Richmond MVA Overlay Analysis

CURA-MVA Committee

VCU L. Douglas Wilder School of Government and Public Affairs
Center for Urban and Regional Analysis
The Center for Urban and Regional Analysis (CURA) and the Wilder School team are grateful to the following individuals who gave us the opportunity to conduct additional analysis on the Richmond MVA and encouraged us to look deeper by overlaying community’s health, economic, and social indicators.

• Mark Constantine, Richmond Memorial Health Foundation (RMHF)
• Danny Avula, Richmond City Health District (RHCD)
• Sheryl Garland, VCU Health Systems
• T K Somanath, Richmond Redevelopment and Housing Authority (RRHA)

We are also grateful to Ira Goldstein and Al Parker of The Reinvestment Fund for the generous collaboration on this study. Learning about MVA first hand was a true privilege.

Finally, we would also like to thank Saphira Baker of Communitas Consulting who brought us all together and made this collaboration possible.
The objective of adding overlays to the MVA study is to understand the relation between real estate market types and the demographic and socio-economic characteristics of the study area.

While the Market Value Analysis gives a cross-sectional snapshot of strength or distress, overlays can add dynamic information by comparing differences between two time periods.

Following are the six most important community indicators that have been considered for overlay analysis.

- Household income
- Racial characteristics
- Employment
- Accessibility
- Housing
- Health
Change in household income represents growth or decline of neighborhoods.

Average income change in the study area between 1999 and 2015 is 26.2 percent.*

Middle market categories (C,D,E, and F) experienced the largest growth in income.

Stronger markets (A and B) on the west side of the study area show modest income growth (20% to 30%).

Most block groups with moderately strong markets (C,D, and E) show income growth of 30% to 60%.

Weaker markets (G,H, and I) experienced changes well below the inflation rate. Some block groups show negative trends.

* Note: The Consumer Price Index inflation factor for the period from 1999 to 2015 is 41%
Household Income Change 1999-2015

Household Income Change: 1999-2015, Census Tract Study Area Average = 26.2%

-35.6% - 0%
30.1% - 60%
0.1% - 20%
20.1% - 30%
More than 60%
Household Income Change: 1999-2015, Census Tract Study Area Average = 26.2%

- -35.6% - 0%
- 0.1% - 20%
- 20.1% - 30%
- 30.1% - 60%
+ More than 60%
Affluent households in the west of the study area have incomes upwards of $100 K
  - These areas showed modest income growth

Areas south of Chippenham and north of I-64 report household incomes higher than the median of the three localities ($58,500)

Richmond’s Southside and areas east of I-95 have considerably lower household income compared to the rest
  - These areas showed negative income change between 1999 and 2015
• The map overlays household income on MVA market categories
  • Extreme income categories are removed to focus on higher-middle and lower-middle income groups

• Weaker markets (G, H, I) correlate with lower household income and stronger markets (C, D, E) correlate with higher household income
  • There are some notable exceptions (Willow Oaks, Gravel Hill, and Oregon Hill) that are categorized as moderately stronger markets but have lower median household incomes
  • Richmond Raceway is another exception that shows higher incomes and a weaker housing market, but the area does not have enough households to play a significant role in this analysis
Household Income 2015 and Market Types

Household Income 2015, Block Group Study Area Median = $58,500

<table>
<thead>
<tr>
<th></th>
<th>30K - 58.5K</th>
<th>58.5K - 70K</th>
</tr>
</thead>
</table>

Legend:
- A
- B
- C
- D
- E
- F
- G
- H
- I
• The study area is racially and income stratified
• The western study area is mostly white, but some block groups in western Henrico have higher proportions of Asian population
• Areas in the Northside, East End, and Southside have African American majorities
• Areas south of Chippenham parkway, North Chesterfield, and along Hull Street and Midlothian Turnpike have higher proportions of Hispanic population.
• Areas with more than 40% African American population correlate with weaker housing markets (G, H, I)
  • However, some majority African American areas represent stronger markets (C, D, E) in northern Henrico and North Chesterfield.
Block Groups with more than 50% African American population with Household Income in 2015 of more than $50,000
Median = $58,500; R=$41K; H=$62K; C=$72K
Black > 50% AND HH Income > 50K
Race and Income: Hispanics and Asians

• The area’s Asian population is concentrated in western Henrico, and those areas show above median incomes

• Higher Asian populations also correlate with stronger markets (A, B, C) and some moderate ones (D and E)

