Residential Historic Preservation and Neighborhood Stability: Through the Housing Crisis and Beyond

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ABSTRACT

Problem: Given Cleveland’s prominence in the foreclosure crisis, discussions surrounding demolition, rehabilitation, and stabilization are particularly active and passionate in the region. It is surprising, though, that the role of historic preservation isn’t more thoroughly explored, both in Cleveland, and beyond. To fill a near void of empirical research, this paper offers a systematic investigation of the relationship between residential historic preservation and foreclosure.

Research Strategy: This research brings together parcel-level foreclosure filing data and parcel-level program data of the Heritage Home Program of The Cleveland Restoration Society. This program has made over 1000 loans, channeling preservation investments of over $36 million into the residential neighborhoods of Cleveland and its Cuyahoga County suburbs. The research focus is on the degree to which the fate of these preservation properties differs from the average housing outcomes of their surrounding neighborhoods and communities.

Findings: Using a conservative estimate, preservation properties foreclosed at roughly 1/6 the rate of comparable non-preservation residential properties. Proportionally, preservation properties foreclosed less than those in their surrounding neighborhoods, communities and region. The foreclosure rate (preservation and overall) wasn’t always lower in areas of concentration, indicating that preservation activity was not occurring only in the region’s prime housing markets.

Takeaway for Practice: Debates relating to the optimal use of scarce housing-recovery resources, often dominated by demolition and sometimes rehabilitation, rarely include historic preservation. Yet in Cleveland, preservation activity was shown to be a stabilizing force during the crisis. Why, then, shouldn’t it be more readily considered as a part of the post-crisis solution?

Keywords: preservation, rehabilitation, stabilization, foreclosure, housing.
Introduction

Historic preservation faces the prospect of falling through the cracks between policy and action as Legacy Cities combat two of their primary challenges: weak market demand and the deterioration of the physical environment (Mallach and Brachman, 2013). With an empirical preservation literature centered on economic value, Legacy City discourse, policy and action (and funding, consequently) are focused on procuring stability, and often through the means of demolition.

As a step toward understanding the relationship between preservation and stability, this research reveals the relationship between preservation and foreclosure in Cuyahoga County, OH, home to Cleveland, where the housing “bubble burst first (Yeater, 2009).” Findings show foreclosure rates of preservation properties to be lower than all comparison sets constructed throughout the research. Stronger consideration and support for preservation efforts in the name of this stability are warranted.

The following section provides background on the specific preservation program under study, the context within which it has been operating, and the research to which the analysis most closely relates. The research approach is detailed next, followed by four specific research findings. A discussion section pulls these related findings together before the final section concludes.

Background

In addition to their detailed review of both preservation practice and research, Ryberg-Webster and Kinahan (2014) also thoughtfully lay out a forward looking research agenda, linking preservation to four current streams of urban research and practice. One of these is...
Legacy Cities. Despite the explicit role and value that history plays in these places, and despite the obvious potential connections to the physical realm, the authors find that discussion to be, “without concerted attention to preservation (p. 130).” Evans (2011, p. 135), in an analysis of preservation in the two legacy cities of Cleveland and Buffalo, judges preservation to be “…primarily off the radar…” in those same mainstream policy discussions. Similarly, in concluding their survey on right-sizing, conducted of stakeholders in twenty Legacy Cities, Bertron and Rypkema (2012) found that, “historic preservation is, at best, on the fringe (p. 16).”

It is possible that this outsider position is fortified by a literature that doesn’t directly address the most debilitating of Legacy City issues. A potential disconnect exists between the pressing nature of Legacy City depopulation, devaluation, and abandonment challenges, and a historic preservation literature dominated by economic impact. The nature of the empirical literature, in fact, leads Ryberg-Webster and Kinahan (2014) to call for “more empirical studies on the contemporary relationship between preservation and urban revitalization and planning…(p. 123, emphasis added).”

Primary among those contemporary research questions has to be the role of preservation in stabilizing Legacy City neighborhoods. Mallach (2011) lays out a framework within which to consider the big picture issues: economic change, regional population dynamics, supply and demand, all within the context of declining industrial cities. He characterizes the challenge not as choosing between preservation and demolition, but as finding the right balance between them in the face of challenging market conditions.

