Connections AND Choices

Affordable Housing and Smarter Growth in the Greater Richmond Area
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Affordable Housing and Smarter Growth in the Greater Richmond Area

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Acknowledgements

Virginia Local Initiatives Support Corporation and the Southern Environmental Law Center are grateful to the many people and organizations who contributed information to this report. The report was supported by funding Virginia LISC received from Capital One and the Home Depot Foundation as well as support the Southern Environmental Law Center received from the Virginia Environmental Endowment.

Research assistance was provided by Rachel Creagan, Daniella Einik and Adam Lovelady. Graphic design assistance was provided by Ami Somers.

Cover Design and Art Direction: Steven Longstaff Creative
Layout and production: Lesha Berkel

Photographs:
© Taylor Dabney (page 1); Dwight Dyke (front cover: City of Richmond skyline, page 43); GRTC Transit System (page 28); Richmond Regional Planning District Commission (page 26, 30, 34, 44)

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The Greater Richmond Area is a vibrant and dynamic region undergoing significant change. Population and economic growth, land development, and transportation projects are transforming the area.

Growth has brought many benefits to the region as a whole, including higher incomes, more jobs, and low unemployment. Growth also has brought—and will continue to bring—a number of unintended consequences and interconnected challenges that are cause for concern, including a shortage of affordable housing, sprawling development, and increasing driving and traffic. These challenges are in turn linked to other pressing issues, such as access to jobs, providing quality education, costs to taxpayers to provide services to scattered development, concentrated poverty, rising energy consumption, and air and water pollution.

These complex issues must be addressed to protect and enhance our environment, communities, economy, health, and quality of life.

Major demographic changes will shape these issues and complicate efforts to address them. Among other things, the region is experiencing rapidly increasing population, redistribution of population between cities and suburbs, changes in racial and ethnic composition, and an aging population. These changes will have significant impacts. If current average household sizes continue, for example, the region would need over 125,000 new housing units between 2000 and 2030 to meet projected population growth.

The Affordable Housing Crunch

Housing is a basic human need. The quality and choice of housing can enhance or diminish the well-being of individuals and families, as well as that of an entire community. Unfortunately, the Greater Richmond Area faces a growing shortage of affordable housing. For example, the median value of owner-occupied housing in the region rose from just under $120,000 to just over $180,000 between 2000 and 2005, an increase of over 50% in just five years. Sales prices have climbed even higher. Incomes have not kept pace with
skyrocketing housing prices, and today many people—including an increasing percentage of the workforce and retirees living on fixed incomes—cannot afford to purchase or rent housing in many parts of the region.

A housing unit is typically defined as affordable when it costs no more than 30% of a household’s income. However, in 2000 approximately 36% of renters and 19% of owners in the region carried housing cost burdens they could not afford under this definition. These figures have increased rapidly since then, according to preliminary data.

A lack of affordable housing most directly harms the individuals and families in need of housing, hitting their pocketbooks and limiting choices of where to live and work. If quality affordable housing is not available, it also can hurt the region’s economic competitiveness by making it difficult to attract and expand businesses and to attract and retain employees. Moreover, a lack of affordable housing can undermine communities by forcing essential employees such as teachers, nurses, police, firefighters, and many others to live outside the area where they work. Although the housing market began to cool somewhat beginning in late 2006, this likely will only slow—rather than address—the deepening of the region’s housing affordability problems.

Sprawling Development and Limited Housing Choices

Most new development has been built beyond existing communities in recent decades. Instead of traditional patterns of relatively compact cities and towns with a variety of neighborhoods, most new construction has been scattered and low-density, with residential and commercial activities segregated. Subdivisions have spread into previously rural areas located farther and farther from central services, schools, shopping and jobs. One consequence is that almost 59,000 acres were developed in the area in just five years—outpacing land conversion in Northern Virginia and Hampton Roads. At this rate, more land will be developed in the Greater Richmond Area in the next 20 years than in the previous 400. Localities have increasingly recognized the high costs of extending services to scattered development. Moreover, as businesses move farther out, it becomes difficult for many people to reach and retain a job, and the costs of commuting increase for many of those who have a job.

In addition, most housing is still being designed for single families, offering limited choices to fit the needs of younger workers, single parents, senior citizens, and other parts of an increasingly diverse population. House sizes have expanded substantially in recent decades, even as the average number of people in each household has decreased, and there are few energy efficient choices available.

These trends all have major impacts on housing affordability and choice, and are transforming our communities and environment.

Growing Gridlock and the Lack of Transportation Options

As homes and businesses spread apart and people travel farther looking for affordable housing, we often are left with little choice but to drive—and to drive longer distances—to go to work, to shop, to take children to school, or to engage in other activities. The Greater Richmond Area has the highest driving rate of any major metro area in Virginia. People in the region drive over 27 million miles daily, traveling roughly the distance to the sun every three days. Increased driving means less time for families and community activities, more congestion, more energy consumption, and more air and water pollution. Transportation costs increase as well. The average household spends more on transportation than on anything other than housing, and transportation costs are higher in sprawling areas. A recent study found that working families moving farther out in search of affordable housing frequently spend more on transportation than they save on housing.

Unfortunately, the region’s transportation system often provides no meaningful alternative to driving. The lack of transportation choices can be especially burdensome to individuals without a car or no longer able to drive, who all
too often find it difficult to get or retain jobs (particularly jobs increasingly in suburban locations not served by transit), to get to the store, or to accomplish other daily tasks many of us take for granted.

Opportunities for Progress

The housing affordability, sprawl, and transportation challenges facing the region are complex and the result of many factors. To some extent, they are the result of market forces, driven by significant population and economic growth. The public and policymakers increasingly recognize, however, that housing, development, and transportation decisions are influenced by a host of governmental incentives and regulations. Public spending on transportation that over-emphasizes road projects and largely overlooks other modes of travel, for instance, can subsidize sprawl and offer few alternatives to driving. Zoning provisions such as large minimum lot size requirements can prohibit traditional neighborhood development and increase the cost of housing and of public services provided by local governments.

There are abundant opportunities to provide more affordable housing and smarter growth. These include innovative, practical approaches that can provide more sustainable long-term development while offering a wider range of housing and transportation choices, better integrating places where people live, work and shop, protecting our open spaces, strengthening existing communities, and safeguarding environmental and human health. These approaches can help us develop better ways to grow, and include:

• Reducing regulatory barriers to traditional neighborhoods and to areas with a mixture of residential and commercial uses, and planning and promoting such developments with a range of housing styles, sizes, and prices.
• Promoting infill development, revitalizing existing communities, and redeveloping declining or abandoned commercial areas.
• Encouraging better design of affordable housing.
• Offering incentives for greener building in order to make new and existing structures healthier, cleaner, and more energy efficient.
• Requiring—or at least offering incentives to—developers to include affordable housing in large projects, and providing additional funding for affordable housing.
• Guiding growth to designated areas and protecting rural and natural areas.
• Providing greater transportation choices by reorienting transportation spending and policies at the state, regional, and local level to promote alternatives to driving and to provide greater access to jobs and a variety of activities.
• Promoting regional cooperation and mechanisms, such as a regional housing coalition and a regional housing trust fund.

This report explores the challenges of affordable housing, sprawl, and transportation facing the region, as well as the connections between these challenges. It also examines the enormous opportunities for housing and more sensible growth policies to address these issues, and the choices we face concerning how the region will grow.

These challenges must be addressed in a coordinated and intelligent manner for the sake of everyone in the region. Our future depends on it.
Demographic Trends

Major demographic changes are reshaping the Greater Richmond Area. Among other things, the area is experiencing rapidly increasing population, redistribution of population between cities and suburbs, shifts in household composition, changes in the racial and ethnic composition of the region and of localities, and an aging population. These changes have significant impacts on housing demand and markets, and have a major influence on land development, transportation, quality of life, and housing affordability.

