Memorandum

DATE May 30, 2017

The Honorable Members of the Economic Development Committee:
Rickey D. Callahan (Chair), Casey Thomas, II (Vice Chair), Adam Medrano,
Lee M. Kleinman, Carolyn King Arnold, B. Adam McGough

SUBJECT Market Value Analysis

On Monday, June 5, 2017, you will be briefed on the Market Value Analysis. The briefing materials are attached for your review.

Please feel free to contact me if you have any questions or concerns 214-671-5257.

Raquel Favela
Chief of Economic Development & Neighborhood Services

c: The Honorable Mayor and Members of the City Council
   T.C. Broadnax, City Manager
   Larry Casto, City Attorney
   Craig D. Kinton, City Auditor
   Rosa A. Rios, City Secretary
   Daniel F. Solis, Administrative Judge
   Kimberly Bizor Tolbert, Chief of Staff to the City Manager
   Majed A. Al-Ghafray, Assistant City Manager

   Jo M. (Jody) Puckett, P.E., Assistant City Manager (Interim)
   Jill A. Jordan, P.E., Assistant City Manager
   Joey Zapata, Assistant City Manager
   M. Elizabeth Reich, Chief Financial Officer
   Nadia Chandler Hardy, Chief of Community Services
   Theresa O’Donnell, Chief of Resilience
   Directors and Assistant Directors

“Dallas, the City that Works: Diverse, Vibrant and Progressive”
Market Value Analysis: Analyzing Real Estate Markets to Support Impactful Data-Based Community Investments

June, 2017
Our mission is to build wealth and opportunity for low-wealth people and places through the promotion of socially and environmentally responsible development.

Since 1985, Reinvestment Fund has made $1.9 billion in cumulative investments and loans.

We are supported by over 850 investors that include individuals, foundations, religious institutions, financial institutions, civic organizations and government.

Top AERIS rating of AAA+1 and AA S&P rating.
Market Value Analysis
The Market Value Analysis (MVA) is a tool designed to assist the private market and government officials to identify and comprehend the various elements of local real estate markets. It is based fundamentally on local administrative data sources.

By using an MVA, public sector officials and private market actors can more precisely craft intervention strategies in weak markets and support sustainable growth in stronger market segments.
Who is using the MVA?

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

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

- Component of a local land banking strategy (Phila., NOLA)
- Guide capital budget (Detroit)
- Focus code enforcement (Phila., Baltimore, Indianapolis, NOLA)
- Inform Assessment of Fair Housing (Phila.)
- Benchmark quality of life measures (Phila.)
- Target statewide Strong Neighborhoods Revolving Loan Fund (DE/DSHA)
- Scoring LIHTC QAP (DE/DSHA)
- Develop CDGB 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)
- 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)
- Transportation planning (St. Louis)
Preparing an MVA
Preparing an MVA

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 visit the city to understand the data.

**Geographic Scale Matters.**
Census tract and MSA geographies are too large to accurately reflect real markets.

**One Size Does Not Fit All.**
Measurement scales and the appropriate number of clusters are different in every city.

**Integrate Local Knowledge.**
All Models are tested with local experts to incorporate qualitative feedback from each geography.
Role:  
Work with the Reinvestment Fund team to understand the methods, view interim results and affirm final results. Support a data-driven approach to resource allocation and planning once the study is complete.

Responsibilities include assisting Reinvestment Fund & County to:

- Identify, select and secure data
- Assist Reinvestment Fund to understand nuances of local market
- Contribute to validation of data and models
- Advise Reinvestment Fund of projects that are in the development/predevelopment stages
- Share experiences working with data sets: understand limitations/offer alternative sources/ways to control for problems
- Recommend strategic investment action by the public, institutional and private entities once the MVA is complete.
Our normative assumptions when analyzing markets:

- Public subsidy is scarce and it alone cannot create a market;
- Public policy and subsidy must be used to leverage, or clear the path, for private investment;
- In distressed markets, invest near strong assets (e.g., major institution of place, transportation hub, environmental amenities) – “Build from Strength”;
- All parts of a city are customers of the services and resources that it has to offer;
- Government action is tailored to the market conditions;
- Decisions to invest and/or deploy governmental programs must be based on objectively gathered data and sound quantitative and qualitative analysis.
## Final Philadelphia MVA Variables