• The Hispanic population is mostly concentrated in Richmond’s Southside and North Chesterfield where MVA categories show moderate to weak markets (C, D, E, and F)
Race and Income: Asian and Hispanic

Block Groups with higher than median Asian and Hispanic population with Household Income more than $50,000

- Asian >5%
- Hispanic >7%
- HH Inc >50K
Employment Centers

• Downtown Richmond has about 30% of all employment in the study area

• Broadway street - starting at downtown core and extending up to the Short Pump area in western Henrico – is the most prominent economic corridor in the study area

• Part of Jefferson Davis Highway and portions of Midlothian Turnpike such as Chesterfield Town Center show higher employment densities

• Jefferson Davis corridor in Chesterfield county shows higher employment densities compared to the Richmond side.

• East side of the study area has higher densities of manufacturing jobs compared to the rest of the study area. This area also represents one of the most distressed markets (G, H, I)
Average Number of Jobs by Block Groups
(Average ~ 900; Median ~200)

- 1 - 200
- 1501 - 3000
- 201 - 500
- 3001 - 35513
- 501 - 1500
Employment Centers: Retail Jobs
<table>
<thead>
<tr>
<th>MVA Splits</th>
<th>Percent Construction</th>
<th>Percent Manufacturing</th>
<th>Percent Transportation and Warehousing</th>
<th>Percent Retail Trade</th>
<th>Percent Accommodation and Food</th>
<th>Percent Finance and Insurance</th>
<th>Percent Real Estate and Leasing</th>
<th>Percent Health Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>5.3%</td>
<td>0.0%</td>
<td>0.6%</td>
<td>14.1%</td>
<td>10.7%</td>
<td>7.7%</td>
<td>2.2%</td>
<td>16.3%</td>
</tr>
<tr>
<td>B</td>
<td>2.2%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>23.8%</td>
<td>24.7%</td>
<td>1.3%</td>
<td>2.8%</td>
<td>9.4%</td>
</tr>
<tr>
<td>C</td>
<td>2.4%</td>
<td>0.3%</td>
<td>0.4%</td>
<td>10.6%</td>
<td>9.7%</td>
<td>21.5%</td>
<td>1.9%</td>
<td>17.7%</td>
</tr>
<tr>
<td>D</td>
<td>4.9%</td>
<td>1.0%</td>
<td>0.8%</td>
<td>9.7%</td>
<td>8.7%</td>
<td>5.7%</td>
<td>1.2%</td>
<td>14.5%</td>
</tr>
<tr>
<td>E</td>
<td>6.5%</td>
<td>4.6%</td>
<td>0.9%</td>
<td>9.9%</td>
<td>5.7%</td>
<td>6.9%</td>
<td>1.4%</td>
<td>12.2%</td>
</tr>
<tr>
<td>F</td>
<td>4.2%</td>
<td>0.0%</td>
<td>1.6%</td>
<td>6.4%</td>
<td>6.5%</td>
<td>1.1%</td>
<td>0.7%</td>
<td>10.9%</td>
</tr>
<tr>
<td>G</td>
<td>11.6%</td>
<td>1.7%</td>
<td>2.8%</td>
<td>8.2%</td>
<td>8.5%</td>
<td>6.7%</td>
<td>1.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>H</td>
<td>15.5%</td>
<td>17.8%</td>
<td>12.2%</td>
<td>4.2%</td>
<td>4.9%</td>
<td>1.3%</td>
<td>0.9%</td>
<td>5.9%</td>
</tr>
<tr>
<td>I</td>
<td>7.6%</td>
<td>8.1%</td>
<td>6.6%</td>
<td>8.6%</td>
<td>2.6%</td>
<td>0.2%</td>
<td>4.4%</td>
<td>16.3%</td>
</tr>
</tbody>
</table>
Accessibility

• Accessibility has been measured in two ways – proximity to public transit networks and travel time.

• Lower than median travel time correlates with moderate to stronger MVA categories (A, B, C, D, and E).
  
  • However, some block groups near GRTC routes also report lower than average travel time.

  • This is an indication (but not definitive conclusion) that most people in the F, G, H, and I market categories in the eastern and southern part of the study area are employed in downtown Richmond or along the Broad Street and Jeff Davis corridors.