That balance is difficult to articulate when the impact and implications of either path is wrought with uncertainty. Likely because the balance so far has weighed heavily in favor of demolition, evidence is starting to emerge on its impacts relative to neighborhood stabilization.
(Griswold, et al. 2014). No such evidence of preservation as a stabilization tool is known to the author.

The potential for a self-fulfilling prophecy exists. Without evidence of its effectiveness, preservation might not be considered as a mainstream stabilization tool, but without that implementation, no opportunity to judge its effectiveness will arise. In the absence of evidence of preservation’s effectiveness as a post-crisis stabilization solution, a logical starting point is preservation’s performance during the crisis.

Broadbent (2011) analyzed a year of residential foreclosure data for the city of Philadelphia. Historic districts were matched to comparable neighborhoods and their residential foreclosure rates compared. While the results of direct neighborhood level comparisons were mixed, historic districts in aggregate had a residential foreclosure rate roughly half that of their matched neighborhoods. This evidences a stabilizing effect for preservation in Philadelphia, at least at the aggregate level, and sometimes at the district level.

The current research builds in this direction, by investigating the prevalence of foreclosure among a set of preservation properties. Rather than districts, however, the focus here is on preservation at the investment level, at the individual parcel level where preservation investments were undertaken.

Specifically, the research questions addressed herein are:

1. Has the foreclosure rate among preservation properties changed over time?
2. Has the preservation foreclosure rate differed from the average foreclosure rate throughout the region?
3. Was the preservation foreclosure rate different than others in their surrounding communities?
4. Was the preservation foreclosure rate lower in areas of preservation concentration?
While evidence is starting to build around the impacts of demolition as a stabilization strategy, the purpose here is to investigate how one specific preservation program weathered the foreclosure storm. If preserved properties performed well during the region’s worst period of housing crisis, perhaps preservation should have a more strongly considered role in the rebuilding and stabilization of neighborhoods.

**Data, Methodology and Research Strategy**

The data set for this analysis was provided directly by Cleveland Restoration Society (CRS). In operation since 1972, CRS is a non-profit organization operating primarily within, but also beyond, Cuyahoga County, OH. A member of the National Trust Partners Network, CRS is actively engaged in a wide variety of preservation activities. One of its programs, the Heritage Home Program (HHP), offers free technical advice and low interest loans to home owners wishing to undertake projects with the goal of rehabilitation, renovation, or preservation.

The loan portion of the HHP is the focus of this research. HHP loans are low interest home equity loans, offered through specific local banks. Linked deposits by CRS-partnering government agencies facilitate the reduced interest rate. Borrowers must meet all of the lending institution’s requirements, in addition to CRS’ set of eligibility requirements. These include age of the structure (must be at least 50 years old), location (must be located in a participating community), and residential use (the loan program is for 1-3 unit residential properties). In 2012, CRS loosened its criteria for lending to homes that had prior modifications that were not appropriate for the structure (vinyl windows, for example). Two important characteristics of the program are that (1) the loans can be used for a wide range of rehabilitation, renovation, and preservation activities, and (2) the loans are not limited to any historic designation – structure,
building, or otherwise. As such, the HHP loans blur the line between preservation and rehabilitation.

The data for this research, detailed in Table 1, contain information on 1026 loans made from 1993 through 2013 in Cuyahoga County. The median loan amount over the time period is roughly $24,500. In total, the loan activity in the data represents over $36.5 million in residential preservation investment.

[Table 1 here]

The foreclosure data used for these analyses comprise foreclosure filings from November of 2005 through May of 2014, sourced from the Cuyahoga County Clerk of Courts. The motivating factor in the foreclosure isn’t known from these data. For example, the foreclosure filing could relate to the HHP loan itself, another loan on the same property, or it could be due to tax foreclosure. The result of the filing also isn’t known from these data. For example, the filing could have been resolved with the original ownership retained, or the property could have eventually transferred through Sheriff Sale. Parcel level foreclosure data for calendar years 2006-2013 are matched to the entirety of the parcel level HHP loan data, 1993-2013.

