Fannie Mae

2021

MAY 8 CONSULTING

REINVESTMENT FUND

Evidence-Based Policy Making

An Analysis of Six Strategies to Stabilize Neighborhoods

By: May 8 Consulting and Reinvestment Fund

Fannie Mae commissioned this paper in connection with its 2021 Duty to Serve plan. This paper was prepared by May 8 Consulting, Inc., and Reinvestment Fund. While Fannie Mae consulted with the authors, and reviewed the paper's content, the conclusions presented are solely those of the authors.

Contents

Executive Summary

As local practitioners begin to assess strategies to address the economic impacts of the COVID-19 pandemic on their communities, this report seeks to provide information that will be helpful in their efforts to effectively and equitably protect and improve housing market conditions in low-income and middle-income neighborhoods.

The research team, made up of May 8 Consulting, Inc., and Reinvestment Fund (Fannie Mae team), performed a basic policy analysis of the effectiveness of six common tools that urban and suburban local governments and their partners use to stabilize low-income and middle neighborhoods. This effort paid particular attention to tools that are being used to stabilize or revitalize housing markets in neighborhoods of color that have been destabilized and weakened by historically racist policies like redlining, race-based zoning ordinances, and restrictive covenants.

The policy interventions selected for analysis are:

1. **Code Enforcement** – System of inspections, fines, and fees to enforce private property condition standards;
2. **Demolition** – Removal of deteriorated or dangerous buildings to eliminate blighting conditions;
3. **Scattered Site Rehabilitation** – Acquisition and rehabilitation of vacant single-family homes for sale or rental;
4. **Land Banks** – Government agency or nonprofit established entities charged with reactivating vacant and underutilized properties and returning them to productive use;
5. **First Look™ Programs** – Programs that provide owner occupants and local nonprofit buyers with an exclusive "first look" to purchase single-family real-estate-owned (REO) properties in the portfolios of financial institutions; and
6. **Emergency Bridge Loan/Soft Second Mortgage Programs** – Short-term loan programs to prevent foreclosure for homeowners who are delinquent on mortgage payments.

For each of the interventions, the team selected two local programs that utilized the intervention and were willing to share data for analysis.

In order to provide practitioners with evidence-based guidance in real time as they define a local response to the COVID-19 economic crisis, the Fannie Mae team adopted a *quick, basic policy analysis* approach. That approach to research, best described by Patton, et al. (2013), is work that is needed in situations when policy analysts are called on "to give advice to policy makers in incredibly short periods of time, in contrast to university researchers and think tank consultants who are hired specifically to conduct intensive research on public policy issues." Quick, basic policy analysis is uniquely appropriate in a moment when policymakers and practitioners desire to make rapid but data-based decisions that have a reasonable prospect to address a problem they confront. It is important to note that quick policy analysis is not robust enough to definitively identify causal links between interventions and neighborhood stability nor was the team able to determine statistical significance for correlations or associations due to the small sample size. Issues of selection bias further constrain the ability to draw conclusions; areas may choose to implement a program for specific reasons that we cannot observe and which may be correlated with stabilization. As a result of the limitations, the findings for any of the six interventions studied cannot be generalized to all local instances of that intervention. What these analyses provide is important information about changing stability over time within particular neighborhood settings that were "treated" by a particular version of each intervention tool. Details about each program and neighborhood context can help policymakers tailor any of the interventions to their own local resources, market conditions, and policy goals.

Table 1: Policy Interventions Summary Table

Policy Intervention	Program Analyzed - Name	Program Administrator (Type and Name)	Program Geography	Metrics Indicative of Stabilization Analyzed	Program Years Analyzed
Code Enforcement	Streamlined Code Enforcement Program	Govt: City Department of Housing and Community Development	Baltimore, MD	Sale Price, Vacancy	2010-2020
	All Together Now Program	Govt: Department of Regulatory Services	Minneapolis, MN	Sale Price, Nuisance Violations	2014-2019
Demolition	Dangerous Buildings Initiative	Govt: Neighborhoods and Housing Services Department	Kansas City, MO	Sale Price, Vacancy, Tenure	2016-2018
	City County Demolition Project	Govt: Department of Regulatory Services	Hennepin County, MN	Sale Price, Sale Volume, Vacancy	2009-2013
Scattered Site Rehabilitation	West Philadelphia Scattered Site Model	For Profit: WPRE and Neighborhood Restorations	Philadelphia, PA	Sale Price, Vacancy, Foreclosure Filings	2010-2014
	Atlanta Neighborhood Development Partnership Scattered Site Model	Nonprofit: Atlanta Neighborhood Development Partnership	DeKalb County, GA	Sale Price, Sale Volume, Assessed Value, Foreclosure Filings, Tenure	2010-2014
Land Bank	Houston Land Bank	Govt: Housing and Community Development Department	Houston, TX	Sale Price	2010-2019
	Albany County Land Bank	Nonprofit: Albany County Land Bank	Albany, NY	Sale Price, Vacancy	2015-2020
First Look Program	New Jersey Community Capital's Community Asset Preservation Corporation	Nonprofit: New Jersey Community Capital	Essex County, NJ	Sale Price, Sale Volume, Bank Sales	2013-2016
	Community Investment Corporation Community Initiatives Acquisition Program	Nonprofit: Community Investment Corp	Cook County, IL	Sale Price, Sale Volume, Completed Foreclosure	2013-2016
Emergency Bridge Loan	Homeowners' Emergency Mortgage Assistance Program	Govt: Pennsylvania Housing Finance Agency	Pennsylvania/ Analysis of Allegheny County	Sale Price, Sale Volume, Foreclosure Filings	2010-2014
	Delaware Emergency Mortgage Assistance Program	Govt: Delaware State Housing Authority	Delaware/ Analysis of Wilmington	Sale Price, Sale Volume, Foreclosure Filings	2011-2019

Because neighborhood housing markets are complex and fluid, and no single indicator can fully capture their relative stability and direction, the team evaluated multiple metrics for each intervention where available. Metrics were selected based on their relevance to stabilizing low-income and middle neighborhood markets

. As with the selection of interventions for study, the metrics were chosen to focus on market characteristics most relevant to homeowner stability. Due to variations in local data availability (e.g., in Houston, foreclosure filings are not publicly available, and the quality of vacancy data varies widely by location and source), the team was not able to use a uniform set of indicators across all interventions. Nor could the team always access preferred indicators for certain interventions; the team sought metric data for periods immediately before and after the intervention time period, but in some cases, the available data overlapped with program activities. Additionally, because this is an exploratory analysis of programs with a wide variety of goals, scales of intervention, and neighborhood conditions, the team did not define success using a threshold value for any of the indicators (e.g., a 25% increase in median sale price or a 10% decline vacancy). The most common metrics used to define whether the neighborhood experienced stabilization were:

- Home sale prices
- Home sale volume
- Foreclosure volume and rate
- Residential vacancy

Sale prices are an indicator of whether existing low- and moderate-income owners are maintaining equity in their homes and are able to access financing or might be at risk of going underwater on their mortgage and whether there is buyer confidence in the local market.

Sale prices are an indicator of whether existing low- and moderate-income owners are maintaining equity in their homes and able to access financing or might be at risk of going underwater on their mortgage and whether there is buyer confidence in the local market. Low sales volume can indicate market stagnation and potential disinvestment. Foreclosures are a more direct measure of stability and forced moves. Residential vacancy is a commonly used measure of disinvestment—and the potential loss of housing units due to inhabitability or abandonment.

It is important to note, however, that in the community development field, there is often a tension between investment and displacement, and housing market dynamics reflected in the selected metrics may have both positive and negative impacts based on local context and resident characteristics. For example, rising sale prices may be followed by rising property taxes that can strain lower income homeowners who are not eligible for senior tax freezes or other programs and may put ownership out of reach for first time buyers. Sales volume could be reflective of short or distressed owner sales. Falling vacancy may make it difficult for some home seekers to find affordable units. Renters tend to be more vulnerable to fluctuations in market strength, as are all households that have less wealth. As a result, some signals of market stabilization and strength may also raise concerns about gentrification.

Although stabilization was the focus of this report, the team endeavored to address potential concerns regarding gentrification by assessing whether market changes likely indicated stability for low or middle-income residents, or a demographic transformation reflecting the replacement of one group of residents with another, higher-income group. Though definitions of gentrification vary, the term generally refers to the arrival of higher income households and the departure of lower income ones in a neighborhood, sometimes accompanied by racial change.[1] Appendix A presents a series of data tables documenting changes in income racial/ethnic makeup and income in all 12 intervention locations. While many of the neighborhoods evaluated saw growth in sales price during the study period, these tables show there were not substantial increases in incomes—many remained below their metropolitan median income—nor were there shifts from non-white to white populations.

---

[1]See, e.g., Hwang, J., & Sampson, R. J. (2014). Divergent pathways of gentrification: Racial inequality and the social order of renewal in Chicago neighborhoods. American Sociological Review, 79(4), 726-751; Kirkland, E. (2008). What's Race Got to Do With it? Looking for the Racial Dimensions of Gentrification. Western Journal of Black Studies, 32(2); Chronopoulos, T. “What’s Happened to the People?” Gentrification and Racial Segregation in Brooklyn. J Afr Am St 24, 549–572 (2020). https://doi.org/10.1007/s12111-020-09499-y; Jonathan Jackson (2015) The Consequences of Gentrification for Racial Change in Washington, DC, Housing Policy Debate, 25:2, 353-373, DOI: 10.1080/10511482.2014.921221

The Fannie Mae team evaluated programs that were implemented in either low-income areas (where median incomes ranged from 30%-60% of the local metro area median according to ACS estimates for the analysis starting year for that intervention) or middle neighborhoods (where median incomes ranged from about 70% to 130% of the local metro area median in the analysis starting year).

Table 2: Program Neighborhood Income and Density Type

Policy Intervention	Program Geography	Median Treated Area Income as Share of Local Metro Median Income	Neighborhood Income Type	Neighborhood Density Type
Code Enforcement	Baltimore, MD	68%	Middle	Urban
	Minneapolis, MN	128%	Middle	Urban
Demolition	Kansas City, MO	42%	Low Income	Urban
	Hennepin County, MN	54%	Low Income	Urban
Scattered Site Rehabilitation	Philadelphia, PA	31%	Low Income	Urban
	DeKalb County, GA	110%	Middle	Suburban
Land Bank	Houston, TX	39%	Low Income	Urban
	Albany, NY	52%	Low Income	Urban
First Look Program	Essex County, NJ	82%	Middle	Urban/Suburban
	Cook County, IL	94%	Middle	Urban/Suburban
Emergency Bridge Loan	Allegheny County, PA	129%	Middle	Suburban
	Wilmington, DE	99%	Middle	Urban

Headline Findings

1 Code Enforcement

- **Streamlined Code Enforcement Program (SCEN), Baltimore, MD** – Proactive code enforcement in middle neighborhoods targeted at vacant buildings and lots.
- **All Together Now Program (ATN), Minneapolis, MN** – Engagement of residents and neighborhood associations prior to proactive inspections.

Summary of Findings: These two programs were the most geographically targeted of all the programs evaluated and showed the strongest association between program activity and neighborhood stabilization. There was observable improvement and relatively more stability in middle markets that were treated by Baltimore's Streamlined Code Enforcement Neighborhoods (SCEN) program. The contrasts between SCEN and non-SCEN block groups were most notable in weaker middle markets, compared to areas identified as stable or strong middle markets. Neighborhoods participating in Minneapolis' All Together Now (ATN) program for three or more years experienced a larger increase in sales price and greater declines in nuisance violations than neighborhoods that were not in the program or that were in the program for just one or two years; dosage is an important consideration (e.g. the level and longevity of treatment within a given neighborhood). Although the analysis of each program was not robust enough to determine a causal relationship, statistical significance, or generalizability, these findings suggest that sustained geographic targeting of code enforcement over multiple years has been effective in Baltimore and Minneapolis neighborhoods that fall between each city's most stressed and more stable communities—where there is room for property condition improvement but not severe challenges with disinvestment.

2 Demolition

- **Dangerous Building Initiative, Kansas City, MO** – Three-year program to demolish backlog of dangerous buildings, primarily single-family homes.
- **City County Demolition Project, Minneapolis, MN** – Three-year program to demolish vacant and dilapidated properties with multiple code violations.

Summary of Findings: The analyses indicated a positive association between demolition activity and housing market stabilization. The programs studied were not designed to stabilize specific geographies, but due to the spatial patterns of dangerous buildings, there were some concentrations of demolition activity, especially in Kansas City. In Kansas City, treated areas experienced much larger increases in homeownership and declines in housing vacancy than comparable areas without concentrated demolitions. The association between demolition and market stability was more limited in Minneapolis where vacancy decline was the only measure by which treated neighborhood substantially outperformed comparable areas. This quick, basic policy analysis does not show that targeted demolition will stabilize all neighborhoods, but in these two cases, we observed a greater level of stabilization over time in treatment areas than in comparable areas, especially where demolition was spatially concentrated. The analysis does not establish causality, statistical significance, or generalizability.

3 Scattered Site Rehabilitation

- **WPRE/Neighborhood Restorations Scattered Site Program, Philadelphia, PA** – Private sector developers acquired and rehabilitated abandoned rowhouses into affordable single-family rental homes in West Philadelphia.
- **Atlanta Neighborhood Development Partnership Scattered Site Program (ANDP), DeKalb County, GA** – Nonprofit acquired and rehabilitated foreclosed single-family homes for homeownership.

Summary of Findings: Neighborhood level associations between market stabilization and scattered site activity were mixed in these two non-governmental programs and there are inherent limits on geographic concentrations in a scattered site model. Areas with relative concentrations of West Philadelphia scattered site renovation activity had greater increases in sales prices than comparison areas, but on other measures, treated neighborhoods and comparable areas saw similar trends. In Dekalb County, GA, at a time of widespread sales price and property assessment declines, the decline in home values was slightly smaller

in areas around ANDP's renovated properties and homeownership declines were also slightly less severe. A higher program dosage was associated with more notable change; treated areas with the most ANDP renovations were more likely to outperform their comparison areas than areas with the fewest ANDP renovations. The limits of the research design do not allow us to extend these findings to other types of markets or different versions of a scattered site model, nor can we establish causality or statistical significance.

4 Land Bank

- **Houston Land Bank, Houston, TX** – Quasi-public local government corporation acquires and transfers tax sale properties without structures to new owners for new construction that meets community needs such as quality affordable housing.
- **Albany County Land Bank, Albany, NY** – Nonprofit acquires tax foreclosed and other vacant or abandoned properties and sells them to homebuyers and developers.

Summary of Findings: There was an association between land bank activity and neighborhood stabilization in both programs. In Houston, land bank activity was concentrated in three market types—all on the weaker end of the city's markets, and all with low median incomes. The most notable stabilization occurred in the strongest of the three markets. These markets also had the greatest concentration of land bank activity. In Albany, land bank activity was exclusive to the city's most stressed low-income markets, making the identification of a non-treated comparison areas difficult. Differences did emerge in looking at areas with one or no land bank transactions and those with two or more; there was a larger increase in sale prices and decreasing vacancy in treated areas with more transactions. Similar to the code enforcement interventions, market context and program dosage may have played a role in these program locations. However, this analysis presents the same limitations regarding causality, statistical significance, and generalizability.

5 First Look Program

- **New Jersey Community Capital, Essex County, NJ** – Nonprofit community lender obtained and renovated REO properties for first time homebuyers.
- **Community Investment Corporation Community Initiatives Acquisition Program, Cook County, IL** – Nonprofit community lender acquired distressed 1-4 unit housing and sold these properties to vetted private-market developers for homeownership or rental.

Summary of Findings: Analysis found observable market stabilization trends in areas within 500 feet of First Look properties in Essex County, NJ, but less clear results in Cook County, IL. Proximity to a First Look home in Essex County was associated with a larger decline in bank sales, a larger increase in median sales price, and an increase in sales volume. Proximity to a First Look home in Cook County was associated with an increase in median sales price and smaller decrease in sales volume relative to the comparison area but also with an increase in foreclosure. It is important to note that while these analyses focus on market changes within a small area, First Look programs are designed to treat properties rather than targeted geographies. As noted in the analyses of emergency bridge loans that follow, previous research has demonstrated impacts of individual foreclosed properties; this quick basic policy analysis did not capture all of the potential effects of the program. Causality, statistical significance, and generalizability could not be determined.

6 Emergency Bridge Loan/Soft Second Mortgage Program

- **Pennsylvania Homeowners' Emergency Mortgage Assistance Program (HEMAP), Allegheny County, PA** – Statewide program offers delinquent homeowners the right to apply for a short-term loan to make mortgage payments and while the application is pending foreclosure action cannot move forward.
- **Delaware Emergency Mortgage Assistance Program (DEMAP), Wilmington, DE** – Statewide program provides emergency bridge loans to homeowners who are at least 90 days delinquent on their mortgage loans due to circumstances beyond their control.

Summary of Findings: These two statewide programs were designed to assist homeowners in need, wherever they live, and previous studies have shown emergency bridge loans benefit individual homeowners, near neighbors, and local government. However, there were not notable geographic concentrations of program activity, even in more densely populated areas of Pennsylvania and Delaware that had concentrations of foreclosure. Areas surrounding HEMAP recipients in Allegheny County, PA, showed some signs of strength relative to areas further from recipients—larger increase in sales volume relative to the comparison areas but similar declines in foreclosures and median home sales price.