  • A majority of people living in or near the eastern and southern part of the study area report that they use public transportation for traveling to and from work.
Accessibility: Proximity

Distance from GRTC Stops
- 0.00 - 0.25 Mile
- 0.26 - 0.50 Mile
- 0.51 - 1.00 Mile
- 1.01 - 2.00 Miles
- 2.01 - 7.44 Miles

Source: GRTC Transit Network Shapefiles
Accessibility: Mode of Travel

Used Public Transportation to Work
Average = 3%
- Less than 2.5%
- 2.6% - 5%
- 7.6% - 10%
- More than 10%
- 5.1% - 7.5%
Most block groups located less than one mile from GRTC routes have median household incomes of less than $50K.

Most block groups less than one mile away from GRTC routes fall into the weak market categories (G, H, I).

Areas that are less than ½ mile away from GRTC routes also have disproportionately high African American populations.

According to the American Community Survey, a sizable proportion of people living in the block groups that are in close proximity to the GRTC network responded that they used public transportation for commuting, and that their commute times are substantially higher than median commute time for the study area. These block groups also showed the lowest median household income in the region. This is an indicator of poor accessibility to low wage jobs for the people living under poverty threshold.
HH Income is less than $50,000 that are less than 1 mile from GRTC routes

- GRTC_Routes
- Less than 1 Mile
Jobs – Housing Imbalance

- The study area shows significant imbalance between availability of modest income jobs and affordable housing.
- Areas immediately on the north and the south of the downtown has less jobs compared to housing units.
- Similarly, west side of the study area along the I-65 corridor has more jobs than housing units.
Jobs – Housing Imbalance

Subtracted Z score (higher absolute value = greater imbalance)

- High jobs imbalance (-0.78 to -0.34)
- Moderate jobs imbalance (-0.33 to -0.09)
- Balanced access (-0.08 to 0.11)
- Moderate housing imbalance (0.12 to 0.30)
- High housing imbalance (0.31 to 0.84)

Features

- Interstate
- US Hwy
- Richmond MSA

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Center for Urban and Regional Analysis
• Median Life Expectancy at birth is 73 years in Richmond City
• Richmond westside has higher Life Expectancy ranging from 78 to 83 years
• Most areas on the Eastside and the Southside have Life Expectancy below 73 years
• Lower life expectancy correlates with higher percentage of African American and Hispanic populations
Health: Life Expectancy

Life Expectancy at Birth

- Insufficient data
- 63 - 68
- 69 - 73
- 74 - 77
- 78 - 83

Source: Virginia Commonwealth University Center on Society and Health, 2015
Health: Life Expectancy and Market Types

- Weaker market areas (H-I) have life expectancies from 73 to 78 years.
- Stronger market areas (A, B, D, and E) have life expectancies from 79 to 83 years.
- Weaker market areas (H, I) in the East End have life expectancies lower than 73 years.
- Lower life expectancy is seen in areas with high African American and Hispanic populations.
- Some moderately stronger market areas (C and D) such as the Forest Hill, Northrop, Byrd Park, Laburnum Park, and Bryan Park neighborhoods have life expectancies of less than 78 years.
Health: Life Expectancy and Market Types

Average Life Expectancy in Richmond is 73 years

- 73 - 78
- 79 - 83
• Weaker markets (F, G, H, I) report higher percentages of low birth weight babies.

• This trend also correlates with higher percentage of African American population, lower median household income, lower median sale prices, and higher dependency on public transportation.

• Neighborhoods in Henrico along the I-64 corridor that have higher percentages of Hispanic population (and higher concentrations of refugee population) have the highest rate of low weight births.
## Overlay Data Summary by MVA Categories