Population Growth and Distribution

The Greater Richmond Area has experienced tremendous population increases in the past few decades. The population of the region increased by 17 percent between 1990 and 2000, expanding by 122,708 people in just ten years to a total of over 845,000 residents. This

### Population Growth (1990-2010)

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>209,274</td>
<td>259,903</td>
<td>294,946</td>
<td>337,167</td>
<td>24</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Goochland</td>
<td>14,163</td>
<td>16,863</td>
<td>19,147</td>
<td>21,619</td>
<td>19</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Hanover</td>
<td>63,306</td>
<td>86,320</td>
<td>98,921</td>
<td>112,735</td>
<td>36</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Henrico</td>
<td>217,881</td>
<td>262,300</td>
<td>286,946</td>
<td>315,774</td>
<td>20</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Powhatan</td>
<td>15,328</td>
<td>22,377</td>
<td>25,983</td>
<td>30,345</td>
<td>46</td>
<td>16</td>
<td>17</td>
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<tr>
<td>Richmond</td>
<td>203,056</td>
<td>197,790</td>
<td>194,707</td>
<td>191,951</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>Area</td>
<td>723,008</td>
<td>845,553</td>
<td>920,650</td>
<td>1,009,591</td>
<td>17</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>State</td>
<td>6,187,358</td>
<td>7,078,515</td>
<td>7,630,256</td>
<td>8,267,305</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

### Population Change (1990-2000)

![Bar chart showing population change from 1990 to 2000 for different areas in the Greater Richmond Area.]

Source: ESRI Business Analyst
growth outpaced both the state population growth of almost 14.4% during that time and the 13.2% increase nationwide, and it followed similarly rapid growth in the 1980s. Population in the region is projected to continue to grow rapidly in upcoming years, increasing by another 164,000—over 16%—between 2000 and 2010.

Population trends have varied widely within the region. The localities that added the most residents during the 1990s were the suburban counties of Chesterfield, Henrico, and Hanover. These counties were among the ten most rapidly growing localities in Virginia in the past decade, and accounted for almost all of the region’s population growth. Powhatan and Hanover experienced the greatest percentage increases in population, however, as the next ring of counties farther away from the City of Richmond began to see greater development. Similar trends are projected for this decade.

During the past decade, population declined in the City and in some portions of the inner ring suburbs. The trend of population decline in the City, however, has begun to slow and population has increased in some urban areas. Overall, Richmond lost 12.2% of its population between 1970 and 1980, 7.4% in the 1980s, but only 2.6% in the 1990s.

It is important to examine trends in the number of households as well as population. The number
of households in the Greater Richmond Area increased by 18% between 1990 and 2000. Over two-thirds of this increase occurred in Chesterfield and Henrico. Chesterfield County increased by 20,000 households during the past decade, the greatest increase in the number of households in the region. Powhatan had the highest percentage increase in households in the area, followed by Hanover. The City lost almost 800 households during this period.

Increasing population and households means growing demand for housing, which puts upward pressure on prices and spurs land development.

Household Composition and Housing Units

The composition of households is changing as well. Although the majority of households in the region are still families, by 2000 less than half (49%) were married couples and less than a quarter (24%) were married couples with children. Family structures with no spouse present have risen to 17.4% of area households and non-family households have increased to a third of area households.

During the 1990s, the fastest growing type of household had a single head of household and children. Non-family households—primarily people living alone—have increased rapidly as well. These changes have significant implications

<table>
<thead>
<tr>
<th>NUMBER OF HOUSEHOLDS (1990-2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>Number Change</td>
</tr>
<tr>
<td>Percent Change</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE OF HOUSEHOLDS (1990-2000)</th>
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</thead>
<tbody>
<tr>
<td>Percent of Total</td>
</tr>
<tr>
<td>Family</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Married Couple</td>
</tr>
<tr>
<td>With Children</td>
</tr>
<tr>
<td>Other Family (no spouse present)</td>
</tr>
<tr>
<td>With Children</td>
</tr>
<tr>
<td>Nonfamily</td>
</tr>
<tr>
<td>Living Alone</td>
</tr>
<tr>
<td>Not Living Alone</td>
</tr>
<tr>
<td>Total</td>
</tr>
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</table>

<table>
<thead>
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<th>AVERAGE HOUSEHOLD SIZE (1980-2000)</th>
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<tr>
<td>Area</td>
</tr>
<tr>
<td>1980</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>2000</td>
</tr>
</tbody>
</table>

Source: ESRI Business Analyst
for housing needs and affordability. Households headed by one person—including many family households with no spouse and many non-family households—typically earn less than family households with a married couple, since married couples often have two incomes.

Even if average household size levels off, the region will need to add over 125,000 units between 2000 and 2030 to meet projected population increases.

**Race and Ethnicity**

The racial and ethnic composition of the Greater Richmond Area is changing. These shifts can have important implications for housing demand, affordability, and ownership.

Approximately 68% of the region's population in 2000 was white, while 29% was African-American, 2% Hispanic, and 2% Asian. In 1980, 71% of the population was white, almost 27% African-American, less than 1% Hispanic, and less than 1% Asian.

The distribution of the minority population throughout the region is highly uneven. The percentage of the non-white population increased significantly in the City, Henrico, and Chesterfield between 1990 and 2000, continuing a trend present in the 1980s as well. On the other hand, Goochland, Hanover, and Powhatan experienced a decrease in the non-white share of their population during the 1990s. Areas with a minority population above 50% are concentrated in Richmond and the first ring suburbs.
There are significant differences in income by race in the region, with a far higher percentage of minorities earning less than $25,000 in 2000 and a greater percentage of whites earning above $100,000. In 2000, 17% of the white households in the region earned less than $25,000. In contrast, almost 37% of African-American households earned less than that amount, as did 23% of Asian households and 29% of Hispanic households. Over 17% of white households earned more than $100,000, while only 6% of African-American households, 15% of Asian households, and 9% of Hispanic households did.

In addition, there is a gap between minority and white homeownership. In the Greater Richmond Area 75% of whites owned their own home in 2000. In contrast, 51% of African-Americans, 54% of Asians, and 40% of Hispanics owned their homes. This gap has not closed appreciably in recent years in the region.

There also is a gap in the rate of loan denials for housing purchases in the region. In 2003, the denial rate of conventional purchase loans to high-income whites ranged between 3.5% and 5.5% in various localities in the region. For high-income African-Americans, the denial rate was as high as 28.6%, for high-income Asians as high as 10.5%, and it was up to 20.8% for high-income Hispanics.
Between 1990 and 2000, the number of whites owning homes increased in every jurisdiction in the region except Richmond. The greatest rise in the number of white homeowners occurred in Chesterfield and Henrico, with the highest percentage increase in white homeowners in Powhatan and Hanover, mirroring trends for population in the region as a whole. The number of African-Americans owning homes grew in every locality, with the greatest numerical and percentage increase both occurring in Chesterfield and Henrico. Asians and Hispanics also increased homeownership in every jurisdiction, again with the largest numerical increase in Chesterfield and Henrico.

The rental picture is largely similar. The number of white renters decreased in Henrico and Richmond between 1990 and 2000, was constant in Chesterfield, and increased the most in Hanover. African-American renters increased in every jurisdiction except for Goochland, with the greatest increase in the number of African-American renters in Henrico and the highest percentage increase in Chesterfield. Asian renters increased in every jurisdiction except Goochland and Hanover, with the greatest number increase in Chesterfield. The number of Hispanic renters rose the most in the City, followed closely by Henrico.