<table>
<thead>
<tr>
<th>Category</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td>• Median Sales Price 2013-15q1 (OPA)</td>
</tr>
<tr>
<td></td>
<td>• Sales Price Variance 2013-15q1 (OPA)</td>
</tr>
<tr>
<td></td>
<td>• Foreclosure filings as a Percent of Sales 2013-2015q1 (Philadelphia Courts, OPA)</td>
</tr>
<tr>
<td><strong>Stress</strong></td>
<td>• Percent of Residential Properties L&amp;I Cited as Vacant 2011-2015 (L&amp;I, OPA)</td>
</tr>
<tr>
<td><strong>Land Use</strong></td>
<td>• Density of Housing Units in Residential Land Area (ACS, OPA)</td>
</tr>
<tr>
<td></td>
<td>• Percent of Single Family Properties that are Condominiums (OPA)</td>
</tr>
<tr>
<td><strong>Occupancy</strong></td>
<td>• Percent of Owner Occupied Housing Units (ACS)</td>
</tr>
<tr>
<td><strong>Subsidy</strong></td>
<td>• HUD MF Rental Units and PHA Owned Residential Properties as a Percentage of Rental Units, (HUD, OPA, ACS)</td>
</tr>
<tr>
<td><strong>Investment</strong></td>
<td>• Percent of Residential Properties with Permits 2013-2015 (L&amp;I, OPA)</td>
</tr>
<tr>
<td></td>
<td>• Percent of Residential Properties Built Since 2008 (OPA)</td>
</tr>
</tbody>
</table>
Median Sale Price 2013 – 2015q2

Median Sales Price 2013-15Q2
Condo Altered

- $20,000 or Less
- $20,001 - $40,000
- $40,001 - $80,000
- $80,001 - $120,000
- $120,001 - $180,000
- $180,001 - $250,000
- $250,001 - $325,000
- $325,001 - $450,000
- Over $450,000
- Fewer than 5 sales
- Non Residential >=150,000 sqft
- Park/Open Space; Culture/Rec
- Water
Foreclosure Filings as a Percent of Sales 2013 – 2015q2
Vacant Residential Properties Cited 2010-14

Percent Vacant Residential Properties
L&I 2010-2014

- 0% - 1%
- 1.1% - 3%
- 3.1% - 6%
- 6.1% - 10%
- 10.1% - 15%
- Over 15%
- Non Residential >=150,000 sqft
- Park/Open Space; Culture/Rec
- Water

REINVESTMENT FUND
2015 Market Value Analysis

Market Value Analysis 2015
DRAFT 9v1 No Splits

- A 42 $458k
- B 99 $330k
- C 165 $191k
- D 97 $148k
- E 150 $118k
- F 164 $76k
- G 126 $50k
- H 168 $29k
- I 160 $17k
- J 111 $10k
- Insufficient Data

- Non Residential >=150,000 sqft
- Park/Open Space; Culture/Rec
- Water
## Market Value Analysis – Average Market Characteristics

