Reinvestment Fund builds wealth and opportunity for low-wealth communities and low and moderate income individuals through the promotion of socially and environmentally responsible development.

We achieve our mission through

- **Capital.** Grants, loans, and equity investments
- **Knowledge.** Information and policy analysis
- **Innovation.** Products, markets, and strategic partnerships
The Market Value Analysis (MVA) is a tool to assist residents and policymakers to identify and understand the elements of their local real estate markets. It is an objective, data-driven tool built on local administrative data and validated with local experts.

With an MVA, public officials and private actors can more precisely target intervention strategies in weak markets and support sustainable growth in stronger markets.

Our Normative Assumptions

When analyzing markets we begin with these principles:

- Public subsidy is scarce; acting alone, subsidies cannot create a market
- Public policy and subsidy must leverage private investment or create conditions for investment to occur
- In distressed markets, build from strength by investing near strong assets
- All residents are customers with an expectation of quality public services and amenities
- The best decisions are based on the sound and objective analysis of quantitative and qualitative data
Who is Using the MVA

MVAs have been funded by government agencies, local foundations, and financial institutions in cities and counties around the country:

- Houston, TX
- Philadelphia, PA
- Washington, DC
- Baltimore, MD
- San Antonio, TX
- Camden, NJ
- Newark, NJ
- Selected (8) NJ regions
- New Orleans, LA
- State of Delaware
- Detroit, MI
- Kansas City, MO
- Milwaukee, WI
- Pittsburgh, PA
- St. Louis, MO
- Atlantic City, NJ
- Allegheny County, PA
- Reading Area, PA
- Jacksonville, FL
- Wilmington, DE
- Prince George’s County, MD
- Indianapolis, IN
- Selma, AL
- Akron, OH
- Richmond, VA

How Cities are Using the MVA

- Component of a local land banking strategy (Phila., NOLA)
- Guide capital budget (Detroit)
- Focus code enforcement (Phila., Baltimore, Indianapolis, NOLA)
- Benchmark quality of life measures (Phila.)
- Transportation planning (St. Louis)
- Target statewide Strong Neighborhoods Revolving Loan Fund (DE/DSHA)
- Inform LIHTC QAP (DSHA)
- Develop CDBG ConPlan / Comprehensive plan (Detroit, Wilmington, St. Louis)
- Assess changes in the market over time (Phila., Baltimore, Pittsburgh)
- Evaluate development opportunities (Pittsburgh, Phila., Houston, Detroit, St. Louis, cities in NJ)
- Target demolition and acquisition activities (Baltimore, Phila., Detroit, NOLA)
- Select transformative tipping point projects (Phila., Baltimore, Pittsburgh, NOLA)
- Engage partners – philanthropic, non-profit, government – in coordinated efforts to rebuild neighborhoods (Baltimore, Milwaukee, NOLA)
- Guide federal Neighborhood Stabilization Program Investment (States of PA & NJ, Houston, Detroit)
The MVA Process

1. Acquire local administrative data and geocode to Census block group geographies.
2. Manually inspect and validate data layers by driving the area.
3. Use statistical cluster analysis to identify areas with common attributes.
4. Manually inspect areas for conformity with local experts to assess fit.
5. Alter parameters; re-solve and re-inspect until model accurately represents area.
6. Summarize and describe the characteristics of each market.

Lessons from 15+ years of experience

Validating Data Is Critical. Researchers must systematically visit and observe neighborhoods in the city to understand the data and final model.

Geographic Scale Matters. MSA and Census tract geographies are too large to accurately reflect the nuances of local real estate markets.

One Size Does Not Fit All. MVA components and models share some similarities across cities but must be customized to the unique traits of each city.

Integrate Local Knowledge. All models are tested with local experts to incorporate qualitative feedback from each geography.

Incorporating Local Knowledge and Expertise

The Local Stakeholder Group works with the Reinvestment Fund team to adapt the MVA to the local context, review interim findings, and affirm final results.