### NUMBER OF HOMEOWNERS BY RACE AND ETHNICITY (1990-2000)

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>White</th>
<th>African American</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Other</th>
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<td>CHESTFIELD</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>51,602</td>
<td>5,810</td>
<td>741</td>
<td>472</td>
<td>235</td>
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<tr>
<td>2000</td>
<td>62,644</td>
<td>10,643</td>
<td>1,307</td>
<td>985</td>
<td>610</td>
</tr>
<tr>
<td>% Change</td>
<td>21</td>
<td>83</td>
<td>76</td>
<td>109</td>
<td>160</td>
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<tr>
<td>GOOCHLAND</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1990</td>
<td>3,085</td>
<td>1,016</td>
<td>7</td>
<td>4</td>
<td>0</td>
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<tr>
<td>2000</td>
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<td>1,106</td>
<td>32</td>
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<tr>
<td>% Change</td>
<td>36</td>
<td>9</td>
<td>357</td>
<td>350</td>
<td>0</td>
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<tr>
<td>HANOVER</td>
<td></td>
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<tr>
<td>1990</td>
<td>17,173</td>
<td>1,606</td>
<td>72</td>
<td>33</td>
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<tr>
<td>2000</td>
<td>23,805</td>
<td>2,095</td>
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<tr>
<td>% Change</td>
<td>39</td>
<td>30</td>
<td>71</td>
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<td>195</td>
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<td>HENRICO</td>
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<tr>
<td>1990</td>
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<td>8,181</td>
<td>585</td>
<td>259</td>
<td>213</td>
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<tr>
<td>2000</td>
<td>55,295</td>
<td>13,096</td>
<td>1,566</td>
<td>648</td>
<td>558</td>
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<tr>
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<td>16</td>
<td>60</td>
<td>168</td>
<td>150</td>
<td>162</td>
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<td>POWHATAN</td>
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<tr>
<td>1990</td>
<td>3,366</td>
<td>586</td>
<td>0</td>
<td>6</td>
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<tr>
<td>2000</td>
<td>5,652</td>
<td>713</td>
<td>0</td>
<td>29</td>
<td>17</td>
</tr>
<tr>
<td>% Change</td>
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<td>0</td>
<td>383</td>
<td>-29</td>
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<td>RICHMOND</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1990</td>
<td>22,707</td>
<td>16,437</td>
<td>207</td>
<td>206</td>
<td>164</td>
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<tr>
<td>2000</td>
<td>21,150</td>
<td>16,991</td>
<td>265</td>
<td>398</td>
<td>245</td>
</tr>
<tr>
<td>% Change</td>
<td>-7</td>
<td>3</td>
<td>28</td>
<td>93</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: US Census
Age

The size of various age groups in the population and changes among them can have significant effects on affordable housing and growth issues.

Increasing life spans, the massive baby-boomer generation born between 1944 and 1964, and lower birth rates are contributing to the aging of the region’s overall population. For example, there was a 33% increase in people above age 75 in the region between 1990 and 2000, almost twice the overall rate of population increase.

Age composition and trends vary among the localities in the region. Henrico and the City had the highest number of residents over age 65 in 2000, although Chesterfield’s senior citizen population has increased more quickly than any other locality in the region in recent years and Chesterfield had the second-highest amount of residents over 65 by 2005. Goochland has the highest percentage of residents over age 65, followed by the City and Henrico.

Although senior citizens are still a relatively small percentage of the total population in the region, their numbers and percentage of the region’s population are projected to continue to grow. These changes in age composition have significant implications for the region. An aging population contributes to the shift toward households headed by one person, and housing costs are often a financial burden for this type of household. Consequently, the growth in this group is likely to fuel the rising demand for affordable housing. Moreover, an aging population typically has different types of housing and transportation needs, requiring housing and neighborhood design that can better accommodate the physical needs of elderly individuals and allow them to remain engaged in the community, and transportation options that offer mobility to people who are no longer able to drive.

Age composition can influence housing prices in other ways. Many baby boomers are currently in their peak earning years, and are helping to drive the increase in house prices and sizes. In the Greater
Richmond Area, the largest age group was 30 to 34 year olds in 1990. In 2000, the largest age group was the 35 to 39 year olds. Moreover, the fastest growing group during that time was 50 to 54 year olds, which increased by almost 80%.

The largest age groups of homeowners across the region are 30 to 44 and 45 to 54 years of age. Between 1990 and 2000, the number of homeowners age 45 to 54 increased more than twice as fast as any other age group, rising by 64%.

This age group also comprises the fastest growing segment of the rental market. People in this age group typically are in their peak earning years and tend to choose larger homes, helping to increase housing prices.

The population of younger adults is rising more slowly, but increasing nonetheless, and can have important implications for the housing market since people in these age groups are often still in school or early in their careers and do not have a sizable income. The 20 to 34 year old age groups are a little over 20% of the region but a larger component in certain areas. Richmond and Henrico are the only two localities in the area with more than 20% of their population in these age groups. In the City, 20 to 34 year olds make up over a quarter of the total population and the single largest age group is 20 to 24 year olds. The largest age group of renters in the region is 25 to 34 years of age.

### AGE GROUPS PERCENTAGE OF POPULATION IN STUDY AREA 1990-2000

![Graph showing percentage of population in study area 1990-2000](image)

Source: ESRI Business Analyst
Housing is a basic human need, and it is a foundation upon which we build our lives. It also is a complicated force in the dynamics of communities, shaping transportation patterns and social interaction, and influencing economic opportunity and social stability. The quality and choice of housing can enhance or diminish the well-being of individuals and families, as well as the character of the entire community. Unfortunately, the Greater Richmond Area is facing a growing shortage of affordable housing, and many people cannot afford to purchase or rent housing in many parts of the region.

**A Growing Problem**

A number of related—yet quite distinct—issues and needs comprise the region's affordable housing challenges.

Affordable housing needs typically vary according to household income. The U.S. Department of Housing and Urban Development defines household income brackets based on the area median income (AMI) of a region:

- Extremely Low Income: 0-30% AMI
- Very Low Income: 30-50% AMI
- Low Income: 50-80% AMI
- Moderate Income: 80-120% AMI

In the Greater Richmond Area, these brackets translated into the following income ranges in 2005:

- Extremely Low Income: Less than $17,828
- Very Low Income: $17,829 - 29,713
- Low Income: $29,714 - 47,541
- Moderate Income: $47,542 - 71,312

Extremely low income and very low income households naturally have difficulty affording market-rate housing. In the Richmond region, this includes people working as cashiers, construction workers, and nursing aides. Extremely and very low income households may need publicly subsidized housing. The poorest of the poor, including the working poor, may require publicly provided housing.

In addition, it has been estimated that as many as 5,200 to 6,500 people in the region may experience homelessness at some point during the year, and that most of these individuals work at least part time. A recent survey found that at any given...
time there are roughly 1,000 homeless people in the City, Chesterfield, Henrico, and Hanover, including approximately 135 children. In that same survey, 454 homeless people listed the City as their last permanent address, 162 listed Henrico, and 103 listed Chesterfield. Although a variety of factors contribute to homelessness, housing affordability is a leading cause.

Overall, more than 97,000 households—over one-quarter of all households in the region—fell into the extremely or very low income categories in 2005. Over 223,275 households—more than 62% of the region—were at or below the average household income ($78,301).

As wages have not kept pace with the rising cost of housing, it has become difficult for more and more individuals to find affordable housing—including low and moderate income households. Increasingly, elements of the workforce such as police officers, firefighters, nurses, teachers, and secretaries are priced out of the market and have trouble finding affordable housing in many parts of the region.

In addition to the housing needs of different income brackets, there can be significant variation in the housing needs within each bracket. For example, a recent graduate earning entry-level wages, a young family looking for their first house, and a person living on a low, fixed income due to age or disability have very different needs for affordable housing.

<table>
<thead>
<tr>
<th>RICHMOND MSA AVERAGE INCOME FOR VARIOUS OCCUPATIONS (2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
</tr>
<tr>
<td>------------------------------</td>
</tr>
<tr>
<td>Fast Food Cooks</td>
</tr>
<tr>
<td>Home Health Aides</td>
</tr>
<tr>
<td>Hairstylists</td>
</tr>
<tr>
<td>Travel Agents</td>
</tr>
<tr>
<td>Fire Fighters</td>
</tr>
<tr>
<td>Police and Sheriff Deputies</td>
</tr>
<tr>
<td>Elementary School Teachers</td>
</tr>
<tr>
<td>Computer Programmers</td>
</tr>
<tr>
<td>Biology Professors</td>
</tr>
<tr>
<td>Veterinarians</td>
</tr>
</tbody>
</table>

Source: www.bls.gov/soc/home.htm
The need for affordable housing in the region thus has expanded far beyond the poorest citizens to include an increasing percentage of the workforce and of retirees living on fixed incomes. A range of affordable housing options is required to meet these needs.

### Overall Housing Affordability in the Region

Housing costs consume the largest percentage of household budgets, with over 31 cents out of every dollar spent by people in the South going to housing. Affordable housing should leave enough income to cover other basic living costs, as well as allowing households to achieve an acceptable standard of living.