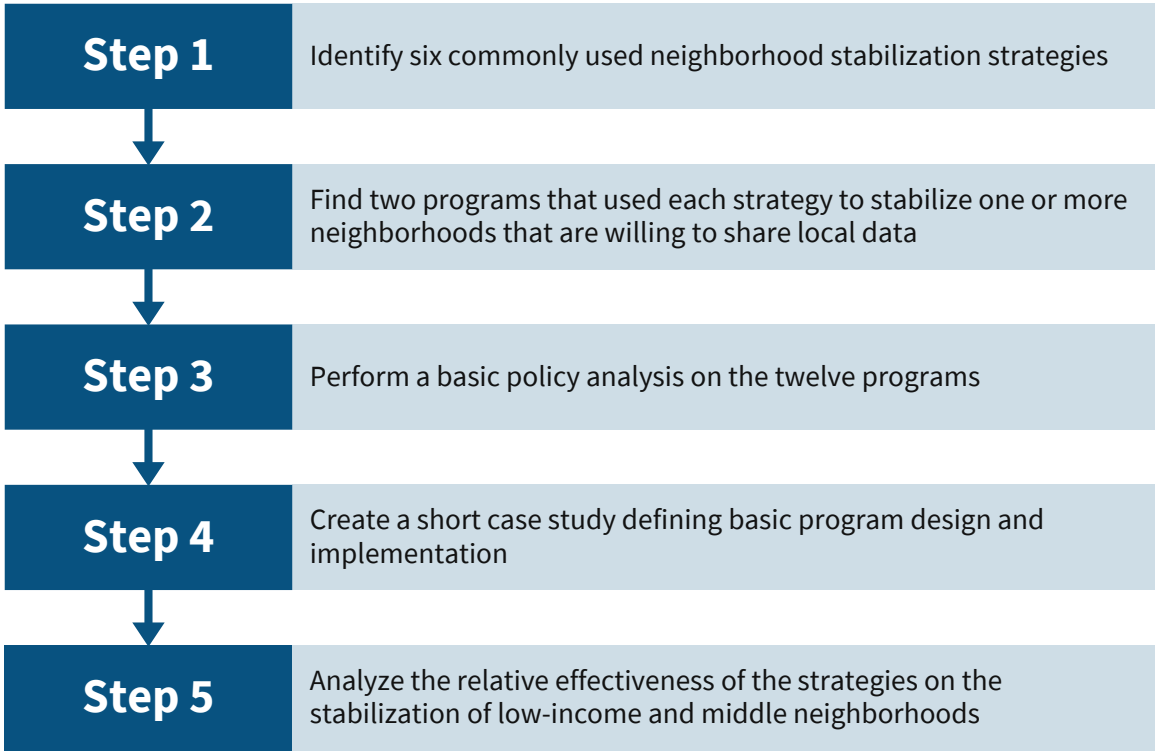
Statistical significance was not calculated due to the small number of treated properties and comparison points. Areas adjacent to DEMAP recipients did not show greater relative stability or improvement. The lack of association with neighborhood level stabilization may be related to market differences, lower density, program design (HEMAP includes an automatic "pause" on foreclosure proceedings that DEMAP does not) or other factors. To achieve an observable neighborhood stabilization effect, these programs would likely need to be more geographically concentrated. But it is important to note that while there is no consistently discernible market impact, these programs are not without impact entirely. To the contrary: every home that is saved from foreclosure has an estimated financial impact of more than $90,000. In a previous study, Reinvestment Fund estimated that the aggregate impact of foreclosures saved by Pennsylvania's HEMAP program between 2013 and 2018 was just under $300,000,000.[2]

[2]See: https://www.reinvestment.com/wp-content/uploads/2019/05/Reinvestment-Fund-Policy-Brief-HEMAP.pdf

Introduction

Faced with the destabilizing impact of a global economic crisis such as the recent COVID-19 economic shock, local governments and their partners often turn to a standard set of policy interventions to stabilize low-income and middle neighborhoods. While governments and philanthropy spend billions of dollars each year on tools such as code enforcement, vacant property remediation, and foreclosure mitigation, practitioners often have very little information about what actually works. In Fall 2020, Fannie Mae partnered with May 8 Consulting, Inc., and Reinvestment Fund (Fannie Mae team) to evaluate six such interventions or tools to determine whether they had an impact on urban and suburban residential neighborhood stability based upon an analysis of key metrics such as vacancy, foreclosure rates and housing sale price.

In order to provide information in a timely manner to partners on the ground working to address the adverse impacts of the COVID-19 economic crisis, the Fannie Mae team adopted a 6-month, 5-step basic policy analysis process.



Step 1

The Fannie Mae team began by performing a broad literature review of existing research and interviewing policymakers, academics, and program staff to identify the universe of common policy interventions or strategies being deployed to stabilize or improve either low-income areas (where median incomes ranged from 30%-60% of the local metro area median) or middle neighborhoods (where median incomes ranged from 70% to 130% of the local metro area median). This exploration identified 12 interventions where there was some evidence of impact or where experts possessed an impressionistic assessment of success in stabilizing low-income and middle neighborhoods. They were:

Table 3: Eleven Policy Interventions with Some Evidence of Stabilizing Impact

Code Enforcement
Demolition
Land Banks
First Look Programs
Scattered Site Development
Emergency Bridge Loans/Soft Second Mortgages
Foreclosure Mitigation Counseling
Homeowner Repair Grants and Loans
Community Land Trusts
Access to Credit/Homeowner Downpayment Assistance
Greening of Vacant Lots/Sideyard Purchase Program

Step 2

The Fannie Mae team identified promising local programs that employed each strategy and reached out to program staff to determine whether they had collected data on the use of that strategy and were willing to share it for this analysis. The team contacted dozens of programs to identify two programs per category that could be analyzed. During this process of identifying and reaching out to localities with programs, the team discovered that many programs were not implemented for the purpose of impacting one or more neighborhoods, or types of neighborhoods, but rather offered on a first-come first-serve basis to any resident of a state, county, or municipality. This lack of targeting constrained the program's ability to measurably impact conditions within a neighborhood. In other cases, the intervention was part of a multipronged effort to intensively assist a specific neighborhood's people and places with a large number of interconnected programs and services, rendering it impossible to assess the causal effects of any one intervention. Other programs did not maintain or were unable to share sufficient data documenting their efforts. Over time, the team was able to obtain data for two programs that employed one of the six selected interventions among a diverse set of low-income and middle residential neighborhood types. The six interventions and twelve programs selected for analysis are:

Table 4: Selected Program Geographies

Code Enforcement
• Baltimore, MD
• Hennepin County, MN
Demolition
• Kansas City, MO
• Hennepin County, MN
Scattered Site Development
• Philadelphia, PA
• Dekalb County, GA
Land Bank
• Houston, TX
• Albany, NY
First Look Program
• Essex County, NJ
• Cook County, Il
Emergency Bridge Loan/Soft Second Mortgage Program
• Allegheny County, PA
• Wilmington, DE

Step 3

The Fannie Mae team next collected and analyzed available data to determine whether and how each program impacted a set of neighborhood metrics. The team employed spatial adaptations of what are known as quasi-experimental designs within a framework of *quick basic policy analysis*. This framework emphasizes the use of the best data available within real world constraints in order guide policymakers in making swift decisions in contrast to purer academic research. In general, the research methods involved creating a reasonable set of matched areas (typically census tracts or block groups) wherein the intervention was applied in reasonable quantity to areas that were otherwise similar except for the presence of the intervention strategy. The team applied one of three types of comparison methods to each intervention: 1) using neighborhood market classifications from Reinvestment Fund's Market Value Analysis where available; 2) identifying areas similar in terms of income, demographics, and other factors; or 3) where comparable untreated areas were not feasible or when the treatment was not highly concentrated, comparing indicators within 500 feet of a treated property to the remainder of the census tract in which the property was located. Market indicators such as sales price, vacancy, and foreclosure were then analyzed in the treatment and comparison areas.

Step 4

The team also conducted a qualitative analysis of each program. Through interviews with staff and city leaders, the team gained a better understanding of how each program worked, how it was funded, its goals, and its strengths and shortcomings. The team then drafted short case studies summarizing the program and shared these summaries with program staff to ensure their accuracy.

Step 5

Finally, the team reported out the findings for whether each strategy has a potential stabilizing impact on low-income or middle neighborhoods.

This research aims to fill some critical gaps in knowledge regarding which neighborhood recovery strategies have the potential to stabilize or improve low-income and middle residential neighborhoods.

Methodology

The Fannie Mae team applied a *quick basic policy analysis* framework to this evaluation of six neighborhood market stabilization interventions. Based on the context for each intervention, the team selected one of three distinct methodologies within this overall framework, which are described below.

Quick Basic Policy Analysis

The original research conducted for this project applies an approach to policy analysis and evaluation that is uniquely appropriate in a moment when policymakers and practitioners desire to make data-based decisions that have a reasonable prospect to constructively address the ongoing impact of the COVID-19 pandemic. That approach is best described in the text by Patton, et al. (2013), as *quick basic policy analysis.*[3] In this text, the authors juxtapose quick basic policy analysis to more traditional academic research designs. Quick basic policy analysis is needed when policy analysts are called on "to give advice to policy makers in incredibly short periods of time, in contrast to university researchers and think tank consultants who are hired specifically to conduct intensive research on public policy issues."

The circumstances around the implementation of an intervention may also support the use of a quick basic policy analysis framework; interventions intended to mitigate a crisis are unlikely to be applied under controlled experimental conditions. Policymakers and practitioners planning for a post-pandemic future are naturally looking back at similarly challenged periods such as the last foreclosure crisis for ideas about interventions that worked in hopes of identifying contemporary adaptations. Quite understandably, during a period when more than two million homes per year were going into a foreclosure status and more than 800,000 jobs vanished, action was prioritized over controlled experimentation that would lend itself to academic evaluation. Indeed, the Fannie Mae team's literature review confirmed that although there are many neighborhood stabilization intervention strategies, there is not a substantial amount of research demonstrating the overall efficacy of many of the strategies, and still less evidence of the unique situations under which a strategy may be more or less impactful.

In doing this sort of post-hoc assessment of impact, when interventions were not implemented with an eye to evaluation, there are a number of challenges that impair the ability to draw definitive conclusions. The analysis does not establish causality, statistical significance, or generalizability. Yet, this quick basic policy analysis approach can yield useful insights.

Selection of Intervention Strategies for Study

The Fannie Mae team selected a set of 12 intervention strategies used in communities across the country since the foreclosure crisis. The selection of strategies for review was driven by an interest in those which were intended or expected to stabilize a market, not bring it back from deep distress.[4] But it was also, of necessity, guided by practical considerations. That is, the strategy selected needed to have been implemented in a quantity that could be impactful at a market level; one instance of housing rehabilitation in a neighborhood, although important for the beneficiary of the rehabilitated home, would not likely have a market affect and could not be detected with standard administrative or third-party market data. The implementation also needed to be recorded with sufficient diligence and detail (e.g., location, date, nature of intervention) such that impact could be measured. Lastly, the organization that did the implementation needed to be willing and able to share their data. These considerations reduced the number of candidate interventions significantly. Making this a greater challenge, the team was looking to select two implementations of each strategy in different places (e.g., targeted code enforcement in Baltimore and Minneapolis).

Further methodological challenges include the potential that the programs selected for evaluation are different than those of the same strategy type not selected and thus the learnings from these may not generalize to all applications of the strategy. For example, a demolition program applied in a different type of market or with a substantially different level of demolition activity

---

[3]Patton, Carl V., David S. Sawicki and Jennifer J. Clark. 2013. Basic Methods of Policy Analysis and Planning, 3rd ed. Boston: Pearson.

[4]Or if not to stabilize a market, to stabilize a homeowner/property which for evaluation purposes were clustered in places (e.g., neighborhoods).

would not be expected to yield similar results. There is also selection bias in that the places that implemented these programs may be different than similar places that did not implement these programs—such as local government capacity that may also lead to better outcomes for these neighborhoods. Another challenge is that there may well have been other stabilization activities going on in the place where the program was implemented. This confounds the ability to know where an observed market change was the result of the intervention of interest, the other things going on, or both. Stated differently, if targeted code enforcement and housing rehabilitation were going on in the same places, it is difficult to know with complete certainty whether any changes observed were a function of the code enforcement, housing rehabilitation, or both. The selection issue, taken together with the fact that the implementations were not carefully constructed from a controlled research perspective, present challenges to the ability to conclude with a high degree of certainty that a particular intervention caused a market to stabilize. But it is important to note that the validity of a controlled research-based conclusion tends not to be a *Yes* or *No* determination; there are degrees of certainty in conclusions about validity that quick basic policy analysis endeavors to push in the direction of more certain than uncertain.

Analysis Strategies

To do this evaluation, the team adopted *quick basic* spatial adaptations of what are known as quasi-experimental designs—"experiments that have treatments, outcome measures, and experimental units, but do not use random assignment to create the comparison from which treatment-caused change is inferred" (p. 6).[5] These are a specific variety of quasi-experimental designs in that the control groups constructed are referred to as *nonequivalent*. As such, there are a number of limits to the validity of any conclusion about whether these analyses show the intervention was impactful or not; it is important to control as much as possible through the selection of comparable areas, and to clearly articulate the limitations of the conclusions. In general, the research methods involved creating a reasonable set of matched areas (typically census tracts or block groups) wherein the intervention was implemented in sufficient quantity to areas that were otherwise similar except for the presence of the intervention strategy.[6] Small sample sizes also presented a challenge; in some cases the team added together more years or data, and in the cases where that was not a viable solution the team looked for an impact within a certain distance of each single intervention activity.

Because the overarching question was whether an intervention stabilized markets, home price change was used as an indicator of market stability in each analysis. Secondary indicators included, based on their relevance and availability, vacancy, foreclosure, code violations, and sales volume. In some instances, these were the articulated impacts of the interventions, while in others it could be inferred (e.g., citing properties that were believed to be exerting a blighting influence on surrounding properties).

[5]Cook, Thomas D., and Donald T. Campbell. 1979. Quasi-Experimentation: Design and analysis issues for field settings. Chicago: Rand McNally College Publishing Company.

[6]This raises another set of "selection" problems for controlled research purposes. How and why did the practitioners pick where they intervened? Was there some critically important element (e.g., the availability of a property to treat, affordable price points) that did not exist in comparison areas?

The team had three general strategies for doing the comparisons:

- **Strategy 1**: Compare all areas with treatments to non-treated areas in the same Market Value Analysis[7] (MVA) category to see whether, as a group, treated areas outperformed comparable areas on stability indicators and, if multiple waves of the MVA were available, whether the treated areas improved sufficiently so as to rise to a stronger MVA category;
- **Strategy 2**: Compare each area where an intervention was made to three comparable areas defined by characteristics such as sales price or household income vis a vis one or another performance measurement—typically a measurement that would be included in the creation of an MVA as a reliable indicator of relative market strength such as sale price, vacancy, or code violations; and
- **Strategy 3**: Compare a 500-foot buffered area around a treated property to areas of the same census tract outside of that 500-foot buffer.

In the end, the analysis strategies are based on an adaptation of a reasonably standard quasi-experimental design. The results that these analyses produced should be viewed through the lens of attempting to learn as much as possible from an experiment that was not organized or executed as a traditional research experiment. The analyses have shortcomings and, in the parlance of Cook, et al. (1979) "threats to the validity" of conclusions. But it is better to extract as much valuable information from these reasonably controlled, post-hoc evaluations for practitioners who are being called into action to address destabilized markets in the communities within which they work.

About the Market Value Analysis Strategy

For six of the 12 intervention geographies, the team was able to draw upon Reinvestment Fund's Market Value Analysis (MVA) as a resource: Houston, Baltimore, Philadelphia, Wilmington, DE, Allegheny County, PA, and Kansas City, MO. The MVA is a data-based assessment of a community's real estate market that Reinvestment Fund created and first used in Philadelphia in 2001; since then, the MVA has been replicated in a range of cities and regions, some of which have had MVAs completed every three years. It is based on a set of market indicators, generally reflected in address-level administrative data points such as: home sale prices, building permits, demolitions, subsidized rental housing and mortgage foreclosures. These indicators are summarized to the census block group geography and then analyzed using a statistical cluster analysis, the purpose of which is to identify categories of block groups that share a common set of conditions. Within any category, the block groups are very similar but the groupings themselves are different from each other. Typically, MVAs are field validated and subject to the input and scrutiny of a local group of subject matter experts.

By using the MVA in communities where one had been completed, the team was able to identify different areas in a city with very similar market conditions. Thus, if an intervention was clustered in several block groups within one MVA category, all else equal, comparing it to other block groups of the same category for which there was no "treatment" provided comparison between reasonably similar places. Matching of areas is done to effectively control extraneous factors. The MVA ensures matched places are as similar as possible. In instances where MVAs were completed both prior to the intervention and post intervention the team could see whether an area changed market categories. In that instance, the MVA itself became a critical performance measurement. MVAs are completed roughly every 3 years in localities where the analysis is updated.

[7]Information about Reinvestment Fund's MVA can be found at: https://www.reinvestment.com/policy-solutions/market-value-analysis/. See also: https://americanassembly.org/s/on-the-edge-final-pdf-2.pdf

Research Findings: Basic Policy Analysis of Six Policy Interventions

1 Code Enforcement

Intervention Overview: Local governments have the authority to make and enforce laws to preserve public health and safety including the regulation of private property condition standards. Local governments historically provided reactive code enforcement, sending out an inspector in direct response to a complaint by a tenant or neighbor. Today, governments are proactively checking on the condition of residential properties to ensure they are in safe, healthy condition and that exterior conditions do not create a nuisance for surrounding properties.

Prior Studies Regarding Neighborhood Stabilization Impact: Studies show that well designed proactive code enforcement initiatives with consistent inspections can improve the condition of the municipality's housing stock and reduce the number of unsafe or substandard rental properties. Some evidence supports the ability of minimum vacant building condition standards to trigger new investment, raise surrounding values, and reduce crime.

Summary of Findings: These two programs were the most geographically targeted of all the programs evaluated and showed the strongest association between program activity and neighborhood stabilization. There was observable improvement and relatively more stability in middle markets that were treated by Baltimore's Streamlined Code Enforcement Neighborhoods (SCEN) program. The contrasts between SCEN and non-SCEN block groups were most notable in weaker middle markets, compared to areas identified as stable or strong middle markets. Neighborhoods participating in Minneapolis' All Together Now (ATN) program for three or more years experienced a larger increase in sales price and slightly greater declines in nuisance violations than neighborhoods that were not in the program or that were in the program for just one or two years; dosage is an important consideration (e.g. the level and longevity of treatment within a given neighborhood). Although the analysis of each program was not robust enough to determine a causal relationship, these findings suggest that sustained geographic targeting of code enforcement over multiple years has been effective in Baltimore and Minneapolis neighborhoods that fall between each city's most stressed and more stable communities—where there is room for property condition improvement but not severe challenges with disinvestment.

There was observable improvement and relatively more stability in middle markets that were treated by Baltimore's Streamlined Code Enforcement Neighborhoods (SCEN) program.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links or statistical significance between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

Program 1: Baltimore Streamlined Code Enforcement Neighborhoods Program (SCEN)[8]

- **Program description**: In 2010, Baltimore launched its Streamlined Code Enforcement Neighborhoods program targeted at vacant buildings and lots in middle neighborhoods. The city designated 88 Streamlined Code Enforcement Neighborhoods (SCENs) as the focus for the program. In each of the neighborhoods, vacant properties were scattered rather than concentrated, and market conditions were believed to be strong enough so that proactive code enforcement was likely to either motivate owners of vacant properties to restore them to use or render the properties desirable candidates for sale and rehabilitation through the city's receivership process. The first step in the Streamlined Code Enforcement process is for an inspector to issue a Vacant Building Notice that requires the owner to restore the property. The inspector then returns in 30 days to post the vacant building notice and confirm that the violations remain unabated.

[8]Information for the program description was obtained from three interviews with three code enforcement leaders within the Baltimore City Department of Housing and Community Development conducted on January 28, 2021: Deputy Commissioner Eric Booker, Assistant Commissioner Kathleen Byrne, and former Chief of Policy & Partnerships Robert Pipik.

