


Planning, Research & Evaluation

Preliminary Impact of the Neighborhood Stabilization Program in Minnesota

6/25/2014

Minnesota Housing Finance Agency

Summary

The Neighborhood Stabilization Program (NSP) began in 2008 in response to the foreclosure crisis. Many communities experienced complete market destabilization, and federal, state and local partners used NSP funds to assist these communities in market stabilization and recovery.

This evaluation provides a mid-implementation snapshot of how early NSP investments have helped the hardest hit communities in Minnesota. Investments by Minnesota Housing's sub-allocators and direct grantees of Minneapolis, Saint Paul, Anoka County, Dakota County, and Hennepin County strategically targeted their investments to ensure that limited resources would have an impact on the housing market.

The current evaluation addresses two questions. First, what is the level of NSP investments so far in heavily impacted communities? Second, has the investment through NSP helped to stabilize these communities?

We found that investments have been targeted; there are NSP activities clustered in high-need communities. These targeted activities have had a positive impact on the housing market position relative to communities with similar characteristics and foreclosures but little to no NSP activity. When evaluating changes in home sales prices, residential vacancy rates and foreclosure rates between 2008 and 2012, we find positive impacts in communities receiving targeted NSP investments: While there were price declines in all areas during this time period, the areas with targeted NSP investments did not decline as much as similar communities without targeted investment. The foreclosure rates in targeted NSP communities declined significantly compared to areas with little to no investments, and vacancy rates declined in targeted NSP areas while vacancy rates increased in similar communities with little to no investments. The table below compares market changes in detail.

Comparison of All Areas: NSP Activity Areas and Comparison Areas with Little to No NSP Activity

	2008-2012 Change		
Community Type	**Median Sales Price**	**Foreclosure Rate**	**Vacancy Rate**
NSP Activity Areas	-3% (N=152)*	-33% (N=152)*	-20% (N=152)*
Comparison Areas, Little or No NSP	-10% (N=152)*	-15% (N=152)*	+41% (N=152)*
Both Areas	**-7%** (N=304)	**-24%** (N=304)	**+11%** (N=304)

* Differences are statistically significant to .05
Note: The areas being analyzed are block groups

This evaluation is preliminary and will be continued as program implementation progresses. Additional work in future evaluations will include a more comprehensive assessment of demographics, monetary investments, and other foreclosure related investments made in a community.

1. Introduction

The foreclosure crisis and recession destabilized the housing market in Minnesota. Many communities experienced complete market destabilization, including neighborhoods in North Minneapolis, East Saint Paul, Brooklyn Park and Brooklyn Center. The Neighborhood Stabilization Program (NSP) has been the primary federal response to the foreclosure crisis and is aimed at stabilizing neighborhoods through acquisition, rehabilitation, financing, demolition, and land banking of foreclosed properties that are blighting communities around the country. In Minnesota, through three rounds of funding, the US Department of Housing and Urban Development (HUD) provided the state and local partners almost $108 million ($58 in round 1 beginning 2008, $37 in round 2 beginning 2009, and $12 during NSP round 3 beginning 2010). HUD distributed a portion of the NSP funds to the state of Minnesota, which in turn allocated them to local jurisdictions (sub-allocators). HUD also distributed NSP funds directly to some local jurisdictions. Table 1 details these allocations.

Table 1: Funds Allocated by Round and Grantee

Allocated by Round & Grantee	Round 1	Round 2	Round 3
Anoka County	$ 2,377,310	-	$ 1,226,827
Dakota County	$ 2,765,991	-	-
Hennepin County	$ 3,885,729	-	$ 1,469,133
City of Minneapolis	$ 5,601,967	$ 19,455,156	$ 2,671,275
City of Saint Paul	$ 4,302,249	$ 18,031,623	$ 2,059,877
Minnesota Housing (State)	$ 38,849,929	-	$ 5,000,000
Total	**$ 57,783,175**	**$ 37,486,779**	**$ 12,427,112**

Source: HUD NSP Help, Retrieved from https://hudnsphelp.info

This report addresses two primary research questions:

1. **What is the level of investments so far in heaviliy impacted communities?**

For all rounds of NSP through May 2013 (1,275 investments), we found in our analysis that there has been a clustering of activities (a high concentration of activity). The clustering of activities reflect the specific targeting expectations created by HUD, Minnesota Housing and its partners to concentrate investments in high-need communities to maximize impact.