Foreclosure Counts and Rates

The primary focus of this paper is to shed light on preservation as a neighborhood stabilization tool. In order to better understand those prospects, it is first necessary to better understand the relationship between preservation and stabilization. Here, that relationship is explored by examining the foreclosure rate on properties that received HHP loans. This requires a careful accounting of individual property-level details to ensure foreclosure filings are appropriately attributed, or not, to HHP properties.
In particular, the sequence of events among the HHP loan, the foreclosure filing, and any property transfers needed to be established. To accomplish this, sales transfer data were incorporated, sourced from the Cuyahoga County Fiscal Officer, for the years 1993-2013. First, to contribute to the HHP foreclosure rate, a foreclosure filing had to occur subsequent to the HHP loan. Additionally, a foreclosure counted towards the HHP foreclosure rate only if the property didn’t change hands between the loan and the foreclosure. For example, if a household obtained an HHP loan, then later sold the house and a subsequent owner went into foreclosure, that isn’t counted towards the HHP foreclosure rate. A change in ownership injects too wide a range of additional influences to reasonably and/or meaningfully relate a subsequent foreclosure filing back to the preservation activity of a previous owner.

Merging the HHP loan data (dating from 1993), county sales records (also dating to 1993), and county foreclosure filing data (dating from 2006) revealed a total of 56 foreclosure filings on HHP properties after the preservation activity. After eliminating properties that sold after the preservation activity but before the foreclosure filing, 36 remained.

To translate these HHP foreclosure filings into foreclosures rates, the total number of HHP loans “in the field” was used as the denominator. For each year in the data, this is simply the cumulative number of HHP loans made, as shown in Table 1, since each year, each previously loaned-to property could have experienced a foreclosure filing.

The motivation behind this measurement strategy is to identify preserved property foreclosure filings that occurred when the property was still under the same ownership that made the preservation decision. This yields not only information about the parcel-level historic preservation, but also its contribution to the broader concepts of neighborhood stability, and
community preservation (Kaufman, 2010, quoted in Mallach, 2011). It would be possible to track other property outcomes, via other event sequencing, but the one identified here provides the closest link to the preservation activity and its direct outcome.

Calculations of the comparison foreclosure rates took two paths. The numerator in both of these rate calculations is the number of foreclosure filings during that calendar year for 1, 2, and 3 unit residential properties, including condominiums. These are the same property classes that are eligible for HHP loans. Following the work of the Federal Reserve Bank of Cleveland (Nelson, 2008) the denominator of the first comparison foreclosure rate is based on total mortgaged housing units (MU, for short) from the American Community Survey. Even though foreclosure filings are most commonly mortgage-related (roughly 80% in our full filing data set), a tax foreclosure could be initiated on any property, with or without a mortgage. This may cause the mortgage-based rate to be an overestimate, since its denominator doesn’t account for the possibility of tax foreclosure on non-mortgaged properties. Thus, the second comparison rate uses as its denominator all residential parcels (RP) of the property classes eligible for the HHP. Since the majority of foreclosure filings are mortgage related, and since the parcels to mortgages ratio ranges from 1.6 to 1.9 over the eight years of available foreclosure data, this latter rate is likely conservative. Presenting both foreclosure rates (MU- and RP-based) provides a reasonable upper and lower bound within which to consider the true comparison foreclosure rate.

Findings

Discussions of the role of preservation in stabilization efforts must be predicated on preservation actually being a stabilizing force for properties and neighborhoods. It would be
misguided to bring preservation to the table as a full partner in stabilization efforts without some background as to if, or the degree to which, residential preservation stabilized properties. Understanding the foreclosure-related performance of the HHP loans through the housing crisis and recovery years of 2006-2013 will serve as a starting point for that discussion.


Even though the overall number of HHP foreclosure filings is small, it is still instructive to look at their distribution over time. The solid line in Figure 1 shows the time trend of the HHP foreclosure rate from 2006 to 2013. On one hand, the 2008 and 2009 rates are markedly higher than those of surrounding years. The 2008 rate is 1.01%, based on 791 loans in the field, while the 2009 rate is slightly lower at 0.95%, based on 843 loans in the field. By comparison, 2007 and 2010 were both less than 0.5%.

[Figure 1 here]

At the same time, and despite the elevated rates in those two years, the scale of the issue is worth noting. Starting with 620 loans in the field in 2006, and ending with a potential of 1026 loans, no year saw more than 8 HHP foreclosure filings (both 2008 and 2009 had 8). In 2009, for comparison, Cuyahoga County experienced over 14,000 filings among similar properties.

Finding #2: The Heritage Home Program foreclosure rate is lower than that of the region.