Tasks and Responsibilities

- Help Team Secure Local Housing Data
- Advise on Data Issues and Limitations
- Help Validate Models and Methods
- Support Dissemination to the Community
- Contribute Local Knowledge of Markets
- Recommend Strategic Actions for Public & Private Actors

Organizations on the Houston Stakeholder Committee

- City of Houston - Housing and Community Development (HCD) Dept.*
- Covenant Community Capital
- Houston Housing Authority
- Houston – Galveston Area Council
- Kinder Institute for Urban Research at Rice University
- LISC – Local Initiatives Support Corporation
- Texas Low Income Housing Information Service

*Project sponsor and lead agency
The remainder of this report is organized into the following four sections:

<table>
<thead>
<tr>
<th>I. Market Characteristics</th>
<th>II. Market Value Analysis Results</th>
<th>III. Supplemental Analyses</th>
<th>IV. Next Steps and Looking Ahead</th>
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<tr>
<td>Overview of Houston</td>
<td>Interpreting the MVA</td>
<td>Change Over Time</td>
<td>Discussion</td>
</tr>
<tr>
<td>Market Indicators</td>
<td>Market Characteristics</td>
<td>Geographic-level Analyses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Houston Maps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I. Market Characteristics

Analyzing the characteristics of the residential real estate markets in Houston, Texas.

- Overview of Houston
- Market Indicators
Overview of Houston

Rapid Population Growth Spurred by Hispanic (Ethnicity) and White (Race) Populations

![Change in Houston Population, 2000-2015 (ACS)]

Incomes Within the City Lag Behind State and Larger Metro Area Medians

![Median Household Income, 2011-2015 (ACS)]

Top Five Industries by Employment, 2011 to 2015 (ACS)

1. Health Care and Social Assistance (11%)
2. Retail and Trade (11%)
3. Construction (10%)
4. Manufacturing (9%)
5. Accommodation and Food Service (8%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>963,437</td>
<td>1,290,888</td>
<td>327,451</td>
</tr>
<tr>
<td>Hispanic</td>
<td>731,680</td>
<td>972,785</td>
<td>241,105</td>
</tr>
<tr>
<td>Asian</td>
<td>102,484</td>
<td>142,260</td>
<td>39,776</td>
</tr>
<tr>
<td>African American</td>
<td>493,149</td>
<td>511,729</td>
<td>18,580</td>
</tr>
</tbody>
</table>

Source: PolicyMap, “Community Profile Report”

Available Indicators of Residential Market Strength

Working with city officials and a local steering committee we identified a core set of 16 indicators that describe the characteristics and vitality of residential real estate markets.

- **Property Value and Investment**
  - Number of Residential Sales
  - Median Residential Sales Prices
  - Variance of Sales Prices
  - Single Family and Multifamily New Construction

- **Blight, Distress, and Vacancy**
  - Homes with Maintenance Violations
  - Foreclosure Filings
  - Homes with Water Service Shut Off
  - Dangerous Buildings
  - Demolished Homes
  - Homes with Signs of Vacancy

- **Housing Characteristics**
  - Owner Occupied Homes
  - Units of Subsidized Housing
  - Commercial and Industrial Land
## Market Value Analysis Sources and Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Property Values and Investment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Home Values, 2014-2015</td>
<td>The median value of all residential home sales occurring between 2014 and 2015, excluding purchases for values below $1,000 or above $4,000,000.</td>
<td>InfoUSA</td>
</tr>
<tr>
<td>Variance of Sales Price, 2014-2015</td>
<td>The coefficient of variance of homes used in the calculation above (Average Value ÷ Standard Deviation).</td>
<td>InfoUSA</td>
</tr>
<tr>
<td>Share of Single Family or Multifamily Homes with New Construction, 2014-15</td>
<td>The share of residential properties with new construction permits valued between 2014 and 2015.</td>
<td>City of Houston</td>
</tr>
<tr>
<td><strong>Blight, Distress, and Vacancy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreclosure Filings, 2014Q2- Aug 2016</td>
<td>The Harris County foreclosure filings, derived from the Constables’ Foreclosure Auction Daily Court Review, 2014Q2- Aug 2016, as a percentage of all sales transactions.</td>
<td>Daily Court Review</td>
</tr>
<tr>
<td>Share of Homes w/ Maintenance Violations, 2014-2016Q2</td>
<td>The share of residential properties that were issued a maintenance-related citation between 2014 and 2016Q2.</td>
<td>City of Houston</td>
</tr>
<tr>
<td>Vacant Properties as a Share of Residential Properties, 2016</td>
<td>The share of residential properties that had water service shut off, were cited on the city’s dangerous buildings list, or were demolished and had no new construction, as of 2016.</td>
<td>City of Houston, Kinder Institute</td>
</tr>
<tr>
<td><strong>Housing Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Owner Occupied Households, 2015</td>
<td>Percent of households that reported owning their home.</td>
<td>ACS (2015)</td>
</tr>
<tr>
<td>Commercial or Industrial Land, 2016</td>
<td>Percent of land area categorized as commercial or industrial, 2016.</td>
<td>HGAC</td>
</tr>
<tr>
<td>Share of Households with Subsidy, 2016</td>
<td>Number of subsidized units, including voucher-based, project-based, and LIHTC, as a share of all households, 2016.</td>
<td>HHA, City of Houston</td>
</tr>
</tbody>
</table>

