Measuring the Impact of Clustered Housing Investment under the Federal Neighborhood Stabilization Program
The Reinvestment Fund (TRF), under contract with the U.S. Department of Housing and Urban Development (HUD), generates data on NSP investments across the country based on program data supplied to HUD by NSP grantees. Those data and accompanying analytic tables and maps are made available to the public on a quarterly basis. The purpose of the analyses and accompanying deliverables is for HUD to provide a tool to grantees that will assist in the implementation of grantees’ local programs. Quarterly interactive maps, tables and reports may be found at HUD’s Neighborhood Stabilization Resource Exchange (https://hudnsphelp.info/index.cfm?do=viewNICTablesHome).

This research is conducted using those data, with the permission of HUD. We appreciate their consent to use the data for this public purpose.
Purpose of Analysis

- Create a methodology for identifying clusters of NSP investment;
- Establish a methodology (a quasi-experimental design) for understanding whether clustered NSP investments changed the trajectory of the markets within which investments were made;
- Provide information (tables, maps and reports) upon which HUD grantees can rely to examine impact of NSP investments;
- Describe the spatial distribution of clustered investments, and performance, nationally;
- Examine the conditions associated with better outcomes.
Step One: Identify and map NSP properties.

TRF last received a file on November 27, 2012 of 71,556 records of NSP investment across the country. Elimination of duplicate properties from the database and properties for which the expenditures were categorized as: (a) admin; (b) capacity building; (c) planning left 48,846 unique properties treated by NSP. Properties were mapped to their address.
Step Two: Identify clusters of NSP properties.

- Spatially identified clusters – places where at least 6 NSP properties were within ¼ mile of each other.
- Selected all of the block groups with this density and grouped them to create clusters.
- Any cluster that was larger than 4 block groups or crossed county boundaries, was broken up into one or more clusters.
- We named these clusters NSP Investment Clusters or NICs.
Step Three: Identify three comparable markets for each cluster.

Comparable markets were defined to be block groups that were at least .125 miles away from any cluster AND had similar:

- median home sale prices in 2008;
- home sale price change between 2006 and 2008;
- homeownership rate;
- NSP 1 Estimated Risk Score
- count of housing units (NIC average per block group).

[Note: In the definition of comparable areas, scoring penalized areas at increasing distance from the NIC and if those areas had NSP investments. Comparable areas could be outside of the NIC county but the block group of that comparable area must have touched the NIC county’s boundary.]
Methodology and Process
Methodology and Process
## Methodology and Process

### Step Four: Score how NICs performed against comparable markets.

- Compared performance of each NIC to its comparables along two indicators: median home sale price change and vacancy rate change.
- Assigned a letter grade (A through D) to indicate how the market within the NIC performed compared to its comparable markets.
**Methodology and Process**

<table>
<thead>
<tr>
<th>Performance Scoring</th>
<th>Description</th>
</tr>
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<tbody>
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<td>“A”</td>
<td>a NIC beat all of its comparable markets for which there was home sale or vacancy data.</td>
</tr>
<tr>
<td>“B”</td>
<td>a NIC beat some of its comparable markets for which there was home sale or vacancy data.</td>
</tr>
<tr>
<td>“C”</td>
<td>a NIC beat one of its comparable markets for which there was home sale or vacancy data.</td>
</tr>
<tr>
<td>“D”</td>
<td>a NIC beat none of its comparable markets for which there was home sale or vacancy data.</td>
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<tr>
<td>“N/A”</td>
<td>there was not sufficient data for any comparable in order to calculate a Performance Score.</td>
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Quarterly HUD Grantee NIC Report

Grantee Report: Philadelphia, PA
Cumulative As Of September 30th, 2012

Summary of NSP Activity: Number of Properties Treated

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<th>Activity Type</th>
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<tr>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>205</strong></td>
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Performance of NSP Investment Clusters (NICs):

- Distribution of NICs by Sale Price Grade:
  - A: 25% (n = 3)
  - B: 17% (n = 2)
  - C: 0% (n = 1)
  - D: 17% (n = 2)

- Distribution of NICs by Vacancy Grade:
  - A: 75% (n = 9)
  - B: 8% (n = 1)
  - C: 17% (n = 1)
As of November 27, 2012, 48,846 unique (unduplicated) properties have been treated under the NSP program across the nation.