2. **Has the investment through NSP helped to stabilize communities?**

Our analysis tests whether there has been an improved market postion in areas with clustered NSP activities compared to similar areas with little to no NSP investment. We found the targeting strategies

used by grantees has had a positive impact on the market position of these communities compared to similar communities with less investment, even though this evaluation occurred mid-implementation of the program.

The following analysis evaluates these research questions, beginning with a methodology and analysis discussion. Recommendations for future research conclude the report.

2. Methodology

Sources

- NSP Data. This evaluation used data that was current to June 2013. For the analysis, we collected data on state grant activity from Minnesota Housing NSP staff and data on local direct grants from the counties of Dakota and Hennepin, and the cities of Minneapolis and Saint Paul. Anoka County was unable to provide direct grant activities.
- Market Data. Market data includes CoreLogic (foreclosure rates and median sales prices), the US Postal Service (residential vacancy rates), and the American Community Survey (homeownership rate, total housing units).

Processing

We consolidated data on NSP activities and market conditions in a single dataset at the block group geography[1]. We used the block group geography because HUD directed recipients of NSP round 3 funds to concentrate investments in block groups heavily impacted by foreclosures. However, some data are not available at the block group level, particularly the market data. CoreLogic provides its data on foreclosure rates and median sales prices at the zip code geography; we translated this data to block group geography. Additionally, the US Postal Service provides its vacancy data by census tract geography.

Limitations

This analysis only focuses on NSP activities. Communities utilized many remediation activities in their foreclosure response. Our final evaluation of the NSP program will include a more comprehensive assessment of all foreclosure remediation activities in a community.

[1] Block Groups are statistical divisions of census tracts, generally defined to contain between 600 and 3,000 people, and are used to present data from the US Census and American Community Survey.

3. NSP Investments in Minnesota

What is the level of investments so far in heaviliy impacted communities?

Minnesota NSP Activities

Under NSP, the grant recipients carried out three primary types of activities: (1) acquisition of a foreclosed home, (2), homeownership assistance (e.g. down payment assistance to buy a foreclosed home), (3) the acquisition and rehabilitation of a foreclosed home or the acquisition and demolition of a foreclosed home with new construction.

In total, we evaluated 1,275 NSP activities that were completed or in progress through May 31, 2013. Of these activities, 964 were completed. The remaining 311 were in progress and included in the analysis.

Activities by Round

At the time of data collection, NSP round 1 grants were in the process of closing, while NSP round 3 activities were just getting started, with some activities not even in progress. Thus, the activities evaluated in this report are primarily NSP round 1 (842 activities, 66% of the sample). Rehabilitation or new construction categories account for most of the activities (486 completed activities under all three rounds). Activities in the homeownership assistance category are limited to rounds 1 and 2. Activities in the acquisition category are most prevalent in round 2. Table 2 shows counts of activities by round and activity type.

Table 2- NSP Activities by Round by Activity Type

	Activity Type						Total	
	Acquisition*		Homeownership Assistance		Rehab/New Construction*			
	In progress	Completed	In progress	Completed	In progress	Completed	In progress	Completed
NSP1	0	67	16	214	249	296	265	577
NSP2	0	114	13	40	0	130	13	284
NSP3	1	43	0	0	32	60	33	103
Total	**1**	**224**	**29**	**254**	**281**	**486**	**311**	**964**
Combined	**225**		**283**		**767**		**1,275**	