## Reinvestment Fund Validation Routes

- Validation: Jan 17-19, 2017
- Validation Route: Nov 7-10, 2016
- Validation Route: Oct 4-6, 2016

2016 MVA Study Area
Available Indicators of Residential Market Strength

**Property Values** provide important information about how the private market values the properties and amenities in different areas of the city.

<table>
<thead>
<tr>
<th>Property Value and Investment</th>
<th>Blight, Distress, and Vacancy</th>
<th>Housing Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Residential Sales</td>
<td>Homes with Maintenance Violations</td>
<td>Owner Occupied Homes</td>
</tr>
<tr>
<td>Median Residential Sales Prices</td>
<td>Foreclosure Filings</td>
<td>Units of Subsidized Housing</td>
</tr>
<tr>
<td>Variance of Sales Prices</td>
<td>Homes with Water Service Shut Off</td>
<td>Commercial and Industrial Land</td>
</tr>
<tr>
<td>Single Family and Multifamily New Construction</td>
<td>Dangerous Buildings</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demolished Homes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Homes with Signs of Vacancy</td>
<td></td>
</tr>
</tbody>
</table>

**Number of Sales, 2014-2015**

![Map of Number of Sales, 2014-2015]

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 REGISTERED TRADEMARK

"DYNAMICY" is a registered trademark of the U.S. Department of the Treasury. The "DYNAMICY" mark and logo are used under a license from the U.S. Department of the Treasury, Eddie T. Bolden, Director, under the Joint Venture Agreement between the Community Reinvestment Fund, Inc. and the U.S. Department of the Treasury, Office of the Comptroller of the Currency, Office of Thrift Supervision.
New Construction Permits as % of Housing Units, 2013-15

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Shade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1%</td>
<td>Light yellow</td>
</tr>
<tr>
<td>1.1% - 2.5%</td>
<td>Yellow</td>
</tr>
<tr>
<td>2.6% - 5%</td>
<td>Orange</td>
</tr>
<tr>
<td>5.1% - 10%</td>
<td>Brown</td>
</tr>
<tr>
<td>10.1% - 15%</td>
<td>Dark brown</td>
</tr>
<tr>
<td>15.1% - 25%</td>
<td>Dark orange</td>
</tr>
<tr>
<td>Greater than 25%</td>
<td>Dark red</td>
</tr>
</tbody>
</table>
Available Indicators of Residential Market Strength

**Blight, Distress, and Vacancy** measures describe the level of distress in different areas of the city, indicating areas that may require additional investment or support.

- **Property Value and Investment**
  - Number of Residential Sales
  - Median Residential Sales Prices
  - Variance of Sales Prices
  - Single Family and Multifamily New Construction

- **Blight, Distress, and Vacancy**
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  - Homes with Signs of Vacancy

- **Housing Characteristics**
  - Owner Occupied Homes
  - Units of Subsidized Housing
  - Commercial and Industrial Land

**Violations as % of Housing Units, 2014-2016Q2**
Foreclosures Filings as % of Sales, 2014Q2-2016Q2

Vacant Housing Units as % of All Housing Units, 2016
Available Indicators of Residential Market Strength

Housing Characteristics describe the housing stock and tenure of residents living in different areas of the city.

Property Value and Investment
- Number of Residential Sales
- Median Residential Sales Prices
- Variance of Sales Prices
- Single Family and Multifamily New Construction

Blight, Distress, and Vacancy
- Homes with Maintenance Violations
- Foreclosure Filings
- Homes with Water Service Shut Off
- Dangerous Buildings
- Demolished Homes
- Homes with Signs of Vacancy

Housing Characteristics
- Owner Occupied Homes
- Units of Subsidized Housing
- Commercial and Industrial Land

Owner-Occupancy as % of Occupied Households, 2015
Subsidized Rental as % of Renter-Occupied Households, 2016

Commercial/Industrial Area as % of Total Area, 2016
II. Market Value Analysis Results

Characterizing the strength of residential real estate markets

- Interpreting the MVA
- Market Characteristics
- Maps
Interpreting Market Value Analysis Results

The Houston Market Value Analysis (MVA) uses a statistical cluster analysis to identify Census block groups - a geographic area of approximately six square blocks - with similar real estate market characteristics.