The inspector will also attempt to contact the owner using the city's registration database. If the owner fails to take action, a letter is sent explaining that the owner will be issued a $900 citation if the owner does not contact the city and demonstrate why additional enforcement actions are unnecessary. If the owner fails to contact the City or is unable to demonstrate an ability to abate the conditions cited in the Vacant Building Notice, a $900 citation is issued. During the next inspection, a second $900 citation is issued, and the case moves to an attorney at the city's housing department for further action. When the owner fails to act to pay the citation and address code violations, the city determines whether to file a receivership action. In a receivership action, the city files an action with the District Court of Maryland to appoint a receiver to sell the property at auction to an eligible high bidder with the capacity to reactivate the property. A local attorney, in 2004, formed a nonprofit called One House at a Time (OHAAT) whose primary function is to act as a court appointed agent (receiver) to convey vacant and nuisance properties to qualified buyers. The minimum bid at auction is $5,000, and the winning bidder commits to rehabilitating the property within one year. To be an eligible bidder, OHAAT requires bidders to prove they have the capacity and experience to renovate the property. OHAAT then administers an auction at a judicial sale where they sell to the highest eligible bidder and monitor permit activity to ensure the new owner rehabilitates the property within the set timeframe. Receivership provides the new owner with a clean title free of all liens on the property. The goal of the program is compliance, and the city attempts to gain the owner's attention and voluntary action at every step of the process. Most new owners choose to rent the property as Baltimore rents are often sufficient to cover costs of rehabilitation while sales prices typically are not adequate.

- **Relevant state or local law**: Building, Fire and Related Code Sect. 121 https://legislativereference.baltimorecity.gov/sites/default/files/Art%2000%20-%20Bldg,%20Fire_0.pdf; ICC Code 2018
- **Duration**: 2010 to present
- **Goal**: To maintain safe and attractive neighborhoods throughout the city
- **Agency that administers**: Baltimore City's Department of Housing and Community Development
- **Budget and staffing**: Annual budget of approximately $9 million. Have approximately 80 inspectors performing property maintenance inspections, as well as office support staff.
- **Key partners**: OHAAT, District Court of Maryland, Department of Public Works (cleans up vacant properties and boards buildings), 311 (takes resident complaints), and the Baltimore Police (responds to complaints that may prove dangerous for inspectors).
- **Funding:** City provides the $9 million budget through general budget allocations.
- **Key Takeaways**
  - Good parcel level data is critical to strategic code enforcement.
  - Different markets require very different code enforcement approaches, so a good neighborhood market study is invaluable in targeting efforts.
  - Need a competent receiver partner to convey vacant and nuisance properties to qualified buyers.
  - It takes many years to make a difference in a neighborhood so need a stable program that will not shift with each new Mayor.

Data Analysis

Overview and Methods: The goal of the analysis is to examine if the Streamlined Code Enforcement Neighborhoods (SCEN) program impacted vacancy rates and sale prices in census block groups treated with the SCEN program. The timeframe for analysis is from 2010, when receivership actions first were targeted to SCEN areas, to 2020 for administrative data indicators; 2019 ACS figures were the most recent available for population and tenure. The geography for the analysis is census block groups (SCEN are collections of block groups). Sales and vacancy data were provided by the Baltimore Department of Housing and Community Development. Race, ethnicity, housing unit, and population data were obtained from the American Community Survey 5-year estimates.

Census block groups in SCEN were compared to similar block groups that were not in SCEN on net change in number of vacant properties, vacant properties as a share of residential parcels, and change in median sale price from 2009/2010 to 2018/2020.

Block groups were treated as similar if they were in the same category in Reinvestment Fund's 2011 Market Value Analysis (MVA), which identified ten distinct market categories ranging from strong (A) to distressed (J). Three "middle market" categories were examined—Middle Market Choice, Middle Market, and Middle Market Stressed (categories C, D, and E, respectively, in the 2011 MVA).

Table 5: Characteristics of Treated and Comparable Areas, Streamlined Code Enforcement

	Middle Market Stressed		Middle Market		Middle Market Choice	
	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas
# Block Groups	80	29	78	11	84	29
Median Household Inc.	$46,700	$42,600	$52,900	$41,000	$70,800	$67,600
Median Sales Price, 09/10	$70,800	$68,200	$106,500	$102,200	$155,500	$153,000
Housing Units / Sq. Mi.	3,800	5,870	2,230	5,280	3,240	3,960
% Black	77.40%	52.30%	71.80%	85.20%	57.20%	61.00%
% White	13.50%	31.20%	17.60%	8.70%	34.60%	29.80%
% Hispanic	5.40%	9.80%	6.60%	3.60%	4.20%	3.00%
% Asian	1.40%	1.80%	1.10%	0.50%	1.60%	2.50%

Findings: There were signs of stabilization in middle markets that were treated by Baltimore's Streamlined Code Enforcement Neighborhoods (SCEN) program. The potential impact of SCEN, when contrasted with comparable block groups, was most notable in weaker middle markets. Vacancy (as a share of residential properties) rose less quickly in SCEN block groups than in similar block groups that were not treated by the SCEN program. Median sale prices rose more in SCEN block groups that were Middle Market Stressed (13.6%) and Middle Market (23.3%) than in similar block groups that were not treated by the SCEN program (0% and 20.6%, respectively). In Middle Market Choice SCEN block groups, sale prices rose (14.2%) but not as much as in Middle Market Choice block groups that were not treated by the SCEN program (15.7%). The population declined less in SCEN Stressed Middle Markets.

Table 6: Changes in Treated and Comparable Areas, Streamlined Code Enforcement

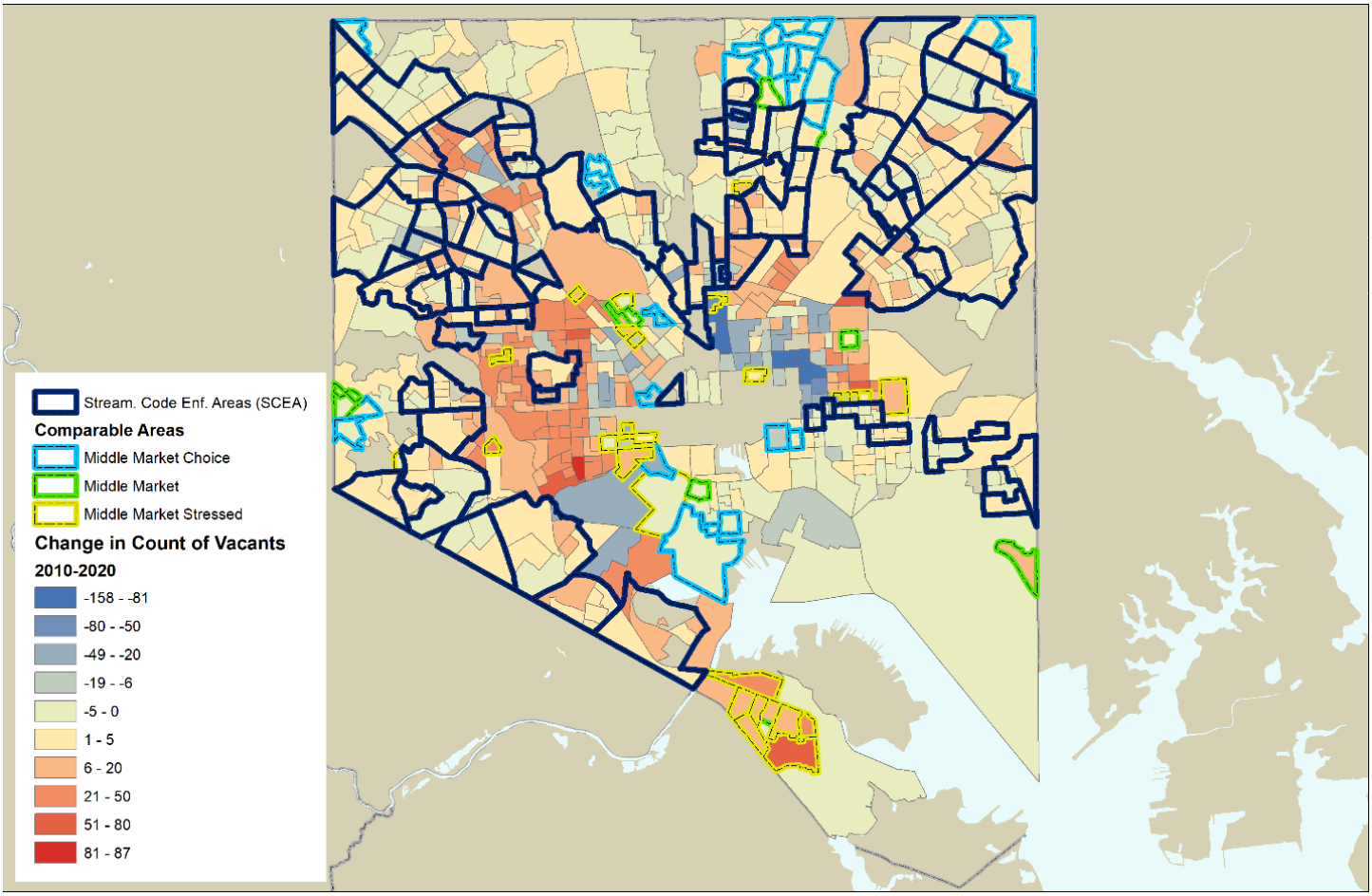
	Middle Market Stressed		Middle Market		Middle Market Choice	
	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas
# Block Groups	80	29	78	11	84	29
First Quartile* Net Change in # Vacant Properties, 2010-2021	0	-3	0	0	0	0
Median Net Change in # Vacant Properties, 2010-2021	4	6	1	1	1	0
Third Quartile Net Change in # Vacant Properties, 2010-2021	8	17	4	4	3	1
% Vacant Properties (of Residential Prop.), 2010	2.0%	5.2%	0.3%	0.3%	0.3%	0.0%
% Vacant Properties (of Residential Prop.), 2021	3.6%	7.1%	1.1%	1.5%	0.6%	0.5%

Sale Price Change, 2009/2010-2018/2020	14%	0%	23%	21%	14%	16%
Population, 2010	73,575	29,441	87,268	9,843	85,553	30,205
Population, 2015/2019	71,165	26,983	90,460	10,874	84,560	30,593
Avg. Change 2010 - 2015/2019	-4.8%	-6.3%	3.1%	7.7%	-1.4%	11.3%
% Owner Occupied, 2015-2019	52.7%	38.7%	58.5%	52.0%	57.9%	70.0%

*Quartiles of block groups by change in the net number of vacant properties; the first quartile of treated block groups in Middle Market Choice had no change in the number of vacant properties or a reduction in the number of vacant properties

Limitations: A limitation of the analysis is that there are clear spatial patterns to the change in vacancy. A map of the net change in vacant properties from 2010 to 2020 is below. Vacancy appears to spread from block group to block group. A more sophisticated research design could take this into account, which could credit the SCEN program with preventing increases in vacancy that might otherwise be expected based on the proximity of SCEN-treated block groups to high-vacancy areas.

Map 1: Vacancy Change in Treated and Comparable Areas, Baltimore Streamlined Code Enforcement



Program 2: Minneapolis All Together Now Program (ATN)[9]

- **Program description**: In 2013, Minneapolis launched the All Together Now (ATN) program to proactively engage residents and associations in neighborhoods prior to exterior code inspections. ATN is part of a larger organizational shift from enforcement to engagement. Under the program, neighborhood associations, property owners, and residents receive information and education about what violations inspectors will be looking for and when inspectors will be coming to their neighborhood in advance of a coordinated inspection. ATN neighborhoods are selected based upon data evaluating levels of nuisance code violations. Typically, neighborhoods that have been in ATN have around twice as many nuisance violations as non-ATN neighborhood. ATN operates between June and September in 10-13 neighborhoods per year. The program was at first limited to just a few neighborhoods but expanded over time. Outreach includes a friendly photo-filled, easy-to-read flyer specifying the violations that inspectors will be looking for including high grass, trash, and junk cars, along with discount coupons for use at local hardware stores on property maintenance related tools and supplies. Inspections are performed by the district inspector, typically from his or her car, during business hours. Some neighborhoods have asked for the exterior inspections to occur in tandem with their clean-up day or other neighborhood event and the city makes every effort to do so. In the first two years of the program, the city performed significant government-funded abatement of the worst public nuisance conditions around vacant properties and sought reimbursement through tax liens.
- **Relevant state or local law**: No additional legal authority needed.
- **Duration:** 2013 - present
- **Goals:** To engage neighborhood associations, businesses, and residents to help make neighborhoods a safe and clean place to live and increase voluntary code compliance
- **Agency that administers**: Department of Regulatory Services
- **Budget and staffing:** Inspections in ATN neighborhoods in 2019 cost approximately $80,000 (2,2286 hours at $35.00 per hour). The program also required a community engagement specialist to work with all residents but more intensively in ATN neighborhoods who cost an additional $12,000. Marketing and communication to residents cost about $2,600.
- **Key partners:** Neighborhood associations help get the word out and local businesses provide a discount to owners on tools and supplies related to property maintenance.
- **Funding:** Department of Regulatory Services operates ATN without additional funding or personnel
- **Key Takeaways**
  - Neighborhoods want differing levels of engagement and have different requests for the program to be effective. For example, some neighborhoods want data on property condition while others want a trash truck for a day to handle dumped trash.
  - City's initial determination to select ATN neighborhoods solely based upon data of public nuisance violations resulted in repeated returns to the same distressed neighborhoods with high concentrations of persons of color, so the city started looking at percent change in nuisance violations and branched out into other neighborhoods to ensure equitable enforcement.
  - Notifying tenants, in addition to property owners, may be important if tenants are responsible for keeping the yard or property exterior maintained.

[9]Information for the program description was obtained from three interviews with three code enforcement leaders within the Minneapolis Department of Regulatory Services conducted on February 18, 2021: Kellie Jones, Director Housing Inspection Services, Caitlin Maxwell-Glenn, Community Relations Specialist and Kira Hasbargen, Grants and Community Engagement Manager.

Data Analysis

Overview and Methods:

The goal of this analysis is to understand how targeted nuisance code enforcement under the All Together Now (ATN) program impacted property sales prices and the number of nuisance code violations in treated neighborhoods. Nuisance violations are rubbish, tree, grass, and inoperable vehicle violations. The code enforcement activity examined in this analysis occurred between 2014 and 2019 (although the number of years in which neighborhoods participated in ATN varied). To understand how these activities impacted the local housing market, the team analyzed changes in home sales prices between 2015/2016 (the earliest years for which data was available, which represent a mid-treatment period rather than a pre-treatment baseline) and 2018/2019 and nuisance code violations between 2012/2013 and 2018/2019.

Table 7: Characteristics of Treated and Comparable Areas, All Together Now

	Treated Areas	Comparable Areas
# Neighborhoods	21	32
% Black	27%	17%
% White	46%	61%
% Hispanic	13%	12%
% Asian	7%	4%
Med. HH Income	$86,900	$105,300
Housing Units per Square Mile	3,329	3,239

The sales price data from 2015-2019 was downloaded from Open Data Minneapolis, courtesy of the Minneapolis Assessor's Office. Code enforcement nuisance violations from 2012 to 2019 were provided by the City of Minneapolis – Regulatory Services. The City of Minneapolis' Regulatory Services department shared which neighborhoods[10] participated in ATN and the number of years those neighborhoods were part of the ATN program. Neighborhoods with median single family home sales prices under $250,000 in 2015/2016 (the highest median sales price for an ATN Neighborhood) and at least 100 residential parcels, but that did not participate in ATN, were selected as comparisons.

The analysis compares the changes in sales prices and number of properties with nuisance code violations within neighborhoods that participated in ATN for one or two years, 3 or more years, and similar neighborhoods which did not participate in ATN. The ATN Neighborhoods started with much higher numbers of nuisance violations and properties with two or more violations.[11]

Table 8: Changes in Treated and Comparable Areas, All Together Now

	Neigh. 1-2 Years in ATN	Neigh. 3+ Years in ATN	Comparable Areas
# Neighborhoods	10	11	32
Median Sales Price, 2015/2016	$160,000	$127,000	$191,000
Median Sales Price, 2018/2019	$205,000	$170,000	$241,500
Median % Change in Sales Price	27%	36%	28%
Med. # Nuisance Violations, 2012/2013	634	1051	325
Med. # Nuisance Violations, 2018/2019	487	629	197
Change in # Nuisance Violations	-28%	-32%	-42%
2+ Violation Properties, 2012/2013	199	386	79

[10]Minneapolis Open Data provided a spatial definition of Minneapolis neighborhoods and Reinvestment Fund confirmed that these definitions are consistent with those used both by Regulatory Services and the Assessor's property sales data.

[11]Regulatory Services uses properties with two or more nuisance violations as a proxy for the worst condition properties, so the team examined both all properties with a nuisance violation and those properties with two or more nuisance violations.

2+ Violation Properties, 2018/2019	135	121	39
Change in 2+ Violation Properties	-37%	-53%	-49%
Median % Violations (per Res. Parcel), 2012/2013	51%	84%	57%
Median % Violations (per Res. Parcel), 2018/2019	45%	43%	32%
Change in % with Nuisance Violations	-6%	-41%	-25%
% 2+ Violation Properties (per Res. Parcel), 2012/2013	17%	28%	13%
% 2+ Violations Properties (per Res. Parcel), 2018/2019	11%	11%	7%
Change in % with 2+ Violation Properties	-6%	-17%	-6%

Findings: Neighborhoods in the ATN program for three or more years experienced a larger increase in sales price (as a percentage) than other neighborhoods that were not in the program or neighborhoods that were in the program for one or two years, although the size of prices increases was similar. The number of nuisance violations and properties with two or more violations greatly decreased in neighborhoods that were in the ATN program for three or more years, including compared to the other two groups of neighborhoods. The most notable distinction for 3+ year ATN neighborhoods was their much larger decline in the share of residential properties that had one or multiple violations.

Limitations: Some limitations of the analysis are small sample size and that property sales data was only available for 2015-2019, while ATN activities began in 2014 in some neighborhoods. Code Enforcement nuisance violations decreased by a large amount throughout Minneapolis in the time period investigated, raising the question about whether the data represent improvement in property conditions or change in enforcement practices and whether the observed changes in ATN neighborhoods were caused by ATN activities or some other factor across the city generally.

2 Demolition

Intervention Overview: Demolition to eliminate individual dangerous or blighted buildings has become a commonly used tool by local governments.[12] Individual residential structure demolitions are typically authorized under a local government's power to abate a public nuisance after providing the owner due process protections. Prior to demolition, a municipality will typically use its code enforcement authority to cite the property for violations and inform the owner of a specific timeframe within which they must fix the violations or demolish the structure. Where the owner fails to comply, the local government can then abate the nuisance by demolishing the structure. The municipality then places a demolition lien on the property or the property's tax bill in order to receive reimbursement from the owner for the expense. Federal funding programs that may be used for demolitions since the Great Recession include HUD Community Development Block Grants (CDBG), the Neighborhood Stabilization Program,[13] and Hardest Hit Funds.[14]

Prior Studies Regarding Neighborhood Stabilization Impact: Studies find that demolition of distressed properties increases surrounding home prices and reduce nearby abandonment. While the vacant lots created by demolition still depress housing values, their impact had a significantly reduced negative impact when compared to distressed structures. Studies show differing impact depending upon neighborhood type and offer conflicting findings as to whether demolition reduces either foreclosures of surrounding properties or crime.

