and their 602 Program participation.

Exhibit 1. Study-Site Participant Summary

	<i>Baltimore, MD</i>	<i>Rochester, NY</i>	<i>Salt Lake City, UT</i>
ACA Participant	St. Ambrose Housing Aid Center	City of Rochester and the Rochester Housing Development Fund Corporation	Community Development Corporation of Utah
Date of ACA agreement	June 21, 2004	January 21, 2004	February 14, 2005
Total number of properties to be purchased	50 in first year of contract, maximum of 94 in second year	133 a contract year	100 a contract year
Total designation notices received (through April 2005)	40	112	29
Total properties rehabilitated (through April 2005)	14	19	0
Total properties sold to resale buyers (through April 2005)	12	17	0

ACA = Asset Control Area.

Source: ACA agreements and progress reports submitted by ACA Program participants

The 602 Program studied in the present evaluation was a relatively new initiative; Rochester’s program started in January 2004, St. Ambrose’s about 6 months later, and CDCU’s just before our March 2005 site visit. Given that the study-site participants had just started their programs, the total number of properties already sold (29) in the three sites is relatively small. Over the remaining term of their ACA agreements, however, these three organizations were expected to rehabilitate and sell up to a maximum of 610 homes.

The remaining portion of this report begins with an analysis of how the 602 Program was being implemented in the three study sites. This material is drawn from the case studies that make up the companion volume to this report. The report then concludes with the presentation of a recommended long-term evaluation strategy, designed to capture changes that may result from the 602 Program. This strategy suggests methodologies for analyzing the 602 Program’s impact on homeownership opportunities and neighborhood revitalization within ACAs.

Section III. How the 602 Program Is Being Implemented in Three Study Sites

To understand how the 602 Program has been implemented, it is useful to begin with a description of the criteria each study-site participant considered when applying for the 602 Program and choosing the ACA boundaries. Then, an analysis of baseline conditions in each ACA² is presented, followed by a comparative analysis of the strategies used by the study-site participants for securing acquisition and repair financing, rehabilitating properties, marketing the renovated homes, and ensuring that all resale buyers participate in homebuyer counseling. This section on program implementation concludes with a discussion of some of the challenges faced by the study-site participants.

A. Study-Site Participants' Reasons for Participating in the 602 Program and Choosing the ACA Boundaries

Rationale for Participating in the 602 Program

Unlike many other areas in the city, Baltimore's ACA has traditionally been a very stable middle-class neighborhood. Although the homeownership rates in many parts of the city have gone down dramatically over time, the neighborhoods within the ACA have not experienced such change until recently. Because of this change, St. Ambrose's primary objective in participating in the 602 Program was to reduce the number of units being converted from owner-occupied housing to rentals within its coverage area. According to St. Ambrose, this dynamic of increasing rental units was destabilizing the neighborhoods within the ACA.

According to St. Ambrose staff, two factors contributed to the destabilization trend within Baltimore's ACA. First, long-time residents were growing older and, as a result, required different types of housing. Therefore, relatively large numbers of homes were placed for sale in St. Ambrose's coverage area, and these homes were often purchased by investor-owners. Second, investor-owners were also purchasing an increasing share of HUD-owned homes, further increasing the proportion of rental properties in these neighborhoods. Under the 602 Program, St. Ambrose will purchase all of the HUD-owned homes in its coverage area and sell them to owner-occupants. The St. Ambrose management team reasoned that an increase in the proportion of owner-occupied homes would help to stabilize these neighborhoods.

CDCU presented a different rationale for participating in the 602 Program. First, the organization found that many of the participants in its homebuyer counseling program were unable to find affordable units for purchase. A key reason for CDCU's participation

² The baseline summary included in this final report excerpts more extensive baseline indicators presented in the case studies. The research team computed more extensive baseline measures than those in the case studies; a complete set of baseline indicators will be included in the data documentation submitted under separate cover.

in the 602 Program was to generate a supply of housing that could be made available to income-eligible graduates of its homebuyer counseling classes.³

Second, CDCU wished to offer affordable homeownership opportunities to families in areas that were relatively close to employment areas in Salt Lake City.⁴ Increasingly, families in search of affordable housing were moving into relatively far-flung regions of Salt Lake County and commuting into Salt Lake City, which increased traffic and sprawl within the region. Because many HUD foreclosures were in Salt Lake City, the 602 Program, according to CDCU staff, could play a small role in reducing the pressures that were contributing to sprawl in Salt Lake County. Finally, by rehabilitating and selling 100 homes a year, CDCU management believed that the 602 Program would raise the organization's visibility among potential funding sources and generate goodwill among local governments, lenders, and other affordable housing stakeholders.

The city of Rochester and its local community development non-profit partner chose to participate in the 602 Program for reasons that somewhat differed from those of the agencies in Baltimore and Salt Lake City. According to city officials, economic conditions had changed dramatically in Rochester since the early 1980s. Large job providers such as Eastman Kodak and Xerox had laid off huge numbers of employees in the area. As a result of the lack of jobs, residents left the city in huge numbers, moving out to the suburbs where new jobs were being created. Thus, the housing market within the city boundaries had become very depressed, sale prices dropped significantly, and vacancy rates rose. The city of Rochester's major reason for participating in the 602 Program was to have access to the relatively large number of homes that HUD had acquired and would likely continue acquiring, given the high foreclosure rate for FHA-insured mortgages in Rochester. Without the 602 Program, many of these homes might remain unsold, contributing to neighborhood decline and the city's already high property vacancy rate.

Rationale for Choosing ACA Boundaries

The 602 Program has only one requirement for choosing ACA boundaries: They must be wholly contained within the area's RVA. In principle, an ACA participant can choose ACA boundaries that are conterminous with the RVA. For reasons detailed below, however, none of the three study-site participants adopted this approach.

In deciding on ACA boundaries, program participants have to balance the expectation that the program, by providing homeownership opportunities to income-eligible buyers, can promote neighborhood revitalization in the ACA against the possibility that a large number of properties acquired under the 602 Program may overwhelm the capacity of the 602 Program participant or make the program financially infeasible in portions of the

³ To the extent that these properties have lots that can be subdivided, homes acquired under the 602 Program can also provide the Community Development Corporation of Utah with relatively inexpensive lots for constructing new homes.

⁴ Salt Lake City is wholly contained within Salt Lake County and is the largest municipality within the county.

RVA. The 602 Program requires that the ACA participant purchase a maximum number of the homes owned by HUD within the ACA and that the resale price of 602 Program homes must be the *lesser* of 115 percent of eligible expenses, which include acquisition and development costs, or the appraised value of the property after it is rehabilitated.

Considering the fact that neighborhood revitalization is one of the goals of the program, one could reason that it is likely that the 602 Program will have its greatest effects on neighborhood revitalization when rehabilitated properties are clustered together; proximity concentrates the investments and property repairs resulting from the program. Therefore, ACA participants might choose ACA boundaries to encompass a relatively small area. By choosing a small area, however, the ACA participant may not have access to a large supply of properties and so the number of families who benefit from the program will be small with little concomitant impact on homeownership rates.

To increase the number of homes available for purchase, an ACA participant has an incentive to define a relatively large ACA. Although such a decision may reduce the potential neighborhood effect of the program, it will increase the supply of housing rehabilitated and sold to income-eligible buyers. Nevertheless, the ACA participant must take into account its capacity to manage the purchase, rehabilitation, and resale of properties acquired under the 602 Program. Therefore, the ACA boundaries should not be so large that they include areas that have so many HUD foreclosures that the organization's staff will not be able to manage the program effectively.

In addition to institutional capacity, 602 Program participants also consider neighborhood housing market characteristics when deciding on ACA boundaries. HUD sells homes to the ACA participant at steep discounts from the homes' appraised values. This discount allows the participant to rehabilitate the homes and sell them to income-eligible buyers either at or below the homes' market values. In some neighborhoods, however, the appraised values that are used to determine the resale prices for the rehabilitated homes will be below the acquisition and repair costs (eligible expenses) for the properties. In these cases, the resale price is not high enough for the ACA participant to recoup its expenses. The potential that a property may be sold at a loss was a major concern raised by representatives of St. Ambrose, CDCU, and Rochester/RHDFC.

All three study-site participants analyzed HUD information regarding HUD foreclosures in the RVA before submitting their 602 Program application. The purpose of these analyses was to determine the expected volume and locations of properties that would be available for purchase. Using the analyzed information, each study-site participant established ACA boundaries and set limits for the maximum number of properties that it would purchase under the 602 Program. By emphasizing different factors, the ACAs are very different across the three study sites.

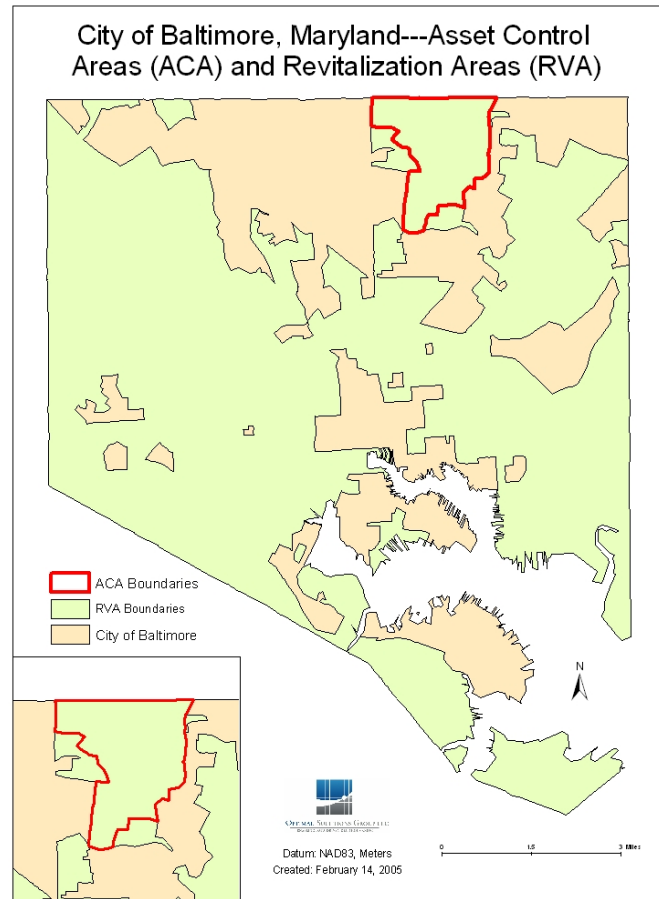
Shown in figure 1, St. Ambrose's ACA is relatively compact; it consists of eight northeast Baltimore neighborhoods. Clearly, the ACA does not include a large portion of Baltimore's RVA. St. Ambrose chose this particular, highly circumscribed area for two reasons. First, the organization's management believed that by selecting a compact ACA,

the resulting concentration of rehabilitation activities would trigger a larger positive neighborhood effect than scattered sites would be able to produce. Second, home prices in the ACA were such that the St. Ambrose management team believed that there was little risk that the appraised value for rehabilitated homes would be less than acquisition and repair costs. Within the chosen ACA boundaries, St. Ambrose expected that it would be able to recoup all of its expenses and earn a 15-percent fee, as allowed under the 602 Program.

CDCU's ACA, as shown in figure 2, includes nearly all of the RVA in Salt Lake County, which is located along a north-south spine in the center of the county. CDCU chose its ACA in part to ensure that it had access to a sufficient supply of homes that could be rehabilitated and sold to graduates of its homebuyer counseling classes. Because CDCU operates in the Salt Lake County region, its staff reported good relationships with most of the local jurisdictions. The one area that is in the RVA but not in the ACA, however, is Midvale, a jurisdiction in which CDCU had not conducted large numbers of redevelopment projects.