Each “cluster” describes a distinct type of real estate market in Houston. Understanding the challenges and opportunities unique to each market type provides a starting point to consider necessary investments and interventions to support local communities.

The MVA results are vetted with the Stakeholder Committee and through a visual examination of nearly every neighborhood in the city to ensure assigned market types accurately reflect the range of real estate markets in the city.

Summary of Market Characteristics

Market Indicators Used in the MVA
- Median Sales Price
- Variance of Sales Price
- New Construction Permits
- Foreclosure Filings
- Maintenance Violations
- Residential Vacancy
- Owner Occupancy
- Commercial/Industrial Land Use
- Subsidized Households

<table>
<thead>
<tr>
<th>Average Characteristics for Houston Market Types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MVA Cluster</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>G</td>
</tr>
<tr>
<td>H</td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
<td>Not Classified</td>
</tr>
<tr>
<td>Study Area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population &amp; Housing Distribution by Market Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MVA Cluster</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Block Groups</strong></td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>G</td>
</tr>
<tr>
<td>H</td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
<td><strong>Split BG</strong></td>
</tr>
<tr>
<td><strong>Not Classified</strong></td>
</tr>
<tr>
<td><strong>Study Area</strong></td>
</tr>
</tbody>
</table>
Market Overview: Purple & Blue Markets

A, B and C markets represent the strongest real estate markets in Houston, with home sale prices and new construction activity well above city averages. 3% of the city’s population reside in A markets, 8% live in B markets, and 9% are in C markets.

All three markets have very strong sales figures, and we see a linear pattern of increasing median sales prices progressing from above citywide average values in C markets to the highest values in A markets. B markets are distinguished by lower levels of owner occupancy (34%) compared with A and C markets (82%). The permitting activity in B markets (13%) is also elevated well above that of A markets (7%) and C markets (3%).

<table>
<thead>
<tr>
<th>MVA Cluster</th>
<th>Number of Block Groups</th>
<th>Median Sales Price, '14-'15</th>
<th>Variance Sales Price, '14-'15</th>
<th>Foreclosures as a % of Sales, '14-'16</th>
<th>Vacancy as a % of Housing Units, '14-'16</th>
<th>Permits as % of Housing Units, '14-'15</th>
<th>Pct Owner Occupied, 2015</th>
<th>Publicly Subsidized Rental, 2016</th>
<th>Pct Industrial/Commercial Area, 2016</th>
<th>Violations as a % of Housing Units, '14-'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>51</td>
<td>$715,627</td>
<td>0.57</td>
<td>0.22%</td>
<td>2.88%</td>
<td>7.09%</td>
<td>81.60%</td>
<td>0.83%</td>
<td>9.56%</td>
<td>0.01%</td>
</tr>
<tr>
<td>B</td>
<td>111</td>
<td>$412,707</td>
<td>0.52</td>
<td>0.44%</td>
<td>2.36%</td>
<td>13.38%</td>
<td>33.70%</td>
<td>0.78%</td>
<td>26.97%</td>
<td>0.07%</td>
</tr>
<tr>
<td>C</td>
<td>132</td>
<td>$337,200</td>
<td>0.48</td>
<td>0.65%</td>
<td>2.56%</td>
<td>3.43%</td>
<td>81.93%</td>
<td>0.68%</td>
<td>11.35%</td>
<td>0.07%</td>
</tr>
</tbody>
</table>

Market Overview: Yellow Markets

D and E markets represent middle markets in Houston’s real estate landscape – these are relatively stable neighborhoods with more moderate home sale prices. 11% of the city’s 1,332 population reside in D markets, and 14% live in E markets, collectively representing about one quarter of the city’s population.

Yellow markets are distinguished from each other on several MVA variables. In D markets, sale prices, permitting activity, and commercial/industrial land use are typically higher than in E markets, while E markets have much high concentrations of owner occupants. D markets are generally located within the I-610 loop or west of downtown along 1-10. E markets are further afield, in southern and northwestern parts of Houston.