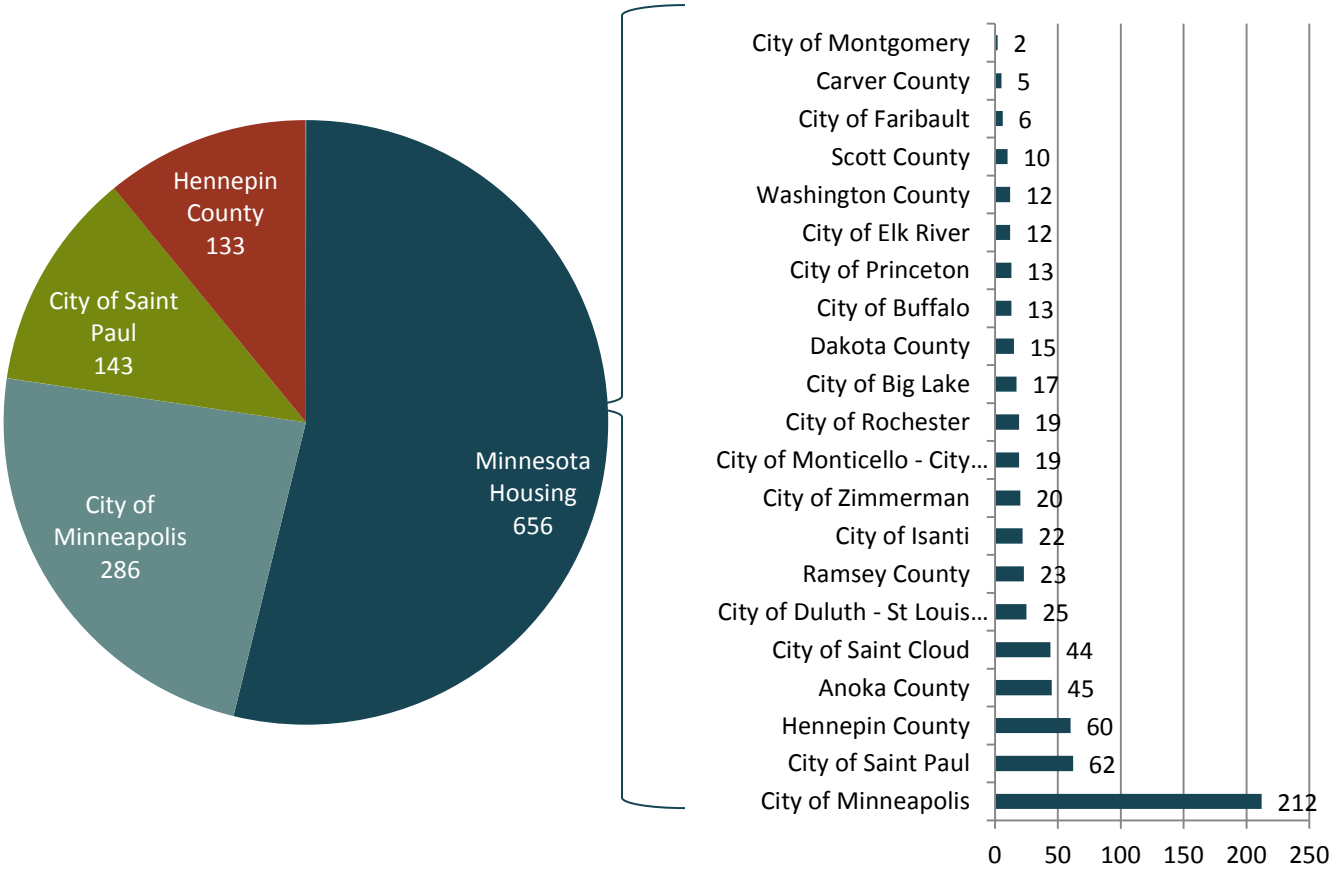
Source: Minnesota Housing analysis of combined grant activities.

* Demolition activities could occur in Acquisition or New Construction categories above. To date, 123 demolitions occurred through NSP1, 118 in NSP2, and 50 through NSP3 activities.

Activities by Grantee

Minnesota Housing working through its sub-allocators financed over half (51.5%) of the activities. The pie chart in figure 1 breaks out all activities by primary grantee, the bar chart on the right breaks out the activities of Minnesota Housing's sub-allocators. It is worth noting that Hennepin County and the cities of Minneapolis and Saint Paul are both a direct recipient of NSP funds and a sub-allocator of Minnesota Housing's NSP grant. Combined, the city of Minneapolis has had the most activities, with 498 or 39% of all 1,275 NSP activities.