Studies find that demolition of distressed properties increases surrounding home prices and reduce nearby abandonment.

Summary of Findings: The analyses indicated a positive association between demolition activity and housing market stabilization. The programs studied were not designed to stabilize specific geographies, but due to the spatial patterns of dangerous buildings, there were some concentrations of demolition activity, especially in Kansas City. In Kansas City, treated areas experienced much larger increases in homeownership and declines in housing vacancy than comparable areas without concentrated demolitions. The association between demolition and market stability was more limited in Minneapolis where vacancy decline was the only measure by which treated neighborhood substantially outperformed comparable areas. This quick, basic policy analysis does not show that targeted demolition will stabilize all neighborhoods, but in these two cases it was associated with stabilization, especially when spatially concentrated.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links or statistical significance between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

---

[12]Hackworth J. Demolition as urban policy in the American Rust Belt. Environment and Planning A: Economy and Space. 2016;48(11):2201-2222. doi:10.1177/0308518X16654914

[13]HUD's Neighborhood Stabilization Program funded 24,425 demolitions from 2009-2016. The Obama Administration's Efforts To Stabilize the Housing Market and Help American Homeowners, U.S. Department of Housing and Urban Development Report (December 2016) https://www.hud.gov/sites/documents/SCORECARD_2016_12_508C.PDF

[14]U.S. Treasury obligated Housing Finance Agency Innovation Fund for Hardest Hit Markets (HHF) $9.6 billion in Trouble Asset Relief Program funds to 19 state housing finance agencies (HFAs). HFAs use funds to implement programs that address foreclosure and help stabilize local housing markets—for example, by demolishing blighted properties. Congress extended HHF in 2015, and HFAs must disburse all HHF funds by December 31, 2021, or return them to Treasury.

Program 1: Kansas City Dangerous Buildings Initiative[15]

- **Program description**: In 2016, the city launched a three-year, $10 million effort to demolish the backlog of buildings on its dangerous buildings list. The majority of the properties to be demolished were single-family houses that were identified by the Fire Department after a fire on the premises, often caused by unauthorized occupants. Prior to beginning demolitions, the city refined its definition of dangerous buildings to ensure that it would not demolish viable houses that could be repaired for less than the $8,000 to $11,000 it would cost to demolish them. 300+ single-family houses came off the city's dangerous list as a result of this reevaluation, reducing the backlog to slightly over 800. The initiative began with the demolition of 200 public properties owned by the land bank. The Kansas City Land Bank offered to sell any of these properties for $1 to buyers with the capacity to rehabilitate the properties and even threw in a grant of $8,500 for rehabilitation, money that they would have spent on demolition. Approximately 45 properties were purchased for rehabilitation under the $1 program. The city also staffed up and began to provide legally required notice to anyone with an ownership or financial interest in the 600 privately owned properties on the dangerous properties list. Owners were told to repair or demolish the property within 60 days, or it would be slated for demolition. Owners were also asked to allow an internal inspection to confirm the property was unsafe. Where the owner refused to allow an interior inspection or was unresponsive, the city obtained a search warrant to evaluate the interior condition. Approximately 30-35% of owners of the 600 privately owned properties took sufficient action to remove the property from the demolition list. In total, 895 demolitions were carried out by six contractors over two years for a budget of $8 million. Demolitions were contracted in packages of up to ten jobs in close proximity. Prior to demolition, the city hired a contractor to perform a hazardous materials evaluation and remediate the asbestos or other toxic materials where found. Liens for demolition and asbestos remediation were placed on the owner's tax bill. The remaining $2 million of the $10 million budgeted was used to perform a reduced number of priority demolitions in 2019 and 2020.
- **Relevant state or local law**: Section 56-532 of the Kansas City Code of Ordinances
- **Duration**: 2016-2018
- **Goals**: Reduce blight by eliminating the backlog of 1200 dangerous properties on the demolition list. Be responsive to residents surveyed who stated that demolishing unsafe structures was a top priority
- **Agency that administers**: Neighborhoods and Housing Services Department Dangerous Buildings Section
- **Budget**: One-time $10 million allocation from Council became available May 2016. Average cost for the demolition of a single-family house was $11,000.
- **Key partners**: Land Bank readied about 200 publicly owned properties to be demolished and offered $1 home program. Water Department coordinated water shut off in each property. Industrial Salvage & Wrecking and Kissick Construction donated 65 free demolitions as a community service.
- **Funding**: One time bond issue of $10 million
- **Key Takeaways**
  - Significant need to streamline process and reduce paperwork permitting demolitions
  - Faced with a clear threat of demolition, approximately 1 in 3 owners will take action to rehabilitate, sell, or demolish the structure on their property
  - Majority of lots will remain vacant after demolition of the structure particularly where the lot size is considered undevelopable under current zoning and building codes
  - Resident satisfaction with city blight efforts did not improve even after 895 demolitions were performed. It is unclear why dissatisfaction persisted.

[15]Program description information obtained through interview with Kate Bender, Office of City Manager on January 19, 2021.

Data Analysis

Overview and Methods: This analysis compared changes in census block groups which received concentrations of demolition activity from 2016 through 2018 and similar census block groups that did not. Changes in home prices, ownership, and vacancy were measured between 2014 and 2020.

Treatment Areas were those that experienced over 10 demolitions between 2016 and 2018 and fewer than 10 demolitions in prior years (11 block groups). Most block groups were located in one of the city's weakest housing markets, identified in the City's 2016 MVA[16] as H or I, while one block group was located in an F market. The average treated area had 14 demolitions between 2016 and 2018 and 4 demolitions between 2012 and 2015. In total, treated areas had a total of 153 demolitions between 2016 and 2018.

For each treated block group, the team identified two comparable block groups that had under 10 demolitions between 2016 and 2018 and were located in the same 2016 MVA category. To further refine the comparison areas, only block groups with similar median sales prices and vacancy rates in 2016 were selected. The average comparison area experienced 2 demolitions between 2012 and 2015 and 4 demolitions between 2016 and 2018. Finding two comparable areas in the same MVA category and with similar home prices and vacancy rates was challenging, as many similar areas in distressed markets also experienced high numbers of demolitions. All of the areas analyzed below were located in an urban area.

This analysis uses data from the City of Kansas City for sales price of residential properties sold between 2014 and 2016Q2 & 2018 and 2020Q2, and the percent of residential properties on the city's vacant property registry, owned by a bank, with a vacant property violation, on the city's dangerous buildings list, or with a demolition permit issued in 2014-15 or 2019-20. Home ownership is drawn from the American Community Survey, Five Year Estimates, 2010-14 & 2015-19. All data is block group level. The table below describes the characteristics of treated and comparable areas in 2010-2014.

Table 9: Characteristics of Treated and Comparable Areas, Dangerous Buildings Initiative

	Treated Areas (Block Groups)	Comparable Areas (Block Groups)
# Block Groups	11	22
% Black	54%	68%
% White	12%	10%
% Hispanic	30%	15%
% Asian	1%	3%
Average Housing Units per Square Mile	2,166	2,538
Average Median Household Income	$24,303	$23,953

Findings: The analysis indicates that areas with targeted demolition activity experienced housing market stabilization in subsequent years. Treated areas experienced much larger increases in homeownership and declines in housing vacancy than comparable areas without concentrated demolitions. However, though both areas saw increases in housing values, the average home price gains experienced in treated areas were not as large as those experienced in comparable areas without demolitions.

[16]The Market Value Analysis (MVA) is an analytic developed by Reinvestment Fund that uses statistical analysis of administrative data to define a range of up to 10 market categories within a geography, each assigned an ordinal letter with "A" being strongest.

Table 10: Changes in Treated and Comparable Areas, Dangerous Buildings Initiative

	Neighborhoods Treated	Comparable Areas
Median Sales Price, 2011	$12,328	$13,509
Median Sales Price, 2018	$29,682	$39,614
Change in Median Sales Price	+$17,354 (+141%)	+$26,104 (+193%)
% Homeowners, 2010-14	44.2%	48.5%
% Homeowners, 2015-19	54.5%	50.3%
Percentage Point Change in Ownership Rate	+10.3%	+1.8%
% Vacancy, 2015	29.1%	19.6%
% Vacancy, 2020	22.4%	17.3%
Change in Vacancy	-6.7%	-2.3%

The table below shows the number and proportion of comparable areas (i.e., block groups) that each treated area outperformed (each treated area had 2 comparable areas). Viewed this way, it is clear that performance across each of the treated areas was not consistent. While many of the treated areas outperformed both of their comparable areas in terms of vacancy and homeownership, only two saw larger home price increases than both of their comparable areas. *These two areas were notable for having the highest number of demolitions over the treatment period*.

Table 11: Comparable Areas Outperformed by Treated Areas, Dangerous Buildings Initiative

			Number of Comparable Areas that Treatment Areas Outperformed (0, 1, or 2 out of 2)		
Block Group ID # of Each Treated Area	**MVA 2016**	**# Demolitions in Treated Areas, 2016 – 2018**	**Increase in Home Prices**	**Decline in Vacancy**	**Increase in Ownership**
290950161002	F	11	0	2	2
290950061003	H	12	1	0	1
290950165002	H	11	1	2	0
290950019004	I	17	2	2	2
290950021003	I	13	0	0	1
290950022003	I	14	1	1	2
290950034003	I	14	0	2	2
290950034004	I	12	1	1	2
290950160002	I	12	1	2	1
290950164001	I	14	0	2	2
290950164002	I	23	2	1	1
# of Comparable Areas Outperformed by All Treated Areas			9	15	16
% of Comparable Areas Outperformed by All Treated Areas			41%	68%	73%

Limitations: The analysis was limited by the intervention's recent implementation; the data available on sale prices and tenure changes may reflect periods too close to the intervention to fully capture change. Finding comparable neighborhoods without demolitions during this period was difficult and establishing statistical significance was not possible due to relatively small numbers of demolitions and home sales.

Program 2: Minneapolis City County Demolition Project[17]

- **Program description:** In 2008, Minneapolis began the City County Demolition Project, a $1.7 million effort to demolish vacant and dilapidated properties. The City demolished 119 properties between 2008 and 2011 using federal Neighborhood Stabilization Program (NSP) dollars. The demolished properties were typically owned by an individual, an LLC, a corporation, or a financial institution. The properties were all vacant and usually had multiple code violations. The city selected the properties to be demolished from the city's Vacant Building Registration list by identifying those that were too deteriorated to be economically feasible for rehabilitation and were subject to multiple resident complaints or visits by police and fire. Each owner or party with a potential interest in the property received an order to raze and remove the building. The identification of the owner, notice, and due process requirements took an average of two months to complete. The City also restructured its demolition bidding process away from a standard one property to "batched bids" where multiple nearby properties were packaged into one bid. The cost of demolition was assessed to the owner's tax bill and where repaid, was recycled back into the demolition fund to finance further demolitions. The cost per demolition from 2008–2011 was approximately $15,000 with the presence of hazardous materials such as asbestos raising the cost.
- **Relevant state or local law:** No change to law needed
- **Duration:** 2008–2011
- **Goal:** To eliminate blighted, vacant properties that were too deteriorated for rehabilitation to be economically feasible
- **Agency that administers:** Minneapolis Department of Regulatory Services
- **Budget and staffing:** 3-4 full time staff in 2008 at an approximate cost of $450,000 in staffing dropped to 2 full-time employees in 2010 and 2011.
- **Key partners:** Received helpful input on the selection of properties to be demolished from community residents and the Fire and Police Departments
- **Funding Sources:** City received $5 million in Federal Neighborhood Stabilization Program (NSP) dollars of which $1.7 million was allocated for demolition. Staff and operations were paid from the city budget.
- **Key Takeaways:**
  - Restructure and repurpose existing staff to respond to an immediate condition. Staff within the Problem Properties Unit was temporarily moved from existing duties around rental housing.
  - Bid nearby demolitions together to reduce cost.
  - Create a structured, timely, and accountable process to select properties, provide due process to protect the owner's rights, and contract with demolition experts.
  - Use threat of demolition to hold owners accountable and motivate action to avoid demolition.

Data Analysis

Overview and Methods: To investigate the association between clustered demolition activity funded by NSP and changes in housing market conditions, the team examined areas where the City conducted the greatest concentration of demolitions occurring between 2009 and 2013 to similar census block groups that did not experience concentrations of demolitions. This

[17]Information for this program description was obtained through an interview with Scott Bockes, Operations Analyst for Department of Regulatory Services on January 25, 2021.

period varies from the core City County Demolition Project period of 2008-2011 because program data was not available and the team instead used data collected in Reinvestment Fund's 2016 NSP-Neighborhood Investment Cluster Analysis, which included demolitions conducted through this and other programs, as well as metrics. The small number of demolitions each year also led the team to expand the number of demolition years included. Changes in home prices, sales volume, and vacancy were measured between 2008 and 2014. Treated areas were clusters of contiguous block groups (NICs) where substantial numbers of NSP-funded activities had occurred. The average treated NIC area had 8.6 demolitions between 2009 and 2013, with a total of 69 demolitions occurring across the 8 NIC areas. For this analysis, treated areas were defined as NICs within the City of Minneapolis where more than 5 demolitions occurred between 2009 and 2013. Each NIC was matched with 3 comparison block groups, with similar characteristics (trends in home prices, foreclosure risk), but did not receive concentrated NSP investments. In order to select a sufficient number of comparison areas with similar market characteristics but fewer demolitions, the team has to include some block groups that were outside the city but still in Hennepin County.

The table below describes the racial composition, housing density, and average median household income in treated and comparable areas 2008-2012. The block groups analyzed in this analysis were located in a mix of urban and suburban areas in Hennepin County.

Table 12: Characteristics of Treated and Comparable Areas, City County Demolition Project

	Treated Areas	Comparable Areas
# Block Groups	8	7
% Black	41%	22%
% White	22%	47%
% Hispanic	13%	18%
% Asian	15%	2%
Percent Other	9%	11%
Average Housing Units per Square Mile	2,801	2,977
Average Median Household Income	$33,129	$33,957

The analysis relied on home sale prices purchased from Boxwood Means, the share of vacant residential addresses in 2008-2012 and 2012-2015 purchased from Valassis Lists, and the count of sales of residential properties sold between 2008 and 2014 purchased from Boxwood Means.

Findings: The association between City County Demolition Project activity and market stability was limited; reduction in vacancy was the only measure by which treated neighborhood substantially outperformed comparable areas. The analysis points to a limited association between NSP demolitions and housing market conditions. Treated areas experienced large increases in home prices, but these increases were matched by comparable areas that did not receive demolitions. At the same time, sales volume, a measure of market interest and activity, declined in treated areas, while increasing in comparable areas.

Table 13: Changes in Treated and Comparable Areas, City County Demolition Project

	Treated Areas	Comparable Areas
Median Sales Price, 2008	$50,528	$84,889
Median Sales Price, 2014	$94,409	$153,261
Change in Median Sales Price	+$43,880 (+87%)	+$68,371 (+81%)
Sales Volume, 2008-09	130	23
Sales Volume, 2013-14	79	31

Change in Sales Volume	-51 (-39%)	+8 (+35%)
% Vacancy, 2008-12	20.7%	7.3%
% Vacancy, 2012-15	10.8%	4.0%
Change in Vacancy	-9.9%	-3.3%

Another way to understand the trends in treated and comparable areas is to examine how individual treated areas performed against their specific comparison block groups. The table below shows the number and proportion of comparable areas that each treated area outperformed. Viewed this way, it is clear that performance across each of the treated areas was not equivalent. Nearly every treated area saw larger declines in vacancy than all of their comparable areas. None of the treated areas saw larger increases in sales volume than any of their comparable areas. While half of the treated areas experienced larger home price increases than 2 or 3 of their comparable areas, three only outperformed one comparable area and one treated area did not outperform any of its comparable areas.

Table 14: Comparable Areas Outperformed by Treated Areas, City County Demolition Project

		Number of Comparable Areas that Treatment Areas Outperformed (0, 1, 2, or 3 out of 3)		
NIC ID # of Each Treated Area	**Demolitions, 2010 - 2014**	**Increases in Home Prices**	**Increase in Sales Volume**	**Decline in Vacancy**
NIC 6	6	1	0	1
NIC 10	6	3	0	3
NIC 3	8	1	0	3
NIC 2	9	2	0	3
NIC 30	9	1	0	3
NIC 24	10	3	0	2
NIC 27	10	0	0	3
NIC 14	11	3	0	3
# of Comparable Areas Outperformed by All Treated Areas		14	0	21
% of Comparable Areas Outperformed by All Treated Areas		58%	0%	88%

Limitations: One challenge with drawing conclusions from this analysis is that the comparable areas identified in this analysis have important differences from treated areas. Home prices were close to 70% greater than in treated areas in 2008, before demolitions began, and had much lower vacancy rates in the period before NSP activity. Moreover, some comparison areas were in suburban Hennepin County. This analysis relied on comparison areas created for an earlier evaluation of NSP and the data collected for those geographies; for this analysis, the available selection of comparison areas were not very similar to those areas that had concentrated demolition activity. Access to additional market data would allow for the selection of more similar comparison areas. The smaller number of demolitions conducted under the City County Demolition Project, as compared to the Kansas City Dangerous Buildings Initiative, may also have limited the team's ability to detect neighborhood-level changes in treated areas.

3 Scattered Site Rehabilitation

Intervention Overview: Scattered site rehabilitation, the acquisition and rehabilitation of vacant single-family homes for sale or rental, is typically adopted as a strategy to reduce vacancy, create affordable housing, and preserve legacy housing stock. Long-term vacant properties tend to require a gut rehab that may involve an investment of $40,000 or more to make a house viable while others will need just minor renovations. Within stronger neighborhood markets, properties have housing resale or rental values that can support this level of investment, but weaker markets may require some level of subsidy. One goal for rehabilitating properties with subsidy in weaker markets may be to create higher "comparables" that over time will raise housing values and create a higher functioning single-family sales market.

Prior Studies Regarding Neighborhood Stabilization Impact: A series of relevant studies have found that the rehabilitation of vacant single-family houses for sale or rental positively impacts surrounding property values in every neighborhood market type. One study found scattered-site rehabilitation had a greater positive impact on property values than multi-unit new construction on a single-site. Studies provide mixed assessments as to whether home improvements are contagious and lead to greater investments in surrounding homes.