<table>
<thead>
<tr>
<th>MVA Categories</th>
<th>% Population Growth 2000-2015 (%)</th>
<th>Median Household Income Change 1999 - 2015 ($)</th>
<th>Median Household Income 2015 ($)</th>
<th>% White</th>
<th>% Black</th>
<th>% Hispanic</th>
<th>% Asian</th>
<th>% Jobs</th>
<th>Proximity to Public Transit (Miles)</th>
<th>% Used Public Transit</th>
<th>Average Commute Time (Minutes)</th>
<th>% Low Birth Weight</th>
<th>Life Expectancy (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>130.1%</td>
<td>$ 134,183</td>
<td>130.1%</td>
<td>83.1%</td>
<td>6.1%</td>
<td>1.8%</td>
<td>7.2%</td>
<td>3.9%</td>
<td>1.96</td>
<td>0.7%</td>
<td>23</td>
<td>8.6%</td>
<td>79</td>
</tr>
<tr>
<td>B</td>
<td>31.4%</td>
<td>$ 55,920</td>
<td>31.4%</td>
<td>75.2%</td>
<td>12.7%</td>
<td>3.8%</td>
<td>5.7%</td>
<td>5.7%</td>
<td>0.40</td>
<td>4.2%</td>
<td>21</td>
<td>10.8%</td>
<td>77</td>
</tr>
<tr>
<td>C</td>
<td>63.7%</td>
<td>$ 86,592</td>
<td>63.7%</td>
<td>75.7%</td>
<td>13.8%</td>
<td>3.1%</td>
<td>5.3%</td>
<td>19.2%</td>
<td>1.78</td>
<td>1.1%</td>
<td>24</td>
<td>9.9%</td>
<td>77</td>
</tr>
<tr>
<td>D</td>
<td>45.3%</td>
<td>$ 44,877</td>
<td>45.3%</td>
<td>50.4%</td>
<td>31.5%</td>
<td>8.6%</td>
<td>6.3%</td>
<td>26.9%</td>
<td>0.93</td>
<td>2.3%</td>
<td>22</td>
<td>10.5%</td>
<td>74</td>
</tr>
<tr>
<td>E</td>
<td>45.5%</td>
<td>$ 66,307</td>
<td>45.5%</td>
<td>58.7%</td>
<td>28.6%</td>
<td>6.3%</td>
<td>3.7%</td>
<td>22.3%</td>
<td>1.98</td>
<td>0.8%</td>
<td>24</td>
<td>10.2%</td>
<td>73</td>
</tr>
<tr>
<td>F</td>
<td>57.4%</td>
<td>$ 40,016</td>
<td>57.4%</td>
<td>28.7%</td>
<td>58.5%</td>
<td>7.7%</td>
<td>2.2%</td>
<td>11.3%</td>
<td>1.00</td>
<td>3.0%</td>
<td>25</td>
<td>11.7%</td>
<td>70</td>
</tr>
<tr>
<td>G</td>
<td>25.9%</td>
<td>$ 42,086</td>
<td>25.9%</td>
<td>29.6%</td>
<td>55.8%</td>
<td>10.6%</td>
<td>1.5%</td>
<td>7.0%</td>
<td>0.91</td>
<td>2.7%</td>
<td>25</td>
<td>12.3%</td>
<td>72</td>
</tr>
<tr>
<td>H</td>
<td>13.9%</td>
<td>$ 30,493</td>
<td>13.9%</td>
<td>10.8%</td>
<td>78.0%</td>
<td>8.5%</td>
<td>0.5%</td>
<td>2.6%</td>
<td>0.32</td>
<td>9.6%</td>
<td>27</td>
<td>12.3%</td>
<td>69</td>
</tr>
<tr>
<td>I</td>
<td>2.5%</td>
<td>$ 22,320</td>
<td>2.5%</td>
<td>5.9%</td>
<td>87.3%</td>
<td>4.1%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>0.20</td>
<td>13.7%</td>
<td>26</td>
<td>12.7%</td>
<td>67</td>
</tr>
</tbody>
</table>
Neighborhoods selected for deeper study have following common characteristics:

- Moderate MVA markets classified under D, E, F, and G
- Neighborhoods that have potential for growth (e.g. surrounded by stronger housing markets)
- Stable income growth between 2000 and 2015
- Mixed race neighborhoods
- Middle income minority races
- Close proximity to job centers
- Moderate jobs-housing imbalance
- Better transportation and accessibility
Case Study Locations
Case Study Location: Meadowbrook, Chesterfield

- Census Tract 1008.04
- Good quality houses on suburban lots
- Racially diverse neighborhood
- MVA: F, D, and E; surrounded by E, F, G, and H
- 39% black, 40% white, 9% Asian, 8.5% Hispanic*
- Median Household Income: $66,596 (90% of Chesterfield median)
- Median Household Income change 2000 to 2015 = 10%
- Neighborhoods to the south: +$0 to +$10,000

* Averages calculated by aggregating block groups
Case Study Location: Glen Tara, Chesterfield

- Census Tract 1009.33
- Lagging neighborhood in wider Swift Creek area
- MVA: D surrounded by C and E (moderately strong market)
- Race*: 
  - White 64%
  - African American 23%
  - Asian 2%
  - Hispanic 8%
- Median Household Income: $50,000*
- Median Household Income change 2000 to 2015 = -12.6%
- Household income change in surrounding neighborhoods is also small but positive

* Averages calculated by aggregating block groups
Case Study Location: Greater Brookland Park, Richmond