Figure 1 – NSP Activities by Allocator & State Grant Sub-allocators

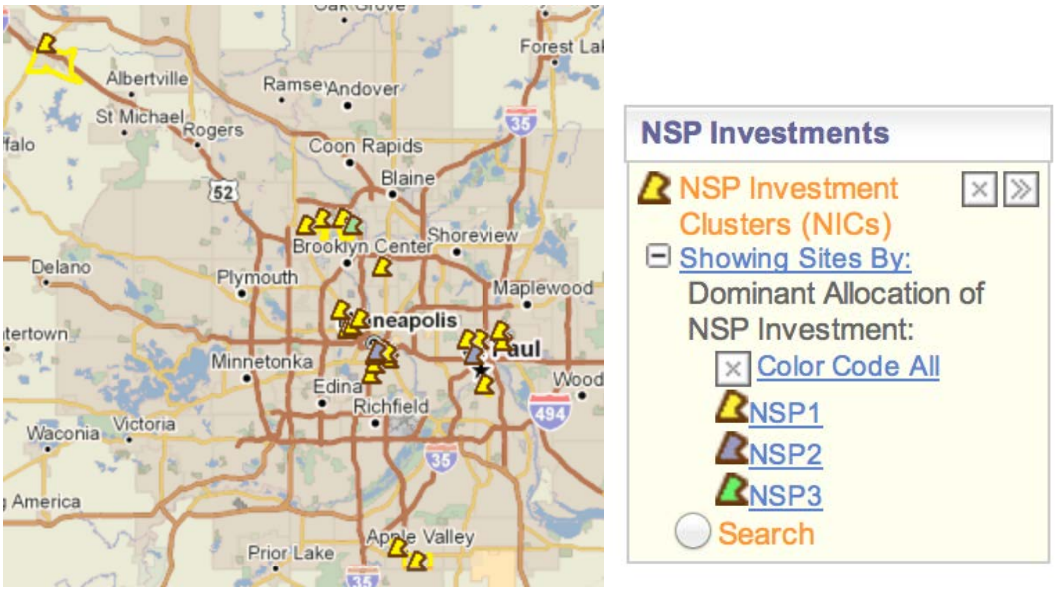


Clustering of NSP Activities

Neighborhood Investment Clusters (NIC)
HUD has commissioned The Reinvestment Fund (TRF) to evaluate NSP investment nationwide by identifying clusters (high concentrations) of NSP activities. TRF's most recent analysis evaluates investments across the three rounds of NSP as of December 30, 2013[2].

According to TRF analysis, 61.3% of Minnesota's NSP properties are clustered. The national average is 63%. Minnesota's clusters are displayed in the map below, color coded by the NSP funding round that predominates the cluster. The yellow icons represent NSP1 which is predominant at this point.

Map 1 - Neighborhood Investment Clusters



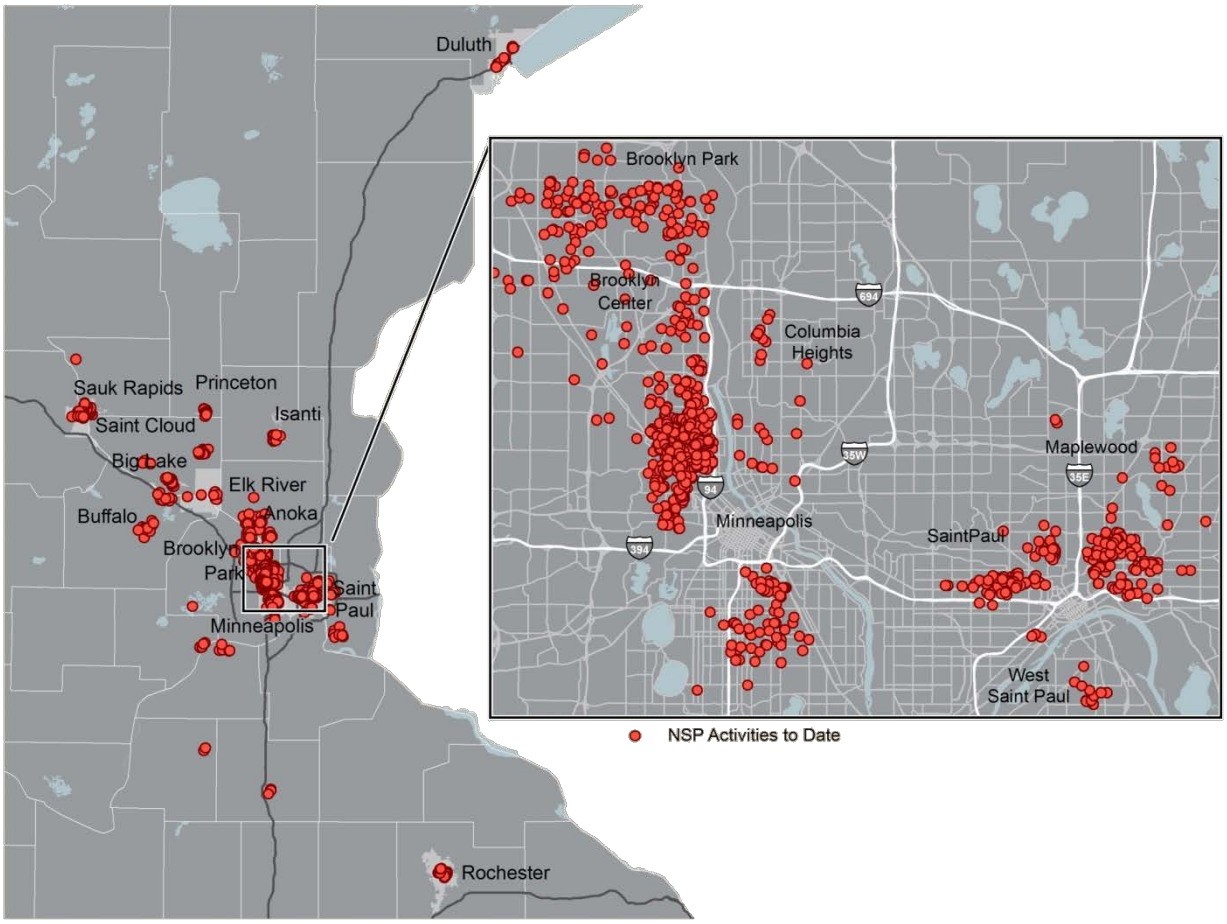
While the TRF's cluster area analysis provides useful information and a good methodology, carrying out our own analysis helps to verify and better understand local dynamics. The following section describes Minnesota's clustered areas in more detail.