In addition, CDCU chose its ACA boundaries based on the organization's capacity to rehabilitate and sell properties. In previous programs, CDCU had rehabilitated and sold no more than 16 homes in a given year. According to CDCU's internal analyses, the total number of properties that would be available for sale from HUD would not exceed 100 a year, which the agency staff judged to be manageable given CDCU's level of staffing.⁵ CDCU, in deciding on its ACA boundaries, appears to have placed the most weight on having access to the greatest number of properties within its capacity.⁶

Figure 1. Baltimore ACA and RVA



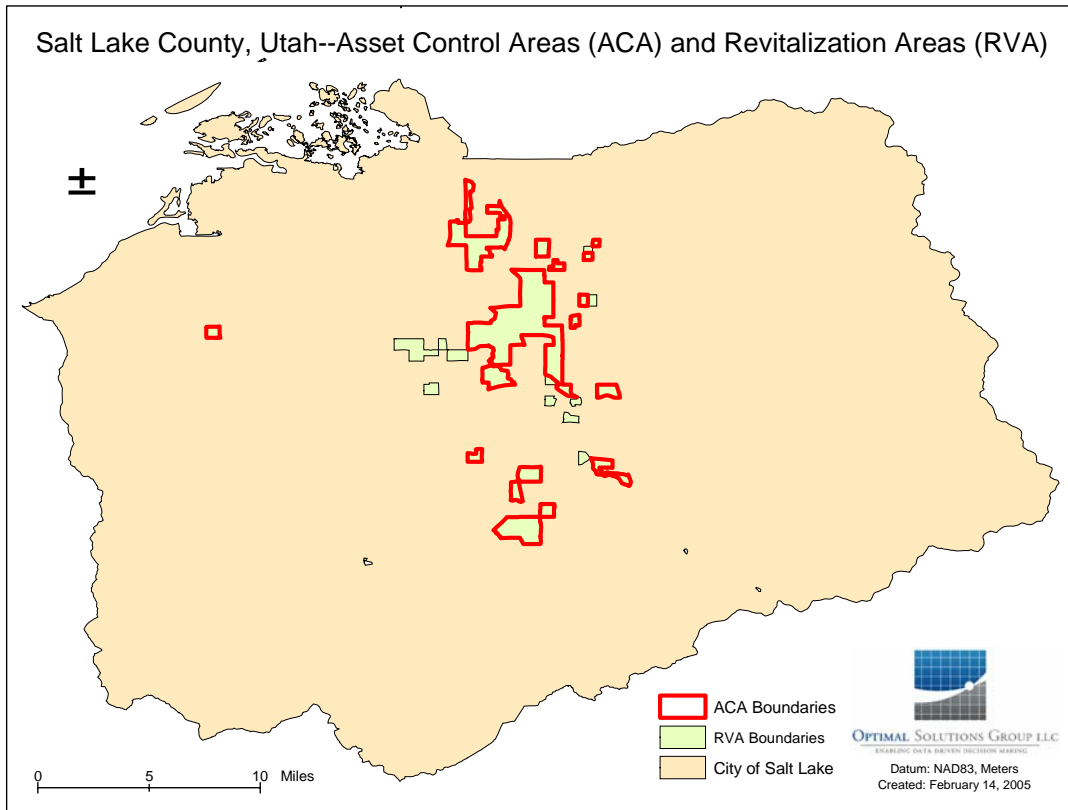
⁵ In reviewing the 602 Program application submitted by the Community Development Corporation of Utah (CDCU), the U.S. Department of Housing and Urban Development questioned the organization's ability to handle the increased volume. The organization's assurances presumably were sufficient, because the application was approved.

⁶ The organization received its first designation notice shortly before the research team's site visit in March 2005. This designation notice included 29 properties, slightly more than 25 percent of the first year's total volume. CDCU staff indicated that it would be better if any one designation notice not include such a large

Given the size of the ACA, CDCU did not seem to take into account the 602 Program’s potential impact on neighborhood revitalization in the entire ACA. It is likely that rehabilitating 100 properties a year that are scattered throughout the large ACA would not trigger neighborhood effects beyond those generated for properties that are located near the rehabilitated properties. This possibility is taken into account in the proposed evaluation methodology detailed later in this report.

Rochester’s ACA, shown in figure 3, consists of about one-half of the city’s RVA. Because of relatively poor economic conditions in Rochester, the RVA accounts for a large proportion of the city. The main reason for Rochester/RHDFC choosing the ACA boundaries was that both partners wanted to include the areas within the ACA that have the highest property values to minimize the losses associated with selling rehabilitated properties for prices that would be less than acquisition and repair costs.

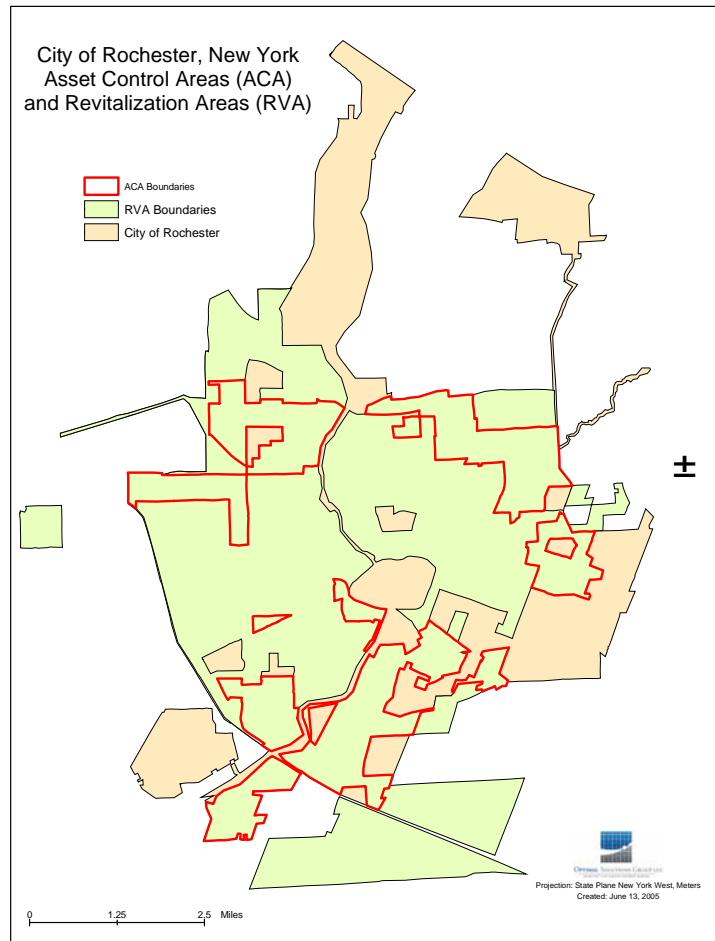
Figure 2. Salt Lake County ACA and RVA



number of properties, because CDCU staff have to complete inspections of every property in a designation notice to decide whether to file an appeal of the appraisal and complete a repair report.

Based on its experience with purchasing and renovating HUD homes, the city of Rochester/RHDFC was aware that home prices in most portions of the RVA were too low to generate resale prices that would be greater than acquisition and rehabilitation costs. In response to this problem, the partnership had additional funding sources (such as HUD's HOME Program which gives state and local governments funds in support of affordable housing initiatives). In Rochester, HOME funds were used to make up the difference between total rehabilitation and repair costs and sales proceeds from 602 Program homes. Of note is the fact that home values in the ACA were relatively high compared with other RVA neighborhoods; therefore, these subsidy dollars could support the sale and repair of more homes than if the ACA included other RVA neighborhoods.

Figure 3. Rochester ACA and RVA



Section IV. Baseline Conditions in Study-Site ACAs

The three study-site participants shared a common purpose: to provide affordable homeownership opportunities for income-eligible families. Despite this common purpose, the ACA areas chosen by each of the study-site participants were different. The St. Ambrose agency in Baltimore defined its ACA to include a small portion of the RVA that has a relatively healthy real estate market. In contrast, CDCU chose an ACA that consists of nearly the entire RVA in Salt Lake County and so planned to purchase properties across a variety of neighborhood-level housing submarkets. The Rochester/RHDFC's ACA, similar to the ACA in Baltimore, is a subset of RVA neighborhoods that have relatively strong housing markets. Unlike in Baltimore, however, these neighborhoods account for nearly 50 percent of Rochester's RVA.

The data presented in exhibit 2 display indicators of baseline conditions in each of the three study-site ACAs. Information is presented about the ACA, the remainder of the RVA that does not include the ACA, and baseline condition totals for each location.

The population in each ACA reflects the decisions that each participant made regarding ACA boundaries. To increase the likelihood of triggering a larger neighborhood effect, the St. Ambrose agency limited the ACA to a relatively small area within the RVA. Accordingly, the ACA's population of about 40,000 was about 8 percent of the total RVA. The population pattern is different in Salt Lake County: there, the ACA's 73,000 residents represented 80 percent of the total RVA's population. The population in Rochester's ACA (68,000) reflects a smaller share of the location's RVA population than the corresponding population proportions in Salt Lake County (40 percent versus 80 percent), but a larger share than in Baltimore.

St. Ambrose and Rochester/RHDFC chose their ACAs to minimize losses associated with selling properties for less than their acquisition and repair costs. The ACA economic and social baseline conditions in Baltimore and Rochester reflect this strategy. The poverty rates for ACA residents in both Baltimore (10.2 percent) and Rochester (19.0 percent) were lower than in the remaining RVA neighborhoods, which were 26.1 percent in Baltimore and 34.0 percent in Rochester. Consistent with lower poverty rates, the average household incomes in the Baltimore and Rochester ACAs, at \$46,455 and \$43,372 respectively, were greater than the average household incomes in those cities' RVAs. Salt Lake County's ACA average household income was slightly less than the average household income in the RVA, but that result is less meaningful because the ACA and RVA nearly overlap.

The median home sales prices for the Baltimore and Rochester ACAs in 2004 (the most recent data available when the present research was conducted) suggest relatively healthy housing markets. The ACA median house price in 2004 was \$92,700 in Baltimore and

Exhibit 2. Summary of Baseline Conditions

	Baltimore, MD			Rochester, NY			Salt Lake City, UT		
	ACA	Remainder of RVA	Entire City	ACA	Remainder of RVA	Entire City	ACA	Remainder of RVA*	Entire County
Population	40,072	448,998	651,154	68,067	104,421	219,766	73,617	21,003	898,387
Minority population proportion	77.7%	77.0%	69.0%	49.0%	73.0%	56.0%	38.7%	31.7%	19.1%
Average household income	\$46,455	\$36,127	\$42,090	\$43,372	\$36,172	\$42,489	\$43,628	\$47,574	\$68,461
Poverty rate	10.2%	26.1%	22.9%	19.0%	34.0%	26.0%	18.3%	13.2%	8.0%
Median housing price (2004)	\$92,700	\$56,000	\$73,000	\$57,200	\$30,000	\$56,000	\$131,259	\$138,985	\$178,087
Change in minority population proportion (1990–2000)	+ 20.2%	+ 8.1%	+ 7.7%	+ 20.7%	+ 13.4%	+ 14.5%	+ 17.9%	+ 18.5%	+ 8.9%
Percent change in median housing price (1999–2004)	24.4%	24.5%	43.1%	10.0%	– 21.0%	8.7%	18.2%	25.9%	24.7%

ACA =Asset Control Area.

RVA = Revitalization Area.

*ACA in Salt Lake County accounts for nearly 80 percent of the RVA.

Sources: U.S. Census 1990 and 2000; 1999–2004 purchased from private vendor First American Real Estate Solutions

\$57,200 in Rochester. In both cases, the ACA median house price was nearly double the median house price in the remaining parts of the cities' RVAs.

Moreover, ACA median home values in Baltimore and Rochester were greater than the median home price for those cities. This was not the case for Salt Lake County, where the median house price in the ACA in 2004 was \$131,259, about \$47,000 less than the median home price in the county. This pattern is likely the result of CDCU's strategy to define its ACA to include nearly all of the RVA. Because the RVA was chosen based on low homeownership rates, low income, and relatively high foreclosure rates, it is not surprising that house values for the whole RVA were lower than for the entire county. The data presented in exhibit 2 show the consequence of choosing an ACA that is nearly coterminous with the RVA rather than restricting the ACA to neighborhoods within the RVA that have relatively healthy housing markets.

A common trend in all three ACAs was that, during the 1990s, the minority population percentage increased at a faster rate than in the remainder of the RVA and the city as a whole. For example, the minority population in the neighborhoods that make up Rochester's ACA increased by 20.7 percentage points as compared with the 14.5-percentage point increase for the city. The pattern is similar in Salt Lake County and Baltimore; the minority population in those ACAs in the 1990s increased by 17.9 percentage points in Salt Lake County and 20.2 percentage points in Baltimore as compared with the changes in minority population in Salt Lake County (8.9 percent) and Baltimore (7.7 percent).

Section V. Strategies for Securing Acquisition and Repair Financing

All three study-site participants financed property acquisition and repair with capital provided by private lenders. St. Ambrose relied exclusively on its six market-rate lines of credit that provided up to \$2.75 million of capital. CDCU in Salt Lake County financed its acquisition and repairs with two lines of credit that provided \$8 million in capital; one line of credit carried market interest rates while another line of credit had an interest rate that is 3 percentage points below market rates (courtesy of the Bank of Switzerland, also known as UBS). In addition to these two sources, CDCU received \$500,000 from the HUD-sponsored HOME Program and Community Development Block Grant funds (the latter is also a HUD program) that were available to cover CDCU's operating expenses during the 602 Program startup period. It is interesting to note that in the 3 fiscal years before the startup, some 70 percent of CDCU's total revenues came from HUD grants.