<table>
<thead>
<tr>
<th>MVA Cluster</th>
<th>Number of Block Groups</th>
<th>Median Sales Price, '14-'15</th>
<th>Variance Sales Price, '14-'15</th>
<th>Foreclosures as a % of Sales, '14-'16</th>
<th>Vacancy as a % of Housing Units, '14-'16</th>
<th>Permits as % of Housing Units, '14-'15</th>
<th>Pct Owner Occupied, 2015</th>
<th>Publicly Subsidized Rental, 2016</th>
<th>Pct Industrial/Commercial Area, 2016</th>
<th>Violations as a % of Housing Units, '14-'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>130</td>
<td>$218,961</td>
<td>0.46</td>
<td>3.77%</td>
<td>2.20%</td>
<td>8.13%</td>
<td>31.52%</td>
<td>2.61%</td>
<td>41.69%</td>
<td>0.63%</td>
</tr>
<tr>
<td>E</td>
<td>178</td>
<td>$149,390</td>
<td>0.44</td>
<td>3.11%</td>
<td>1.40%</td>
<td>0.54%</td>
<td>72.09%</td>
<td>5.16%</td>
<td>13.45%</td>
<td>1.29%</td>
</tr>
</tbody>
</table>
**Market Overview: Orange Markets**

F and G markets in Houston lie between middle markets and distressed markets, these areas may be stable while also at elevated risk for market decline. 14% of the city’s population live in F markets, and 19% live in G markets, together representing one-third of the city’s population.

Orange markets generally have sales prices near $100k, with elevated foreclosure rates relative to purple, blue or yellow markets. F and G markets differ substantially in terms of owner occupancy. F markets are predominantly rental (only 24% owner occupied), whereas G markets are nearly two-thirds (65%) owner occupied. G markets have elevated rates of rental subsidy (7%) and housing violations (3%) as well, second only to H markets on both measures.

**Market Overview: Red Markets**

H and I markets are the most distressed real estate markets in Houston. 10% of the city’s population reside in H markets, and 3% live in I markets. Together these markets make up 13% of the city’s population.

Red markets are characterized by low median sales values, often below $55k. Within these areas, H and I markets differ in owner occupancy. In H markets, about half (53%) of residents are owner occupants, while only 16% of units in I markets are owner occupied, the lowest level across all markets. In H markets, rental subsidies (7.7%), foreclosures (75%), residential vacancy (8.3%) and violations (6.1%) are the highest across all nine market types. Elevated levels of foreclosure (27%) are also found in I markets.

### Market Overview: Orange Markets

<table>
<thead>
<tr>
<th>MVA Cluster</th>
<th>Number of Block Groups</th>
<th>Median Sales Price, &quot;14-'15</th>
<th>Variance Sales Price, &quot;14-'15</th>
<th>Foreclosures as a % of Sales, &quot;14-'16</th>
<th>Vacancy as a % of Housing Units, &quot;14-'16</th>
<th>Permits as % of Housing Units, &quot;14-'15</th>
<th>Pct Owner Occupied, 2015</th>
<th>Publicly Subsidized Rental, 2016</th>
<th>Pct Industrial/Commercial Area, 2016</th>
<th>Violations as a % of Housing Units, &quot;14-'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>165</td>
<td>$ 104,433</td>
<td>0.48</td>
<td>10.83%</td>
<td>1.46%</td>
<td>1.36%</td>
<td>24.39%</td>
<td>3.65%</td>
<td>35.44%</td>
<td>0.70%</td>
</tr>
<tr>
<td>G</td>
<td>229</td>
<td>$ 86,096</td>
<td>0.46</td>
<td>12.77%</td>
<td>2.47%</td>
<td>0.94%</td>
<td>65.34%</td>
<td>7.47%</td>
<td>19.06%</td>
<td>2.98%</td>
</tr>
</tbody>
</table>

### Market Overview: Red Markets

<table>
<thead>
<tr>
<th>MVA Cluster</th>
<th>Number of Block Groups</th>
<th>Median Sales Price, &quot;14-'15</th>
<th>Variance Sales Price, &quot;14-'15</th>
<th>Foreclosures as a % of Sales, &quot;14-'16</th>
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<th>Publicly Subsidized Rental, 2016</th>
<th>Pct Industrial/Commercial Area, 2016</th>
<th>Violations as a % of Housing Units, &quot;14-'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>169</td>
<td>$ 53,846</td>
<td>0.61</td>
<td>75.15%</td>
<td>8.26%</td>
<td>0.80%</td>
<td>52.70%</td>
<td>7.75%</td>
<td>19.75%</td>
<td>6.06%</td>
</tr>
<tr>
<td>I</td>
<td>36</td>
<td>$ 33,208</td>
<td>0.53</td>
<td>27.02%</td>
<td>1.54%</td>
<td>0.38%</td>
<td>16.26%</td>
<td>3.67%</td>
<td>34.83%</td>
<td>0.94%</td>
</tr>
</tbody>
</table>
III. Supplemental Analyses

Contextualizing changes in housing market characteristics since the 2013 Houston MVA

- Notable Market Changes
- Sales Price and Foreclosure Change
- Potential Areas for Market Growth
Comparing results from the 2013 and 2016 Houston Market Value Analyses can provide important context for understanding changes in neighborhood development, housing, and economic development. Below are some examples of additional analyses using the Market Value Analysis in combination with historical MVA data.