<table>
<thead>
<tr>
<th>Market</th>
<th>Number of Block Groups</th>
<th>Median Sales Price</th>
<th>Median Sales Price (Condo Altered)</th>
<th>Sales Price Variance</th>
<th>Percent Condo</th>
<th>Percent New Const (08-15)</th>
<th>Percent of Properties with Permits</th>
<th>Percent Owner Occupied</th>
<th>Percent Vacancy</th>
<th>Housing Units per Acre</th>
<th>Forclosures as Percent of Sales</th>
<th>Subsidized Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42</td>
<td>$458,429</td>
<td>$595,024</td>
<td>0.67</td>
<td>67.1%</td>
<td>2.1%</td>
<td>33.9%</td>
<td>35.6%</td>
<td>3.4%</td>
<td>272</td>
<td>6.8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>B</td>
<td>99</td>
<td>$330,164</td>
<td>$344,922</td>
<td>0.48</td>
<td>13.4%</td>
<td>5.1%</td>
<td>8.8%</td>
<td>47.7%</td>
<td>2.0%</td>
<td>50</td>
<td>10.0%</td>
<td>4.6%</td>
</tr>
<tr>
<td>C</td>
<td>165</td>
<td>$191,327</td>
<td>$194,649</td>
<td>0.39</td>
<td>4.6%</td>
<td>0.8%</td>
<td>4.9%</td>
<td>75.1%</td>
<td>1.7%</td>
<td>26</td>
<td>18.7%</td>
<td>0.1%</td>
</tr>
<tr>
<td>D</td>
<td>97</td>
<td>$148,248</td>
<td>$150,917</td>
<td>0.47</td>
<td>10.9%</td>
<td>1.2%</td>
<td>6.6%</td>
<td>33.8%</td>
<td>3.3%</td>
<td>47</td>
<td>28.4%</td>
<td>5.2%</td>
</tr>
<tr>
<td>E</td>
<td>150</td>
<td>$117,613</td>
<td>$117,713</td>
<td>0.42</td>
<td>0.9%</td>
<td>0.3%</td>
<td>4.4%</td>
<td>71.6%</td>
<td>1.9%</td>
<td>29</td>
<td>35.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>F</td>
<td>164</td>
<td>$75,952</td>
<td>$76,285</td>
<td>0.57</td>
<td>3.4%</td>
<td>0.2%</td>
<td>4.4%</td>
<td>60.3%</td>
<td>3.5%</td>
<td>36</td>
<td>39.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>G</td>
<td>126</td>
<td>$49,674</td>
<td>$49,708</td>
<td>0.68</td>
<td>1.4%</td>
<td>0.2%</td>
<td>4.3%</td>
<td>62.1%</td>
<td>4.5%</td>
<td>35</td>
<td>45.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>H</td>
<td>168</td>
<td>$28,794</td>
<td>$28,844</td>
<td>0.84</td>
<td>1.4%</td>
<td>0.4%</td>
<td>4.4%</td>
<td>51.6%</td>
<td>6.9%</td>
<td>38</td>
<td>38.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>I</td>
<td>160</td>
<td>$17,227</td>
<td>$17,233</td>
<td>0.90</td>
<td>1.1%</td>
<td>0.3%</td>
<td>4.1%</td>
<td>49.9%</td>
<td>9.6%</td>
<td>39</td>
<td>30.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>J</td>
<td>111</td>
<td>$9,956</td>
<td>$9,956</td>
<td>0.99</td>
<td>1.2%</td>
<td>0.2%</td>
<td>3.4%</td>
<td>43.6%</td>
<td>11.9%</td>
<td>42</td>
<td>19.0%</td>
<td>14.1%</td>
</tr>
</tbody>
</table>
Examples of How Cities with MVAs Apply the Analysis to Related Community Issues
Measuring Change: 2011 vs 2015 MVAs
City of Akron and Land Bank Owned Properties
Equitable Development: MVA (2015) with Extreme DRR Changes
80% of median family income in Kansas City was $47,337 in 2014. Our analysis assumes families earning 80% MFI can afford homes worth up to $142,010 (three times $47,337).

261 of the city’s 454 block groups had median sales prices below $142,010. Of these block groups, 57% were in E, F, and G markets.

### Share of Affordable Block Groups by MVA Category

<table>
<thead>
<tr>
<th>Total Block Groups</th>
<th>Affordable at 80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>B</td>
<td>28</td>
</tr>
<tr>
<td>C</td>
<td>64</td>
</tr>
<tr>
<td>D</td>
<td>69</td>
</tr>
<tr>
<td>E</td>
<td>52</td>
</tr>
<tr>
<td>F</td>
<td>45</td>
</tr>
<tr>
<td>G</td>
<td>53</td>
</tr>
<tr>
<td>H</td>
<td>35</td>
</tr>
<tr>
<td>I</td>
<td>28</td>
</tr>
<tr>
<td>NULL</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>441</strong></td>
</tr>
</tbody>
</table>
120% of median family income in Kansas City was $71,005 in 2014. Our analysis assumes families earning 120% MFI can afford homes worth up to $213,015 (three times $71,005).