A housing unit is typically defined as affordable when it costs no more than 30% of a household’s income. However, in 2000 approximately 36% of renters and 19% of owners with a mortgage in the Greater Richmond Area carried housing cost burdens they could not afford under this definition. These figures have increased since then in each locality where data is available for 2005, although this data is preliminary and based on a sample. The most rapid increase apparently is in Henrico, where the percentage of owners with a mortgage paying over 30 percent of their income on housing seems to have increased from 19% in 2000 to 35% in 2005.

### Indicators of Housing Affordability

Indicators quantify and simplify phenomena and help us to understand complex realities; they can help us to understand where we are, where we are going, and how far we are from various goals. When assessing housing affordability, the indicators often used include household income, house values, vacancies, and rental supply.

### Household Income

Household income—the combination of annual personal income for all household members—provides basic information about household wealth. It should be noted, however, that it is not sufficient to use household income as an indicator of relative standard of living because it does not account for household composition. For example, a one-adult household with a median annual household income of $35,000 is likely to enjoy a higher standard of living than a two-adult, two-child household with the same income.

In 1990, the median household income for the Greater Richmond Area was $46,486 (in 2000 dollars). The median household income increased more than 30% of their income on housing are found in the three lowest income categories.

Like renters, owners paying greater than 30 percent of income for housing are concentrated in the lowest three income categories.

### PERCENTAGE AREA RENTERS AND OWNERS SPENDING OVER 30% OF INCOME ON HOUSING IN 2000

<table>
<thead>
<tr>
<th>Renters</th>
<th>Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesterfield</td>
<td>32%</td>
</tr>
<tr>
<td>Goochland</td>
<td>30%</td>
</tr>
<tr>
<td>Hanover</td>
<td>32%</td>
</tr>
<tr>
<td>Henrico</td>
<td>33%</td>
</tr>
<tr>
<td>Powhatan</td>
<td>29%</td>
</tr>
<tr>
<td>Richmond</td>
<td>41%</td>
</tr>
</tbody>
</table>

*Source: US Census*
by only 4 percent over the next decade when adjusted for inflation, reaching $48,220 in 2000. Incomes have risen more rapidly in recent years, with the median household income reaching an estimated $59,427 in 2005 ($53,926 in 2000 dollars).

Income is not distributed equally across the area. In 2005, the counties had an average median household income of approximately $67,287. In contrast, median household income in the City of Richmond was only $38,316.

Overall, households with the lowest incomes are found in the City and the first ring suburbs in the counties bordering it. The poverty rate in the City dipped slightly in recent years while it has increased in the surrounding suburbs, although the poverty rate remains higher in the City.15 Higher incomes form a ring around these areas.

<table>
<thead>
<tr>
<th>MEDIAN HOUSEHOLD INCOME BY LOCALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 Median Household Income</td>
</tr>
<tr>
<td>Richmond</td>
</tr>
<tr>
<td>Henrico</td>
</tr>
<tr>
<td>Powhatan</td>
</tr>
<tr>
<td>Goochland</td>
</tr>
<tr>
<td>Chesterfield</td>
</tr>
<tr>
<td>Hanover</td>
</tr>
</tbody>
</table>

Source: ESRI Business Analyst
House Values

House value is the estimate of how much a property might bring if sold. Like much of the country, the Richmond region has seen a tremendous escalation in house values in recent years. Median house values increased 8% between 1990 and 2000, rising from $111,247 (in 2000 dollars) to $119,891. By 2005, median housing values had reached over $180,000, an increase of over 50% in just five years. Sales prices rose even higher, and by late 2005-early 2006 had reached an average of $220,427 in the region.16

There is a significant difference in median house values among localities. In 2000, it was $135,352 in the counties and $87,445 in the City—a difference of almost $48,000.

WHAT PRICE HOUSE CAN YOU AFFORD TO BUY?

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Annual 2004 Median Income</th>
<th>Price of House</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast Food Cooks</td>
<td>$14,600</td>
<td>$ 55,750</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>$17,260</td>
<td>$ 65,908</td>
</tr>
<tr>
<td>Hairstylists</td>
<td>$18,880</td>
<td>$ 72,094</td>
</tr>
<tr>
<td>Travel Agents</td>
<td>$28,500</td>
<td>$108,828</td>
</tr>
<tr>
<td>Fire Fighters</td>
<td>$35,680</td>
<td>$145,639</td>
</tr>
<tr>
<td>Police and Sheriff Deputies</td>
<td>$38,140</td>
<td>$150,641</td>
</tr>
<tr>
<td>Elementary School Teachers</td>
<td>$48,330</td>
<td>$184,550</td>
</tr>
<tr>
<td>Computer Programmers</td>
<td>$57,860</td>
<td>$220,941</td>
</tr>
<tr>
<td>Biology Professors</td>
<td>$60,920</td>
<td>$232,625</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>$96,590</td>
<td>$368,833</td>
</tr>
</tbody>
</table>

Source: www.hsh.com (assumes 6.3 rate, zero down payment, 30 year loan)

Source: US Census and ESRI
### MEDIAN VALUE AND MONTHLY COSTS FOR OWNER-OCCUPIED HOUSING

<table>
<thead>
<tr>
<th>Area</th>
<th>Chesterfield</th>
<th>Goochland</th>
<th>Hanover</th>
<th>Henrico</th>
<th>Powhatan</th>
<th>Richmond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2000 Median Value</strong></td>
<td>$119,891</td>
<td>$119,267</td>
<td>$150,845</td>
<td>$146,787</td>
<td>$119,867</td>
<td>$139,993</td>
</tr>
<tr>
<td><strong>2000 Monthly Costs</strong></td>
<td>$971</td>
<td>$967</td>
<td>$1,202</td>
<td>$1,172</td>
<td>$971</td>
<td>$1,121</td>
</tr>
<tr>
<td><strong>2005 Median Value</strong></td>
<td>$180,444</td>
<td>$179,427</td>
<td>$213,110</td>
<td>$220,689</td>
<td>$179,742</td>
<td>$209,949</td>
</tr>
<tr>
<td><strong>2005 Monthly Costs</strong></td>
<td>$1,422</td>
<td>$1,414</td>
<td>$1,665</td>
<td>$1,721</td>
<td>$1,417</td>
<td>$1,641</td>
</tr>
<tr>
<td><strong>2010 Median Value</strong></td>
<td>$241,063</td>
<td>$237,887</td>
<td>$281,388</td>
<td>$289,684</td>
<td>$241,187</td>
<td>$274,494</td>
</tr>
<tr>
<td><strong>2010 Monthly Costs</strong></td>
<td>$1,873</td>
<td>$1,849</td>
<td>$2,173</td>
<td>$2,235</td>
<td>$1,874</td>
<td>$2,122</td>
</tr>
</tbody>
</table>

*Assumes fixed rate (6.3%), 30-year mortgage, zero down, good credit; includes principal and interest, taxes and mortgage insurance.


Assuming good credit, zero down, and a fixed rate (6.3%) 30-year mortgage, the monthly payments to afford the median value housing units in the various localities of the region are highest in Goochland and Hanover, and lowest in the City. Housing values and the cost to own a home are projected to increase significantly throughout the region.

People in many occupations in the area cannot afford to pay these prices, and they will have great difficulty finding housing to purchase in the area.

The gap between household income and housing costs is projected to continue to widen. It is estimated that median income in the region will increase by 46% between 2000 and 2011, while median house value is projected to increase 110%.
Vacancies and Rental Supply

In assessing affordable housing in the region, it is important to look at what is available for rent or purchase, and where it is located. The City of Richmond has the highest number of rental units—as well as the highest number of vacant units—in the region.

Single-family, detached units are most of the available housing available in each locality, particularly in the outer counties. Goochland, Hanover and Powhatan have few—if any—multi-family units available to rent or own.

Richmond had by far the lowest median asking price for vacant housing for sale in 2000, followed by Henrico and Chesterfield. The City also has had the highest percentage of available housing affordable by those with low to moderate incomes, again followed by Henrico and Chesterfield.