[2] Find TRF Neighborhood Investment Cluster (NIC) reports here: https://www.onecpd.info/resource-library/nsp-investment-cluster-nic-reports/

Clustering of Activities in Minnesota

Map 2 displays locations of individual NSP activies in Minnesota. To evaluate clustering of these activities, we used a methodology similar to the one used by TRF.

Map 2 - NSP Activities by Location

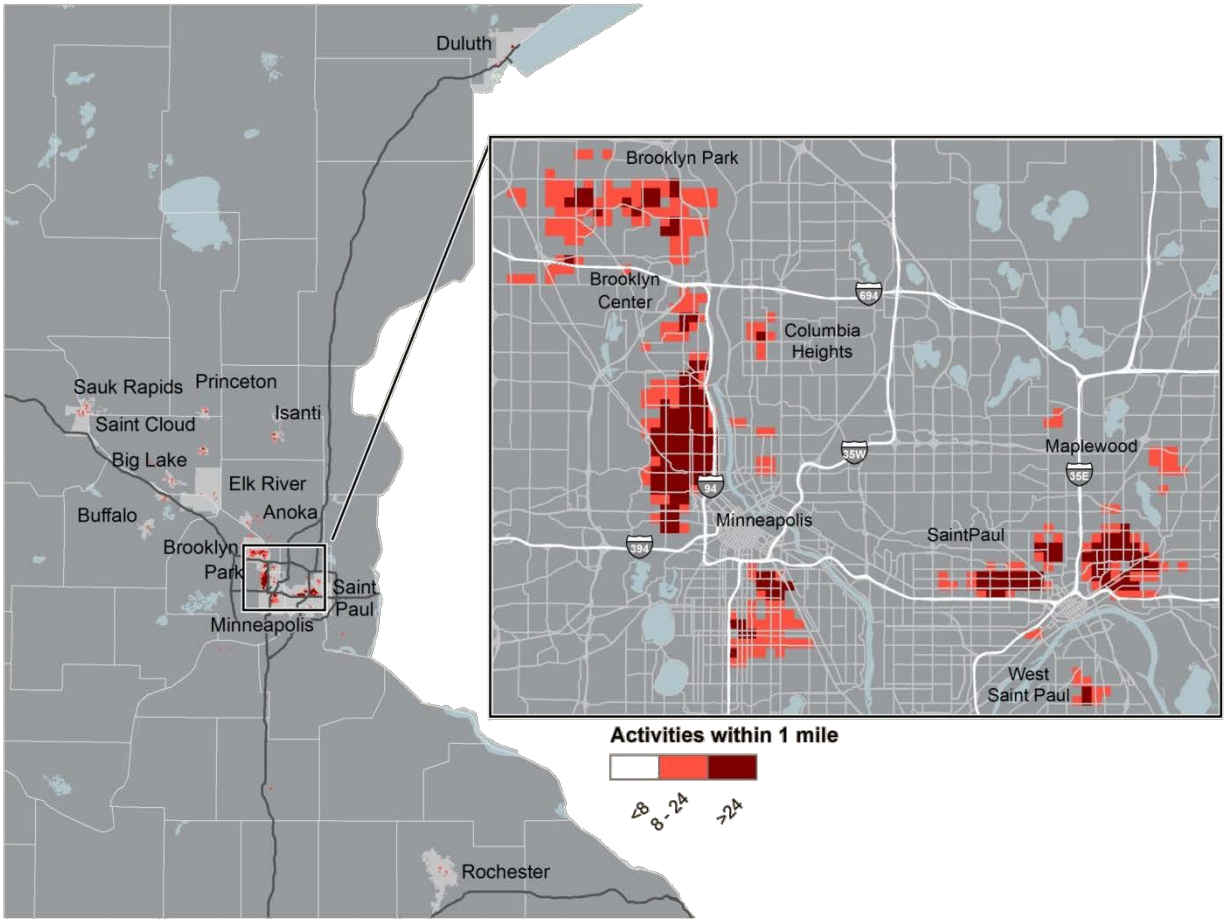


First, we summarized activities for each block group by counting the number of NSP activities within one mile of the block group. Block groups with fewer than 8 activities within one mile are considered to have no clustering. Block groups with 8 to 24 activities within one mile are "moderately clustered". Block groups with more than 24 activities within one mile are "clustered". Those with 24 or more activities meet TRF's definition of a cluster.

Map 3 shows the block groups by cluster categories. The light red colored block groups are moderately clustered, while the darker red areas are clustered.

While the core cities of Minneapolis, Saint Paul, Brooklyn Park and Brooklyn Center have clustered block groups, there are smaller pockets of clustered block groups in most communities with NSP funding across the state.

Map 3 - Clustered NSP Activities by Block Groups



Next, we aggregated the clustered block groups into three or four contiguous block groups to simulate submarkets using a process similar to the one used by TRF.