**Geographic Level Analyses**

**Potential Growth Markets**
Areas above the city average in both sales variance and new construction permit activity

**Notable Market Changes**
Markets that have shifted two or more categories between the 2013 and 2016 MVAs

**Median Sales Price Change**
Displaying both absolute difference and percent changes in inflation-adjusted prices

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**2016 - Above Average Permit Activity & Sales Variance**
2016 Market Value Analysis
With Notable Market Changes
Since 2013 MVA

Notable market changes include block groups where the MVA market has shifted two or more market categories between the 2013 and 2016 analyses. Market lags do not necessarily indicate an absolute decline in market strength. For instance, a sharp uptick in median sales prices amongst many markets in Houston between 2013 and 2016 meant that an area with flat or moderate sales price growth may now be classified differently. Changes in the trends for other MVA variables, such as a citywide decline in foreclosures and a citywide increase in permitting also factor into potential market lags and gains.

2016 Houston MVA

Notable Market Gain
Notable Market Lag
Insufficient Market Activity (< 5 Sales)

<table>
<thead>
<tr>
<th>Market Cluster</th>
<th>Median Sales Price 2013-16</th>
<th>Number of BGs</th>
<th>MVA Cluster</th>
<th>Median Sales Price '13-’14</th>
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</table>

Growth in Sales Prices by MVA Market Type 2013-2016

Number of BGs
Notable Market Gain 59
Notable Market Lag 76
Insufficient Market Activity (< 5 Sales)
2016 Market Value Analysis
With Notable Market Changes
Since 2013 MVA

Notable market changes include block groups where the MVA market has shifted two or more market categories between the 2013 and 2016 analyses. Market lags do not necessarily indicate a decline in sales price. For instance, a sharp uptick in median sales prices amongst many markets in Houston between 2013 and 2016 meant that an area with flat or moderate sales price growth may now be classified differently. Changes in the trends for other MVA variables, such as a citywide decline in foreclosures and a citywide increase in permitting also factor into potential market lags and gains.

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IV. Next Steps and Discussion

I. Market Characteristics
II. Market Value Analysis Results
III. Supplemental Analyses
IV. Next Steps and Looking Ahead
Additional publications on developing a data-driven approach to neighborhood improvement using the Market Value Analysis

**Making Sense of Markets: Using Data to Guide Reinvestment Strategies**
Chapter on the MVA in *What Counts: Harnessing Data for America’s Communities*, outlining opportunities and challenges for the strategic use of data to reduce poverty, improve health, expand access to quality education, and build stronger communities.

**Maximizing the Impact of Federal NSP Investments through the Strategic Use of Local Market Data**
Chapter by Reinvestment Fund’s Ira Goldstein for the book *REO & Vacant Properties: Strategies for Neighborhood Stabilization*, discussing the MVA as a means to strategize the targeting of resources under the federal Neighborhood Stabilization Program.

**A Data-Based Approach to Understanding Urban Housing Markets**
Chapter on the MVA by Reinvestment Fund’s Ira Goldstein in *Putting Data to Work: Data-Driven Approaches to Strengthening Neighborhoods*, by the Board of Governors of the Federal Reserve System. The chapter highlights how the MVA approach can inform citywide strategies and decision-making.

**On the Edge: America’s Middle Neighborhoods**
*Book edited by Paul C. Brophy* on ways that policymakers and community development professionals can support “middle neighborhoods,” communities on the edge of decline or improvement.

**Market Value Analysis: Understanding Where and How to Invest Limited Resources**
*Article by Ira Goldstein and Sean Closkey* on using the Market Value Analysis (MVA) to prioritize investments for *Bridges*, the quarterly publication of the St. Louis Federal Reserve Bank.

Reinvestment Fund’s work on the Houston MVA was supported by the City of Houston, Housing and Community Development Department. Support was also provided by the JPMorgan Chase Foundation.