Although the supply of housing has increased in the region in recent years, relatively little has been affordable. 17

Fortunately, the affordable housing problems in the region are not yet as severe as they are in some other areas of the country, or in Northern Virginia. Housing affordability in the Greater Richmond Area has been decreasing, however, and the challenges of affordable housing are likely to increase as the region’s housing needs change over time. 18
Development Trends

Development patterns have changed dramatically throughout the Greater Richmond Area. Since World War II, there has been a shift away from relatively compact cities and towns that contained a variety of neighborhoods and allowed residences and businesses to be in fairly close proximity. Most new development has been haphazard and sprawling, with far-flung residential growth, and businesses and jobs increasingly located beyond existing communities. The size of the average house has expanded significantly, even as the size of the average household has shrunk. Most new housing continues to be designed for a household type—married couples with children—that is no longer the majority. These trends all have a major impact on housing affordability and choice, and they are altering our communities and our environment.

Rapid, Scattered Development

The Greater Richmond Area is being transformed by rapidly sprawling development. The area has recently outpaced Virginia’s other major metro areas in land development, earning the dubious distinction of being the Commonwealth’s sprawl champion.19 According to the U.S. Department of Agriculture, 58,800 acres were developed in the region for subdivisions, office parks, highways, parking lots, and other projects between 1992 and 1997. This means that a land area over 1.5 times the size of the entire City of Richmond was developed in just five years. In contrast, Northern Virginia developed 49,300 acres during this time period and Hampton Roads developed 43,300 acres. During the previous ten years, 58,300 acres were developed in the Richmond area, almost 100,000 acres in Northern Virginia, and 60,800 acres in Hampton Roads.

If land continues to be developed at the recent average annual rate, approximately 294,000 acres will be developed over the next 20 years, an area over seven times the size of the City of Richmond. This would mean that the region would develop more land in 20 years than it had in the previous 400.20

Source: Natural Resource Conservation Service
Development in the Richmond area has outpaced population growth considerably, with the amount of developed land increasing by over 30% between 1992 and 1997, while population only increased by a little under 8% during that period.\textsuperscript{21}

The region’s rapid land development and changes in development patterns are driven by a number of factors, including population and economic trends. As noted previously, the region will need over 125,000 new housing units between 2000 and 2030 given current population projections and average household sizes. Escalating loss of open space also is driven in large measure by public investments (such as roads and water and sewer lines) that subsidize scattered development. In addition, governmental regulations such as zoning measures that require large lot sizes and the separation of land uses can effectively mandate greater land consumption. Further, many localities have surrendered much of their ability to guide the pace and location of growth by signing off on an enormous amount of potential development. For example, almost 43,000 additional dwelling units and 75 million square feet of commercial space could be built in Chesterfield County without any additional rezoning.\textsuperscript{22}

Sprawling development patterns put upward pressure on housing costs. For example, larger lot sizes tend to increase the cost of housing by increasing the cost of land per housing unit and driving up land costs as developable land in desirable locations becomes scarcer. Sprawl is also chewing up the relatively inexpensive rural land that has been a source of affordable housing for the region. In addition, scattered development where residential and commercial uses are strictly separated means more driving, further increasing household costs (as discussed more fully in the transportation section of this report).

**Larger Houses, Fewer Choices**

Along with changes in housing location and lot size, the type of housing built has changed.

House sizes have increased substantially in recent decades, even as the average number of people in each household has decreased. In 2005, the average house size in the South was 2,463 square feet, a 4%
increase in just one year, and a 44% increase from 1975. Part of this shift is due to increasing wealth and changing consumer preferences, but it also is driven by higher profit margins for developers, minimum lot and house size requirements, low interest rates, and other factors. Regardless of the cause, increasing house sizes have played an important role in escalating housing prices in the region, and there have been limited choices for individuals seeking smaller new homes.

Larger houses also require more energy to heat and cool, and the resulting higher energy bills make many newer houses even less affordable for many potential homebuyers. The energy that housing requires is a major issue, however, regardless of house size. There is a shortage of energy efficient housing choices in the area. This is a particularly serious problem for low income households, which typically pay a substantially higher percentage of their income on energy bills than other families, in part because low income housing tends to be less energy efficient.

Housing choices also have been limited by the fact that the majority of housing built is large single-family, detached structures on large lots in the suburbs, despite increasing diversity in household composition, age, and income in the region. Residential construction has been booming. Between 1990 and 2000, the number of housing units in the region increased by 16%, although new construction varied among localities. The number of new housing units is projected to rise another 10.5%—to a total of over 385,000 units—between 2000 and 2006.

Most new residential construction, however, is designed for a household type—married couples with children—whose share of households is

---

**HOUSING UNITS (1990-2000)**

<table>
<thead>
<tr>
<th>Total Housing Units</th>
<th>Area</th>
<th>Chesterfield</th>
<th>Goochland</th>
<th>Hanover</th>
<th>Henrico</th>
<th>Powhatan</th>
<th>Richmond</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>299,849</td>
<td>77,381</td>
<td>5,203</td>
<td>23,727</td>
<td>91,539</td>
<td>4,910</td>
<td>94,139</td>
</tr>
<tr>
<td>2000</td>
<td>348,819</td>
<td>97,707</td>
<td>6,555</td>
<td>32,196</td>
<td>112,570</td>
<td>7,509</td>
<td>92,282</td>
</tr>
<tr>
<td>Number Change</td>
<td>8,970</td>
<td>20,326</td>
<td>1,352</td>
<td>8,469</td>
<td>21,031</td>
<td>2,599</td>
<td>-1,857</td>
</tr>
<tr>
<td>Percent Change</td>
<td>16%</td>
<td>26%</td>
<td>26%</td>
<td>36%</td>
<td>23%</td>
<td>53%</td>
<td>-2%</td>
</tr>
</tbody>
</table>

**PERCENTAGE OF HOUSING UNITS THAT ARE SINGLE-FAMILY, DETACHED HOMES (1990-2000)**

<table>
<thead>
<tr>
<th>Area</th>
<th>Chesterfield</th>
<th>Goochland</th>
<th>Hanover</th>
<th>Henrico</th>
<th>Powhatan</th>
<th>Richmond</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>64.0</td>
<td>80.1</td>
<td>84.6</td>
<td>86.5</td>
<td>62.2</td>
<td>91.9</td>
</tr>
<tr>
<td>2000</td>
<td>68.6</td>
<td>81.8</td>
<td>91.2</td>
<td>88.4</td>
<td>64.7</td>
<td>94.2</td>
</tr>
</tbody>
</table>
declining. The percentage of housing units in the area that are single-family detached houses increased from 64% to almost 69% in the 1990s and increased in every locality. Over 90% of the housing units in Goochland and Powhatan, and over 80% of the units in Chesterfield and Hanover, are detached, single-family homes.

A greater variety of housing types is needed to provide for an increasingly diverse and changing population—including younger workers and families, single parents, senior citizens, empty nesters, and persons with special needs—and to provide housing options for those who are unable or do not desire to purchase a house.

Although the market for housing is beginning to change in response to these needs, the limited availability of alternative housing types means that most people have to choose from among single family homes whether or not they are affordable.

The Shortage of Public Housing and Public Housing Assistance

There also is a need for more public housing units and public housing assistance. The City of Richmond is the only locality in the region that has a housing authority and that has public housing. The Richmond Redevelopment and Housing Authority (RRHDA) serves almost 10,000 residents. It manages approximately