- Census Tracts 105, 106, 107, 108
- MVA: E, G, H (generally MVA classification declines from west to east)
- The block groups west of Route 1 are classified under the stronger markets-A, B, and C
- Race*:
  - African American 87%
  - Hispanic 1.3%
  - Asian 0.3%
- Median Household income = $43,585
- Household Income Change between 1999 to 2015 was +23.5%

* Averages calculated by aggregating block groups
Case Study Location: Lakeside, Henrico

- Census Tract 2006
- MVA Category: D, E, and F, surrounded by D, E, and F
- Race*
  - African American 18%
  - Hispanic 7%
  - Asian 2%
- Median Household income = $46,611
- Household Income Change between 1999 to 2015 was +15.8%

* Averages calculated by aggregating block groups
### Case Study Locations: Summary Tables

#### Income

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesterfield</td>
<td>Glen Tara</td>
<td>$149,975</td>
<td>$50,000.00</td>
<td>-12.6%</td>
</tr>
<tr>
<td>Richmond</td>
<td>Greater Brookland Park</td>
<td>$146,428</td>
<td>$43,585.00</td>
<td>23.5%</td>
</tr>
<tr>
<td>Henrico</td>
<td>Lakeside</td>
<td>$162,043</td>
<td>$46,611.57</td>
<td>15.8%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Meadowbrook</td>
<td>$179,667</td>
<td>$66,596.67</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

**Study Area Median** $174,950

#### Race

<table>
<thead>
<tr>
<th>City/County</th>
<th>Neighborhood</th>
<th>% African American</th>
<th>% Hispanic</th>
<th>% Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesterfield</td>
<td>Glen Tara</td>
<td>23.1%</td>
<td>7.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Richmond</td>
<td>Greater Brookland Park</td>
<td>87.2%</td>
<td>1.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Henrico</td>
<td>Lakeside</td>
<td>18.2%</td>
<td>7.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Meadowbrook</td>
<td>38.9%</td>
<td>8.7%</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

**Study Area Median** 31.0% 6.5% 4.5%
## Case Study Locations: Summary Tables

### Accessibility / Proximity

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>%Used Public Transportation</th>
<th>Travel Time (Minutes)</th>
<th>Proximity to GRTC (Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glen Tara</td>
<td>1.9%</td>
<td>28</td>
<td>0.70</td>
</tr>
<tr>
<td>Greater Brookland Park</td>
<td>8.9%</td>
<td>26</td>
<td>0.10</td>
</tr>
<tr>
<td>Lakeside</td>
<td>0.2%</td>
<td>23</td>
<td>0.80</td>
</tr>
<tr>
<td>Meadowbrook</td>
<td>0.5%</td>
<td>25</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Study Area Median</strong></td>
<td><strong>2.5%</strong></td>
<td><strong>25</strong></td>
<td><strong>0.68</strong></td>
</tr>
</tbody>
</table>

### Low Birth Weight*

<table>
<thead>
<tr>
<th>City/County</th>
<th>Neighborhood</th>
<th>%LBW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesterfield</td>
<td>Glen Tara</td>
<td>7.9%</td>
</tr>
<tr>
<td>Richmond</td>
<td>Greater Brookland Park</td>
<td>13.3%</td>
</tr>
<tr>
<td>Henrico</td>
<td>Lakeside</td>
<td>33.5%</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>Meadowbrook</td>
<td>12.1%</td>
</tr>
<tr>
<td><strong>Study Area Median</strong></td>
<td></td>
<td><strong>11.0%</strong></td>
</tr>
</tbody>
</table>

*Weighing less than 5.5 pounds at the time of birth*
Summary of Findings

- Correlation of median income with MVA. Strong relationship between market housing value and household income.
  - Strong income growth in middle MVA markets (C, D, E, and F)
- High percentage of African American households in weak housing markets. However, significant number of African American households in MVA categories A through E
- Jobs – regional imbalance of affordable housing and jobs
- Strong median household income growth in Richmond around the downtown core and other scattered neighborhoods.
  - Most of West End, neighborhoods north and south of James River
  - Barton Heights
  - Church Hill
  - Blackwell
  - Other scattered neighborhoods
Summary of Findings

• Trend of stagnation and decline in Chesterfield, in many established neighborhoods, and in scattered neighborhoods in Henrico.

• Strong racial and income stratification and showing significant correlation with MVA market categories.
  • Black middle class neighborhoods performing well in terms of income change and market category

• Middle market areas with significant income growth and high accessibility to employment centers show potential for growth.