In Rochester, acquisition and repair financing were provided by a combination of \$10.5 million market-rate loans secured by RHDFC plus lines of credit from foundations and the city of Rochester that made a total \$5.5 million available. An important difference between the Rochester 602 Program and the programs in the other two study sites was that almost all of the rehabilitated homes sold in Rochester to resale buyers had an appraised value that was lower than the total acquisition and repair costs. On average, Rochester/RHDFC lost \$22,000 on every property it sold and had to use additional sources of revenue to make up the difference between sales proceeds and total development costs. The sources of this subsidy were city and state HOME funds; these funds were limited, however, and the Rochester 602 Program could only be sustained to the extent that subsidy funds were available to cover the shortfall between sales proceeds and development costs.

Under the 602 Program, HUD makes available acquisition financing that carries no interest as long as the loan is repaid within 89 days. None of the study-site participants used this financing. In general, representatives of the study-site ACA participants said that they preferred to use their existing financing sources to maintain good relationships with the lenders. ACA management teams also reported that the savings from using HUD's acquisition financing were not sufficient to make it worth going outside of their typical financing arrangements.

Section VI. Property Rehabilitation Strategies and the Issue of Appraisals

Considerable care was taken by ACA participants to ensure that the renovated properties were inspected and found to be in compliance with federal, state, and local building codes. The 602 Program requires that ACA participants repair properties to a standard that meets three criteria: (1) HUD's General Acceptability Criteria as specified in HUD Handbooks 4905.1 and 4150.2, (2) applicable state and local building codes, and (3) the rehabilitation standards as identified in the 602 Program participant's business plan. To comply with these requirements, shortly after receiving a designation notice for a given property, each of the study-site ACA participants conducted property inspections and identified the repairs that were necessary to make the property marketable, given the neighborhood's housing market dynamic.⁷ In making this determination, ACA participants must be mindful of the likely appraised value of the property after repairs are completed.

This issue was relatively straightforward for the St. Ambrose organization. Most of the properties within its ACA were the same type; therefore, it was relatively easy for the organization's staff to estimate the appraised value of a property after it was repaired. In general, St. Ambrose budgeted about \$50,000 worth of repairs for each of its properties; these repairs usually included replacing kitchens and bathrooms, updating electrical systems, and replacing roofs. Given the market for homes in the ACA, St. Ambrose expected that resale prices would be sufficient to cover acquisition costs of about \$37,000, \$50,000 of rehab expenses, and another \$20,000 of development costs per property.

The repair strategy for CDCU was slightly different; the agency assumed that the appraised value of the property after it was repaired would be identical to the as-is appraised value before acquisition. Therefore, the organization limited its repairs to items that totaled no more than the difference between the appraised value in the designation notice and the property's acquisition price. In general, this difference allowed CDCU to renovate kitchens and bathrooms, replace appliances, and renovate or replace HVAC systems.

Because CDCU's ACA encompasses a relatively large number of neighborhoods, the organization planned to purchase a wide range of property types. Some of the properties were in relatively good condition and some required extensive repairs. Overall expenses and resale income were not in balance, however. CDCU found (albeit on a limited basis at the time this evaluation was conducted) that the as-is appraisals for many properties were too high and increased the properties' acquisition costs. In such cases CDCU appealed the appraisal, but the second appraisal still might have been too high. Under

⁷ This initial property inspection is also conducted to determine whether the Asset Control Area participant should appeal the appraised value on the designation notice.

these circumstances, CDCU did not receive the full subsidy provided for in the 602 Program. The reason was that the property, given the actual costs associated with the required repairs, was sold to CDCU at a price that was not 50 percent of, or \$25,000 less than, the true market value of the property. Under such cases, the organization would either complete fewer repairs on the property or complete all of the repairs and sell the property at a loss. Because CDCU did not have access to funds to cover losses, however, it could not subsidize too many properties.

Because of a weak housing market in Rochester, nearly all of the 602 Program properties in that city were selling at a loss. Therefore, the city of Rochester/RHDFC limited its repairs to those that were necessary to make properties marketable (as well as compliant with building codes) and that would reduce maintenance costs for the resale buyers. To keep repair costs to a minimum, properties rehabilitated in Rochester did not include new kitchen appliances, which had to be purchased and installed by the resale buyers. Despite its efforts to limit repairs, the city of Rochester/RHDFC spent an average of \$60,000 per property for repairs.

After a study-site ACA participant identified the repairs required to bring a property “up to code” and make it marketable, the participant completed a repair report that was submitted to HUD.⁸ Each study-site ACA participant prepared a scope of work based on this report and solicited bids from contractors to complete the work.

St. Ambrose had three private contractors that it used for repairing 602 Program properties. These contractors spent 100 percent of their time on St. Ambrose projects and were familiar with the organization’s quality standards. Instead of soliciting bids, St. Ambrose chose one of its contractors to price out a repair job and reviewed the bid. After review, St. Ambrose executed a contract with the contractor.

CDCU’s process was similar. The organization used 13 contractors for property repair work. CDCU completed a work writeup based on its inspection that detailed the required repairs for a given property and sent the work writeup to one of the 13 contractors for a bid. If CDCU considered the bid to be too high, it would solicit bids from the other 12 contractors.

In Rochester, RHDFC coordinated the process for soliciting bids for properties that required the most extensive repairs. After a property was determined to fall under RHDFC’s responsibility, the organization chose a community-based housing developer to solicit bids and hire a contractor. For properties that required less extensive repairs, the city of Rochester solicited bids and chose a contractor. A key difference between properties repaired under the authority of the city versus those repaired under RHDFC’s authority was that any contractors repairing properties that were under the city’s authority

⁸ The U.S. Department of Housing and Urban Development waived the requirement that St. Ambrose submit a repair report. The Community Development Corporation of Utah and the city of Rochester/Rochester Housing Development Fund Corporation had to submit repair reports within 15 calendar days of receipt of a designation notice.

were required to pay prevailing union wages; this requirement increased construction costs.

Each study-site ACA participant had a very similar process to ensure that contractors completed repairs on time. St. Ambrose had an inhouse architect who conducted weekly onsite meetings with contractors to discuss any issues that could create delays. Although rehabilitation activities had not started in Salt Lake County as of the research team's site visit, CDCU staff reported that two staff members were responsible for property rehabilitation management and oversight. In Rochester, the community-based housing developers were responsible for ensuring that repairs were completed on a timely basis for properties under RHDFC's authority; city of Rochester staff were responsible for oversight of properties under the city's authority.

Section VII. Homebuyer Counseling and Marketing Strategies

A. Homebuyer Counseling Strategies

The 602 Program requires that resale buyers (except participants in the Officer Next Door and Teacher Next Door Programs discussed earlier) receive homebuyer counseling. It is the ACA participant's responsibility to certify that all resale buyers meet this requirement. All three of the study-site ACA participants required each resale buyer to document that they had completed a homebuyer counseling course.

Although St. Ambrose conducted HUD-certified homebuyer counseling courses, it did not market properties rehabilitated under the 602 Program to participants in that program. The reason, according to representatives of St. Ambrose, was that the organization did not want to place itself in a position where it could be accused of having a conflict of interest and that it was steering its homebuyer counseling program participants to properties developed by the St. Ambrose organization.

Instead of providing homebuyer counseling to potential resale buyers, St. Ambrose referred people who made enquiries regarding these properties to other HUD-certified homebuyer counseling agencies in the Baltimore area. Resale buyers are required, at closing, to present a certificate that documents that they have successfully completed homebuyer counseling.

In contrast to St. Ambrose, CDCU marketed 602 Program properties to participants in homebuyer counseling classes conducted by that organization. Of course these participants were not obligated to purchase a 602 Program property, but CDCU staff indicated that they did expect a large number of resale buyers to be graduates of the organization's homebuyer counseling classes.

In Rochester, homebuyer counseling was provided by the Home Store, a city-sponsored agency operated by the Rochester Urban League. Potential resale buyers were referred to the agency if they had not already completed a homebuyer counseling class.

B. Property Marketing Strategies

Each of the study-site ACA participants used a slightly different marketing strategy to ensure that potential resale buyers were made aware of properties offered for sale under the 602 Program. In Salt Lake County and Rochester, would-be buyers were also informed about potential sources of subsidies.

St. Ambrose marketed the 602 Program properties through its inhouse Realtor[®], Charm City Realty. Charm City Realty maintained an electronic list of Realtors in the Baltimore area and sent an email notification to these brokers that a property was becoming available for sale when 95 percent of the repairs for a given property were completed.

These brokers could show the property to their customers, who could make an offer on the house before it was listed on the multiple listing service (MLS). All potential resale buyers were made aware that they needed to complete homebuyer counseling and that the property, for the first 5 days of its listing, could be purchased by a participant in the OND/TND Programs.

After all repairs were completed on a property (usually about 3 days after brokers were notified by email), Charm City Realty listed the property on the MLS. The listing indicated that the home was being offered for sale with certain conditions (that is, that a resale buyer must have an income below 115 percent of the area median, that a resale buyer must complete homebuyer counseling, and that the property would be available for the first 5 days of listing to participants in the OND/TND programs). Resale buyers of St. Ambrose properties were required to secure their own financing. The organization did not provide any subsidies to homebuyers.

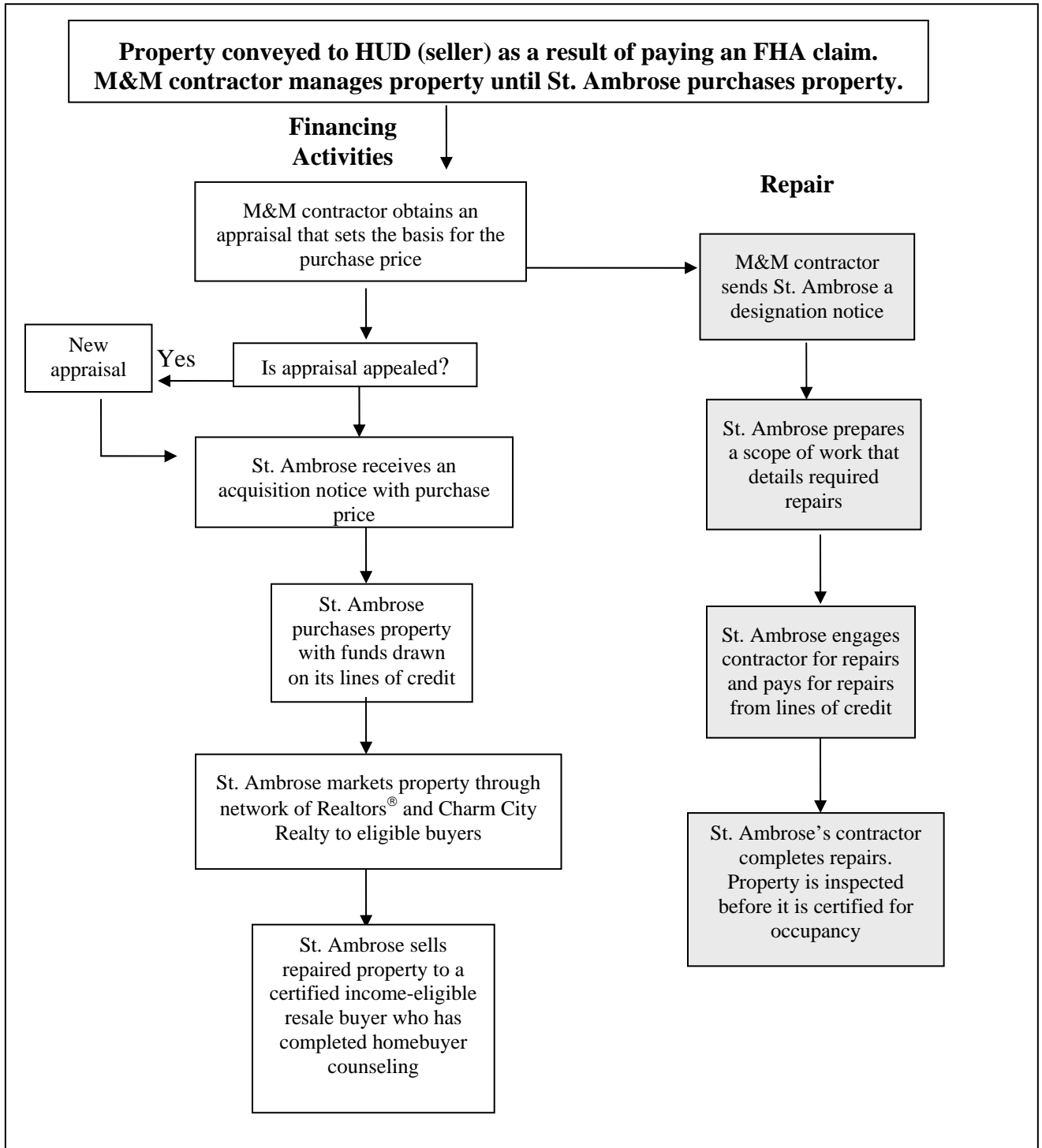
Exhibit 3 is a flowchart that illustrates the process by which Baltimore's St. Ambrose agency acquired, renovated, and subsequently resold a HUD home acquired through the 602 Program. Although the process differed somewhat across ACA Program participants, this flowchart may be helpful in giving the reader a sense of the overall process.