27,238 or 56% of these properties are located within a cluster of NSP investments. The remaining 44% are scattered investments and were not a part of this analysis.

- 53% of NSP-1 properties are clustered in NICs
- 75% of NSP-2 properties are clustered in NICs

1,914 clusters of investment NICs exist around the nation.

Most NICs are dominated by the following activity types: Clearance (48.6% of NICs), Rehab (20.9%), Land Banking/Acquisition (5.0%) and General Acquisition (6.9%).
Performance Summary

- Home Sales: 72.9% of all NICs trended better than at least one of their comparable markets when it came to home sale price change between 2008 and 2011. 25.8% ("A"s) beat every comparable against which they were studied.

- Vacancy: 75.2% of all NICs trended better than at least one of their comparable markets when it came to vacancy rate change between the first half of 2008 and the first half of 2012. 24.8% ("A"s) beat every comparable against which they were studied.
## Distribution of NICs by State

<table>
<thead>
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## Distribution of NSP Investments by State

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<th>State</th>
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## Distribution of NSP Investments by County (Top 10)

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Distribution of NSP Investments by State and Funding Round
Grade Distribution of NICs
Selected Results for Home Sale Price Comparisons
Home sale price comparisons were better in NICs dominated by NSP-2 funding.

Home sale price comparisons were somewhat better in NICs that started out with higher HUD NSP Risk Scores.
Home sale price comparisons were somewhat better in NICs dominated by new construction.

Home sale price comparisons were slightly better in NICs that had higher numbers of investments.
Grade Distribution by Price and Price Change

Home sale price comparisons were somewhat better in NICs where there were higher concentrations of lower income households.

Home sale price comparisons were better in NICs that experienced more substantial decline prior to NSP.
Home sale price comparisons seemed unrelated to the percent Hispanic households in the NIC. Best performance in NICs 2.5-19.99% Hispanic.

Home sale price comparisons seemed unrelated to the percent African American households in the NIC. Best performance in NICs 50-75% African American.
NIC Performance by Activity Type and Funding Round

Percent of NICs with an A by Activity Type and Funding Round

- New: 27.5% (NSP-1), 40.0% (NSP-2), 33.3% (Mixture)
- Rehabilitation: 26.5% (NSP-1), 44.1% (NSP-2), 17.2% (Mixture)
- Demolition: 26.4% (NSP-1), 43.8% (NSP-2), 35.7% (Mixture)
- Other: 19.3% (NSP-1), 20.6% (NSP-2), 22.1% (Mixture)
NIC Performance by Activity Type and Level of Activity

Percent of NICs with an A by Level and Type of Activity

Activity Type / Level of Activity

New: 15.0% Under 10, 30.0% 10-24, 50.0% 25 and Over
Rehabilitation: 25.5% Under 10, 29.5% 10-24, 21.7% 25 and Over
Demolition: 24.4% Under 10, 31.7% 10-24, 32.5% 25 and Over
Other: 18.6% Under 10, 20.0% 10-24, 26.1% 25 and Over
Among NICs primarily funded under NSP Round 1:

- New construction dominated NICs were most positively impactful where the number of investments was 25 or more. [44.4% received an A compared to 18.8% where the number of investments was less than 10.]

- Rehabilitation dominated NICs were somewhat more positively impactful where the number of investments exceeded 10. [31.9% of NICs with 10-24 investments and 32.1% of NICs with 25+ investments received an A compared to 22.6% with fewer than 10 investments.]

- No remarkable difference among NICs dominated by demolition.
Among NICs primarily funded under NSP Round 2:

- Demolition dominated NICs were substantially more impactful where the number of investments exceeded 10. [60% of NICs with 10-24 investments and 75% of NICs with 25+ investments received an A.]

- Rehabilitation dominated NICs were more positively impactful where the number of investments was less than 10. [62.5% of NICs with fewer than 10 investments and 50% of NICs with 10-24 investments received an A compared to 0% where the number of investments was 25+.] 

- Too few new construction dominated NICs to draw any conclusions.
Among NICs with no predominant NSP Round:

- Demolition dominated NICs were substantially more impactful where the number of investments was 10-24. [43.8% received an A.]
- Rehabilitation dominated NICs were more positively impactful where the number of investments was less than 10. [20% received an A.]
- Too few new construction dominated NICs to draw any conclusions.
The Reinvestment Fund

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