Summary of Findings: Neighborhood level associations between market stabilization and scattered site activity were mixed in these two non-governmental programs, and there are inherent limits on geographic concentrations in a scattered site model. Areas with relative concentrations of West Philadelphia scattered site renovation activity had greater increases in sales prices than comparison areas, but on other measures treated neighborhoods and comparable areas saw similar trends. In Dekalb County, GA, at a time of widespread sales price and property assessment declines, the decline in home prices was slightly smaller in areas around ANDP's renovated properties and homeownership declines were also slightly less severe. A higher program dosage was associated with more notable change; treated areas with the most ANDP renovations were more likely to outperform their comparison areas than areas with the fewest ANDP renovations. The limits of the research design do not allow us to extend these findings to other types of markets or different versions of a scattered site model.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

Program 1: West Philadelphia Scattered Site Model[18]

- **Program description**: Two private sector developers, WPRE and Neighborhood Restorations (WPRE/NR) have been rehabilitating abandoned rowhouse shells into affordable rental housing in West Philadelphia since 1989. The developers purchased long-term vacant rowhouses at below market prices from tax sales and on the private market. From 1989-2013 the developers produced more than 1,100 units of affordable rental housing in 760 single-family houses or duplexes in West Philadelphia. The developers rehabilitated the rowhouses using Low Income Housing Tax Credits (LIHTC) and private financing. Over the past three decades, Pennsylvania Housing Finance Agency (PHFA) approved 24 different scattered-site redevelopment projects for LIHTC funding. Tenant households who rent these 3-bedroom homes have incomes at or below 60% of area median income. WPRE/NR homes are located in some of West Philadelphia's most economically distressed blocks. Wherever possible, WPRE/NR targets their efforts and seeks to acquire and rehab a sufficient number of properties to stabilize a block.
- **Relevant state or local law**: No change to law needed.
- **Duration:** 1989 to present
- **Goals**: Reuse vacant properties for affordable housing and have a significant positive impact on neighborhood conditions.
- **Agency that administers**: For profit developers
- **Budget and staffing**: One full-time employee to handle vacant house acquisition, LIHTC applications and coordinate with developers rehabilitating the properties with a staff budget of approximately $100,000.

[18] Jim Levin and George Bantel of WPRE/NR provided program description information on March 3, 2021.

- **Key partners**: PHFA, Prime Property Management, an affiliate of WPRE/NR that leases and manages the units
- **Funding**: LIHTC and private financing
- **Key Takeaways**
  - Maintain rental houses well and they will be indistinguishable from private market homeowners' houses and help create a thriving mixed income neighborhood.

Data Analysis

Overview and Methods: This analysis explores the association between WPRE's scattered site renovation activity and indicators of neighborhood change, comparing census block groups which received concentrations of WPRE renovation activity between the years of 2010 and 2014 to other similar census block groups that did not receive WPRE renovation activity.

The focus was changes in home prices, residential vacancy, and foreclosures between 2010 and 2018. Because the intervention occurred across a number of years, in which other factors and macroeconomic trends may have impacted the treated areas the team identified comparison areas which had similar characteristics to the treated areas before the intervention. Treated areas were defined as block groups where WPRE rehabbed more than three units using LIHTC between 2010 and 2014, and in which zero WPRE units were constructed between 2005 and 2009. All of the treated block groups were located in one of the three most stressed housing markets identified in the 2011 Philadelphia MVA (G, H, I). The average treated area had 14 LIHTC units built by WPRE between 2010 and 2014. A total of 85 units were built in the 6 treated block groups between 2010 and 2014.

For comparable areas, the team identified three block groups for each treated block group that had zero WPRE LIHTC units built between 2010 and 2014 and were classified as the same 2011 Philadelphia MVA market category. To further refine the comparable areas, the team selected areas with similar median sales prices and foreclosures in 2011.

The analysis drew on the 2011 and 2018 MVAs, 2010-2011 and 2016-2018 sale records obtained from the City of Philadelphia, foreclosure records obtained from the court (2010 to 2011Q1 and 2016 to 2018Q2), and American Community Survey Five Year Estimates (2010-14 and 2015-19) for vacancy and tenure. The table below describes the characteristics of treated and comparison areas in 2010-2014. All of the areas analyzed were located in an urban area.

Table 15: Characteristics of Treated and Comparable Areas, WPRE Scattered Site

	Treated Areas	Comparable Areas
Unique Block Groups	6	18
% Black	90%	69%
% White	5%	8%
% Hispanic	0%	17%
% Asian	0%	3%
Housing Units per Square Mile	10,479	8,693
Average Median Household Income	$18,547	$24,484

Findings: There were greater increases in sales prices in areas with WPRE renovation activity than in comparison areas. On other measures, treated neighborhoods and comparable areas saw similar trends, with little change in foreclosures (slightly up) and vacancy (slightly down) during this period. While this analysis is not robust enough to identify causal impact, there were promising indicators of stabilization in proximity to WPRE's scattered site renovation activity. Treated areas, on average, experienced greater increases in home prices than comparable areas. Changes in foreclosures and residential vacancy were similar in treated and comparable areas, with comparable areas experiencing a slightly larger increase in foreclosures, but also a larger decline in vacancy than treated areas.

Table 16: Changes in Treated and Comparable Areas, WPRE Scattered Site

	Treated Areas	Comparable Areas
Median Sales Price, 2011	$39,442	$38,269
Median Sales Price, 2018	$65,221	$57,109
Change in Median Sales Price	+$25,779 (+65%)	+$18,839 (+49%)
Average #Foreclosures, 2011	4.5	4.6
Average #Foreclosures, 2018	5.5	6.2
Change in Foreclosures	+1.0	+1.6
Average Foreclosures per 100 Housing Units, 2011	0.83	1.20
Average Foreclosures per 100 Housing Units, 2018	1.06	1.55
Change in Foreclosures per 100 Housing Units	+0.22	+0.34
Average % Vacant Units, 2010-14	22%	21%
Average % Vacant Units, 2015-19	20%	16%
Change in Vacancy	-2%	-5%

Another way to evaluate the impact of WPRE's scattered site activity is to examine how each treated and comparison area's MVA classification changed between 2011 and 2018, when the city updated its MVA. The table below shows how the MVA classification of each block group changed between the 2011 MVA and the 2018 MVA. Every treated area saw an improvement in its MVA classification between 2011 and 2015, while only 61% of comparable areas saw an improvement in their MVA classification.

Table 17: Changes in Market Value Analysis (MVA) Category, Treated and Comparable Areas, WPRE Scattered Site

	Declined	Stable	Improve by 1 MVA Category	Improved by 2+ MVA Categories
Comparable Areas (n = 18)	0%	39%	28%	33%
Treated Areas (n = 6)	0%	0%	17%	83%

Limitations: The small number of foreclosures makes it difficult to draw conclusions from changes in their rate over this time period. ACS vacancy data was used because the City of Philadelphia changed the way it estimates vacancy during the course of the study period; while the research team has found the City's new measure more accurate than ACS, there was no comparable baseline data.

Program 2: Atlanta Neighborhood Development Partnership Scattered Site Model[19]

- **Program description**: Atlanta Neighborhood Development Partnership (ANDP) launched their scattered site single-family rehabilitation program in 2009 in Atlanta. In its first year, ANDP completed a six-home pilot to develop an effective process for foreclosed property acquisition, rehab, and rental disposition. With a proven method and capital in hand, ANDP competed successfully through city and county-led RFP processes for over $26 million in federal Neighborhood Stabilization Program dollars from 2010-16 to acquire, rehab and reactivate vacant, foreclosed single-family homes with homeownership. ANDP was active in both the city of Atlanta and in suburban parts of Dekalb and Fulton Counties, which

[19]Program description information obtained through an interview with John O'Callaghan, CEO on October 6, 2020 and edited by George Burgan, Senior Director for Communications and Technology on February 26, 2021.

each contain a portion of the city. ANDP acquired vacant, abandoned, and foreclosed properties that required $20,000-$70,000 of rehabilitation to be marketable. ANDP's goal, was to return affordable homeownership and lift depressed home values in neighborhoods most impacted by the foreclosure crisis. ANDP performed most of its scattered site rehabilitation work in majority Black neighborhoods with low single-family housing values and high levels of underwater properties (the mortgage exceeded the value of the property). ANDP contracted with private sector mission-aligned developers and contractors to perform the renovation work with an emphasis on small businesses of color. Newly rehabbed homes were offered for sale to income eligible buyers (with overall household incomes at or below 120% of AMI initially, evolving into a stronger focus on those below 80% of AMI), including a new emphasis on Veteran and active-duty military homebuyers in 2013. In its initial years, ANDP relied heavily on acquiring properties at low cost from First Look Programs as well as donations from local lenders. The NSP program allowed ANDP to provide buyers with down payment assistance of up to $25,000 in the form of a forgivable loan. ANDP targeted its marketing to partnering real estate professionals, mortgage lenders and housing counselors with clients ready for homeownership.

- **Relevant state or local law**: None
- **Program Duration:** 2009 to present
- **Goal**: To rehabilitate and repopulate single-family homes for low- and moderate-income households throughout the metropolitan Atlanta region
- **Agency that administers**: Nonprofit organization
- **Budget and staffing:** The budget for the scattered site rehabilitation program grew from $700,000 to almost $15 million from 2009 to 2019. ANDP staff rose from 12 to 17 employees.
- **Key partners:** Mission-aligned private sector contractors and developers who perform rehab and identify properties, county, and city governments, Neighborworks America who provided training, and National Community Stabilization Trust and private lenders who provided REO properties.
- **Funding Sources**: From 2008-2013, ANDP relied heavily on NSP1 and 3, winning over $26 million in NSP funding. In 2013, ANDP became a Community Housing Development Organization (CHDO) in several local jurisdictions to access over $3 million in federal HOME funds for foreclosure redevelopment. ANDP also raised private enterprise-level capital, philanthropic grants, Program Related Investments from banking and finance sector, and public capital through programs such as New Markets Tax Credits (NMTCs) and Capital Magnet Fund resources (CMF).
- **Key Takeaways**
  - The federal response to the foreclosure crisis, including First Look programs and NSP, created opportunities to pilot a new scattered site acquisition and rehabilitation model. The model, however, has proven sustainable with creative and aggressive raising of enterprise capital, New Market Tax Credits, Capital Magnet Fund resources and other sources of funding.
  - In low value neighborhoods, a key to reviving markets is creating new comparable sales transactions to raise values sufficiently to allow for profitable rehabilitation of older homes.

Data Analysis

Overview and Methods: The research team focused on suburban areas as an opportunity to evaluate a neighborhood stabilization effort conducted outside of a central city, where such efforts are often implemented. To evaluate the association between ANDP's scattered site renovation activity in suburban portions of Dekalb County and changes in the surrounding housing market, the team analyzed changes in home prices and sales volume between 2009 and 2015, changes in assessed values between 2010 and 2016, changes in home ownership between 2007-11 and 2015-19, and changes in foreclosure filings between 2008-09 and 2015-16. This analysis only examines renovated homes that were sold to homeowners. The average treated block group experienced 6.25 ANDP renovations between 2010 and 2014. The treated block group with the greatest number of ANDP renovations experienced 8 between 2010 and 2014.

The team selected comparison areas which had similar characteristics to the treated areas before the intervention. It is important to note that over the period in which ANDP was doing its work, housing prices in DeKalb County were falling. Estimates from Zillow indicate that home values fell nearly 10% between 2011 and 2012. Over the same period, assessed property values in the

county were also declining across the county. Treated areas were defined as block groups where ANDP performed more than four renovations between 2010 and 2014. Each treatment area was matched with 3 block groups in DeKalb County with similar home sales prices in 2009, homeownership rates in 2007-11, foreclosure filings in 2008-09, and no ANDP renovations. All of the areas analyzed were located in suburban areas.

Data sources were residential home sales occurring in 2009 and 2015, purchased from Data Axle, average total assessed values for residential properties in tax years 2010 and 2016 downloaded from the DeKalb County Assessor's Office (which reassesses properties annually), residential foreclosure filings in 2008-09 and 2015-2016 purchased from Attom Data, and tenure from the ACS Five Year Estimates, 2007-11 and 2015-19.

Table 18: Characteristics of Treated and Comparable Areas, ANDP Scattered Site

	Treated Areas	Comparable Areas
# Block Groups	4	12
% Black	94%	93%
% White	2%	3%
% Hispanic	2%	1%
% Asian	0%	1%
Percent Other	1%	2%
Housing Units per Square Mile	557	539
Average Median Household Income	$62,445	$56,787

Findings: Both treated and comparison areas experienced a decline in housing values between 2008 and 2014. The decline in home values was slightly larger in comparable areas, where values fell by 6% on average, compared with only 3% in treated areas. The number of non-distressed sales that occurred in each block group increased in both treated and comparison areas, with comparable areas experiencing a much larger increase in sales volume on average. Assessed values in treated and comparable areas experienced similar declines in assessed values. On average, treated neighborhoods saw assessed values fall by 20%, while comparable areas saw values decline by 21% between 2010 and 2016.

Treated neighborhoods saw a larger decline in foreclosures than comparable areas between 2008-09 and 2015-16. On average, treated areas experienced a decline of 2.8 foreclosures per 100 households, while comparable areas experienced a decline of 1.1 foreclosures per household. Treated and comparable areas experienced similar declines in homeownership, (declining by 8% on average in treated areas and 11% in comparable areas).

Table 19: Changes in Treated and Comparable Areas, ANDP Scattered Site

	Treated Areas	Comparable Areas
Median Sales Price, 2008	$142,375	$133,583
Median Sales Price, 2014	$138,375	$125,417
Change in Median Sales Price	-$4,000 (-3%)	-$8,167 (-6%)
Average Sales Volume, 2008	29	17
Average Sales Volume, 2013	32	27
Change in Sales Volume	+2 (+10%)	+9 (+59%)
Average Assessed Value, 2010	$150,631	$129,058
Average Assessed Value, 2016	$120,869	$101,826

Change in Average Assessed Value	-$29,763 (-20%)	-$27,232 (-21%)
Average Foreclosure Filings, 2008-09	178	137
Average Foreclosure Filings, 2015-16	37	25
Change in Foreclosure Filings	-141 (-79%)	-112 (-82%)
Average Foreclosure Filings per 100 Households, 2008-09	3.5	1.3
Average Foreclosures per 100 Households, 2015-16	0.7	0.2
Change in Foreclosure Filings per 100 Households	-2.8	-1.1
Average Ownership Rate, 2007-11	89%	85%
Average Ownership Rate, 2015-19	81%	74%
Change in Ownership Rate	-8%	-11%

Another way to understand the trends in treated and comparable areas is to examine how individual treated block groups performed against their specific comparison areas. The table below shows the number and proportion of comparable areas that each treated area outperformed. Viewed this way, it is clear that performance across each of the treated areas was not equivalent. Treated areas with the fewest ANDP renovations were less likely to outperform their comparison areas than treated areas with the most ANDP renovations. Nearly all treated areas outperformed all of their comparison areas in terms of foreclosure filings.

Table 20: Comparable Areas Outperformed by Treated Areas, ANDP Scattered Site

		Number of Comparable Areas that Treatment Areas Outperformed (0, 1, 2, or 3 out of 3)				
Block Group ID # of Each Treated Area	**Renovations, 2010 - 2014**	**Home Prices**	**Sales Volume**	**Ownership**	**Foreclosure Filings**	**Assessed Values**
130890234241	5	1	2	2	3	3
130890234184	6	0	0	2	3	0
130890233121	7	2	0	3		2
130890233122	8	3	3	1	3	0
# of Comparable Areas Outperformed by All Treated Areas		6	5	8	11	5
% of Comparable Areas Outperformed by All Treated Areas		50%	42%	67%	92%	42%

The team also analyzed changes in assessed property values among homes within 500 feet of an ANDP renovation and compared them to the change in assessed values for homes located in the same block group but farther than 500 feet from an ANDP renovation. The table below shows the average assessed value of homes in the year prior to each ANDP renovation and three years after each ANDP renovation.

Homes near ANDP renovation experienced greater increases in assessed values than homes farther away from ANDP renovations. For example, among homes near an ANDP renovation in 2013 assessed values grew by 79%, while homes in the same block group that were not located near an ANDP renovation saw assessed values grow by only 63% over the same time period.

Limitations: Multiple foreclosure prevention programs were operating widely during the period of analysis, both in treated and comparison areas. The team did not evaluate factors such as new construction activity that may be associated with changing assessed values.

Table 21: Changes in Treated and Comparable Buffer Areas, ANDP Scattered Site

Renovation Year	Study Period	ANDP Renos	Properties within 500-Feet of an ANDP Renovation (Reno)			Properties More than 500-Feet from an ANDP Renovation		
			As. Value Pre-Reno	As. Value Post-Reno	%. Change	As. Value Pre-Reno	As. Value Post-Reno	%. Change
2012	2011 to 2015	13	$106,693	$102,026	-4%	$123,782	$114,433	-8%
2013	2012 to 2016	13	$48,651	$87,085	79%	$60,173	$97,791	63%
2014	2013 to 2017	6	$48,731	$100,505	106%	$57,926	$104,630	81%
2015	2014 to 2018	8	$63,606	$124,437	96%	$97,290	$170,261	75%
2016	2015 to 2019	17	$79,244	$127,442	61%	$76,479	$120,333	57%
2017	2016 to 2020	8	$98,407	$150,838	53%	$97,494	$149,154	53%
Total		**65**	**$76,232**	**$114,311**	**50%**	**$86,114**	**$122,887**	**43%**

4 Land Bank

Intervention Overview: Over 170 counties and municipalities across the country have formed land banks to reactivate vacant and underutilized properties and return them to productive use.[20] Typically created pursuant to state enabling legislation, some land banks are created as a local government agency, while others are formed as quasi-governmental agencies or independent nonprofits. The powers of land banks differ across the country, but a key purpose land banks serve is to convert tax-delinquent properties back into productive reuse. As a result, many land banks, including the two evaluated here, have some power to acquire tax foreclosed properties outside of tax sale auction to proactively transfer the property to an eligible buyer with the interest, experience, and financial capacity to reuse or redevelop the property.

Prior Studies Regarding Neighborhood Stabilization Impact: Studies find that auctions of tax-foreclosed properties to the highest bidder often result in the property remaining vacant, unmaintained, and tax delinquent. Land banks with the power to obtain tax foreclosed properties outside of the tax auction process and transfer properties to responsible buyers achieved better outcomes, including reactivating the property with stable ownership and increasing property values. Studies suggest that the transfer of a property to a land bank may preserve the value of nearby homes, but it does not increase property value unless the property is well-maintained or renovated.

Summary of Findings: In both cities, areas with land bank activity also had signs of neighborhood stabilization. In Houston, land bank activity was concentrated in three market types all on the weaker end of the city's markets and all with low median incomes. The most notable stabilization occurred in the strongest of the three markets. These markets also had the greatest concentration of land bank activity. In Albany, land bank activity was exclusive to the city's most stressed low-income markets, making the identification of a non-treated comparison area difficult. Differences did emerge in looking at areas with one or no land bank transactions and those with two or more; there was a larger increase in sale prices and decreasing vacancy in treated areas with more transactions. Similar to the code enforcement interventions, market context and program dosage may have played a role in these program locations.