The variation in the preservation foreclosure rate is further put into its regional context by comparing it to county-wide foreclosures over the same time period. The two comparison rates are also presented in Figure 1. Compared either to the MU-based or the RP-based foreclosure rates, the HHP foreclosure rate is consistently, and substantially, lower. The foreclosure rate
related to the HHP properties is generally below 1%, while the lower- and upper-bound comparison rates, with the exception of 2013, are above 3% and 5%, respectively. Even the more conservative RP-based foreclosure rate ranges from 3.4 times (in 2008) to 14 times (in 2010) the foreclosure rate of the HHP program.

Finding #3: The Heritage Home Preservation foreclosure rates were lower than comparable foreclosure rates in their surrounding communities.

Perhaps, the HHP is attractive to borrowers only in the strongest and most stable of housing submarkets within the county. That possibility could account for an HHP foreclosure rate regularly below that of the county average. Perhaps, it could be argued, the HHP foreclosure rate is explainable simply because borrowers are only seeking loans in low foreclosure communities.

Figure 2 shows first the geography for this comparison. The City of Cleveland, shown with the heavy border, is parsed into its 17 City Council Wards, while suburban areas are represented by the Census’ County Subdivision geography (municipalities/townships). These will be collectively referred to as communities. While a finer geographic resolution is possible (census tracts, for example), the number of loans per geography becomes very small, making rate comparisons difficult (Broadbent, 2011).

[Figure 2 here]

Unshaded areas had no HHP loans over the time period. This could be due to a community’s non-participation in the program, a lack of demand for the loan product, or both. The former could be an indicator of the latter, as there is a cost to communities to participate in the loan program. Rate comparisons are not calculated for these areas. Stippled areas had fewer
than 20 loans over the time period. Rate comparisons are conducted for these areas, but the stippling serves as a reminder of the small number of loans upon which the ratios are calculated.

The lightest shading in Figure 2 shows the 24 areas with HHP loans, but with no HHP foreclosure filings during the study period. While most (18) of these communities had fewer than a dozen HHP loans over the time period, the remaining six had an average of 50 HHP loans, including Cleveland Heights, an inner ring suburb with the most HHP loans of any community (166).

As shades progress from lighter to darker, the ratio of community foreclosure rate to HHP foreclosure rate increases. For example, the next class shows the single community (Chagrin Falls, 30 loans) with a ratio less than 1. The subsequent class shows ratios where the community foreclosure rate ranges from 1.54 to 2.99 times the HHP foreclosure rate. The maximum ratio belongs to Lakewood, an inner-ring, west-side suburb where the overall foreclosure rate is 10.56 times the HHP foreclosure rate (77 loans).

Finding #4: In areas of concentration, the HHP foreclosure rate was comparatively, although not uniformly, lower.

Figure 3 shows areas of HHP loan concentration. To work around the problem of small loan numbers in small geographic areas, a two-step process was employed. First, using the number of loans and the number of eligible parcels, a location quotient\(^1\) was calculated for each census tract, identifying those locations where the loan concentration was twice the amount expected, relative to the number of eligible parcels in the tract. Second, contiguous tracts were

\[ LQ_i = \frac{\frac{HHP \text{ Loans}_i}{\text{Total HHP Loans}}}{\frac{\text{Residential Parcels}_i}{\text{Total Residential Parcels}}} \]

LQ values greater than 1 are interpreted as concentration, having a greater than expected share of all HHP loans, relative to the census tracts share of eligible parcels.

\(^1\) The location quotient for each census tract \(i\) is calculated as \(LQ_i\).
aggregated into the three cluster areas depicted in Figure 3. The East Cluster stretches across Cleveland’s eastside neighborhoods of Glenville, University Circle, Little Italy and Shaker Square, and the inner ring suburbs of Cleveland Heights and Shaker Heights. The West Cluster includes portions of the Cleveland neighborhoods of Detroit-Shoreway, Ohio City and Tremont, while the Southwest Cluster includes two tracts within the neighborhood of Brooklyn Centre. The remaining tracts with loans were aggregated into a single group, “Not Concentrated” while tracts without any HHP loan activity through the study period were also identified and grouped. Data for each of these five subgroups (three HHP concentrations, one subgroup of non-concentrated census tracts, and one subgroup of census tracts with no HHP loans) were aggregated, and group HHP, RP- and MU-foreclosure rates were calculated. This step helps avoid the small-sample bias that Broadbent (2011) feared clouded preservation’s impact in the Philadelphia analysis. Table 2 lists the loan and foreclosure characteristics of these five groups.