### HOUSING TYPES (1990-2000)

<table>
<thead>
<tr>
<th></th>
<th>Chesterfield</th>
<th>Goochland</th>
<th>Hanover</th>
<th>Henrico</th>
<th>Powhatan</th>
<th>Richmond</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, detached</td>
<td>79,931</td>
<td>5,977</td>
<td>28,476</td>
<td>72,822</td>
<td>7,074</td>
<td>44,935</td>
<td>239,215</td>
</tr>
<tr>
<td>1, attached</td>
<td>3,595</td>
<td>32</td>
<td>355</td>
<td>8,224</td>
<td>51</td>
<td>7,771</td>
<td>20,028</td>
</tr>
<tr>
<td>2</td>
<td>780</td>
<td>32</td>
<td>182</td>
<td>1,197</td>
<td>108</td>
<td>6,010</td>
<td>8,309</td>
</tr>
<tr>
<td>3 or 4</td>
<td>1,528</td>
<td>40</td>
<td>240</td>
<td>5,267</td>
<td>0</td>
<td>7,572</td>
<td>14,647</td>
</tr>
<tr>
<td>5 to 9</td>
<td>3,601</td>
<td>0</td>
<td>587</td>
<td>9,204</td>
<td>0</td>
<td>9,240</td>
<td>22,638</td>
</tr>
<tr>
<td>10 to 19</td>
<td>3,893</td>
<td>7</td>
<td>1,150</td>
<td>9,060</td>
<td>32</td>
<td>5,689</td>
<td>19,831</td>
</tr>
<tr>
<td>20 to 49</td>
<td>703</td>
<td>0</td>
<td>85</td>
<td>2,437</td>
<td>0</td>
<td>3,117</td>
<td>6,342</td>
</tr>
<tr>
<td>50 or more</td>
<td>1,079</td>
<td>0</td>
<td>250</td>
<td>3,820</td>
<td>8</td>
<td>7,258</td>
<td>12,415</td>
</tr>
<tr>
<td>Mobile home</td>
<td>2,586</td>
<td>467</td>
<td>854</td>
<td>529</td>
<td>221</td>
<td>676</td>
<td>5,333</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>97,707</td>
<td>6,555</td>
<td>32,196</td>
<td>112,570</td>
<td>7,509</td>
<td>92,282</td>
<td>348,819</td>
</tr>
<tr>
<td><strong>1990</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, detached</td>
<td>61,950</td>
<td>4,585</td>
<td>20,562</td>
<td>58,380</td>
<td>4,551</td>
<td>43,807</td>
<td>193,835</td>
</tr>
<tr>
<td>1, attached</td>
<td>2,894</td>
<td>22</td>
<td>188</td>
<td>7,296</td>
<td>31</td>
<td>6,998</td>
<td>17,429</td>
</tr>
<tr>
<td>2</td>
<td>569</td>
<td>16</td>
<td>163</td>
<td>716</td>
<td>49</td>
<td>6,437</td>
<td>7,950</td>
</tr>
<tr>
<td>3 or 4</td>
<td>1,591</td>
<td>8</td>
<td>245</td>
<td>4,689</td>
<td>14</td>
<td>7,200</td>
<td>13,747</td>
</tr>
<tr>
<td>5 to 9</td>
<td>3,480</td>
<td>21</td>
<td>586</td>
<td>8,247</td>
<td>7</td>
<td>11,225</td>
<td>23,566</td>
</tr>
<tr>
<td>10 to 19</td>
<td>3,275</td>
<td>3</td>
<td>926</td>
<td>9,544</td>
<td>25</td>
<td>8,805</td>
<td>22,578</td>
</tr>
<tr>
<td>20 to 49</td>
<td>605</td>
<td>0</td>
<td>101</td>
<td>2,721</td>
<td>0</td>
<td>3,814</td>
<td>7,241</td>
</tr>
<tr>
<td>50 or more</td>
<td>181</td>
<td>0</td>
<td>0</td>
<td>1,578</td>
<td>0</td>
<td>3,919</td>
<td>5,678</td>
</tr>
<tr>
<td>Mobile home</td>
<td>2,389</td>
<td>500</td>
<td>803</td>
<td>433</td>
<td>181</td>
<td>789</td>
<td>5,095</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77,329</td>
<td>5,203</td>
<td>23,727</td>
<td>94,539</td>
<td>4,910</td>
<td>94,141</td>
<td>299,849</td>
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Source: US Census
4,100 units of public housing and provides subsidized housing assistance through Housing Choice Voucher Programs (commonly referred to as Section 8 vouchers) to about 3,100 families. Other programs provide vouchers for roughly 3,500 other units. In addition, RRHDA has been redeveloping selected sites, including demolishing 440 public housing units and planning to construct about 597 new homes and rental units. Yet thousands of people are currently on the waiting list for public housing or housing assistance in the City.

Voucher programs are the primary opportunity for publicly assisted housing in the counties. Although the inventory is fluid and databases are incomplete, it appears that in addition to having the only public housing, the City also has over 60% of the units covered by voucher programs in the region. Outside of the City, Henrico provides vouchers for more than twice as many units as Chesterfield, Goochland, Hanover, and Powhatan combined. As one report noted, the region has “more demand for Housing Choice Vouchers than supply, especially among seniors and people with disabilities.”

Further, the federal Low Income Housing Tax Credit has played a major role in creating affordable units, offering tax credits for building or rehabilitating of rental housing targeted to low income households. These credits have led to the construction or rehabilitation of over 5,300 units in the City between 1990 and 2006.
over 4,300 units in Henrico, and over 2,100 units in Chesterfield. In Hanover, 663 tax credit units were created during that time; none were created in Goochland or Powhatan.

The Shortage of Housing Near Jobs

Like housing, jobs have become more decentralized in the region. Over 100,000 net new jobs were created in the Greater Richmond Area during the past 15 years, as employment increased from 507,649 in 1990 to 608,077 in 2004. There are, however, significant differences in job creation among localities. Henrico and Chesterfield were the primary engines of job creation in the past decade, adding almost 80% of new jobs in the region, followed by Hanover. Yet in percentage terms, the highest job growth occurred in Goochland and Powhatan. In contrast, the City of Richmond lost over 41,000 jobs.

Despite the greater dispersal of jobs in the region, the City continues to be a major employment center. Richmond has the second highest number of jobs in the region, trailing only Henrico. The vast majority of jobs in the area remain relatively close in, particularly when compared to other metro areas in the South. A report on “job sprawl” found that while only 16.6% of employment is within three miles of the central business district in Richmond, just over three-quarters (75.71%) is within 10 miles.

Increasing dispersal of jobs nevertheless is occurring in the region, making it more difficult for many low and moderate income individuals to reach and retain jobs and reducing their opportunities. In addition to the increasing suburbanization of businesses and jobs, many new jobs are located in areas limited to commercial uses where residences are prohibited or greatly restricted, pushing home buyers and renters farther out. The only housing built nearby is often unaffordable to many workers. Sprawling development patterns exacerbate this problem, driving up costs and using up land, making it difficult to build housing near job centers.

As a result of this imbalance between the location of jobs and housing, it is difficult to find affordable housing near many jobs. This problem is magnified for many workers by the lack of transportation options in the region, since the area’s limited public transportation system does not reach many jobs.
Transportation Trends

Transportation is central to the economy and quality of life of the Greater Richmond Area. It also has an enormous impact on housing affordability. It is the second largest household expense (behind only housing), and low-income households spend a much higher percentage of their income on transportation. The mismatch of jobs and housing, the sprawling development that increasingly characterizes the region, the location of affordable housing, and the lack of meaningful transportation choices all influence transportation decisions and drive up the cost of transportation. These factors also increase traffic congestion, time spent driving, energy consumption, and pollution.

Driving and Congestion

As homes and businesses spread farther out, people often are left with little choice but to drive—and to drive longer distances—to go to work, to shop, to take their children to school, or to engage in other activities. Geographic separation of residential and commercial development can further increase driving and congestion. In addition, a shortage of affordable housing in many parts of the region can force people to move farther out in search of reasonably priced housing, increasing the length of commutes and the amount of congestion in the region. Transportation choices are also limited by the fact that the bulk of transportation funding in the Greater Richmond Area has been devoted solely to road projects.

The Richmond urbanized area has the highest amount of motor vehicle travel per capita among Virginia’s major metro areas—an average of 28.7 miles per person per day in 2004. In Hampton Roads, the average is 24 miles per day, and in the Washington area 22.5 miles.35
The amount of driving in the region has increased dramatically. Between 1983 and 2003, the total number of vehicle miles traveled (VMT) in the Richmond urban area increased by over 104%, more than twice the rate of population increase.36

In total, people in the Greater Richmond Area drive an average of over 27.4 million miles each day.37 This is roughly the equivalent of driving to the sun every three days. More than three-quarters of the miles driven in the region are in Chesterfield, Henrico, and Richmond.

Motor vehicles are the dominant mode of personal transportation throughout the country. In the Richmond area in 2000, over 92% of trips commuting to work involved driving, a little over 2% used transit, and roughly 5.5% of commuting trips were made by walking, working at home, or other means.38

Roughly half of all commuters live and work within the same locality. Far more commuters live and work in the same locality in Richmond, Henrico, and Chesterfield than in Hanover, Goochland, and Powhatan. Almost 94% of commuters work within one of the six localities in the area.