350 of the city’s 454 block groups had median sales prices below $213,015. Of these block groups, 63% were in C, D, E, or F markets.

**Share of Affordable Block Groups by MVA Category**

<table>
<thead>
<tr>
<th>Total Block Groups</th>
<th>Affordable at 120%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>34</td>
</tr>
<tr>
<td>B</td>
<td>28</td>
</tr>
<tr>
<td>C</td>
<td>64</td>
</tr>
<tr>
<td>D</td>
<td>69</td>
</tr>
<tr>
<td>E</td>
<td>52</td>
</tr>
<tr>
<td>F</td>
<td>45</td>
</tr>
<tr>
<td>G</td>
<td>53</td>
</tr>
<tr>
<td>H</td>
<td>35</td>
</tr>
<tr>
<td>I</td>
<td>28</td>
</tr>
<tr>
<td>NULL</td>
<td>33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>441</strong></td>
</tr>
</tbody>
</table>
Monitoring Investors (Jacksonville): Home Sales by Party Type

Purchases by Party Type
2013-2014
- Investor Purchases
- Occupant Purchases
Non Residential >50,000 sf
<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Rental Units</th>
<th>Eviction (14-15)</th>
<th>HH w/ Multiple Evictions</th>
<th>Evic as a % of Rental Units</th>
<th>Evictions (10-11)</th>
<th>Numeric Change (10-11 to 14-15)</th>
<th>% Change (10-11 to 14-15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strong Markets</td>
<td>110,320</td>
<td>10,131</td>
<td>935</td>
<td>5%</td>
<td>9835</td>
<td>296</td>
<td>3%</td>
</tr>
<tr>
<td>1. Low Black Pop</td>
<td>77,342</td>
<td>5,796</td>
<td>476</td>
<td>4%</td>
<td>5322</td>
<td>474</td>
<td>9%</td>
</tr>
<tr>
<td>2. Mid Black Pop</td>
<td>31,585</td>
<td>4,112</td>
<td>445</td>
<td>7%</td>
<td>4328</td>
<td>-216</td>
<td>-5%</td>
</tr>
<tr>
<td>3. High Black Pop</td>
<td>1,393</td>
<td>223</td>
<td>14</td>
<td>8%</td>
<td>185</td>
<td>38</td>
<td>21%</td>
</tr>
<tr>
<td>2. Middle Markets</td>
<td>78,474</td>
<td>14,377</td>
<td>1,237</td>
<td>9%</td>
<td>14660</td>
<td>-283</td>
<td>-2%</td>
</tr>
<tr>
<td>1. Low Black Pop</td>
<td>19,445</td>
<td>2,412</td>
<td>99</td>
<td>6%</td>
<td>2370</td>
<td>42</td>
<td>2%</td>
</tr>
<tr>
<td>2. Mid Black Pop</td>
<td>36,292</td>
<td>6,863</td>
<td>667</td>
<td>9%</td>
<td>7118</td>
<td>-255</td>
<td>-4%</td>
</tr>
<tr>
<td>3. High Black Pop</td>
<td>22,737</td>
<td>5,102</td>
<td>471</td>
<td>11%</td>
<td>5172</td>
<td>-70</td>
<td>-1%</td>
</tr>
<tr>
<td>3. Distressed Markets</td>
<td>77,353</td>
<td>15,526</td>
<td>1,250</td>
<td>10%</td>
<td>15436</td>
<td>90</td>
<td>1%</td>
</tr>
<tr>
<td>1. Low Black Pop</td>
<td>5,440</td>
<td>576</td>
<td>29</td>
<td>5%</td>
<td>567</td>
<td>9</td>
<td>2%</td>
</tr>
<tr>
<td>2. Mid Black Pop</td>
<td>26,119</td>
<td>5,212</td>
<td>384</td>
<td>10%</td>
<td>5323</td>
<td>-111</td>
<td>-2%</td>
</tr>
<tr>
<td>3. High Black Pop</td>
<td>45,794</td>
<td>9,738</td>
<td>837</td>
<td>11%</td>
<td>9546</td>
<td>192</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: City of Philadelphia Assessment of Fair Housing
Crime Index with MVA Markets (St. Louis, MO)