To test for whether clustered NSP investment improved the housing markets of these communities, we compared the clustered groups with similar markets that had little to no NSP activities. The market impact analysis is described in the next section.

4. Market Impact of NSP Investments

Comparable markets

To evaluate how housing markets have changed in block groups with clustered NSP activities compared to changes in similar block groups that had little to no NSP activity, we first define "similar block groups".

We used a k-means clustering technique to create comparison groups that had similar market and foreclosure conditions in 2008. 2008 was the start of the NSP program and the early peak of foreclosure activities in Minnesota. The k-means clustering procedure attempts to identify relatively homogeneous groups of neighborhoods based on selected characteristics. These market characteristics include:

- Homeownership rate in 2010[3]
- Total housing units in 2010
- Residential foreclosure rate in 2008
- Median home sales price in 2008
- Change in median sales price between 2006-2008

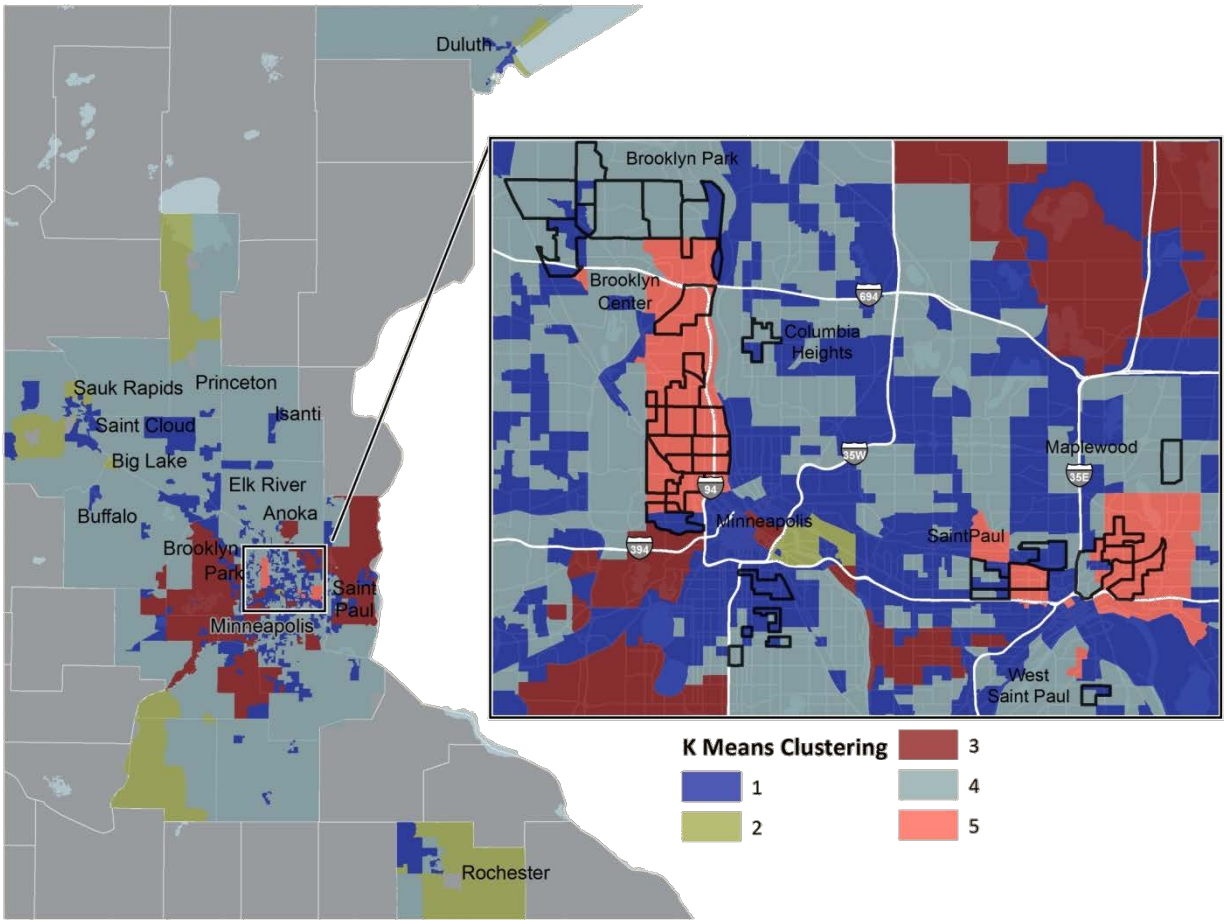
The k-means clustering creates five market types, as described below. We use colors to name the categories, which refer to the colors used in Map 4. The clustered block groups of NSP activity are shown with black outlines on the map.