CDCU marketed its properties through two channels. The organization maintained a list of individuals who had completed the organization's homebuyer counseling classes and contacted CDCU either through referrals or after seeing yard signs for a rehabilitated property. CDCU contacted individuals on this list as rehabilitated properties became ready to show. In addition, CDCU engaged the Coldwell Banker Real Estate Corporation as its listing agent for placing 602 Program properties on the MLS.

CDCU provided some resale buyers with downpayment assistance from funds it received from HUD's HOME program as well as HUD's American Dream Downpayment Initiative; the latter is designed to assist first-time homebuyers. Downpayment assistance was also available through the Federal Home Loan Bank of Seattle's Mortgage Reduction Program. Although the assistance amount varied, the average subsidy for resale buyers who receive assistance was between \$2,500 and \$3,000.

In Rochester, the community-based housing developers that were responsible for rehabilitating properties under RHDFC's authority had an exclusive 30-day period to sell homes. These organizations typically marketed their homes by placing for-sale signs in front of properties and soliciting potential resale buyers through their established community networks. Properties under RHDFC's authority that were not sold within 30 days were placed on the MLS, as were 602 Program properties that were rehabilitated under the city of Rochester's authority. (The reader should note here that differences between the RHDFC's participation in the 602 Program and that of the city of Rochester itself are discussed in detail in volume II).

Exhibit 3. 602 Program Process Flowchart for St. Ambrose in Baltimore



FHA = Federal Housing Administration.
 HUD = U.S. Department of Housing and Urban Development.
 M&M = management and marketing.
 St. Ambrose = St. Ambrose Housing Aid Center, Inc.

Because homes rehabilitated by RHDFC were targeted to homebuyers with incomes of less than 80 percent of the area median, nearly all resale buyers in Rochester received subsidies. The most common source of subsidy was the city of Rochester's First-Time Homebuyer Program, which provided closing cost assistance to buyers with incomes of less than 80 percent of the area median. On average, resale buyers received between \$5,000 and \$6,000 in assistance under this program.

Section VIII. Summary and Conclusions

Overall, the research team's analyses indicate that each of the study-site participants appeared to have adequate financing for acquisition and repair, capacity to manage the program, contractors available to make property repairs, and marketing plans in place to ensure that 602 Program properties were rehabilitated and sold within the timeframes stipulated in their ACA agreements. This report's observations on the implementation of the 602 Program by St. Ambrose, Rochester/RHDFC, and CDCU raised some issues, however, that should be considered by future ACA participants.

Perhaps the most important issue for any ACA participant, and one that was raised by representatives of St. Ambrose, Rochester/RHDFC, and CDCU, is the potential that the resale price of a given property will not be sufficient to cover acquisition and repair costs. To minimize this potential risk, St. Ambrose and Rochester/RHDFC chose their ACA boundaries to include neighborhoods with relatively high property values. CDCU did not follow this strategy. Its ACA includes nearly the entire RVA in Salt Lake County. As a result, CDCU was forced to confront the possibility that it might lose money on some properties rehabilitated and sold under the 602 Program.

It appears that a strategy of limiting ACA boundaries to relatively healthy neighborhoods will work only insofar as home prices in those areas are high enough that the resale prices are higher than development costs. This was not the case in Rochester, even in relatively healthy ACA neighborhoods. Home prices were so low in Rochester that properties rehabilitated under the 602 Program sold for \$22,000 less than development costs. In such cases, the 602 Program was only sustainable to the extent that additional subsidies, beyond the discounted acquisition price, were available to the ACA participant. Rochester anticipated this issue and earmarked additional subsidies to cover the extra costs. Housing prices in the St. Ambrose ACA, on the other hand, were relatively high compared with rehabilitation needs. St. Ambrose was less exposed to the risk of a particular property selling for a price that was lower than development costs.

The lesson for potential 602 Program participants is to make sure that, within a proposed ACA, the resale prices for rehabilitated properties are likely to be greater than the acquisition and repair costs or that the participants have additional subsidies to cover the difference. Given this approach, it may be possible that the 602 Program in many cities will not target the most socially distressed neighborhoods. These areas are likely to have very low home prices and thus are the most likely to have properties that would have to be sold at a loss. St. Ambrose mitigated this risk by choosing an ACA with home sales prices that were high enough to cover the development costs. Rochester mitigated this risk by choosing the relatively higher priced neighborhoods in the RVA and by obtaining additional subsidies to cover losses.

To reduce the risk of selling properties at a loss, HUD could consider allowing more flexible purchase price terms that would not automatically set purchase prices at 50

percent of appraised value. The reason for making such a change is that some properties in certain submarkets may require such extensive repairs that the purchase prices must be set at a greater than 50-percent discount from the appraised values for the total eligible expenses to be less than the expected after-repaired appraised values. In other words, the cost to the unit of general local government or non-profit would be lower while the original appraised value would not be changed.

A benefit of allowing a more flexible algorithm for setting purchase prices is that the current program is inefficient for properties that are in relatively good condition and require relatively inexpensive repairs. Currently, ACA participants purchase these properties at 50 percent of appraised value and can sell them for only the lesser of 115 percent of eligible expenses or the appraised value of the properties. Because the purchase price accounts for nearly all of the eligible expenses, the resale price for such properties is close to 50 percent of the appraised values of the properties. As a result, the resale buyer receives nearly the full subsidy by purchasing a home well below market value. To discourage quick resale in situations where homes are sold for prices that are at least \$5,000 below their market or appraised values, ACA participants require the execution of homeowner enforcement notes for the difference between the appraised values and the resale prices. The enforcement notes, however, may amortize relatively quickly.

The relatively inflexible algorithm that sets the purchase price for the ACA participant potentially creates distortions whereby some properties in weaker housing submarkets can be brought “up to code” but cannot really be fully rehabilitated in the sense of fully enhancing marketability because doing so places the ACA participant at risk of not recouping expenses, or properties in good condition in relatively healthy submarkets are sold to eligible buyers for steep discounts, which, in effect, transfers the subsidy from the ACA participant to the resale buyer. A more flexible algorithm that takes into account local submarket conditions may reduce these inefficiencies.

A second potential solution to this problem is to allow cross-subsidization. The current program rules mandate that the maximum sales price on every home be the lesser of 115 percent of eligible expenses or the after-rehab appraised value. Instead, the program could allow the ACA participant to sell all houses at the market price, which might be more than 115 percent of eligible expenses in some cases. The additional funds could be used to cover the losses for homes sold at less than the development costs. To ensure that no excessive fees are generated from the program, the rules could limit total revenue from the sale of all houses in a year to 115 percent of the total development costs of those houses. One issue with this approach is that the accounting and auditing of the program would become more complicated; however, the potential benefits in increased participation and the mitigation of risk of including the most distressed areas in the RVA may outweigh this downside.

Another important issue in the 602 Program is that of accurate appraisals. An appraiser typically generates an estimated value for a given property by identifying *comparable* sales in the neighborhood and making any adjustments to those prices based on the

subject property's condition. Given this methodology, it is important that appraisers are familiar with repair costs so that they can make accurate downward adjustments to comparable sales prices. This is critical because ACA participants only receive the full 50-percent subsidy under the 602 Program to the extent that the purchase prices accurately reflect all of the repairs that must be made to upgrade the subject property's condition so that it is the same as any comparable property. In some cases, ACA participants indicated that this was not the case: Appraisers grossly underestimated repair costs for 602 Program properties and the acquisition price was set too high.

To reduce this risk, ACA participants suggested that appraisals of properties that need extensive repairs be conducted by individuals who are certified under HUD's Section 203(k) Program. Because this program provides funding for repairs, appraisers who are certified to provide estimates are familiar with repair costs and are likely to make more accurate adjustments to comparable sales prices to estimate a subject property's market value. In addition, HUD could establish an arbitration process in which ACA participants provide an arbitrator with information that challenges an appraisal and ask the arbitrator to determine a subject property's market value. This arbitration process could be reserved for properties whose value is still in dispute, despite the appeal that is already provided for under the ACA agreement.

Although the study-site ACA participants have processes in place to rehabilitate and sell properties to income-eligible resale buyers, the ability of Rochester/RHDFC and CDCU to trigger neighborhood revitalization may be hampered by the relatively large area included within their respective ACAs. Therefore, both ACA participants may be successful in providing homeownership opportunities through the rehabilitation and sale of 602 Program properties but they may be less successful in generating measurable improvements in ACA conditions to the extent that the properties sold within the ACA under the program are scattered across a large area. This problem is not as relevant to St. Ambrose, which has a relatively small ACA and a higher concentration of 602 homes.

The following sections in part 2 present a recommended evaluation strategy and methodologies that can be used in a future evaluation of the 602 Program's ability to create homeownership opportunities that trigger neighborhood revitalization. The evaluation strategy takes into account the strategies implemented by the three study-site participants and provides a roadmap for HUD to conduct a rigorous assessment of the program's effect.

Part 2

Section I. Recommended Evaluation Strategy

The recommended evaluation strategy includes quantitative estimates of the 602 Program's effect on homeownership opportunities and neighborhood conditions within the ACA combined with indepth qualitative analysis.

The 602 Program seeks to foster homeownership opportunities that, in turn, will lead to neighborhood revitalization in the ACAs. As part of its charge, the research team was asked to develop an evaluation strategy to provide HUD with an accurate and comprehensive assessment of the program's effects; the above stated "homeownership to revitalization" objective is one of them. To accomplish this task, the research team formulated a strategy that combines rigorous quantitative analyses of the extent to which the 602 Program fostered homeownership opportunities and improved neighborhood conditions within the ACAs with indepth qualitative analyses of ACA operations through case studies. The case studies were used as a tool to put the quantitative findings in perspective.

As will be detailed in an upcoming discussion of specific methodologies, the quantitative analyses will estimate the effect of the 602 Program on homeownership opportunities and neighborhood conditions. Two critical aspects of the quantitative analyses are (1) that they accurately measure the effect of the program by estimating changes in key indicators from a preprogram baseline, and (2) that any measured changes are attributable to the 602 Program, as compared with other contemporaneous factors. Consequently, the quantitative analyses must be able to estimate the extent to which homeownership opportunities and neighborhood conditions changed in the ACA by taking into account the trends in the ACA before the program. Moreover, the quantitative analyses must also control for other factors that affect the ACA subsequent to the 602 Program.

The quantitative analyses must be completed with data that measure changes to conditions within the ACA over time. Notwithstanding that requirement, it is important to recognize the importance of providing HUD with timely information regarding the 602 Program's effect; as a practical matter, the recommended evaluation strategy cannot be conducted so far in the future as to make the results irrelevant. Therefore, our strategy is to conduct quantitative analyses of the program from data that reflect ACA conditions 3 years from the time that an ACA participant executed its agreement with HUD. This timeframe allows the subsequent evaluation team to analyze data that capture at least 1 year's worth of information reflecting "post" 602 Program ACA conditions. In addition, the analyses of property values, detailed later in this report, should also be completed with a longer "post" 602 Program time period to provide more robust statistical results.

It is also recommended, given the 602 Program's complexity, that the evaluation include an indepth qualitative analysis. As detailed below, this analysis should be based on information provided by key informants with indepth knowledge of how each ACA

implemented its program and the program's effects on homeownership opportunities and neighborhood opportunities. These discussions will allow the evaluation team to ask key informants about their perceptions of the 602 Program's effects and the extent to which changes to the ACA are attributable to the program.

In summary, the recommended evaluation methodology combines rigorous quantitative analyses of the impact of the 602 Program with respect to fostering homeownership opportunities, ACA conditions, and qualitative data collected from discussions with key informants who are knowledgeable about the 602 Program's effects on the ACA. Each respective methodological component is presented in detail below.

Section II. Recommended Evaluation Methodology To Measure the 602 Program’s Effect on Fostering Homeownership Opportunities

Although the 602 Program contemplates that fostering homeownership opportunities will lead to ACA neighborhood revitalization, it does not specify what the term “fostering homeownership” means. Here, the projected evaluation strategy and associated methodology defines the term and uses this definition to develop measures that can be tracked over time.