[20]Frequently Asked Questions on Land Banking, Community Progress https://communityprogress.org/resources/land-banks/lb-faq/.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

Differences did emerge in looking at areas with one or no land bank transactions and those with two or more; there was a larger increase in sale prices and decreasing vacancy in treated areas with more transactions.

Program 1: Houston Land Bank[21]

- **Program description:** The Houston Land Bank is a quasi-public local government corporation that obtains vacant, abandoned, and deteriorated properties and transfers them to new responsible owners for new construction that meets community needs such as quality affordable housing. The land bank solely acquires vacant parcels without structures and sells these properties to relatively small for-profit and nonprofit builders for the purpose of constructing single-family homes. The deed requires the builders to construct affordable homes that maintain their affordability for ten years. From 2002 to 2017, the land bank (known until 2018 as the Land Assemblage Redevelopment Authority (LARA)) acquired tax sale properties through direct purchase or as "strike off" that failed to sell at auction from the county. Properties that did not sell were deeded to the land bank for closing costs through an agreement with taxing authorities that expired in 2017. The land bank was run as a city program with shared staff from 1999 to 2017. Only in 2018 did the authority officially change its name to the Houston Land bank and hire its first CEO and independent staff.
- **Relevant state or local law**: Subtitle A, Title 12, Local Government Code, Chapter 379H Urban Land Bank Program in Municipality with Population of Two Million or More (2021).
- **Duration**: Incorporated as the Land Assemblage Redevelopment Authority (LARA) in 1999 and became the Houston Land Bank in 2018.
- **Goal:** To reclaim vacant, abandoned, and deteriorated vacant parcels on behalf of the City that meets community needs for quality affordable housing, community, and economic development and increased quality of life
- **Agency that administers:** Houston's Housing and Community Development Department is responsible for overseeing the initiative and is the sponsoring agency. The land bank is an independent corporation with its own board of directors appointed by the Mayor, City Council, the county, and the School District.
- **Budget and staffing:** The land bank operated within the Housing and Community Development Department, borrowing staff time and spending down on direct program dollars until 2018. During the five years from 2010-2015, the land bank spent approximately $1.5 million on property maintenance and $2 million on land purchase including closing costs, permits, and property taxes.
- **Geography**: Land Bank focuses on nine historically neglected Houston neighborhoods that have high concentrations of vacant abandoned, tax delinquent lots.
- **Key partners**: City of Houston, homebuyers of new construction affordable housing, non- and for-profit builders such as Habitat and in recent years, the Houston Community Land Trust
- **Funding**: The majority of funding comes from a central pool of local tax increment financing dollars derived from a Tax Increment Reinvestment Zone (TIRZ), a special district that allows investments in public improvements to be made from the resulting tax increases. The TIF dollars are dedicated to funding affordable housing with a mandatory 10-year compliance period. Currently, the land bank also earns over $1 million annually in sales and administrative fees.

[21]Program description information obtained through interview with Anne Gatling Haynes, Houston Land Bank CEO on January 15, 2021.

- **Key Takeaways**
  - The land bank requires a full-time director and staff. From 1999 to 2018, the land bank capacity was limited because it shared staff with its supervising city agency.
  - In a growing city like Houston, CEO and President Anne Gatling Haynes says vacant land is currency, and there is a power in ensuring that vacant land is redeveloped for purposes that serve the community.
  - Acquiring land at low prices is critical to a land bank model. Yet in the recent competitive real estate market, less than 5% of tax sale properties fail to sell. Now that the interlocal agreement has expired, the land bank must create a new model for cost-effectively acquiring and transferring properties to responsible buyers.
  - Good data collection and analysis helps to ensure buyers use land for intended purposes, such as affordable housing, and to measure impact.
  - Vacant properties sold to adjacent owners will often remain vacant without a committed new owner.
  - Early on, the land bank sold vacant parcels for $1 when it was difficult to sell lots in disinvested neighborhoods but found that builders prioritized the redevelopment of land for which they paid a market value purchase price. As a result, the $1 lot program ended in 2018. Now, the land bank sells parcels at a discounted market value of approximately $10,000 to $20,000 per lot depending on the neighborhood.

Data Analysis

Overview and Methods: The goal of this analysis is to understand how land bank acquisition and subsequent sale of vacant land impacted home sale prices in Houston, TX. The land bank activity examined in this analysis occurred between 2010 and 2019. To understand how these activities impacted the local housing market, the team analyzed changes in home sales price between 2010/2011 and 2018/2019. Block groups in which the land bank acquired and resold at least five properties were considered part of the treatment group. A set of block groups which were in the same MVA category in 2013, but did not have land bank acquisitions, were selected as comparisons.

Table 22: Characteristics of Treated and Comparable Areas, Houston Land Bank

	2013 MVA F		2013 MVA G		2013 MVA H	
	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas
# Block Groups	3	4	2	3	6	13
Median Income	$19,300	$35,000	$19,600	$17,800	$22,800	$25,800
Housing Units per Square Mile	1,620	1,440	2,200	1,500	1,200	1,700
% Black	69%	81%	89%	76%	67%	75%
% White	0%	1%	1%	0%	5%	2%
% Hispanic	31%	16%	10%	23%	27%	23%
% Asian	0%	2%	0%	0%	0%	0%

Property sales price records were purchased from InfoUSA (now Data-Axle). Reinvestment Fund's 2016 MVA classified the low-income treated areas as F, G, and H on a citywide market scale from A (strongest, e.g., higher sales prices, lower vacancy) to I (most distressed, e.g., lower sales prices, higher vacancy). The treated areas were all low-income. The average treated block group in the MVA F category experienced 49 land bank acquisitions and resales between 2010 and 2019. Treated block groups in MVA category G experienced an average of 36 land bank sales, and block groups in MVA category H experienced 22 land bank sales on average.

Table 23: Changes in Treated and Comparable Areas, Houston Land Bank

	2013 MVA F		2013 MVA G		2013 MVA H	
	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas	Treated Areas	Comparable Areas
# Block Groups	3	4	2	3	6	13
Average # Land Bank Sold Prop.	49	0	36	0	22	0
Average # of Sales, 2010/2011	56	54	35	17	87	149
Average # of Sales, 2018/2019	125	82	60	39	123	277
Median Sale Price, 2010/2011	$85,300	$91,000	$80,800	$91,500	$57,300	$49,100
Median Sale Price, 2018/2019	$164,000	$95,800	$115,000	$150,800	$106,000	$93,200
% Sale Price Change, 2010/2011-2018/2019	95%	17%	42%	57%	95%	90%

Findings: The land bank treated block groups in MVA category F outperformed comparable areas in residential sale price change by the largest amount, with an average 95% increase in sales price in land bank treated areas compared to 17% in areas without land bank activity. F is the strongest market type out of the three categories of treated areas, and F block groups also had the highest amount of land bank activity. Land bank treated block groups in MVA category G underperformed comparable block groups (42% to 57%), and land bank treated block groups in MVA category H slightly outperformed comparable areas (95% to 90%).

Limitations: One limitation of this analysis is the lack of data on what happened to properties after the land bank resold the property to the private market. Some sales may have led to development of new housing while others may remain vacant lots. The subsequent choices of private developers likely affect local sale prices. Additionally, the number of block groups with land bank activity was small. Another limitation is that Reinvestment Fund has not completed an MVA in Houston since 2016, and so more comprehensive data on how other market factors like vacancy, foreclosure filings, building permitting, and overall market strength have changed in the examined block groups was not readily available.

Program 2: Albany County Land Bank[22]

- **Program description**: The nonprofit Albany County Land Bank was established in 2014 to facilitate the process of acquiring, improving, and transferring tax-foreclosed, vacant, or abandoned properties to productive use. The county provides almost all of its tax foreclosed properties to the land bank at no charge after extinguishing back taxes and liens on the properties. More than half of the properties acquired by the land bank are vacant lots without a structure. Where there is a structure, the land bank establishes an action plan based upon the condition of the structure and whether it is ready to be sold immediately, requires some level of stabilization prior to sale, requires rehabilitation that exceeds the market value of the property, or must be demolished. The land bank accepts purchase offers for properties on an open, competitive basis. In order to purchase a property, buyers cannot have a history of negative or harmful real estate stewardship and must provide a plan and proof of financial capacity to complete the proposed project. As part of the purchase process, the land bank requires all owners to "put their feet" in the building to understand how much work is needed. Approved buyers must also sign a redevelopment agreement committing to use the property for authorized purposes and/or complete rehabilitation within a specified timeframe. Where the owner fails to do so, the land bank can recapture the property through various methods. Thanks in part to the purchase process, the land bank has not had to take action to recapture a property to date. Properties are typically turned around within 12 months.

[22]Program description information obtained through interview with Adam Zaranko, Executive Director on January 11, 2021.

- **Relevant state or local law:** Enabled under the 2011 Land Bank Act, Article 16 of the New York State Not-for-Profit Corporation Law and Albany County Resolution 68 of 2014
- **Duration:** 2014 to present
- **Goals:** Facilitate the process of acquiring, improving, and redistributing vacant properties, eliminate the harms & liabilities caused by such properties, return properties to productive use, and remain consistent with the municipality's redevelopment and comprehensive plans
- **Agency that administers:** 501(c)(3) Nonprofit
- **Budget and staffing:** $2.5 million budget in FY21 and 8 FTE staff members
- **Key partners:** Albany County, municipal governments, nonprofits including organizations like the Albany Community Land Trust and Habitat for Humanity, private buyers, and responsible real estate developers and investors
- **Funding:** Funding from the New York State Attorney General's Office and Enterprise Community Partners, Inc, Albany County, and the City of Albany, along with sales proceeds and associated fees. There are no NYS Attorney General grant funds that will extend beyond FY 2021.
- **Key Takeaways**
  - The land bank's ability to obtain a large volume of tax foreclosed properties at differing market values in a variety of municipalities helps provide operating income that funds a significant portion of its operations.
  - A land bank needs grants to reclaim or demolish properties in weak market neighborhoods where there is no demand for properties. As executive director Adam Zaranko says, "we receive 100-plus-year-old properties, and now we hold the bag. Grant money is what we use to fill the bag."
  - Access to capital for buyers is a significant challenge in neighborhoods that have faced decades of lender disinvestment. Only 12 of the 275 buyers of land bank properties were able to obtain loans to finance the purchase and rehabilitation of the properties from traditional lenders. As a result, neighborhood residents who are eligible buyers are turned down because they cannot raise the purchase price plus money for critical rehabilitation costs. The land bank is creating a new partnership with a community lender in Syracuse, Home HeadQuarters, to ensure more residents can buy properties in their neighborhoods and reduce Albany's significant gap between white and Black homeownership.
  - The land bank primarily has access to tax foreclosed properties. The land bank has no power to revitalize surrounding vacant and abandoned properties that are bank owned or privately owned.
  - The land bank works in the neighborhoods with so many other good programs that it may be hard to isolate the land bank's work.

Data Analysis

Overview and Methods: The goal of this analysis is to understand how clustered land bank acquisition and resale activity of foreclosed properties impacted sale prices and vacancy in Albany, NY. The land bank activity examined in this analysis occurred between 2015 and 2020. To understand how these land bank activities impacted the local housing market, the team analyzed changes in home prices between 2012/2014 and 2018/2020 and changes in the share of vacant properties between 2013 and 2020. Census block groups with at least two properties that the land bank had both acquired and resold were considered treated areas. Block groups with no land bank activity from 2015 through 2020 and median sale prices below $150,000 in 2012/2014 were considered comparable areas.

Table 24: Characteristics of Treated and Comparable Areas, Albany County Land Bank

	Treated Areas	Comparable Areas
# Block Groups	30	13
% Black	48%	22%
% White	28%	56%
% Hispanic	13%	11%
% Asian	6%	7%
Med. HH Income	$32,200	$50,800
Housing Units per Square Mile	3,100	3,000

The average treated block group experienced 11 land bank acquisitions and dispositions between 2015 and 2020. The treated block group with the greatest number of land bank acquisitions and dispositions experienced 32 between 2015 and 2020.

Residential property sales were downloaded from albany-ny.tolemi.com for 2012-2020. The City of Albany provided lists of parcels cited for vacancy for 2013, 2017, and 2020.

Table 25: Changes in Treated and Comparable Areas, Albany County Land Bank

	Treated Areas	Comparable Areas
Average # Land bank Properties Sold	11	0
Median Sales Price, 2012/2014	$68,800	$132,400
Median Sales Price, 2018/2020	$93,500	$162,200
% Change in Median Sales Price	40%	20%
% Vacant Residential Prop., 2013	7.2%	1.1%
% Vacant Residential Prop., 2020	7.0%	2.3%
Change in Vacant Residential Prop.	-0.2%	1.3%

Prior to 2016, the Land Bank sold fewer than 10 properties per year but has sold at least 20 per year since. The median length of time a property remained in the land bank before sale was 364 days.

Table 26: Count and Median Sale Price 2012-2020, Albany County Land Bank

Year	Count of Land Bank Sales	Median Sale Price of Land Bank Sales
2012	7	$5,000
2013	3	$0
2014	5	$0
2015	3	$1
2016	24	$750
2017	35	$14,500
2018	40	$10,000
2019	33	$5,100
2020	38	$7,000

Findings: Block groups with land bank treated properties experienced a much larger increase in sale prices (as a percentage) than comparable areas (40% to 20%), although they also began the period with lower sale prices. The vacancy rate decreased slightly in land bank treated areas (-0.2%) but increased in comparable areas (1.3%) over the same time period. The areas began and ended with higher vacancy rates, however.

Limitations: The land bank works comprehensively in the most distressed parts of Albany, making it difficult to find strictly comparable areas. The Code Enforcement Division indicated that their methods for citation of vacant parcels, especially buildings, has improved greatly in recent years. The changes in observed vacancy levels, therefore, could reflect improved enforcement practices rather than actual changes in residential vacancy.

5 First Look Program

Intervention Overview: First Look programs were developed in response to the Great Recession to give owner occupants and local nonprofit buyers a "first look" to purchase single-family real-estate-owned (REO) properties in the portfolios of financial institutions. The goal of First Look programs is to promote homeownership and allow local nonprofits seeking to stabilize neighborhoods to negotiate and purchase foreclosed properties before they are made available to investors that will help to achieve their mission. The National Community Stabilization Trust (NCST) was founded in 2008 by six national nonprofits to facilitate sales of single-family REO properties to a network of vetted, community-based, nonprofit, and mission-focused for-profit organizations and land banks. NCST facilitated approximately 17,000 First Look property sales between 2008 and 2020 on behalf of the Federal Housing Administration, Fannie Mae, Freddie Mac, and a number of large banks and mortgage servicers. Under First Look programs, eligible non-owner occupant buyers are given a short period of time to express interest (i.e., 48 hours) and then a slightly longer period (i.e., 15 days) to perform inspections and evaluate whether to buy a property. Prices are set by the seller based upon a cost avoidance strategy where the seller avoids certain costs by transferring the property through the program, such as maintenance and marketing. In situations where no owner occupants or local nonprofits choose to buy a property, the property is made available for sale through retail disposition processes such as the Multiple Listing Service or auction websites. The vast majority of First Look sale properties were rehabbed and sold for homeownership.

Prior Studies Regarding Neighborhood Stabilization Impact: Limited studies of First Look Programs that seek to sell single-family REO properties to nonprofits and local owner-occupant buyers rather than investors found that they may reduce negative impacts on neighborhoods, including declining property values and risk of future tax foreclosure. A recent paper argues there should be no direct link between sales prices and the First Look program, but rather through changing the buyer composition to investors.[23]

[23]Leaving Households Behind: Institutional Investors and the U.S. Housing Recovery by Lauren Lambie-Hanson, Wenli Li, Michael Slonkosky : SSRN.

Summary of Findings: Analysis found observable market stabilization trends in areas within 500 feet of First Look properties in Essex County, NJ, but less clear results in Cook County, IL. Proximity to a First Look home in Essex County was associated with a larger decline in bank sales, a larger increase in median sales price, and an increase in sales volume. Proximity to a First Look home in Cook County was associated with an increase in median sales price and smaller decrease in sales volume relative to the comparison area, but also with an increase in foreclosure filings. It is important to note that while these analyses focus on market changes within a small area, First Look programs generally do not amass large number of properties within smaller, targeted geographies. As noted in the analyses of emergency bridge loans that follow, previous research has demonstrated impacts of individual foreclosed properties; this quick basic policy analysis did not capture all of the potential effects of the program.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

Program 1: New Jersey Community Capital[24]

- **Program description:** In 2010, New Jersey Community Capital (NJCC), a Community Development Financial Institution (CDFI), began to acquire Northern New Jersey vacant and foreclosed properties from the National Community Stabilization Trust (NCST) First Look mortgage pools through its newly acquired subsidiary, the Community Asset Preservation Corporation, (CAPC). Over time NJCC acquired 143 properties from NCST, with 127 of those being single-family homes. NJCC acquired these properties both individually and as part of 18-20 bulk property pools between 2010 and 2016. CAPC staff evaluated thousands of First Look REO properties and purchased a small percentage of those evaluated based upon capital availability and options for disposition and reuse in target markets. CAPC has continued to build on the First Look Program, and in FY 20, sold 169 renovated owner-occupied properties to buyers with an average income of 98% of AMI. 63% of these sales were to first time homebuyers and 68% were to minority households. CAPC has a rental portfolio consisting of 591 units leased to tenants with an average income of 43% of AMI. CAPC targeted its efforts by obtaining a critical mass of properties in distressed neighborhoods where NJCC was already working using a multipronged stabilization approach that included initiatives to use resident engagement and cross sector partnerships to improve public spaces and educational opportunities.
- **Relevant state or local law:** No change to law needed.
- **Duration:** 2010 to present
- **Goals:** Acquire foreclosed, real-estate-owned (REO) properties to stabilize fragile neighborhoods and protect homeowners and tenants from the toxic effects of the foreclosure crisis
- **Agency that administers:** Nonprofit Community Development Financial Institution (CDFI)
- **Budget and staffing:** Staff of 19 in FY20. Total income has grown from $319,000 in FY11 to $10.9 million in FY20.
- **Key partners: L**enders who provided loans, lines of credit, and grant assistance.
- **Funding Sources:** Lines of credit (largest was $13 million with Prudential (ASF 1) and acquisition and construction loans. In addition, by FY 20, the properties earned approximately $4.3 million in rent. A 5% construction management fee also helped finance acquisition of new properties.
- **Key Takeaways**
  - Neighborhood change takes time. It requires an investment of ten years or more to move the needle and improve a neighborhood.
  - Reactivating vacant and foreclosed properties requires access to flexible capital in the forms of low interest loans and lines of credit in addition to project-based subsidy.