Several patterns are worth noting. First, reading across Table 2, each of the four subgroups with HHP investments, both concentrated and not concentrated, has a lower HHP foreclosure rate than its overall foreclosure rate, by at least a factor of 5. The Ratio columns compare the RP-based (lower bound) and MU-based (upper bound) foreclosure rates to the HHP foreclosure rate.

Next, it is not the case that HHP activity is occurring only in low foreclosure areas. Looking at the RP-based foreclosure rate, two of the areas receiving HHP loans are below the county average foreclosure rate, while the other two are above. Referencing the MU-based
foreclosure rate, three of the four HHP investment subgroups have overall foreclosure rates greater than the county average, and the tracts not receiving any HHP investment have the 2nd lowest foreclosure rate of any subgroup. If HHP activity were wholly avoiding unstable or undesirable market conditions, it might be expected that the RP- and MU-rates for areas with no HHP loans would be the highest among all county subgroups in Table 2.

Further, while the HHP foreclosure rate is lower than its RP- and MU-based comparison foreclosure rates across the board in each subgroup, the HHP rate itself is not uniformly lower in the three areas of concentration. The lowest HHP foreclosure rate occurs in the East cluster, which also has the lowest comparison foreclosure rates. The second lowest, however, occurs in the non-concentrated census tracts. Finally, the highest HHP foreclosure rate occurs in the Southwest cluster, also home to the highest overall foreclosure rates (both RP- and MU-based). While all three rates are the highest in this cluster, interestingly, so too are the ratios highest, representing the greatest distinction between HHP performance and the overall market.

Residential Historic Preservation, Foreclosure, and Stability

When viewed in isolation, the doubling of the preservation foreclosure rate in 2008 seems an indictment of the stabilizing prospects of preservation. In context, however, less so. While parcel level foreclosure filing data are available only since CY 2006, all 21 years of loans were matched against the filing data (since 1993). In the two “peak” years, there were 8 filings each. In any other year, no more than five.

Considering HHP foreclosure rates, they pale in comparison to the market conditions occurring in the county. It is interesting, though, that the 2008-2009 peak is evident in all three
trends – the preservation foreclosure rate and the RP- and MU-based comparison rates. The same market forces are at work, but they are resulting in foreclosure much less often in Cuyahoga County’s preservation market.

The relative stability of the preservation properties seems not to be a simple function of preservation occurring only in the region’s more stable communities. When compared at that community level, there was but one community whose preservation foreclosure rate was higher than the community as a whole. And that community had but two preservation foreclosures over the study period. In every other community in which a preservation loan was received, the foreclosure rate on the preservation loans was less than the prevailing foreclosure rate in the community. This was true for city wards, as well as inner ring, and outer ring suburban communities.

Perhaps, though, the market stability influence is operating at a neighborhood, not county, and not community level. Preservation concentrations were identified and compared to both areas with HHP investments in a non-concentrated context, and to areas with no HHP investment. While Broadbent’s (2011) research identified a foreclosure rate ratio between district and non-district areas of near 2, ratios here measured the difference between preserved and non-preserved properties within the same location, and thus subject to the same context and market conditions – and conservatively, each exceeded 5.0. Upper bound estimates reached above 17. Additionally, it doesn’t even appear, in the Cuyahoga County market, that preservation stability is predicated upon a concentrated location. The preservation foreclosure rate in non-concentrated areas was lower than that of two of the preservation concentration locations. Overall, the foreclosure rate ratio between non-preservation and preservation properties was 6.3 (2.84% vs. 0.45%).
While these research findings highlight but one market’s preservation experience, it should not be overlooked that the detailed market performance was (1) positive, and (2) over a tumultuous eight year period, and (3) in the market many considered by many to be the epicenter of the housing crisis (Nelson, 2008). Certainly, though, questions remain.

The current research does not address the HHP loans strictly as investments. That is, the relationship between the initial value of the house, the amount of the loan, appreciation over time, etc. It is an open question as to whether any particular home improvement project and/or loan is a “good investment” for the homeowner, and such consideration surely would involve difficult to measure concepts like pride of ownership and quality of life. The findings here, however, revolve around the stability of those loans, and stability, it is argued, is the first order of business for many Legacy City housing markets.

The parcel-level analysis here did not focus on specifically designated areas or buildings. While there is much evidence of the value-impacts of such designations, it isn’t a common suggestion that new designations on their own would stabilize struggling residential markets. Likely, significant investment would be needed in concert, and the HHP loans represent that type of investment.