Defined narrowly, ACA participants can foster homeownership simply by renovating homes under the 602 Program and offering these units to income-eligible buyers. Under such a definition, the evaluation could assess the extent to which the 602 Program fostered homeownership by counting of the number of sales of homes to eligible buyers including police officers and teachers who become buyers through the OND/TND Programs discussed earlier.

One might take the position, however, that the above approach is inaccurate because it is not clear that homes purchased under the 602 Program are purchased by eligible buyers who are not already homeowners, and that a simple count of sales under the 602 Program does not take into account whether the resale buyers would have purchased another home in the ACA. Therefore, in the following discussion, the research team defines “fostering homeownership” as the extent to which homes sold through the 602 Program are purchased (1) by first-time homebuyers and (2) income-eligible buyers. Each definition is discussed below, as are methodologies to analyze the 602 Program’s effects on those two definitions of fostering homeownership.

The 602 Program itself provides homeownership opportunities without regard to the prospective buyers’ homeownership histories. That is, it provides purchase opportunities for existing homeowners who choose to move into the ACA. Although the program rules do not restrict purchases to first-time homebuyers, the Baltimore and Rochester ACA participants reported that all home sales through March 2005 had been to first-time homebuyers.⁹ Therefore, the first proposed measure of whether the 602 Program is fostering homeownership is the number of homes sold to first-time homebuyers.

For the first measure of fostering homeownership and to get a basic understanding of the number and disposition of homes at the ACA sites, the evaluation should create a table

⁹ Rochester’s Asset Control Area (ACA) Program was the only program that explicitly limited sales to first-time homebuyers. Sales were limited to buyers who did not own a home at the time they submitted a purchase offer for the ACA home. A person who did not own a home before purchasing an ACA home may not be a first-time homebuyer if they owned a home at some earlier time but did not own one before their purchase of the ACA home. It is a reasonable assumption, however, that most, if not all, of the people meeting this requirement are first-time homebuyers. To ensure accurate measurement of the number of first-time homebuyers, it is recommended that ACA participants be asked to track whether each buyer is a first-time homebuyer.

with the information shown in exhibit 4. The shaded row is the first proposed measure of the program's effectiveness in creating homeownership opportunities for income-eligible homebuyers.¹⁰

A shortcoming of the first measure of fostering homeownership is that it does not measure how many homeownership opportunities are created by the 602 Program because, even without the program, some people who purchased homes that were rehabbed in the program may have purchased different homes. In addition, some of the homes rehabbed through the program may have been purchased by low- and moderate-income buyers, even if the homes were not rehabbed through the program.

To measure accurately the 602 Program's actual impact on fostering homeownership, it is recommended that one measure the program's effect by estimating the *difference* between the number of income-eligible homebuyers who purchase homes offered for sale through the 602 Program as compared with the number of income-eligible homebuyers who would have purchased those same homes without the 602 Program. Although there is no perfect way to measure this difference, one can make two comparisons that will provide some guidance about the size of the fostering homeownership effect. The following text refers to this second measure of fostering homeownership as the net effect.

At the outset of the evaluation process, the data analysis can include a computation of the share of nonprogram homes within the ACA that are purchased by buyers with incomes of less than 115 percent of the area median income during the same time period as ACA participants are selling 602 Program homes.¹¹ Assuming that the same share of ACA homes would have been sold to such buyers in the absence of the program, the evaluation can include an estimate of the number of additional homeownership opportunities created by the 602 Program. This can be done by applying the share of nonprogram homes in the ACA that were purchased by income-eligible buyers for the ACA homes. For example, assume that within an ACA 70 percent of homes not sold through the 602 Program are purchased by income-eligible households. Therefore, the assumption is that, the presence of the 602 Program notwithstanding, 70 percent of homes sold by the ACA participant would have been purchased by income-eligible buyers. Under the program, 100 percent of these homes are sold by the ACA participant to income-eligible buyers. Therefore, the effect of the 602 Program is that the share of homes purchased by income-eligible buyers of properties sold by the ACA participant increased by 30 percentage points, from 70 percent to 100 percent.

¹⁰ The table decomposes income-eligible homebuyers into three income groups. This analysis will allow the evaluation to assess the extent to which the 602 Program provides homeownership opportunities for different income groups below the 115-percent-of-area-median-income threshold.

¹¹ The Rochester Asset Control Area Program is primarily geared toward homebuyers with incomes below 80 percent of the area median income. For Rochester, this may be the appropriate comparison group.

**Exhibit 4. Fostering Homeownership: The Number of First-Time Homebuyers
With Low or Moderate Income**

Type of Buyer	Baltimore, MD	Rochester, NY	Salt Lake City, UT	Total No.	Total % of All ACA Participant Homes
First-Time Homebuyer					
Very low income (<50% of AMI)					
Low income (50–80% of AMI)					
Moderate income (80–115% of AMI)					
Total home purchases by first-time homeowners with low or moderate income					
Other Purchasers or Unsold Homes					
Non-first-time homebuyer (income < 115% of AMI)					
Homebuyer >115% of AMI					
Institutional buyer					
Unsold home					
Total ACA homes					100%
Police officer or teacher buyer (already counted in a category above)					

ACA = Asset Control Area.
AMI = Area Median Income.

By looking at information on home mortgages obtained for properties in an ACA, much can be learned about homeownership patterns in these enclaves. The Home Mortgage Disclosure Act (HMDA), passed by Congress in 1975, provides for the collection and reporting of public loan data and thus provides a valuable source of information for the evaluation at hand. HMDA data (for example, data on whether the mortgage financing was for a home purchase, regardless of whether it was for owner-occupancy; the census tract in which the home was purchased; and the income of the purchaser) can be used to estimate the aforementioned net effect¹² (that is, to obtain a measurement of the degree to which the 602 Program is fostering homeownership). Four limitations to this analysis exist: (1) HMDA data are at the census tract level, so the area covered by the nonprogram home sales is larger than the ACA and thus may not be perfectly comparable. It is not

¹² Because the number of Asset Control Area (ACA) sales meeting these criteria are known, they can be subtracted from the Home Mortgage Disclosure Act (HMDA) totals.

clear which way this would tend to bias the results. (2) With HMDA data, one cannot differentiate between single-family sales and two- to four-unit sales. Because low- and moderate-income buyers are less likely to purchase two-to four-unit buildings, this may bias the net effect upward. (3) The ACA Program may lower the chance that low- and moderate-income buyers would buy nonprogram homes in the ACA if the perception is that they get a better value on the ACA homes. This might also bias the estimate of the net effect upward. (4) If the program has a spillover effect on the neighborhood, it might increase the number of owner-occupant purchases in the neighborhood. If so, the additional owner-occupant purchases caused by the program are most likely to be made by low- and moderate-income buyers, which would bias the program effect downward. Nevertheless, in using this approach, the research team does not anticipate that any of these potential biases will be large effects, so this calculation will be a reasonable measure of the net effect of the program on fostering homeownership for low- and moderate-income households.¹³

A second way to measure the program's net impact on fostering homeownership is to use the preprogram share of homes in the ACA that were purchased by low- and moderate-income buyers as a basis of comparison for what would have happened in the absence of the program (see exhibit 5). This can also be done with HMDA data. Although this measure would eliminate the potential bias due to spillover effects of the program (limitations number 2 and 3 above), it will not reflect any secular changes that are affecting patterns of home purchases among low- and moderate-income homebuyers during the ACA Program period. This could lead to over or underestimates of the net effect, depending on the strength of the trend and whether the secular trend is for a higher or lower share of homes to be purchased by low- and moderate-income homebuyers. Nevertheless, if the magnitude of the effect is close to that of the initial comparison, it will strengthen the finding. If it is very different, it may mean that there is more uncertainty about the size of the net effect.

Note that an alternative data source for the second measure of net impact is Federal Housing Administration data on the disposition of Real Estate Owned (REO)¹⁴ properties in the period before the ACA Program. That is, instead of using HMDA data on the share of all homes sold to low- and moderate-income buyers, calculate the share based on the sale of HUD-owned properties. These properties may be a better comparative estimate for houses sold through the ACA Program because they are also REO properties.

¹³ One other consideration is that some of the ACA Program homes might have remained vacant in the absence of the program. Homes that become vacant do not show up in HMDA data because no loan was originated to buy the home. If a nontrivial number of homes are becoming vacant each year, this will bias downward the program effect on fostering homeownership.

¹⁴ Real Estate Owned properties are those sold by lenders after foreclosure.

Exhibit 5. Fostering Homeownership: The Net Effect of the Program on the Number of Homebuyers With Low or Moderate Income

	Baltimore, MD	Rochester, NY	Salt Lake City, UT	Total
(1) Number of ACA Program homes sold to low- to moderate-income buyers				
(2) Share of nonprogram homes sold to low- and moderate-income buyers during program period				
(3) Estimated number of ACA Program homes that would have been sold to low- and moderate-income buyers in the absence of the program (row 1 multiplied by row 2)				
(4) First estimate of net effect of the ACA Program on fostering homeownership (row 1 minus row 3)				
(5) Share of homes in ACA sold to low- and moderate-income buyers before ACA Program				
(6) Second estimate of number of ACA Program homes that would have been sold to low- to moderate-income buyers in the absence of the program (row 1 multiplied by row 5)				
(7) Second estimate of net effect of the ACA Program on fostering homeownership (row 1 minus row 6)				

ACA = Asset Control Area.

Fostering homeownership can be thought of as more than purchasing a home. It can also include the ability to remain a homeowner over time. Several of the 602 Program features may make it less likely that a homebuyer will default on his or her mortgage loan than will a similar buyer who purchases a non-ACA home. First, the program requires homebuyer counseling. Thus, these buyers may be better prepared for homeownership and less likely to default. Second, in some cases the homebuyer purchases the home at a below-market price. Having built-in equity from the start should make it less likely that a person will default on their loan. Third, the ACA participants have stated that they have made improvements to the homes that should keep homeownership costs lower than average for at least several years after the home purchases. For example, they have put in energy efficient appliances or made repairs on items (such as roofs) that could have caused significant financial investments by the homeowner down the road. The ACA participants have also implicitly stated that some of these housing quality improvements were not fully reflected in the resale prices, either because of the need to maintain affordability or because the market does not fully capitalize these less-visible improvements. Needing less money to maintain a home or having a home that maintains

its value over time should decrease the likelihood that the buyer will default. As a third measure of the program's effectiveness in fostering homeownership, the research team proposes examining default rates in the first 3 years after home purchase for ACA homebuyers. Ideally, the default rate of buyers of 602 Program homes can be compared with similar low- and moderate-income buyers who purchased nonprogram homes during the same time period.

Although this third measure of fostering homeownership may capture a potentially valuable impact of the program, it is not clear whether there is a data source that will capture the share of people who buy homes through the ACA Program and default on their loans. HUD only collects information on loan performance for transactions that include homeowner enforcement notes; as mentioned earlier, such notes are only issued when homes are sold for prices that are at least \$5,000 below their market or appraised values. At the two study sites that had sold a number of homes to eligible buyers by the end of March 2005, only a handful of houses had such enforcement notes. Hence, at this writing (mid-2005), there does not appear to be an administrative source for such information. One other possibility is to purchase data collected by a commercial vendor (for example, LoanPerformance in San Mateo, California). During its research, the research team learned that LoanPerformance was selling data on default and foreclosure rates for borrowers with various characteristics. Such data should provide useful information for default rates for low- and moderate-income homebuyers who purchase non-602 Program homes. It was not clear, however, if LoanPerformance had the requisite coverage and data to match addresses to the homes sold through the 602 Program. The research team thought it the case that LoanPerformance relied on the voluntary provision of data from lenders and servicers, so data availability depended on whether the lenders and servicers of ACA home loans participated in LoanPerformance's data collection process.

Section III. Recommended Evaluation Methodology To Measure the 602 Program’s Effect on ACAs

As discussed earlier, a key 602 Program objective is to revitalize neighborhoods. This section focuses on the proposed modeling methodology for measuring neighborhood revitalization. The first step is to review the theory of how renovations to properties purchased via the 602 Program are expected to generate a spillover effect that triggers neighborhood revitalization. The next subsection explains the Adjusted Interrupted Time Series (AITS) method, which is a form of hedonic regression with trends and fixed effects. AITS is the leading method researchers use for measuring neighborhood effects, but limitations still may make it hard to detect neighborhood changes from the 602 Program interventions. In particular, when the ACAs are scattered over a metropolitan area, little reinforcement is likely between the sites. A variant of the AITS method, using 500-foot circles around the rehabbed units, may be better suited for capturing the localized neighborhood effect.