Given the rapid growth in driving, the increasing distance between destinations as the area sprawls, and population growth in the region, it is not surprising that traffic congestion and time spent driving are increasing as well. The total amount of hours lost to travel delay in the area increased eight-fold between 1983 and 2003, from a little over 1 million to more than 8.3 million hours.39

In addition, the mean travel time to work rose from 21.4 minutes in 1990 to 24.3 minutes in 2000, a 13.5% increase.40 Although figures are not yet available for all localities in the area, it appears that commutes have continued to grow longer. Moreover, commuting trips are only a fraction of
total travel. Nationwide, work and work related trips are less than 18% of all trips taken; over 70% of trips are for family, personal business, social, or recreational purposes.41

Public Transit

The number of people riding public transportation has been rising nationwide and statewide in recent years. Despite some swings, both public transportation ridership and the number of passenger miles on transit in the Richmond region has been relatively flat overall in recent years. Transit ridership in the Richmond urban area in 2003 totaled an estimated 42 million miles of travel, an increase of 13.5% since 1993.42 Overall, however, only 2.2% of commuters in the region used public transportation in 2000, well below the state average of 3.7%. Commuters living in the City have by far the highest rate of transit usage (8.27%); in contrast, less than one-half of one percent of commuters in Chesterfield, Hanover, Goochland, or Powhatan use transit.43

The Greater Richmond Transit Company (GRTC) is the primary fixed bus route service provider in the area, operating routes in Richmond, Chesterfield, and Henrico. GRTC also provides paratransit for disabled persons and other specialized services. The system is one of the most efficient in the country, but service is limited compared to many similarly sized areas. As the Richmond area’s long range transportation plan notes, “GRTC has a highly efficient service in a limited service area that has not grown to match suburban growth patterns in the region.”44

There is no large-scale transit service in Hanover County or in the more rural counties of the region, which only have specialized paratransit service and community action agency services.
A report from the Richmond Regional Planning District Commission recently concluded that the current system “cannot continue to sustain the transportation needs of rural residents.”

Many commercial and office developments in Henrico and Chesterfield lack transit service as well.

As noted in the previous chapter, the public transportation network in the region does not serve many areas where jobs are located. As a result, these jobs are either inaccessible to low income households or require high transportation expenditures to reach them.

Transportation investments in the region have overwhelmingly favored roadbuilding, slighting public transit and other options. There is no light or commuter rail service within the region, for example, and only limited passenger rail service to other regions. Moreover, transportation planning and investments in the region have tended to ignore bicycling and walking as viable options, discouraging these means of transportation. As the bicycle and pedestrian plan for the region notes, “It is generally agreed that the Richmond region lags well behind other regions (i.e. Northern Virginia) in the pace of bicycle and pedestrian improvements.”

There also are disincentives for localities to invest in transit and other alternatives to driving. Federal and state funds pay almost all of the costs of road construction and maintenance, but only 55% of public transit capital and operating expense. This
creates an unlevel playing field, offering localities an enormous incentive to select new road construction over transit. As an analysis of transit funding statewide noted, “absent a major increase in federal, state, or local funding—little money will be available for transit system expansion.” The same conclusion applies to the potential for expanding rail, pedestrian, and bicycling facilities.

The High Cost of Transportation

Transportation expenses are second only to spending on housing, and families in the South spend more on transportation than on health care and food combined. The average southern household spends $7,233 per year on transportation, roughly 18.5 cents out of every dollar spent. When housing and transportation expenses are combined, only about 50% of income is left for food, clothing, health care, education, and other expenses, as well as for savings.

Transportation costs tend to be highest in areas with more scattered development, since increased distances between home, work, school, and other activities increase the amount and the cost of driving. This problem is compounded by the almost exclusive focus of transportation investments in the Richmond region on roads, which further increases the cost to access jobs, stores, and other activities. Households that regularly use transit and have fewer vehicles typically spend far less on transportation. By de-emphasizing transit and promoting sprawl, localities deprive households of this opportunity to reduce transportation expenses.

Many people decide to drive farther to purchase or rent in an area with cheaper housing. Yet the hidden transportation costs of housing location are poorly understood and surprisingly high. A recent study showed that the costs to own and operate vehicles increases dramatically as people move out farther, and that people often end up spending more on transportation costs than they save on mortgage or rent. The recent increases and volatility in gas prices exacerbate the hefty price tag of longer commutes and have an important impact on affordability.

The tremendous household spending on transportation highlights the fact that the traditional definition of housing affordability is too narrow and should be expanded to include transportation as well as housing costs. In short, it may be more useful to focus on affordable communities instead of just affordable housing.

Low income households tend to devote a larger percentage of their income to transportation, even though they may spend a fraction of what other
households spend. The cost to own and operate a car places a heavy burden on low-income persons, and increasingly on middle-income individuals as well. Absent effective public transportation, however, having a car allows less skilled job seekers to overcome their separation from entry level jobs by giving them the ability to travel greater distances, travel at different times, and travel to areas not accessible by public transit.

The high cost of transportation may be trapping the working poor in poverty and placing homeownership out of reach for many low and moderate income families—or at least reducing the housing people can afford to buy. Extra money spent on transportation tends to represent a lost opportunity to build wealth. Homeownership generally is a very effective tool for increasing wealth since real estate tends to appreciate over time; in contrast, cars typically decline in value.

Lack of Alternatives, Lack of Access

In areas with few transportation choices, not only do people have to spend more on transportation, driving farther and more often, but they may also find it difficult to live without a car. Too often, individuals without a car or who are unable to drive cannot find or retain jobs (particularly entry-level jobs increasingly found in suburban locations that are not served by mass transit), get to the grocery store, take their children to daycare, or accomplish other daily tasks many of us take for granted.

In the Greater Richmond area, almost 9% of households—over 29,000 households—were without a vehicle in 2000. Over 30% of households below the poverty level, however, did not have a vehicle. In addition, as the population ages, a rapidly growing number of people who might have access to a vehicle are unable to drive. However, as a report by AARP observed, “Today’s transportation infrastructure is unprepared for the transformation in America’s demographic shape.”

The bottom line, as a recent study concluded, is that in the Richmond region “many … elderly, disabled, and low-income persons have few or no mobility options to meet their basic needs.”
The High Cost of Current Trends

The housing, land development, and transportation trends transforming the Greater Richmond Area have enormous, wide-ranging impacts.

Economic

The region as a whole has enjoyed significant economic growth. However, sprawl, traffic, and a lack of affordable housing can harm the region’s economic competitiveness by making it difficult to attract and expand businesses and to attract and retain employees. A lack of affordable housing also can harm the region’s economic competitiveness and localities by concentrating poverty and its accompanying social problems. In our increasingly mobile society, if affordable housing or a high quality of life is not available in one area, businesses and employees can move to another. A national report found that business leaders “are recognizing that quality of life directly affects economic prosperity, and that sprawl threatens quality of life in many communities.”

Other adverse economic impacts of current trends include the following problems:

- Air pollution accompanying the rapid rise of driving diminishes quality of life, increases health costs, and businesses may be required to adopt additional pollution control measures if the region cannot meet federal health standards.
- Travelers spent over $1.5 billion in the region in 2005. The region’s vital tourist industry can be hurt by increasing traffic congestion, the loss of rural landscapes and historic resources to sprawl, and pollution from vehicle exhaust.
- Agriculture is harmed as farms and forests are paved over and pollution reduces crop yields. In less than 40 years, farm acreage dropped over 70% in Chesterfield and roughly 60% in Henrico; Hanover had a smaller, 36% decline that still meant almost 60,000 acres less farmland.
- Our thirst for fossil fuels contributes to our dependence on imported oil, takes money out of our economy, and leaves it vulnerable to volatile fuel prices.
- Sprawl undermines vibrant urban centers that often serve as incubators for innovation and entrepreneurship.