[24]Program description information obtained through an interview with Wayne Meyers, President and Jeff Crum, Chief Investment Officer of NJCC on October 6, 2021.

Data Analysis

Overview and Methods: The analysis examined the changes in bank sale volume (2013-16 to 2017-19), median sales prices (2013-16 to 2017-19), and residential sales volume (2013-16 to 2017-19) in the study and comparison areas. Because the treated and non-treated areas were parts of the same census tract, the demographic characteristics were the same. Treated areas were defined as the portion of a census tract within a 500-foot buffer of a First Look property between 2013 and 2016 with the rest of the census tract outside the 500-foot buffer considered the comparable areas. There were 68 First Look properties in Essex County, New Jersey, between 2013 and 2016.

Table 27: Characteristics of Treated and Comparable Areas, First Look Essex County, NJ

	Treated and Comparable Areas
# Census Tracts	137
Household Income	$54,745
Housing Units per Square Mile	3,524
% Black	50.6%
% White	17.1%
% Hispanic	26.2%
% Asian	3.4%

The National Community Stabilization Trust (NCST) and New Jersey Community Capital provided the First Look program data. Demographic and income data came from the U.S. Census Bureau's American Community Survey 2015-19 5-year estimates. Sales volume and median home sales prices came from Monmouth County's Open Public Records Search System (OPRS). Bank sales were estimated based on a Reinvestment Fund analysis of the OPRS sales data.

Findings: Proximity to a First Look home was associated with a larger decline in bank sales, a larger increase in median sales price, and an increase in sales volume. Both treated and comparison areas saw declines in the number of bank sales, but the decline was larger for areas close to First Look properties (-50.9% vs. -40.6%). Both areas also saw an increase in median sales price, but the gains were larger for the treated area (43.4% vs. 26.4% increase). Sales volume also increased in both the study and comparison areas, but the increase was larger in the treated area (40.5% vs. 20.5%).

Table 28: Changes in Treated and Comparable Areas, First Look Essex County, NJ

	Treated Areas	Comparable Areas
# Census Tracts	137	137
# Bank Sales, 2013-16	57	106
# Bank Sales, 2017-19	28	63
Change in Bank Sales	-50.9%	-40.6%
Average Median Sales Price 2013-16	$133,656	$216,643
Average Median Sales Price 2017-19	$191,712	$273,878
Change in Average Median Sales Price	43.4%	26.4%
# Sales, 2013-16	4,780	13,138
# Sales, 2017-19	6,715	15,827
Change in Sales Volume	40.5%	20.5%

Limitations: The design of this intervention focused on foreclosed properties available through the First Look program acquired by just one buyer, wherever they were located. As a result, there were not significant clusters of activity. At the same time, other First Look houses may have been sold in the treated/not treated areas, although NJCC was the most active buyer.

Program 2: Community Investment Corporation Community Initiatives Acquisition Program - Chicago[25]

- **Program description**: The Community Investment Corporation (CIC) through its affiliate Community Initiatives, Inc. (CII), is one of the leading buyers of NCST First Look properties in Chicago. In 2013, responding to widespread abandonment of Chicago's struggling 1-4 unit rental housing stock caused by the foreclosure crisis, CIC launched the Community Initiatives Acquisition Program. The mission of the new program was to acquire distressed 1-4 unit housing in low- and moderate-income neighborhoods at below market prices. CIC then sold these properties to vetted private-market developers for immediate renovation and sale for homeownership or rental. CIC bought properties for which the total cost of acquisition and rehab could be supported by neighborhood rents or sales prices. CIC acquired just 9 properties in 2014 and expanded to 659 properties by the end of 2020. The majority of the First Look properties CIC acquired were single family homes. Once CIC bought the property and the closing process was complete, CIC quickly sold the property to a vetted developer and recycled the money back into their acquisition fund. CIC monitored the renovation of each property and encouraged the developers to renovate at a high-quality level and to obtain the highest price possible for the housing. Developers were not permitted to simply hold the property or to "flip" it to another investor. By 2016, home values were high enough in many neighborhoods to sell the properties for homeownership, which allowed the small developers to immediately reinvest their proceeds into a subsequent property.
- **Relevant state or local law:** No change in law needed.
- **Duratio**n: 2013 to present
- **Goals**: Preserve and improve unsubsidized affordable rental and homeownership housing units and return them to the tax rolls without subsidy
- **Agency that administers:** Nonprofit Community Development Financial Institution (CDFI)
- **Budget and staffing:** 2-5 person staff team. Annual budget is approximately $823,000 in 2021.
- **Key partners**: Small reliable developers who renovated the properties and NCST's First Look Program that provided distressed properties at below market prices.
- **Funding Source**: In 2013, CIC received a $5 million PRO Neighborhoods grant from the JPMorgan Chase Foundation to create a 1-4 housing units collaborative effort with Neighborhood Housing Services of Chicago (NHS) and Chicago Community Loan Fund (CCLF) that funded the acquisition program. CIC recycled acquisition dollars several times and charged an acquisition and management fee for properties where the sales price could support it.
- **Key Takeaways**
  - Ensure staff understands private market real estate development.
  - Collaborate with private market developers who are rehabilitating properties for a profit.
  - Help a dependable set of small developers get to scale by providing a dependable pipeline of properties.

Data Analysis

Overview and Methods: To examine the relationship of First Look activity and market stabilization in Cook County, the team applied the same strategy as the in Essex County, NJ, examining the changes in bank sale volume (2013-16 to 2017-19), median sales prices (2013-16 to 2017-19), and residential sales volume (2013-16 to 2017-19) in treated and comparison areas. Treated areas were defined as the portion of a census tract within a 500-foot buffer of a First Look property between 2013 and 2016, with

[25]Program description information obtained through an interview with Andre Collins, VP Director of Acquisitions on February 24, 2021.

the rest of the census tract outside the 500-foot buffer considered the comparable areas. Based on their density, 628 census tracts were categorized as urban core, 288 were categorized as suburban. There were 1,647 First Look properties purchased by NCST buyers in Cook County, Illinois between 2013 and 2016.

NCST provided the First Look program data. Demographic and income data came from the U.S. Census Bureau's American Community Survey 2015-19 5-year estimates. Sales volume and median home sales prices came from the Cook County Assessor's Office. Foreclosure filing data from 2013 to 2015 came from the Cook County Recorder of Deeds' Office. Foreclosure data from 2017 to 2019 was purchased from ATTOM Data Solutions.

Table 29: Characteristics of Treated and Comparable Areas, First Look Cook County, IL

	Treated and Comparable Areas
# Census Tracts	916
Average Median Household Income, 2015-19	$58,443
Housing Units per Square Mile	2,041
% Black	28.9%
% White	34.8%
% Hispanic	28.8%
% Asian	5.6%

Findings: Proximity to a First Look home in Cook County was associated with an increase in median sales price and a smaller decrease in sales volume relative to the comparison area, but also with an increase in nearby foreclosures. The treatment area saw a 5.1% increase in foreclosures while the comparison area saw a 2.9% decrease. Both areas saw an increase in median sales price, but the gains were larger for the treated area (38.1% vs. 22.6% increase). Sales volume decreased in both the treatment and comparison areas, but the decrease was smaller in the treated area (-12.9% vs. -17.8%).

Table 30: Changes in Treated and Comparable Areas, First Look Cook County, IL

	Treated Area	Comparable Area
# Census Tracts	916	916
# Foreclosures, 2013-March 2015	6,133	11,114
# Foreclosures, 2017-19	6,445	10,787
Change in Foreclosures	5.1%	-2.9%
Average Median Sales Price 2013-16	$111,894	$187,573
Average Median Sales Price 2017-19	$154,510	$230,019
Change in Average Median Sales Price	38.1%	22.6%
# Sales, 2013-16	47,565	127,885
# Sales, 2017-19	41,413	105,170
Change in Sales Volume	-12.9%	-17.8%

Limitations: The foreclosure data for the years 2013-15 came from the Cook County Assessor's Office while the foreclosure data for 2017-19 came from ATTOM data. While both datasets were records of mortgage foreclosures, it is possible that there may be differences in how the data were collected that could impact the analysis. Due to the design of this intervention, targeting foreclosed properties available through the First Look program, wherever they were located, there were not significant clusters of activity.

6 Emergency Bridge Loan/Soft Second Mortgage Program

Intervention Overview: Several states have established emergency home mortgage assistance programs to prevent mortgage foreclosures during periods of economic downturn. Emergency bridge loan programs, like Pennsylvania's Homeowners' Emergency Mortgage Assistance Program (HEMAP) and Delaware's Homeowners' Emergency Mortgage Assistance Program (DEMAP), are intended for homeowners most likely to avoid foreclosure with help, such as those experiencing temporary income loss or a short-term medical crisis. The state programs provide short-term bridge loans to cover missed mortgage payments and prevent foreclosure. In addition to Pennsylvania and Delaware, Maryland, North Carolina, Connecticut, and Ohio have adopted bridge loan programs. Under these state programs, homeowners typically can apply for a short-term loan to cure past delinquency or to cover mortgage payments for a set period of time. Most of these programs require the homeowner to show some evidence that their delinquency is due to unemployment, a medical crisis,, or some other event beyond their control. The owner must be otherwise credit-worthy and show that the household will be able to pay their mortgage over the long-term. The loan is typically added onto the principal of the mortgage or added as a lien on the house that must be repaid if the house is refinanced or sold. Loans are paid directly to the mortgage servicer.

Prior Studies Regarding Neighborhood Stabilization Impact: Empirical evidence reveals that many temporarily troubled mortgage borrowers prove able to retain their homes and pay off their mortgages in full, without a loan agreement modification, when offered bridge loan assistance.

Summary of Findings: These two statewide programs were designed to assist homeowners in need, wherever they live, and previous studies have shown that emergency bridge loans benefit individual homeowners, near neighbors, and local government. However, there were not notable geographic concentrations of program activity, even in more densely populated areas of Pennsylvania and Delaware that had concentrations of foreclosure activity. Areas surrounding HEMAP recipients in Allegheny County, PA, showed some signs of strength relative to areas further from recipients—larger increase in sales volume relative to the comparison areas but similar declines in foreclosures and median home sales prices. Areas adjacent to DEMAP recipients did not show greater relative stability or improvement. The lack of association with neighborhood level stabilization may be related to market differences, lower density, program design (HEMAP includes an automatic "pause" on foreclosure proceedings that DEMAP does not), or other factors. The operation of other mortgage assistance programs including HARP and HAMP at the same time make it more difficult to measure impact and to identify true control areas. To achieve a neighborhood stabilization effect, these programs would likely need to be more geographically concentrated. But it is important to note that while there is no consistently discernible market impact, these programs are not without impact. To the contrary: every home that is saved from foreclosure has an estimated positive financial impact of more than $90,000 including local government tax revenue. In a previous study, Reinvestment Fund estimated that the aggregate impact of foreclosures saved by Pennsylvania's HEMAP program between 2013 and 2018 was just under $300,000,000.

Note on Quick Basic Policy Analysis: The analyses presented here on these two programs do not examine causal links between the interventions and neighborhood stability and cannot be generalized to all local instances of an intervention type. They document market changes related to neighborhood stability in areas that were "treated" by a certain intervention.

Program 1: Pennsylvania Homeowners' Emergency Mortgage Assistance Program (HEMAP)[26]

- **Program Description:** The Pennsylvania Homeowners' Emergency Mortgage Assistance Program (HEMAP) was launched in 1983 to offer loans to homeowners who, through no fault of their own, were financially unable to make their mortgage payments and were in danger of losing their homes to foreclosure. Under Pennsylvania law, homeowners who have failed to pay their mortgage for at least 60 days receive an Act 91 Notice from their lender which includes information

[26]Information approved as accurate by Lori Toia, Director of HEMAP on February 18, 2021.

about their right to apply to the HEMAP program through PHFA-approved housing counseling agencies. While the application is pending, lenders/servicers cannot move forward with the foreclosure action if the applicant applies within 33 days from the date of the Notice. PHFA has 60 days to make a determination of eligibility based on several factors including whether the financial hardship of the homeowner is due to circumstances beyond their control and if they have a reasonable prospect for resuming full payments within 36 months. If approved, HEMAP assistance can take two forms: continuing (i.e., an amount to reinstate the mortgage delinquency and assistance with monthly payments for 24 months, or 36 months in periods of high unemployment, to compensate for a loss of income) or non-continuing, a single lump sum to bring the mortgage current. In either instance, the current maximum loan amount is $60,000 and must be repaid. Loan disbursements are made directly by HEMAP to lenders on the owner's behalf. Currently HEMAP loan recipients are required to pay 35% of their net monthly income towards their total housing expense. Although repayment is based on household income, owners must pay a minimum monthly payment to HEMAP of $25.00 per month for each mortgage assisted. Application approval rates since the program began are at 21%. By law, mortgages insured by the Federal Housing Administration under Title II of the National Housing Act are not eligible under HEMAP.

- **Relevant state or local law**: HEMAP was established by the General Assembly with the passage of the act of December 23, 1983 (P. L. 385, No. 91) (Act 91), signed into law on December 12, 1983 ("Act 91").
- **Duration**: 1983 to present (unfunded during some years)
- **Goal:** Prevent foreclosure and loss of homeownership due to circumstances beyond an owner's control, including major macroeconomic shocks that result in job loss
- **Agency that administers:** Pennsylvania Housing Finance Agency (PHFA)
- **Budget and staffing**: HEMAP was initially funded through a state of Pennsylvania appropriation of $25,750,000 in 1984. For the majority of HEMAP's history, the program has relied mainly on state appropriations and proceeds from repayment of existing loans. The State appropriations supplemented proceeds with an average of $8.5 million annually from 2005 to 2012 after multiple years with no appropriation.
- **Key partners:** Housing counseling agencies
- **Funding**: HEMAP is funded by State appropriations and through repayment of existing HEMAP loans. Although the program has not received a state appropriation since fiscal year 2012, the Agency was entrusted with administering funds received by the state under the national mortgage servicer settlement agreement. A total of $60,668,000 was received during fiscal years 2013 through 2017. HEMAP loans over the life of the program have averaged about $11,500.
- **Key Takeaways**
  - HEMAP applications automatically pause a foreclosure action allowing some property owners time to obtain the finances needed to avoid a foreclosure even when their application for a HEMAP loan is denied.

Data Analysis

Overview and Methods: The Fannie Mae team compared areas within a 500-foot buffer of a home that received HEMAP funds between 2010 and 2014 (treated area) with the rest of the census tract outside the 500-foot buffer (comparable area). The analysis examined the changes in the levels of mortgage foreclosure filings (2013-16 to 2017-19), median sales prices (2012-14 to 2017-19), and residential sales volume (2012-14 to 2017-19) in the treated and comparable areas.

The Pennsylvania Housing Finance Authority (PHFA) provided the HEMAP loan data. Demographic and income data came from the U.S. Census Bureau's American Community Survey 2015-19 5-year estimates. Sales volume, median home sales prices, foreclosures, and Market Value Analysis disposition came from Reinvestment Fund's previous analyses Market Value Analysis (MVA) for Allegheny County.

All census tracts are in Allegheny County but outside of the city of Pittsburgh. Census tracts are split 43% urban core and 57% suburban. There were 330 HEMAP loan approvals across the 178 study block groups.

Table 31: Characteristics of Treated and Comparable Areas, Homeowners' Emergency Mortgage Assistance Program

	Treated and Comparable Area
# Census Tracts	178
Average Median Household Income, 2015-19	$66,758
Housing Units per Square Mile	542
% Black	9.6%
% White	83.3%
% Hispanic	1.7%
% Asian	2.7%

Findings: Treated areas experienced a larger increase in sales volume relative to the comparable areas but similar declines in foreclosures and median home sales price. Areas within 500 feet of HEMAP homes saw a 57% increase in average residential sales volume compared with just 6% in areas outside the buffer. Foreclosure filings declined 34.9% in treated areas and 36.2% in comparable areas. Median sales price rose by 14.2% in treated areas and 12.1% in comparable areas.

Table 32: Changes in Treated and Comparable Areas, Homeowners' Emergency Mortgage Assistance Program

	Treated Area	Comparable Area
# Foreclosure Filings 2013-16	490	4,546
# Foreclosure Filings 2017-19	319	2,902
Change Foreclosures 2010-11, 2017-19	-34.9%	-36.2%
Average Median Sales Price 2011-13	$92,897	$158,435
Average Median Sales Price 2017-19	$106,135	$177,598
Change in Median Sales Price 2012-13, 2017-19*	14.2%	12.1%
# of Residential Sales 2012-14	1,393	26,538
# of Residential Sales, 2017-19	2,193	28,249
Change in Sales 2012-14, 2017-19	57%	6%

Limitations: Previous studies of the HEMAP program have focused on the impact on homeowners; HEMAP is not designed to be implemented as a targeted geographic program, so there were no clusters of concentrated HEMAP loans for study. There were also multiple other foreclosure prevention programs operating widely at this time, both areas considered treated and comparison in this analysis. The exclusion of FHA-backed mortgages from this program may also limit an observable impact. Finally, the program itself does not necessarily prevent a foreclosure filing even if it ultimately prevents a completed foreclosure.

Program 2: Delaware Emergency Mortgage Assistance Program (DEMAP)[27]

- **Program description**: DEMAP is a statewide program that provides emergency bridge loans to homeowners who are at least 90 days delinquent on their mortgage loans due to circumstances beyond their control. To be eligible, the

[27]Program description information was obtained through an interview with Brian K. Rossello, Director of Housing Finance, and Marlena Gibson, Director of Policy and Planning at Delaware State Housing Authority, on January 14, 2021.

homeowner's income must be lower than 115% of the area median income, they must have lost 15% of their earning power, and must have a reasonable prospect of being able to make monthly mortgage payments in the near future. The majority of successful applicants lost their jobs, had their hours significantly reduced, or had a significant medical expense. The delinquent mortgage also must be on a primary residence, whether that is a one- or two-family home, condominium, or mobile home on a permanent foundation. The loans of up to $30,000 are paid directly to the lender/loan servicer in the form of a single payment to bring a mortgage current, or monthly as a continuing loan to cover a percentage of mortgage payments for up to 24 months. (Note: Loan maximums varied during the 15 years of the program, beginning at just $15,000 and rising to $50,000 during the period when HUD was offering bridge loans for two years under the federal Emergency Homeowners' Loan Program (EHLP).) Loans currently come with 0% interest, but for at least half of the years the program has been offered since 2006 a fixed 3% simple interest rate was charged. Borrowers must pay 31% of their monthly income toward their mortgage payments for the duration of the loan assistance program. DEMAP loans may cover delinquent principal, interest, mortgage insurance, (real estate taxes, hazard insurance, and assessments only when escrowed in the first mortgage payment) late charges, and reasonable court costs and attorney fees incurred by the mortgagee. DEMAP makes no distinction around the type of loan, whether it is conventional, FHA, or VA. All applicants must work with a HUD approved housing counseling agency to apply. At the start of the DEMAP program, the state required borrowers to make monthly payments to repay the bridge loan of at least $25 or $40. The state has eliminated that requirement as burdensome on the borrower and see the bridge loan now as more of a refinancing product. Delaware does not require lenders to pause the foreclosure process until the application is evaluated. Acceptance rates hover around 20-25%.