Market Type Categories:

1) Dark Blue: These areas had a higher housing density, an average sales price, an average sales price change, and an average number of foreclosures. Examples include Uptown and Northeast Minneapolis or Saint Anthony Park in Saint Paul.
2) Green: These areas had increases in sales prices, higher homeownership rates, and few foreclosures. Examples include some areas of Olmsted County, and the Prospect Park neighborhood in Minneapolis. There are relatively few communities that are in this cluster group.
3) Red: These areas had the highest sales prices, and also had high homeownership rates and few foreclosures. Examples include the Macalester Groveland neighborhood in Saint Paul, the city of North Oaks, and many suburban communities in Hennepin and Washington Counties.
4) Teal: These areas had the biggest price declines, and lower sales prices overall, yet were average in foreclosures in 2008. Examples include areas of South Minneapolis, the West 7th neighborhood in Saint Paul, Maplewood, Brooklyn Park, and many communities in the suburban metro and collar counties north of the 7 county metro.
5) Pink: These areas were most heavily impacted by foreclosures and sales price declines. Example communities include north Minneapolis, east Saint Paul, and the city of Brooklyn Center.

[3] 2010 census data are used as there are no small areas estimated of homeownership rate or total housing units for 2008.

Map 4 - Market Clustering



Note that in the following analysis, we removed market type 3 (red on the map; those areas with high sales prices and few foreclosures) because there were no NSP activity areas in the market type. In the evaluation, we compared the 152 block groups with NSP activity to 152 randomly selected block groups with little or no NSP activity but had the same mix of market types (blue, red, teal and pink on map) as the NSP block groups.

Market Characteristics

To assess market stabilization from NSP investments, we used three market characteristics to compare the NSP activity areas with the resulting comparison areas.

1) Change in median home sales price 2008-2012, using data from Core Logic.
2) Change in residential vacancy rates 2008-2012, using data from the US Postal Service.
3) Change in foreclosure rates 2008-2012, using data from Core Logic.

Results of Market Comparisons

In the comparison, the NSP activity areas fared better than the comparison areas with little or no NSP activities. While there were price declines in all areas overall, the NSP activity areas didn't decline nearly as much. The foreclosure rates in the NSP activity areas declined significantly, while those with little investment saw slight increases. With respect to vacancy rates, the comparison areas experienced increases while the NSP activity areas had declines. The table below shows these results.

Table 3 – Comparison between NSP activity areas and comparison areas

	2008-2012 Change		
Community Type	**Median Sales Price**	**Foreclosure Rate**	**Vacancy Rate**
NSP Activity Areas	-3% (N=152)*	-33% (N=152)*	-20% (N=152)*
Comparison Areas, Little or No NSP	-10% (N=152)*	-15% (N=152)*	+41% (N=152)*
Both Areas	**-7%** (N=304)	**-24%** (N=304)	**+11%** (N=304)*

*Differences are statistically significant to .05

Comparisons by Type of Market

There is variation by market type; however, certain market types have insufficient sample size to identify statistically significant differences. The green and red areas on the map were low foreclosure areas and did not have enough block groups with NSP activity for comparison. For the other market types, the NSP activity areas had significant improvements in foreclosure rates compared to areas with little to no NSP activity. The areas hardest hit by foreclosures and price declines (the pink areas on the map) had the most dramatic improvements between 2008 and 2012 in areas with NSP activity. Sales prices increased by 7% in NSP activity areas and declined by 6% in comparison areas. Foreclosure rates in these areas declined by 49% and increased by 42% in comparison areas. In addition, vacancy rates declined by 48% and increased by 13% in comparison areas. Table 4 compares the market changes between for all three of the remaining market types.