A. How the 602 Program Affects Neighborhood Conditions

Given the program objectives, it is hypothesized that properties rehabilitated under the 602 Program improve those units’ quality, thereby leading to higher property values for surrounding properties because non-602 Program owners of the surrounding properties can use the increased value of their respective homes as a source of financing to make improvements and the improvements made by ACA participating agencies to their properties may be beyond those made by pre-602 Program owners, thereby increasing the average unit quality of the ACA.

The model assumes that, in the absence of the 602 Program, property owners in the ACA maintain and make investments in their properties that yield positive financial net returns. In this framework, owners will only make repairs to their properties in which the increase in the units’ market values resulting from the repairs exceeds the repair costs,¹⁵ and so we assume a “rule of thumb” in which an owner does not improve his or her property beyond the neighborhood average quality because the house value will not increase as much as the cost of the improvements. Nevertheless, if ACA participants fix up the worst properties (those that have negative effects on surrounding property values) in an ACA, then owners of surrounding properties are likely to experience property value increases, which could trigger such owners to invest in their own properties. Such repairs will boost those homes’ market values, and the neighborhood improves both because vacant FHA foreclosures are no longer depressing the market and because other owners join in the revitalization effort by fixing up their own houses.

¹⁵ Owner-occupied housing is both an investment and consumption good. Therefore, some owners may make repairs that do not yield positive financial returns because their homes simply require repairs or improvements.

The above theory predicts that the 602 Program will have a favorable effect on local property values. Other factors, however, could affect observed ACA property values, which could attenuate the favorable impact of the 602 Program. One such factor is the pool of buyers who seek owner-occupied homes in the ACA. House prices are ultimately limited by buyer incomes, and the buyers willing to live in a neighborhood may not be able to afford more expensive houses.¹⁶ The new owner of a 602 Program property may benefit from the discounted sale price,¹⁷ but buyers of non-602 Program properties have to pay the market rate. The revitalization spillover might be constrained by the limited incomes of other prospective homebuyers interested in the neighborhood. Alternatively, the improvement in unit quality from the 602 Program renovations could draw demand of higher income households that are willing and able to pay for higher house prices.

An appraisal has an effect on the loan amount that a potential homeowner can receive¹⁸ and may also affect the bids placed by potential purchasers for a property. Most appraisals are determined by comparing a subject property to three comparable sales (as determined by characteristics such as the subject property's number of bedrooms, bathrooms, and square footage) within the neighborhood. If the quality of homes renovated under the 602 Program is much higher than the quality of other homes in the neighborhood, the appraised value for the renovated homes may not accurately reflect their value to the extent that the only comparable sales in the area are for homes that are not renovated. This may be the case in some areas within ACAs because they include neighborhoods in which owners have not made significant investments in their properties. In such cases the first few renovations in a neighborhood could be hampered by a lack of comparable, improved-quality sales (Lang and Nakamura 1993). But, as more and more units are improved, appraisal values may increase with sale prices. Even if the average price does not change substantially, a sufficient number of comparable, good-quality houses could be enough to raise values of new appraisals. The higher appraisals, in turn, could boost sale prices of newly renovated houses, both within and outside the 602 Program.

Appraisers may underestimate the value of neighborhood properties because they only observe the houses for sale or those with permitted remodeling. Many owners are reluctant to get permits for their remodeling projects because it is inconvenient and potentially costly. The owners are concerned that the construction permits will trigger tax re-assessments of the remodeled homes or city inspectors will force the owners to bring their houses up to code. In this case, quality improvements in the housing stock could go largely unnoticed by appraisers.

¹⁶ This assumes, of course that neighborhood improvements will not attract higher income potential residents who will bid up home values in the neighborhood because local amenities and public services are such that the income characteristics of potential neighborhood residents do not change.

¹⁷ To the extent that the resale price for a property sold under the 602 Program is below its appraised value or that the appraised value that is used to establish a resale price does not accurately reflect the property's market value.

¹⁸ Nearly all home mortgage loans are restricted to a certain loan-to-value ratio that is computed by dividing the loan amount by the appraised value of the property.

Another potential factor could, in principle, make it difficult to measure a positive 602 Program effect on neighboring property values. To the extent that 602 Program participants sell renovated properties at a discount to the expected appraisal,¹⁹ these sales could be used by appraisers as comparable sales for future transactions of nearby homes that are not renovated. Appraisers should recognize that 602 Program properties are subsidized, and thus 602 Program sales should not be used as comparables or the sale prices should be adjusted to remove the discount. Nevertheless, it is possible that the discounted 602 Program sales are used as comparables and are not fully adjusted. Then non-602 sales might not benefit from higher prices despite the fact that the houses in the neighborhood are of a higher quality. This “discount” spillover might be more likely to happen in neighborhoods dominated by 602 Program renovations, but the effect is likely to be short lived. As soon as homebuyers recognize the quality improvements in the neighborhood, higher offers will correct any temporary underestimates from appraisals.

Overall, however, the model discussed here predicts that the 602 Program will have a favorable impact on surrounding properties. Moreover, to the extent that renovated properties are clustered within a relatively concentrated area, the 602 Program has the potential to improve neighborhood conditions within the ACA. The positive effect, however, may take time to be observed as there may be a lag between the time renovations are completed and the time market participants and appraisers observe these changes. The methodology described below is designed to capture such effects.

B. AITS Method

The AITS method, which is the most statistically rigorous, nonexperimental method used to determine whether the 602 Program had an impact, takes into account the trends in the neighborhoods before the intervention and then compares deviations from that trend at and after the intervention for the ACA and comparison neighborhoods. If house prices increased in the neighborhoods around the 602 Program rehabilitation properties, this provides evidence that the 602 Program had a positive impact on neighborhood revitalization. The AITS method has been used by researchers to evaluate the impact of the Low-Income Housing Tax Credit Program (Johnson and Bednarz 2003), HOPE VI (Holin et al. 2003), Community Development Block Grant (Galster et al. 2004), and Section 8 (Galster et al. 1999) housing programs. The approach presented here will use the AITS method with key summary measures such as house prices and possibly criminal activity.²⁰ House prices provide a good yardstick for neighborhood revitalization because that single value captures the many dimensions of unit quality, neighborhood amenities, and municipal services. The method is described below in more detail.

¹⁹ Due to the uncertainty of the after-repair appraised value for a given property, 602 Program participants may conservatively estimate that the appraisal for the renovated property will be the same as the as-is appraisal value, as the Community Development Corporation of Utah did. If this assessment is accurate, then the renovated property will have an appraised value that is identical to the property’s value before renovation, thereby having no effect on the comparable sales price that an appraiser could use.

²⁰ It is best used for measures that have data available on at least a quarterly basis and where the events (such as home sales) have a single address so that events can be aggregated to whatever geographic area is needed for the analysis.

In using this multiple regression-based methodology for the analysis of housing prices, there has to be control for the factors (other than the 602 Program) that affect housing prices, such as the characteristics of the house and the fixed neighborhood effects (for example, closeness to job centers). The quality of a house is not directly observed or summarized in one simple descriptor, so researchers typically use hedonic price indices that describe the “quality” of each housing unit as a package of various characteristics. The quality of the house, or its “hedonic value,” is a function of its physical characteristics, neighborhood attributes, and local public services.²¹ The price of the house is a function of its hedonic quality. The empirical tool for statistically deconstructing sales prices into the constituent package of attributes is a multiple regression equation. The log sales price is typically used as the dependent variable in the equation, and vectors of physical, neighborhood, spatial, and other relevant characteristics are the independent variables.

The distinct feature of this approach is the use of a pre or post design that compares both levels and trends of house prices in the surrounding neighborhood both before and after key milestones of the 602 Program. Using a period in time before the start of the initiative as the baseline for establishing what prices would have been in the absence of the redevelopment, the pre or post design measures changes in both price levels and trends in the ACA area during and after the 602 Program. It is the examination of these changes relative to changes in non-ACA neighborhoods that provides evidence for inferring the impact of 602 Program.

Symbolically, the multiple regression model is expressed as follows:

$$\text{LnP} = c + [\text{Struct}] + [\text{Quarter}] + [\text{Tract}] + [\text{Spatial}] + \text{DAll} + \text{D_DuringACA} + \text{DPostACA} + \text{TrDuringACA} + \text{TrPostACA} + \text{Time} + \epsilon$$

The unit of observation is individual home sales. The 602 Program properties are excluded because those properties sell at a discount relative to the market in most cases. All other home sales in the ACA and comparison neighborhoods are included. Sales before the 602 Program began provide a baseline and sales after the 602 Program began are used to estimate the size of the treatment effect. The symbol definitions include the following:

LnP = Log of single-family home sale price.

c = Constant term.

[Struct] = Vector of physical characteristics of homes; this controls for the size, quality, and amenities associated with the home.

²¹ Santiago et al. (2001, 69). For additional information on the definition and use of a hedonic price index, see Rothenberg et al. (1991, chapter 3).

[Quarter] = Vector of dummy variables indicating the year and quarter of the home sale; this vector controls for the regional and seasonal home sales price trends affecting prices across the city.

[Tract] = Vector of census tract dummy variables denoting the location of the home; this vector controls for tract-level characteristics of the neighborhood that are fixed over the study period.

[Spatial] = Vector of standardized spatial characteristics that includes the latitude coordinate (X), longitude coordinate (Y), X², Y², and XY; this vector controls for spatial heterogeneity.²²

DAll = Dummy variable for impact area (to be determined; for example, the ACA or within 500 feet of an ACA home); equals 1 if home sale occurs within impact area and equals 0 otherwise. This dummy variable controls for the characteristics of the impact area that are fixed over the study period.

D_DuringACA = Dummy variable for the impact area during the 602 Program startup period; equals 1 if home sale occurs within the impact area and after start of 602 Program and equals 0 otherwise. This dummy variable tests for a change in the level of home sales prices within the impact area after the start of the 602 Program.

DPostACA = Dummy variable for the impact area after several years (length to be determined) after the 602 Program has occurred for several years; equals 1 if home sale occurs within the impact area and after the start of demolition and equals 0 otherwise. This dummy variable tests for a change in the level of home sales prices within the impact area after the 602 Program has occurred for several years.

TrDuringACA = Trend variable for impact area during startup period of 602 Program; equals 0 if sale is not in impact area or occurs before the start of 602 Program and in impact area. If sale occurs after start of 602 Program and in impact area, trend variable equals 1 if sale occurs in the first quarter after the program's start, equals 2 if the sale occurs in the second quarter after the program's start, and so on. This trend variable tests for change in trend of home sales prices in impact area after start of initiative.

TrPostACA = Trend variable for impact area after the 602 Program has occurred for several years; equals 0 if sale is not in impact area or occurs before defined post-ACA period and in impact area. If sale is postdefined ACA period, equals 1 if sale occurs in the first quarter after demolition, equals 2 if sale occurs in the second quarter after demolition, and so on. This trend variable tests for change in trend of home sales prices in impact area after the 602 Program has occurred for several years.

²² As suggested by Galster et al. (1999), the issue here is whether the parameters associated with the regression equation are constant across space or whether they take different values depending on the local socioeconomic, demographic, or other physical characteristics across the county.

Time = Trend variable for the impact area; equals 0 if home sale does not occur within impact area. Otherwise, trend variable equals 1 if sale occurs in the first quarter of study period, equals 2 if sale occurs in second quarter of study period, and so on. This trend variable controls for the home sales price trend in the impact area.

ε = Random error

These variables control for localized fixed effects within the area immediately surrounding the ACA site,²³ characteristics of these properties, and overall trends in housing values within the city. If either of the two dummy variables or two trend variables after the start of the 602 Program are significant or if the combined effect of those variables is significant, then the 602 Program has had an impact on home prices. If the significant coefficient(s) is or are positive, the analysis suggests the 602 Program has helped revitalize the neighborhood.

The possible changes in house prices are illustrated graphically in exhibit 6. In all three graphs, the solid line, CC'C", shows the path of house prices in the comparison areas. In the top graph, the dotted line, T T'T", shows the path of house prices in the treatment areas or ACA. In this situation, the house prices are lower in the treatment area before and after the program but otherwise follow the same pattern of appreciation. Such a finding would suggest the program had no effect on house prices. That is, there was no shift in home prices after the intervention and no change in the trend of house prices after the intervention. In terms of the AITS model, both the intercept (DPostACA) and trend (TrPostACA) coefficients would not be statistically significantly different from 0.