Indicators include:
- Personal Crime per 1,000 people (2011-2013)
- Property Crime per 1,000 people (2011-2013)
- % Vacant Households (Census 2010)
- % Vacant Land (2013)

Note: Both crime indicators (personal and property crime) are normalized by the resident population. Users should be aware that results in downtown are inflated relative to the rest of the city, as the daytime downtown population swells relative to its resident population during working hours.
Across Kansas City average life expectancies ranged from 71 to 82 years. Many of the areas with the lowest life expectancies in the city are concentrated in disadvantaged communities and distressed markets.

84% of the block groups with an average life expectancy over 79.5 years were in Blue and Purple markets, while 86% of block groups with life expectancies of 70.9 to 72.7 years were in Yellow markets.

### Average Life Expectancy by MVA Category

<table>
<thead>
<tr>
<th></th>
<th>Shortest</th>
<th>73.8 to 76.1</th>
<th>77.0 to 79.4</th>
<th>Longest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70.9 to 72.7 years</td>
<td>73.8 to 76.1 years</td>
<td>77.0 to 79.4 years</td>
<td>Over 79.5 years</td>
</tr>
<tr>
<td>A</td>
<td>0%</td>
<td>3%</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>B</td>
<td>2%</td>
<td>1%</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>C</td>
<td>4%</td>
<td>25%</td>
<td>13%</td>
<td>22%</td>
</tr>
<tr>
<td>D</td>
<td>2%</td>
<td>6%</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>E</td>
<td>2%</td>
<td>19%</td>
<td>26%</td>
<td>6%</td>
</tr>
<tr>
<td>F</td>
<td>6%</td>
<td>17%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>G</td>
<td>31%</td>
<td>18%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>H</td>
<td>28%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I</td>
<td>25%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Indicators include:
- Distance to FQHC (2013 HRSA)
- % Population with Insurance (ACS 2012)
- % Population with Medicaid (ACS 2012)
- % Households with SSI (ACS 2012)
Housing & Jobs (Jacksonville): Job Centers (Jobs per mi²)

MVA Cluster

- A
- B
- C
- D
- E
- F
- G
- H
- I
- Non Residential >50,000 sf
- Split Block Groups
- Fewer than 5 Sales

Jobs per Square Mile

- 1.001 - 2,000
- 2.001 - 3,000
- 3.001 - 4,000
- 4.001 - 5,000
- 5.001 - 6,000
- 6.001 - 8,000
- 8,001 - 10,000
- 10,001 - 15,000
- 15,001 - 80,000
## Commercial Corridors (Philadelphia): Ogontz Avenue*

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firms</strong></td>
<td>173</td>
<td>157</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>2,143</td>
<td>2,010</td>
</tr>
</tbody>
</table>

### Firms by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>2008</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods producing</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>77</td>
<td>61</td>
</tr>
<tr>
<td>Health Services</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>All Other Services</td>
<td>81</td>
<td>81</td>
</tr>
</tbody>
</table>

### Firms by Emp. Size

<table>
<thead>
<tr>
<th>Employment Size</th>
<th>2008</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 employees</td>
<td>85</td>
<td>72</td>
</tr>
<tr>
<td>5 – 20</td>
<td>73</td>
<td>75</td>
</tr>
<tr>
<td>21 – 50</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>51 – 100</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Greater than 100</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

* Excluded firms with less than 3 employees
Commercial Corridors (Philadelphia): Business Turnover on Ogontz Avenue
MVA Markets with Low Fresh Food Access
Ira Goldstein
President, Policy Solutions

Contact:
ira.Goldstein@reinvestment.com
www.reinvestment.com