- **Relevant state or local law:** Established as a new program under existing authority of the Delaware State Housing Authority.
- **Duration**: 2006 to present
- **Goal:** To assist homeowners, who through no fault of their own, are in danger of losing their home to foreclosure
- **Agency that administers:** Delaware State Housing Authority's Division of Housing Finance
- **Budget:** Annual allocation of $2 million. Spend approximately $750,000 in mortgage loans for newly approved borrowers each year.
- **Key partners**: Housing counselors help applicants to apply and the Delaware Department of Justice leads a foreclosure mediation process between the homeowner and the lender/loan servicer.
- **Funding**: State budget appropriations fund the program annually. In 2013, funding was expanded for a couple of years by HUD Emergency Homeowners' Loan Program (EHLP). Loan repayments are also used to fund the program.
- **Key Takeaways**:
  - Be agile and change the program process regularly to better achieve goals and ensure the loan will create success for the borrower and the program.
  - Inform at-risk homeowners that help is available before late fees and attorney's fees raise too severely the amount owed.
  - Determine whether the goal is to get paid back. It is easier to prevent foreclosures with a quick infusion of cash if the program can provide a grant or forgivable loan.

Data Analysis

Overview and Methods: Reinvestment Fund compared areas within a 500-foot buffer of homes receiving DEMAP loans between 2010 and 2014 (treated area) with the rest of the census tract outside the 500-foot buffer (comparable area). The analysis examined the changes in the levels of mortgage foreclosure (2010-11 to 2017-19), median sales prices (2011-13 to 2017-19), and residential sales volume (2011-13 to 2017-19) in the treated and comparable areas.

All 70 census tracts in the treated and comparable areas are in New Castle County, Delaware. Census tracts were categorized as "urban core" or "suburban" based on their density. Most tracts (74%) were categorized as suburban while the remaining 26% were urban core. There were 201 DEMAP loan approvals across the treated area.

Table 33: Characteristics of Treated and Comparable Areas, Delaware Emergency Mortgage Assistance Program

	Treated and Comparable Areas
# of Census Tracts	70
Average Median Household Income, 2015-19	$63,712
Housing Units per Square Mile	472
% Black	31.7%
% White	48.7%
% Hispanic	12.1%
% Asian	4.9%

Findings: The treated areas saw a decrease in median sales price while comparable areas saw an increase. Residential sales volume decreased for both the treated and comparable areas but decreased more in the treated areas. Foreclosures decreased in both the treated and comparable areas but declined more in the comparable areas. Average median sales price for treated areas decreased 6.2% while the average median sales price increased by 41.7% in comparable areas. Residential sales volume decreased by 3.9% in treated areas and decreased by 42.8% in comparable areas. The decrease was more substantial in comparable areas (-72.8% vs -11.4%).

Table 34: Changes in Treated and Comparable Areas, Delaware Emergency Mortgage Assistance Program

	Treated Area	Comparable Area
Foreclosures 2011-13	395	6,635
Foreclosures 2017-19	350	1,804
Change in Annual Foreclosures 2010-11, 2017-19	-11.4%	-72.8%
Average Median Sales Price 2011-13	$117,840	$173,581
Average Median Sales Price 2017-19	$110,506	$246,015
Change in Average Median Sales Price 2011-13, 2017-19	-6.2%	41.7%
# of Sales 2011-13	1,158	7,388
# of sales 2017-19	1,113	4,226
Change in Average # of Yearly Sales 2011-13, 2017-19	-3.9%	-42.8%

Limitations: Source data for sales and foreclosures were different in the two time periods. It is possible that there may be differences in how the data were collected that could impact the analysis. Additionally, similar factors apply as in the Pennsylvania mortgage assistance program—such as the contemporaneous operation of multiple foreclosure prevention programs that may have included properties in both treated and comparison areas.

Conclusion

Neighborhoods are negatively impacted by macroeconomic shocks beyond their control. The economic impacts are particularly acute for neighborhoods of color that have been weakened by historically racist policies like redlining, race-based zoning ordinances, and restrictive covenants.

Changing the trajectory of a neighborhood is extremely difficult. Government leaders and practitioners tend to look to a defined set of standard tools to attempt to stabilize or improve neighborhoods wrestling with the negative impacts of an economic shock. In many cases, the economic crisis exacerbates existing challenges presented by long-term disinvestment and declining population, as well as deteriorated housing stock and infrastructure.

The new research provided in this report does not provide definitive answers, but it does indicate the promise of several interventions that localities and their partners can implement to help residential neighborhoods withstand a national or global economic crisis. The analyses as a whole offer five important lessons.

Providing limited and dispersed help to a vast area renders it far less likely to change a neighborhood's trajectory, even if individual program participants benefit materially.

First, data collection and evaluation are essential to enlarging our knowledge about what works effectively to stabilize low-income and middle neighborhoods. Several promising programs did not collect data that would allow for even a basic evaluation. Others kept data in antiquated databases that could not report out that data in a form that was useful, and a few even discarded data once reporting requirements with funders or regulatory agencies were met. Few, if any, had dedicated funding for data collection or analysis.

Second, scale is important. Several of the programs identified were innovative pilot programs but were tested at such a limited level, or were spread across large geographies rather than concentrated, that the program did not show an impact. Municipalities that invested in programs with sufficient levels of activity within specific geographies for a significant number of years were more likely to influence a neighborhood.

Third, targeting limited resources is essential to impacting a neighborhood. Many programs seek to approach a problem at a citywide or even statewide level, providing help to affected individuals or properties, wherever they are located. Providing limited and dispersed help to a vast area renders it far less likely to change a neighborhood's trajectory, even if individual program participants benefit materially. For example, many First Look efforts were somewhat diffuse across counties or entire metro areas. That said, it should also be noted that there remains value in programs that target positive outcomes for individual households or homes. Every homeowner that retains their home and every distressed property that is restored to active use is a positive outcome that should not be discounted. However, the benefits of such programs may not extend to neighborhood level impact. Therefore, policy makers and practitioners should be clear with regard to their intentions for program outcomes, and whether the primary focus is on individual homes and households or on broader neighborhoods and communities.

Fourth, the specifics of program design and implementation significantly affect outcomes. Even where one of two programs analyzed was modeled on the first, differences in design and implementation may cause differences in impact. For example, DEMAP, an emergency bridge loan program, was modeled on the Pennsylvania program HEMAP, but DEMAP had several differences in program design including the fact they DEMAP did not pause foreclosure proceedings for applicants during the time period in which their application was evaluated. These differences may have impacted the program's observable outcomes. Recognition of how program features impact outcomes motivated the creation of short case studies detailing the program design, level of investment, and implementation approach for each program to allow practitioners to understand the key attributes that contributed to the outcomes analyzed.

Fifth, no metric for analyzing whether a specific program positively impacted a neighborhood is definitive. Often, programs were designed without a specific goal or were developed in hopes that they would achieve multiple goals. Although change in home sales price is a commonly used indicator of neighborhood market stability, and it was the most universally available property-level metric, it must be properly evaluated in context. For neighborhoods with low property values, an increase in sales prices can be critical to welcoming new investment and protecting the home equity of residents who may have limited wealth apart from their investment in their home. It can also point to displacement and gentrification. Within this exercise, the team endeavored to understand whether increases in sales price indicated stability for low- or middle-income residents, or a demographic transformation reflecting the replacement of one group of residents with another, higher-income group. Though many of the neighborhoods evaluated for this effort saw growth in sales price during the study period, they did not see the sort of dramatic demographic and home price shifts typically associated with gentrification.

This report seeks to contribute to the use of evidence-based policies to stabilize communities vulnerable to national and global economic shocks. While every community is unique in its context, challenges, and opportunities, we hope that local practitioners find useful the information contained in this report and that it informs their efforts to address the specific needs of their neighborhoods. Fannie Mae stands ready to partner with local governments and practitioners in the pursuit of strategies that contribute to stability and recovery, and that promote equity and opportunity.

APPENDIX A: Indicators of Potential Displacement (Gentrification)

The following tables show changes in the population of different racial and ethnic groups as well as in median incomes in treated and comparison areas for each of the interventions studied in this report. In each table, the sum is the total count of all block group or tract populations by race and ethnicity, while the average is the average count per block group or tract in that category. The percent change is the average of all block or tract-level population changes, rather than the pooled average change across the block groups or tracts. These tables were not included in the core analytic work conducted for this report but are provided as information to readers who wish to know more about the nature of change in these areas. In general, these tables show that treated areas did not appear to experience major increases in income or declines in non-white populations overall or when contrasted with trends in comparable areas.

Note that calculating an average of a group of changes can result in seemingly divergent trends: in two cases, both in Kansas City, the average percent change moved in the opposite direction of the average block group population due to small block group level populations. These are different ways of evaluating change across a set of block groups. First Look and Emergency Bridge Loans, comparisons were made inside and outside a buffered area within a single tract, so only change over time by tract can be compared.

Code Enforcement

Baltimore, MD

Middle Market Stressed										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	58,980	737	55,084	688	-7.4%	16,657	574	14,123	487	-14.4%
White Population	9,135	114	9,586	119	37.6%	8,766	302	8,427	290	18.1%
Hispanic Population	3,240	40	3,856	48	105.2%	2,416	83	2,654	91	57.7%
Asian Population	756	9	987	12	62.9%	592	20	484	16	153.1%
Med. HH Income		$37,198		$46,733	$9,535		$34,803		$42,633	$7,830
Metro Median Income		$66,195		$81,598	$15,403		$66,195		$81,598	$15,403

Middle Market										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	63,615	795	64,959	811	4.5%	8,174	743	9,266	842	8.3%
White Population	15,918	198	15,878	198	17.9%	1,247	113	951	86	-2.0%
Hispanic Population	4,724	59	5,931	74	53.1%	179	16	389	35	96.9%
Asian Population	1,165	14	1,016	12	11.4%	45	4	58	5	165.6%
Med. HH Income		$44,502		$52,937	$8,435		$34,089		$41,037	$6,948
Metro Median Income		$66,195		$81,598	$15,403		$66,195		$81,598	$15,403

Middle Market Choice										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Sverage	Average	Sum	Average	Sum	Average	Average
Black Population	46,238	543	48,344	568	10.8%	18,879	651	18,668	643	-9.0%
White Population	32,149	378	29,289	344	0.8%	8,965	309	9,115	314	9.2%
Hispanic Population	3,789	44	3,561	41	23.9%	1,175	40	919	31	63.3%
Asian Population	1,362	16	1,354	15	19.5%	560	19	774	26	53.2%
Med. HH Income		$54,002		$70,655	$16,653		$49,262		$67,631	$18,369
Metro Median Income		$66,195		$81,598	$15,403		$66,195		$81,598	$15,403

Minneapolis, MN

	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	31,590	244	35,793	277	23.0%	21,026	173	23,301	192	15.9%
White Population	57,349	444	61,346	475	11.1%	74,191	613	82,582	682	10.6%
Hispanic Population	17,186	133	17,698	137	23.0%	16,759	138	15,529	128	-1.7%
Asian Population	8,668	67	9,464	73	22.4%	5,426	44	5,704	47	12.7%
Med. HH Income		$75,384		$86,940	$11,556		$84,172		$105,290	$21,118
Metro Median Income		$65,181		$80,421	$15,240		$65,181		$80,421	$15,240

Demolition

Kansas City, MO (2010-14 to 2015-19)

	Treated Area		Treated Area		% Change	Comparable Area Start Year		Comparable Area End Year		% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average		Sum	Average	Sum	average	
Black Households	5,219	474	4,310	392	12%	10,904	496	11,807	537	14%
White Households	1,157	105	1,296	118	-17%	1,541	70	2,291	104	167%
Hispanic Households	2,927	266	4,039	367	38%	2,459	112	3,561	162	169%
Asian Households	98	9	7	1	-93%	466	21	237	11	40%
Med. HH Income		$23,953		$31,434	31%		$25,382		$31,934	40%
Metro Median Income		$57,056		$66,632			$57,056		$66,632	

Hennepin County, MN (2008-12 to 2015-19)

	Treated Area		Treated Area		% Change	Comparable Area Start Year		Comparable Area End Year		% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average		Sum	Average	Sum	Average	
Black Households	6,066	758	7,781	973	32%	1,257	201	617	76	6%
White Households	3,212	402	3,406	426	9%	2,679	387	2,708	489	18%
Hispanic Households	1,974	247	2,911	364	90%	1,033	102	1,281	183	23%
Asian Households	2,129	266	2,870	359	52%	94	6	282	35	535%
Med. HH Income		$33,129		$45,612	41%		$35,940		$70,247	157%
Metro Median Income		$66,751		$80,421			$66,751		$80,421	

Philadelphia, PA (2010-14 to 2015-19)

	Treated Area		Treated Area		% Change	Comparable Area Start Year		Comparable Area End Year		% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average		Sum	Average	Sum	Average	
Black Households	5,389	898	5,570	928	3%	10,659	592	13,098	728	34%
White Households	311	52	427	71	37%	1,307	73	956	53	507%
Hispanic Households	25	4	139	23	456%	2,587	144	3,386	188	33%
Asian Households	6	1	160	27	2,567%	488	27	324	18	-73%
Med. HH Income	$18,547		$21,403		15%	$24,484		$39,028		72%
Metro Median Income	$62,169		$72,343			$62,169		$72,343		

Scattered Site Rehabilitation

DeKalb County, GA (2007-11 to 2015-19)

	Treated Area		Treated Area		% Change	Comparable Area Start Year		Comparable Area End Year		% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average		Sum	Average	Sum	Average	
Black Households	14,223	3,556	12,396	3,099	-11%	27,804	2,317	34,657	2,888	28%
White Households	356	89	607	152	90%	875	73	775	65	56%
Hispanic Households	325	81	405	101	39%	259	22	629	52	176%
Asian Households	72	18	22	6	-100%	227	19	276	23	-27%
Med. HH Income		$62,445		$71,700	15%		$56,787		$65,543	17%
Metro Median Income		$57,783		$68,316			$57,783		$68,316	

Land Banks

Albany, NY

	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	16,212	540	13,372	445	-19.2%	3,016	232	2,948	226	2.2%
White Population	9,999	333	8,119	270	-23.5%	8,789	676	7,899	607	-11.6%
Hispanic Population	4,047	134	4,800	160	14.5%	1,074	82	1,488	114	35.8%
Asian Population	1,178	39	1,883	62	17.3%	734	56	1,284	98	33.3%
Med. HH Income		$31,294		$32,200	$906		$44,277		$50,800	$6,523
Metro Median Income		$57,781		$71,285	$13,504		$57,781		$71,285	$13,504

Houston, TX

F Market										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	4,437	833	3,515	669	-16.4%	3,882	971	4,554	1,139	27.3%
White Population	55	16	81	24	221.7%	94	24	16	4	-90.0%
Hispanic Population	1,341	359	1,756	585	86.7%	689	172	1,137	284	73.1%
Asian Population	19	3	0	0	-100.0%	21	5	56	14	115.4%
Med. HH Income		$19,014		$32,928	$13,914		$34,828		$32,561	-$2,267
Metro Median Income		$55,207		$67,516	$12,309		$55,207		$67,516	$12,309
G Market										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	3,078	1,539	2,254	1,127	-26.7%	2,269	756	1,434	478	-36.1%
White Population	41	21	36	18	-15.7%	63	21	102	34	175.0%
Hispanic Population	614	307	1,003	502	71.8%	819	273	976	325	48.1%

Asian Population	24	12	0	0	-100.0%	10	3	8	3	-33.3%
Med. HH Income		$22,552		$37,969	$15,417		$22,148		$16,817	-$5,331
Metro Median Income		$55,207		$67,516	$12,309		$55,207		$67,516	$12,309

H Market										
	Treated Area				% Change	Comparable Area				% Change
	Start Year		End Year			Start Year		End Year		
	Sum	Average	Sum	Average	Average	Sum	Average	Sum	Average	Average
Black Population	4,666	778	4,171	695	-5.7%	11,934	918	10,679	821	-12.9%
White Population	118	20	152	25	52.8%	197	15	416	32	186.9%
Hispanic Population	1,773	296	2,032	339	85.5%	3,762	289	5,846	450	135.2%
Asian Population	4	1	31	5	350.0%	20	2	21	2	-12.2%
Med. HH Income		$22,767		$39,057	$16,290		$28,842		$34,035	$5,193
Metro Median Income		$55,207		$67,516	$12,309		$55,207		$67,516	$12,309

First Look Programs

Essex County, NJ

	Treated Area		Treated Area		% Change
	Start Year		End Year		
	Sum	Average	Sum	Average	
Black Population	254,311	1,856	251,955	1,839	-0.9%
White Population	86,163	628	85,051	620	-1.3%
Hispanic Population	122,970	897	130,555	952	6.1%
Asian Population	16,899	123	16,888	123	0.0%
Med. HH Income	$48,478		$54,745		12.9%
Metro Median Income	$66,902		$78,773		17.7%

Cook County, IL

	Treated Area		Treated Area		% Change
	Start Year		End Year		
	Sum	Average	Sum	Average	
Black Population	1,129,726	1,233	1,083,957	1,183	-4.1%
White Population	1,387,414	1,514	1,306,040	1,425	-5.9%
Hispanic Population	1,038,667	1,133	1,080,094	1,179	4.1%
Asian Population	198,895	217	210,514	229	5.5%
Med. HH Income	$50,098		$58,443		16.7%
Metro Median Income	$ 61,497		$71,770		16.7%

Emergency Bridge Loan/Soft Second Mortgage Programs

Pennsylvania/ Analysis of Allegheny County

	Treated Area		Treated Area		% Change
	Start Year		End Year		
	Sum	Average	Sum	Average	
Black Population	62,368	350	64,458	362	3.4%
White Population	576,596	3,239	561,112	3,152	-2.7%
Hispanic Population	9,455	53	11,397	64	20.8%
Asian Population	15,582	87	17,732	99	13.8%
Med. HH Income	$57,620		$66,758		15.9%
Metro Median Income	$51,883		$60,535		16.7%

Delaware/ Analysis of Wilmington

	Treated Area		Treated Area		% Change
	Start Year		End Year		
	Sum	Average	Sum	Average	
Black Population	100,325	1,433	104,231	1,489	3.9%
White Population	165,353	2,362	160,214	2,288	-3.1%
Hispanic Population	35,266	503	39,836	569	13.1%
Asian Population	12,172	173	5,904	227	31.2%
Med. HH Income	$57,000		$63,712		11.8%
Metro Median Income	$62,169		$72,343		16.4%