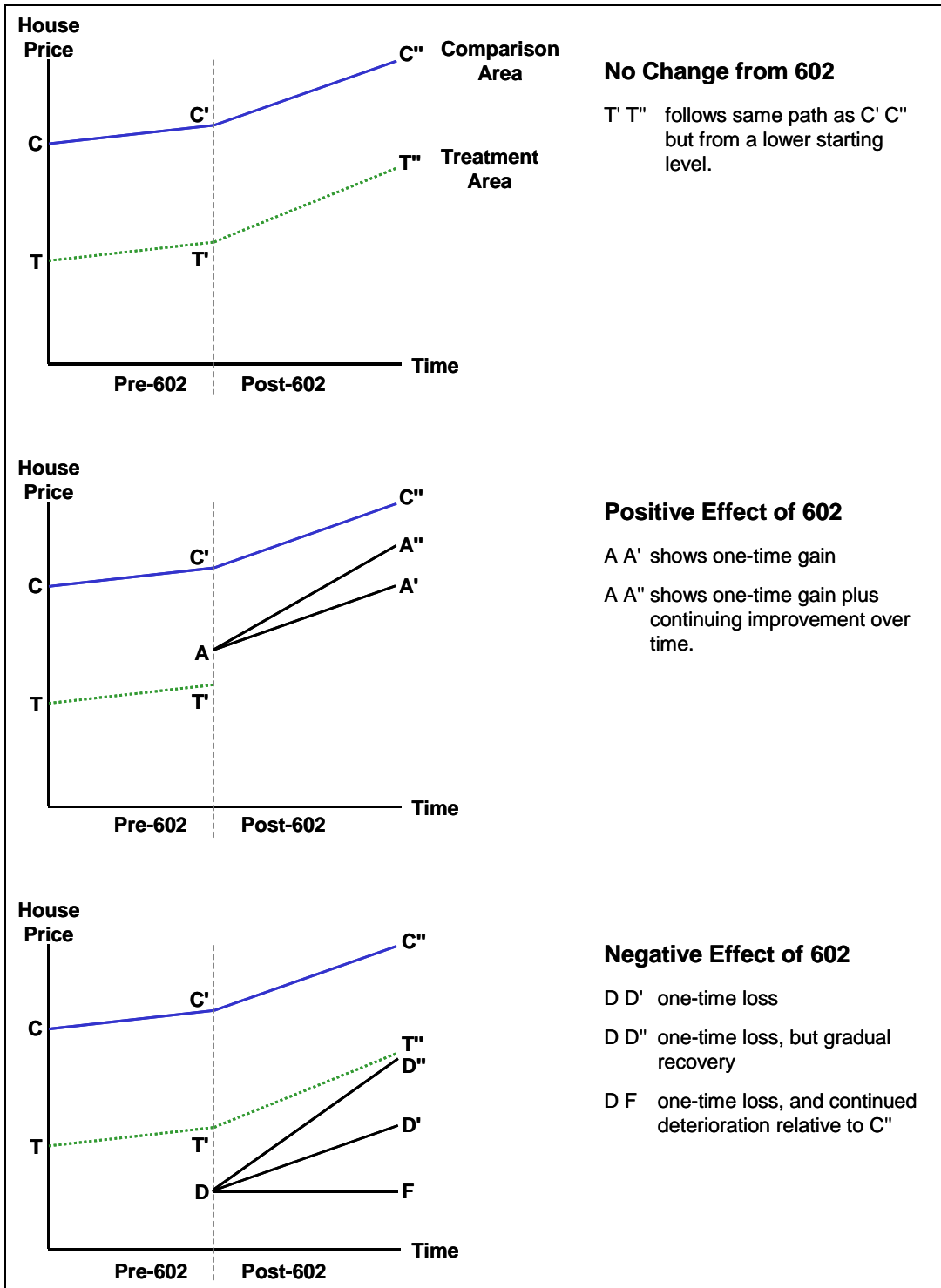
The 602 Program could have a positive effect in two ways as shown in the middle graph of exhibit 6. First, the program could be responsible for a one-time gain in house prices in the ACA (DPostACA is significantly positive) but then resume the same trend of appreciation as in the comparison areas (TrPostACA is insignificant). This path is shown as TT'AA' on the graph. The second positive impact would be an increasing trend after the 602 Program began. In that case, both DPostACA and TrPostACA would be positive and significant, shown by TT'AA". There is a shift up in prices after the intervention and the house price trend indicates prices continue to rise faster than the comparison area. A third possible way the program could have a positive effect (not shown in the graphs) is that housing prices do not shift up after the intervention (that is, DPostACA is not significant and A=T' on the graph), but thereafter prices increase faster in the treatment area than in the control area (TrPostACA is significantly positive).

Alternatively, there are a few ways that the 602 Program could have a negative effect. Instead of a one-time gain as the intervention began, there could be a one-time loss, T'D.

²³ These include numerous neighborhood characteristics (for example, physical and occupancy characteristics of nearby properties, environmental conditions) and attributes of the local public service sector (for example, schools, police and firefighting protection, taxes, zoning). These localized fixed effects are captured in summary form using a series of dummy variable specifications. The limitation to this approach is that the effect on home sales prices associated with individual attributes cannot be distinguished.

This downward shift in house prices might occur if the construction phase was disruptive to the neighborhood or the work highlighted the problem of vacant, dilapidated houses. If the neighborhood recovered from the construction, it would follow DD" or a stronger recovery could put the neighborhood above T". In terms of the regression coefficients, DPostACA would be negative and significant, but TrPostACA would be positive and significant. If the neighborhood failed to recover from the intervention, it could follow DD' or even DF in which house prices continued to lose ground relative to the comparison areas. In these latter cases, the coefficients on both DPostACA and TrPostACA are negative and statistically significant.

Exhibit 6. Diagrams Illustrating Neighborhood Effects of the 602 Program



C. Advantages of AITS

The AITS method isolates the 602 Program effect by controlling for as many factors that could affect house prices as there are available data. Only the change in house prices that occurs in the ACA areas at the time of the 602 Program are attributed to it. By including separate terms for the one-time shift and the subsequent trend, the model can accurately represent a wide range of alternative outcomes. A pre-post comparison is simpler, but it fails to determine whether the program difference continues as an increasing or decreasing trend.

In addition, the model is not constrained to a few treatment and comparison sites. Sometimes it can be quite difficult to find a comparison area that matches the treatment area along all the dimensions that could affect house prices. The AITS methodology allows inclusion of sales data from all the locations that are in the same housing market. The model can also accommodate spatial heterogeneity controls based on the x-y coordinates (Can 1997).

Another advantage is that the construction period is flexible. The initial impact of the 602 Program is likely to be small and could be negative, but the important impact comes after houses are renovated and are being sold on the market in significant numbers. The startup period can be excluded from the estimation or separate controls can be inserted to separate the short-term from the long-term impacts of the 602 Program. The length of the startup period may vary by city, but it is likely to be 6 to 12 months from the first designation notice to the first property resales. Moreover, if the 602 Program effect is not substantial until several houses in the same block are rehabilitated, it may take a couple of years depending on the clustering of project sites.

D. Limitations of AITS

Although AITS is the most sophisticated method for measuring neighborhood revitalization effects through house prices, it does require a lot of data. Not only does the model require many variables for house structure, neighborhood quality, and regional amenities, it also requires time-series observations for several years before the program to several years after the program began. Sample sizes reported in Galster et al. (2004) are 104,505 for Portland, 64,682 for Denver, and 33,349 for Boston. For Boston, the researchers associate the finding of an insignificant effect with preintervention volatility. Similar AITS analysis by Ellen et al. (2001) of neighborhood revitalization in New York City had 234,591 observations.

Another limitation of AITS, as with all regression approaches, is that it is susceptible to omitted variable bias. The assumption of the model is that it has controlled for all the factors that could affect differences in house prices between treatment and comparison areas during that time, so any remaining change estimated by the location fixed effect and trend variable must be associated with the 602 Program. Unfortunately, it is impossible to eliminate all the possibilities. Some factors, such as property tax, quality of schools, public transportation districts, and even other community development initiatives, can

differentially impact the ACA area relative to comparison areas. New activities and new fiscal measures are taking place every year. Moreover, new construction, both commercial and residential, can affect local house prices. Most of these market transactions will be independent of the 602 Program effect, but the researcher must recognize that even thoroughly collected data cannot control for all the factors that could influence the coefficient estimates. Qualitative analysis through local interviews can be critical for a complete understanding of the ACA market and surrounding neighborhoods.

The AITS method compares the trend after the intervention to the trend before the intervention. The same is true for the ACA intercept. If the pre-602 Program period is volatile, then it is more difficult to detect an impact from the program. In effect, if too much noise is in the data (that is, considerable variance in the housing prices) before the intervention, it is harder to determine whether the 602 Program impact surpasses the noise. Galster et al. (2004, 532) found this to be an issue in Boston.

The evaluation of the 602 Program in Rochester could have a related problem in that the Rochester group conducted an earlier version of 602 during the baseline period (that is, before the current version of the program). The presumption in the AITS model is that there is no intervention before the 602 Program rather than one program replacing a previous one. If the old 602 Program in Rochester was creating a positive neighborhood effect, it may be harder to detect increases in house prices specifically related to the current 602 Program. The new 602 Program would have to be significantly more effective than the old 602 Program to stand out.

Galster et al. (1999) measured the impact of Section 8 sites on neighborhood house prices. To avoid tainting the results from interactions during the baseline period, the researchers excluded any property sales that occurred within 2,000 feet of a subsidized site before the intervention period. The researchers did not want to include in the baseline period any property sales that could have been tainted by a relationship to neighborhood Section 8 sites. In terms of the 602 Program and Rochester, the analogous restriction would be to exclude sales near the old 602 Program sites that occurred before 2004 when the new 602 Program began. The tradeoff for untainted results may be thin samples, especially if the new 602 Program units are clustered near the old sites.

Time-trend variables are good for measuring average increases or decreases, especially when the pre-602 Program trend is well behaved (Shadish et al. 2002). Both the pre-602 Program trend and the post-602 Program trend may be rough approximations if the impacts are erratic over time. To account for this likely pattern, it is appropriate to use a more flexible approach that allows for jump-points in housing prices with time-specific dummy variables that estimate a constant change in property values for a particular period in addition to changes resulting from the overall trend in a particular area during that period (Schill et al. 2002). Time-specific dummy variables, however, may require averaging before projecting an effect beyond the sample period. The trend variable can easily project the same trend continuing beyond the sample. Moreover, a quadratic function (including time squared) could detect an acceleration or deceleration in the trend. These equations presume that there are several years of postintervention data.

A theory of neighborhood revitalization usually envisions a compounding effect as more and more units in the neighborhood get renovated. This idea suggests it would be easier to detect revitalization in a compact ACA than if the sites were scattered throughout a metropolitan area. Two of the study sites, Salt Lake County and Rochester, have scattered ACAs. When the research at hand was being conducted, it was too early to tell how much clustering would be in the rehab sites, but it is possible that the renovations would be separated by several blocks or more. Hence, the 602 Program impact may attenuate over time unless it is reinforced by other renovations close by. Separation of treatment houses by either space or time could make it difficult for the 602 Program to develop a compounding effect. The underlying issue is the size of a neighborhood. The perception of staff at the Community Development Corporation of Utah was that the neighborhood was quite small, perhaps only a block or two.

E. Impact Areas Measured as Concentric Circles

A technique used by Ellen et al. (2001), as applied here, is to measure the neighborhood impact as the difference between house prices within 500 feet of the 602 Program renovated house relative to the other houses in either the rest of the census tract or the rest of the ZIP Code. In fact, Ellen et al. (2001) took advantage of Geographic Information System mapping abilities by drawing three concentric circles (500, 1,000, and 2,000 feet from the treatment site). It might reasonably be expected that the spillover effect would be strongest in the smallest circle (500 feet), which measures house prices immediately around the treatment site. As the circles get wider, the spillover or externality would likely get diluted by other effects. The research results generally bear out this pattern. The results, however, depend on the number of home sales in each circle. The spillover might be most intense within 500 feet, but still not detectable if the sample sizes are too thin. Rochester has 105 sites and the 500-foot circles contain a range of 4 to 74 sales (cumulated over 5 years) with an average of 33 sales. This sample would be adequate for a single point in time but may be too thin to track changes over 5 years (especially if some of those sales are close to old 602 Program sites). The next concentric circle (measuring 501 to 1,000 feet) has an average of 82 home sales. Even if the 500-foot circle proves to be inadequate, the 1,000-foot circle should be sufficient. The research team recommends using the 1,000-foot concentric circles for the scattered ACAs in Rochester and Salt Lake County.

Sample size also affects the choice of tract versus ZIP Code. Ellen et al. (2001) studied New York City where the population density is high and there are many ZIP Codes. The researchers included fixed effects for each ZIP Code to pick up any local effect that did not change with the intervention. If different housing markets exist within the same ZIP Code, however, there may be corresponding fixed effects for each submarket that would be better captured at the census tract level. If the sales data per tract are too thin, there is the danger of picking up some of the treatment effect by the fixed effects. Taking a close look at the distributions of key variables in the analysis data will help the evaluators determine whether tracts or ZIP Codes are more appropriate for the particular

metropolitan area. Given the sample sizes, we recommend using tract fixed effects in Baltimore, Rochester, and Salt Lake City.