Summary

Legacy Cities are currently faced with the challenges of weak market demand and a deteriorating physical capital stock. These two challenges are related to each other, and related to historic preservation. As a potential and partial solution to aid an aging housing stock, it would seem on the surface that historic preservation would be a go-to tool for Legacy Cities. This turns out, however, not to be the case. Given the lack of empirical link between historic...
preservation and neighborhood stability, over 1000 individual investments in residential historic preservation were analyzed. In terms of foreclosure, and relative to a variety of temporal, spatial, and contextual comparisons, residential historic preservation is revealed to be a stabilizing force.

Additionally, it is an important detail to remember that the investments analyzed here are not grants – they are loans. Incentivized, yes, but they are loans through local financial institutions that households are paying back. Households are selecting the investment locations, the amount of the investment, etc. The market is governing these loans, and the loan program is working.

Where does this leave preservation in the stabilization debate? Hopefully, closer to the table. A body of evidence relating stabilization to preservation won’t materialize overnight, but progress can be made by answering the persistent calls for empirical research based on programs similar to the Heritage Home Program. Mallach (2011) wrote of finding the right balance between demolition and preservation. Facilitating this proven market activity, and those like it, might be a reasonable first step in tipping that balance towards preservation.

Finally, a reasonable observer might still pose this argument: the results detailed here simply reveal that financially stable households are self-selecting into these preservation loan products, and financially stable households are less likely to be foreclosed on. If that is true, if financially stable households, with a mere interest-rate buy-down enticement, are taking out loans to invest in the region’s half-century+ old housing stock with the guide of expert technical advice, and in so doing, are roughly 6 times less likely to wind up in foreclosure, then the
preservation community shouldn’t be internalizing, or even deflecting that as a criticism. They should be documenting it and using it as evidence in pursuit of their policy goals.
References


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<th>Loans in the field</th>
<th>Median Loan Amount</th>
<th>Total Loaned</th>
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<td>3</td>
<td>3</td>
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<td>15</td>
<td>18</td>
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<td>1995</td>
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<td>10</td>
<td>39</td>
<td>$ 17,300</td>
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<td>1997</td>
<td>9</td>
<td>48</td>
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<td>8</td>
<td>56</td>
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<td>8</td>
<td>64</td>
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<td>92</td>
<td>233</td>
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<td>85</td>
<td>318</td>
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<td>98</td>
<td>718</td>
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<td>52</td>
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<td>38</td>
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<td>2013</td>
<td>75</td>
<td>1026</td>
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<td>1026</td>
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Table 1.
Figure 1. Foreclosure Rate Comparison: 2006-2013

- Foreclosure Rate (MU)
- Foreclosure Rate (RP)
- HHP Foreclosure Rate
Heritage Home Program
Foreclosure Rate Comparison
2006-2013

Figure 2.
Figure 3.
### Comparison of Foreclosure Rates in Areas of HHP Concentration

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Tracts</th>
<th>Number of HHP Loans</th>
<th>HHP Foreclosure Rate</th>
<th>Foreclosure rate (RP)</th>
<th>Ratio (RP vs. HHP)</th>
<th>Foreclosure rate (MU)</th>
<th>Ratio (MU vs. HHP)</th>
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<td>No loans</td>
<td>276</td>
<td>0</td>
<td>--</td>
<td>2.81%</td>
<td>--</td>
<td>5.08%</td>
<td>--</td>
</tr>
<tr>
<td>Not concentrated</td>
<td>143</td>
<td>485</td>
<td>0.49%</td>
<td>2.91%</td>
<td>5.94</td>
<td>5.21%</td>
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<td>East Cluster</td>
<td>17</td>
<td>325</td>
<td>0.35%</td>
<td>2.42%</td>
<td>6.99</td>
<td>4.00%</td>
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<td>2</td>
<td>44</td>
<td>0.57%</td>
<td>4.46%</td>
<td>7.85</td>
<td>9.93%</td>
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<td>West Cluster</td>
<td>8</td>
<td>172</td>
<td>0.51%</td>
<td>2.78%</td>
<td>5.46</td>
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<td>446</td>
<td>1026</td>
<td>0.45%</td>
<td>2.84%</td>
<td>6.30</td>
<td>5.11%</td>
<td>11.33</td>
</tr>
</tbody>
</table>

Table 2.