Table 4 - Comparison between NSP activity areas and comparison areas by market type

	Blue on map (1)			Teal on map (4)			Pink on map (5)		
2008-2012 Change	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**
NSP Activity Areas	-13% (N=41)	-22% (N=41)*	-14% (N=41)	-11% (N=41)	-19% (N=41)*	-3% (N=41)	7% (N=67)*	-49% (N=67)*	-48% (N=67)*
Comparison Areas	-11% (N=41)	4% (N=41)*	+18% (N=41)	-14% (N=41)	+8% (N=41)*	110% (N=41)	-7% (N=67)*	-42% (N=67)*	+13% (N=67)*
Both Areas	**-12%** (N=82)	**-9%** (N=82)	**+17%** (N=82)	**-12%** (N=82)	**-6%** (N=82)	**+53%** (N=82)	**0%** (N=134)	**-45%** (N=134)	**-17%** (N=134)

*Differences are statistically significant to .05

Comparisons by Region

There is also regional variation among market improvements in NSP activity areas. The below table breaks out the core cities of Minneapolis and Saint Paul, Suburban Twin Cities metro, and Greater Minnesota. In the core cities, the improvement in the market conditions between 2008 and 2012 in the NSP activity areas compared with the areas with little to no NSP activity was significant across all market indicators. In the core cities, areas with NSP activity had a 2% increase in sales prices while areas with little to no NSP activity had a 7% decline in sales prices. Improvement in foreclosure rates were statistically significant for each region, however the core cities had the largest declines in foreclosure rates, for NSP activity areas and comparison areas. Table 5 details each region.

Table 5 – Comparison between NSP activity areas and comparison areas by region

	Core Cities (Minneapolis and Saint Paul)			Suburban Twin Cities			Greater Minnesota		
2008-2012 Change	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**	**Sales Price**	**Foreclosure Rate**	**Vacancy Rate**
NSP Activity Areas	+2% (N=89)*	-44% (N=89)*	-45% (N=89)*	-11% (N=40)	-21% (N=40)*	-18% (N=40)	-12% (N=23)	-9% (N=23)*	+73% (N=23)
Comparison Areas	-7% (N=78)*	-38% (N=78)*	+24% (N=78)*	-13% (N=50)	+2% (N=50)*	+65% (N=50)	-12% (N=24)	+20% (N=24)*	+50% (N=24)
Both Areas	**-2%** (N=167)	**-42%** (N=167)	**-13%** (N=167)	**-12%** (N=90)	**-8%** (N=90)	**+28%** (N=90)	**-12%** (N=47)	**+6%** (N=47)	**+61%** (N=47)

*Differences are statistically significant to .05

Comparison Summary

Overall, when evaluating all market types and regions, areas with NSP activity had more market stabilization than comparable areas with little to no NSP activity. NSP activity areas had significant declines in residential vacancy rates, significant declines in foreclosure rates, and less steep declines in home sales prices. However, when breaking out comparisons groups by market type and geography, these differences are most significant in market types that were most heavily impacted by the foreclosure crisis and within the core cities.

5. Recommendations for Next Steps

NSP activities are still occurring; this analysis provides a snapshot in time of activities in Minnesota through May 2013. This analysis provides insights about market stabilization when comparing NSP activity areas to similar areas with little or no NSP activity. Future evaluation should take a more comprehensive look at:

- **Demographics.** How do the demographics of the NSP activity areas compare to the surrounding communities?
- **Monetary Value of Investments.** What is the level of investment and subsidy left in the property? For example, in Hennepin County, homeownership assistance averaged $15,000 per property, while rehabilitation and new construction assistance averaged $60,000. Land banking investments averaged $15,000 per property. Evaluating the activities by the monetary investment may provide additional insights.
- **Other Foreclosure Resources.** Foreclosure remediation efforts are not limited to NSP. A complete survey of all resources used by communities and partners to address foreclosures will provide a more complete picture of investments.

After the third round of NSP closes out, a more thorough analysis should occur of the entire grant's impacts on Minnesota communities.