The scattered sites raise another issue. The AITS method provides an estimate of the average impact for all treatment areas. If those areas are scattered over different housing markets, it is possible that the 602 Program has a large impact in some neighborhoods but a negligible impact in other neighborhoods. For example, in Salt Lake County the North Salt Lake neighborhood is close to downtown and has displayed reasonably strong demand and high prices. In contrast, Magna is a town located outside Salt Lake City and near a declining Kennecott copper mine. At the time of this evaluation (mid-2005), the mine was scheduled to be phased out over the next 20 years and there was an abundance of older houses for sale (many for sale by owner). In North Salt Lake, the impact of renovating a few eyesore properties might be an increase in local house prices because any downside to buying in that neighborhood would have been removed. On the other hand, renovations in Magna may have little effect because that housing market suffered from excess supply. Adding to the excess supply, even if the additions are houses in good condition, may not do much to attract new demand and higher prices. The overall finding from AITS may depend on whether there are more sales in the strong markets versus the weak markets. In other words, the 602 Program could have positive impacts in some markets but not in others. Influence statistics, which gauge the impact of particular observations to the analysis at hand, can be used to rank the observations according to how important the observation is to the estimate of the coefficient (Rodda and Wallace 1996). This approach could indicate where the 602 Program had the largest and smallest impacts on neighborhood revitalization. In the long run, the ACAs could be tailored to places where the 602 Program was most effective.

F. Additional Measures of Neighborhood Impact

Although standard economic theory is that housing prices fully capitalize changes in neighborhood quality over the long term in competitive markets, it may be true that other changes occur first (and have not yet been capitalized in prices or do not meet the threshold to change price) or that some constraint in the market limits increases in prices (such as buyer liquidity constraints). Furthermore, there may not be enough property sales in these neighborhoods to distinguish actual changes in housing prices from sampling error in the data-intensive AITS methodology for analyzing housing prices. Hence, to be comprehensive, the research team recommends that future evaluations examine nonproperty sales indicators of neighborhood quality.

For the nonproperty sales indicators of neighborhood quality, the data were not available as point data or at a less than annual basis, so the AITS method was not appropriate. Instead, for these measures, the research team suggests a simple pre-post 602 Program comparison of changes in the ACA neighborhood. A limitation of a pre-post comparison is that the pre-602 Program period is not necessarily a good basis of comparison for what would have happened in the absence of the program. The changes may have occurred without the 602 Program. Therefore, changes (positive or negative) cannot necessarily be attributed to the 602 Program. In the absence of an experimental design or sufficient data

to use the AITS method, the next best alternative is to compare changes with like neighborhoods that were not covered by the 602 Program. The ACAs in Rochester and Salt Lake City cover a wide swath of the low- and moderate-income parts of the city, however, and Baltimore did not have an obvious comparison neighborhood. That is, there were no credible comparison neighborhoods within the respective cities under study here.

The research team offers three recommendations for partially overcoming this attribution issue. First, compare the changes with the rest of the city. Although this is not a perfect comparison, it will at least suggest whether any changes appear to be part of a citywide change or are concentrated in the ACA neighborhoods. Second, if the ACA Program is driving the changes, there should be large changes in the neighborhoods where the most ACA activity occurred. The presence of a concentration of 602 properties in a particular neighborhood or neighborhoods suggests doing an analysis that compares areas in the ACA where the most ACA homes were located to areas where few or no homes were in the program. More change in the more active ACA neighborhoods suggests the changes are attributable to the ACA Program. A severe limitation of this comparison is that the location of ACA homes may be severely geographically restricted (that is, meaningful comparisons are not possible). The neighborhoods that would have negative changes or the least positive changes may be the same neighborhoods where homes are foreclosed and the homes end up in the program. As a result, this comparison is likely to underestimate any positive effect of the ACA Program. Third, evaluators should talk to key informants about the changes to understand differences within the ACA neighborhood and to seek to understand the different factors that may have played a role. The interviews with key informants will also provide more general information on what changes may be attributable to the program. These interviews are discussed in section V.

Exhibit 7 shows the recommended measures of neighborhood quality for analyzing the impact of the 602 Program on neighborhood revitalization. Each of the measures is also discussed below.

The first three measures of neighborhood quality using Home Mortgage Disclosure Act data (number of mortgage applications, approval rate, and median loan amount) are based on findings from Galster et al. (2005). These authors found that these three measures of mortgage activity from HMDA were highly correlated with many other measures of neighborhood quality and thus they were good summary measures of neighborhood quality. Furthermore, HMDA data are inexpensive and publicly available within 8 or 9 months of the end of the year. One shortcoming is that the smallest geographic level for which HMDA data are available is the census tract. Because ACAs are defined by census block groups, only parts of some census tracts are in the ACA.

Exhibit 7. Additional Measures of Neighborhood Revitalization

Measure	Source	Time Period	Geographic Level for Analysis
(1) Number of home purchase mortgage applications	HMDA	Annual	Census tracts in which the ACA is located.
(2) Percentage of home purchase mortgage applications approved	HMDA	Annual	Census tracts in which the ACA is located.
(3) Median dollar amount of loans for home purchase mortgage applications	HMDA	Annual	Census tracts in which the ACA is located.
(4) Percentage of home sales that are for owner-occupants	HMDA	Annual	Census tracts in which the ACA is located.
(5) Percentage of home sales that are for owner-occupants	First American	Annual (or less)	ACA
(6) Homeownership rate	Census	Every 10 years	ACA
(7) Vacancy rate	Census	Every 10 years	ACA
(8) Crime rate	Local police departments	Still being negotiated—annually at least	Still to be determined—negotiated ACA-wide at least

ACA = Asset Control Area.

First American = First American Real Estate Solutions.

HMDA = Home Mortgage Disclosure Act.

The fourth and fifth measures of neighborhood quality are the same measure—the percentage of home sales to owner-occupants—but from different data sources. The use of this measure of neighborhood quality is based on input from Baltimore’s ACA participant, who argued that one of the main benefits of St. Ambrose’s program was selling houses to owner-occupants instead of to investors who did not live in the neighborhood. The rationale is that owner-occupants will have more of an incentive to take care of their homes and participate in activities to stabilize or improve the neighborhood.

The share of owner-occupant purchases can be measured from HMDA data and from First American Real Estate Solutions, a private vendor of home sales price data. The benefit of First American data is that the information is at the single-address level and so can be exactly matched to the boundaries of the ACA. First American data, however, need to be purchased at more than the nominal cost of HMDA data. First American identifies an owner-occupant by comparing the address of the subject property to the

address that the mortgagee uses and by comparing the names on the deed to other deeds to see if the buyer owns more than one property. If the addresses match and the person does not own another property, he or she is flagged as an owner-occupant. In HMDA, it appears that the buyer is flagged as an owner-occupant based on the self-reported tenure status on the mortgage application. Because there is no known research on the accuracy of the owner-occupant flags from either of these sources, the research team recommends that the evaluator analyze both data sources to see if there is a consistent finding.

The sixth and seventh measures are the neighborhood homeownership rate and vacancy rate; both are derived from census data. The neighborhood homeownership rate can be affected directly by the 602 Program to the extent that the program creates more owner-occupants and indirectly by influencing other homeowners to buy in the neighborhood or lenders to lend to owner-occupants in the neighborhood. Measuring the neighborhood vacancy rate was suggested by the Rochester ACA participant. A major problem facing the city of Rochester was the number of vacant housing units. Mindful of this situation, one of the city's goals for its participation in the 602 Program was to reduce the number of such units by improving the housing quality and thus making the ACA neighborhoods more desirable. The Rochester staff also stated that reducing vacancies was important because it was considerably more difficult and expensive for homeowners located next to vacant properties to obtain homeowners insurance and for potential homebuyers to obtain mortgages for properties located next to vacant properties.

Homeownership rates and housing vacancy rates are both collected during the decennial census, but obviously often are not current. In addition, the U.S. Department of Housing and Urban Development's Office of Policy Development and Research (PD&R) has concluded an arrangement with the United States Postal Service for the receipt of quarterly data on addresses that are known to be vacant for 90 days for all current ZIP Codes plus an additional four-digit identifier (that is, the typical nine-digit ZIP Code). As of early 2006, PD&R planned to geocode these vacant address data and make them available to the general public at the census tract level. Again, with respect to neighborhood homeownership rate data, this information may be available from individual local jurisdictions.

Crime and perceptions of safety are key quality of life measures for neighborhood residents. If the ACA neighborhoods are improving, one way this improvement could show up is in decreased incidence of crime. The final recommended measure of neighborhood quality is the crime rate. The specific measure recommended here is the number of an ACA neighborhood's Part 1 crimes (that is, the eight most serious felony crimes contained in the Federal Bureau of Investigation's Uniform Crime Reports) (excluding arson) reported to the police divided by the population of that ACA neighborhood. The resulting figure can then be converted to a crime rate per 1,000 people as is standard in the criminal justice literature. The evaluation team, with the assistance of the HUD project officer, negotiated with local police departments at the three ACA sites for crime data. When data collection and analysis ended, however, the team had not received crime data. The team was also not sure at what geographic level the crime data would be provided or for which years it would be provided. If the data were provided as

point data on an annual basis, the team recommends using the AITS method for analyzing it. If it is provided at a more aggregate geographic level or not provided for all the requested years, a pre-post comparison as described earlier in this section might be possible.

The research team also considered using measures of commercial activity, such as employment, sales volume, and the number of establishments in the neighborhood, as a neighborhood quality indicator. The team learned, however, that ACA participants at each of the three sites thought that any changes in commercial activity were not likely to occur or would occur later than other measures of neighborhood change. Given these participant perceptions and the expense of purchasing such data from commercial vendors, the research team was hesitant to recommend these measures for the evaluation.

Section IV. Qualitative Analyses of 602 Program Effects

As discussed above, the recommended research strategy includes rigorous quantitative analyses of the extent to which the 602 Program fosters homeownership opportunities and has a positive effect on the ACA neighborhoods. These quantitative analyses are designed such that they are consistent with the present evaluation's strategy which provides for a reasonable basis of comparison that estimates property disposition and ACA neighborhood quality outcomes "but for" the 602 Program, is flexible enough to support analyses with different size ACAs, and assesses 602 Program effects by analyzing multiple neighborhood indicators.

The research team cautions prospective evaluators to take into account the fact that the 602 Program is relatively complex. ACA participants must work with contractors, Realtors, homebuyer counseling agencies, and lenders to acquire, rehabilitate, market, and sell 602 Program properties. Moreover, to trigger a larger neighborhood effect, the sale and repair of 602 Program properties must create higher property values in the ACA, which creates equity for existing homeowners that can be used to finance further property improvements in the ACA.

Although the research team believes that its recommendations for quantitative analyses are appropriate methodologies to assess the effects of the 602 Program, it also believes that any evaluation of the program should include a qualitative assessment performed by preparing detailed case studies of the 602 Program through key informant interviews and discussions. Indeed, it is generally recognized that any evaluation of community development initiatives requires a combined quantitative and qualitative methodology to capture program effects that may not be measurable with even the most rigorous quantitative analytical methodology (Galster et al. 2004).

Consistent with this approach, the present research team recommends that future evaluation teams conduct indepth discussions with key informants who are knowledgeable about the 602 Program's effects on ACAs. To identify these key informants, the evaluation team should use a "snowball" method, beginning with the ACA participant's executive director (ED). The ED should be asked to identify key informants who work for organizations that are knowledgeable about the 602 Program and neighborhood conditions both within the ACA and in the city as a whole. It is expected that these key informants will include representatives of the ACA participant, local governments, neighborhood organizations, lenders, other community development organizations that are active in the ACA, academics, and other researchers of the city.

In conducting interviews with key informants, the evaluation team should ask about key informants' perceptions of the 602 Program and how the program has affected local ACA conditions. In addition, the research team can present key informants with preliminary quantitative analyses results and ask them if the results are consistent with their perceptions. Importantly, key informants can provide valuable insights about the extent to

which measured changes in the ACA are attributable to the 602 Program or any other factors that influence ACA conditions.

The results of the key informant interviews should be reported in case studies that describe how the ACA participant implemented the 602 Program, how the program changed over time from the process described in the baseline report, and what effects the 602 Program appears to have had on the ACA. Of course, the first two topics will be covered in interviews with ACA participant representatives; the last topic will be covered in discussions with all of the key informants.

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