The direct impacts of current trends on household finances are tremendous. Half of all spending by households in the South is for transportation and housing. A shortage of affordable housing most directly harms individuals and families in need of housing, hitting their pocketbooks and limiting choices of where to live and work. A growing number of people can no longer afford to purchase or rent housing in many parts of the region. In addition, transportation costs have increased and are higher in sprawling areas. Moving farther out in search of affordable housing often leads to higher transportation costs that eat up any savings on housing, and the annual cost of traffic congestion in the area is estimated to be around $140 million,
an average of $153 per person. Moreover, the lack of transportation choices increases the cost to access jobs, stores, and other destinations, and can limit the ability of people without a car to find and retain employment.

Fiscal

Sprawling development can be a major drain on local and state budgets, carrying a hefty price tag that ultimately burdens taxpayers. Although proposed developments frequently are justified by promises of tax revenues they will bring, localities have increasingly discovered that growth may not pay for itself and must be subsidized by higher tax rates, higher debt, or both. New development does bring tax revenues; however, it often does not generate enough revenue to pay for the water and sewer lines, schools, roads, and other infrastructure and services needed to serve that development. The money spent to provide infrastructure and services to scattered development can mean fewer funds for other parts of a locality, as well as for other purposes such as education and health. Sprawl also is inefficient and costly to taxpayers since the infrastructure that localities already have built may be underused or abandoned as development spreads outward. In contrast, the costs to serve more compact development typically are far less, and studies of over 125 communities nationwide have found that local tax revenues from farmland and open space average almost three times more than the costs of providing services to them.

Counties in the Richmond region are increasingly concerned with the costly demands that development generates for public services and facilities. It has been estimated, for example, that it would cost $5.7 billion to serve the new development allowed under Chesterfield County’s comprehensive plan.

Environmental

From air and water pollution to the loss of wildlife habitat and open space, the region’s development and transportation patterns are causing substantial environmental damage.

As discussed in an earlier chapter, almost 59,000 acres were developed in the area in just five years—outpacing land consumption in Northern Virginia and Hampton Roads.

In addition, the rapid rise in driving spurred by scattered development and a road-centered transportation system is a primary cause of air pollution. Between 2000 and 2006, there were 122 violations of the ozone standard in the Richmond area, an average of over 17 each year. This is fewer violations than in Northern Virginia during this period, but almost twice as many as in Hampton Roads. One study found that almost half (48%) of the six primary air pollutants—carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, particulate matter, and lead—in the region are from transportation.

Transportation spews 367,572 tons of these pollutants into the air each year, the equivalent of 765 pounds per capita in 1999. This is the highest rate of any major metro area in Virginia. These and other pollutants from cars and trucks contribute to smog, visibility impairment, acid rain, and other serious environmental problems.

Vehicles also are a primary source of carbon dioxide, contributing to changes in the Earth’s climate. Among the catastrophic potential effects of climate change...
are more intense hurricanes, coastal flooding, species extinction, and wetland loss as a result of altered temperature and moisture patterns. Virginia produces more carbon dioxide than some western industrial nations, and transportation produced more than 40% of the Commonwealth’s CO$_2$ emissions in 2002—over 48 million metric tons.\textsuperscript{69} Another leading cause of greenhouse gas emissions is residential energy consumption, which includes burning fossil fuels for heating, as well as power plant pollution to generate electricity for heating, cooling, appliances, lighting, and other uses.

Sprawl, road-building, and driving also are taking a toll on water quality, harming rivers, streams, wetlands and the Chesapeake Bay, as well as stressing water supplies:

- Buildings, roads, and parking lots are replacing acres of forests, farms, and wetlands throughout the region that otherwise would filter water.
- Development has dramatically increased the amount of asphalt, rooftops, and other impervious surfaces, which in turn can increase the volume of runoff of pollutants, erosion, and flooding. A study examining two options for the same property found that a sprawl development alternative would cause 43% more runoff than a better designed, more traditional development.\textsuperscript{70} Increased runoff also reduces groundwater replenishment, depleting water supplies.

- Land cleared for roads and development can deposit sediment in rivers and streams. In just one week in 2002, for example, monitoring stations showed that rainfall washed 1.4 million pounds of sediment and 400 pounds of phosphorous off of construction sites for Route 288 into the Swift Creek Reservoir, a primary drinking water source for Chesterfield County.\textsuperscript{71}
- Road use and maintenance can introduce pollutants such as de-icing chemicals and herbicides into water.
- Population growth, as well as expanding home and lawn sizes, increase water consumption and can stress water supplies.
Health and Safety

Dirtier air from escalating driving harms our health. Cars and trucks emit a number of pollutants that can damage lung tissue, and one report estimates that the transportation-related public health costs in the Richmond urbanized area totaled over $118 million in 2001 alone. Power plant pollution produced in generating electricity for residential energy use is another primary cause of air pollution harming public health. Nitrogen oxides from vehicles and power plants, for example, are a major contributor to ground level ozone, which can cause pain when inhaling, shortness of breath, coughing, and headaches, and may also cause asthma attacks and even premature death.

The American Lung Association recently gave Chesterfield, Hanover, and Henrico a failing grade for their air quality due to the number of high ozone days, and it estimates that individuals whose health is at risk in these localities include almost 66,000 people over 65, over 14,000 children with pediatric asthma, more than 35,000 people with adult asthma, over 20,000 people with chronic bronchitis, and over 158,000 with cardiovascular disease. Anyone exercising or working outdoors also faces increased health risks from ozone pollution.

Indoor air quality often is even worse. Many people spend up to 90% of their time indoors, yet buildings often have poor air quality as a result of emissions from sources such as building materials, furnishings, and furnaces. Nationally, poor indoor air quality has been estimated “to cause thousands of cancer deaths and hundreds of thousands of respiratory health problems each year.”

In addition, the lack of safe, affordable shelter can lead to greater health problems. It has been estimated that families with children comprise over one-third of the homeless population in the United States, and homeless children have been reported to suffer from a higher rate of illness.

Further, high energy costs may require low income or elderly people on fixed incomes to cut back or turn off their heating and cooling, which increases risks of death or illness. High energy costs also can force people to cut back on spending for medicine, again increasing health risks.

There is increasing evidence that current transportation and land use patterns are having a dramatic impact on our health by decreasing physical activity. Physical inactivity contributes to health problems such as obesity, diabetes, cardiovascular disease, certain forms of cancer, and depression. It is estimated to be responsible for over 200,000 deaths each year in the U.S. The decline in physical activity rates appears to be linked in part to scattered development, poor community design, and a lack of adequate and safe facilities that can make walking and bicycling impractical if not impossible.

Current transportation and development patterns also have serious safety impacts. High rates of driving are accompanied by high rates of injuries and fatalities from accidents. In 2005 alone, there were almost 21,500 automobile crashes in the region, resulting in 11,743 injuries and 81 deaths. Contrary to common perceptions that suburban areas are safer, according to one study residents in the rural counties of Goochland, Hanover, and Powhatan were at great risk of death than City residents when traffic accidents are considered together with the risk of being killed by a stranger. The more urbanized counties of Chesterfield and Henrico had a lower fatality rate than the City.

Social

Our sprawl, transportation, and affordable housing challenges have profound social and community impacts as well. Among other things:

• A lack of affordable housing can undermine communities by forcing essential employees such as teachers, nurses, police, firefighters, and many other members of the workforce to live outside the area where they work.

• An affordable housing shortage can limit the ability of elderly residents to keep their homes or to find new housing to fit their changing needs, as well as limit the ability of young adults just entering the job market to find housing.
Increased time commuting, running errands, and being stuck in traffic means less time for our families, careers, and community activities, as well as increased stress.

A transportation system that offers few alternatives to driving limits the activities of people unable to drive and can increase their isolation, as well as restrict access to job opportunities.

A transportation system and development based on the automobile mean many children can no longer walk or bicycle to school or to a friend’s house, nor can they play safely along streets built for speed.

Development patterns have been shaped by many factors, including racial and class prejudice. The concentration of low income and minority households in inner cities means they are less likely to have equal opportunities to access housing and jobs, especially as more businesses locate farther out and the region’s public transportation system provides a limited area of service. Children in areas of concentrated poverty may not have equal educational opportunities.

A shortage of affordable housing can harm the quality of life in a community, since economic and racial diversity provide a more vibrant community.

**Historic and Scenic Impacts**

The Richmond region boasts unparalleled historic, cultural, and archaeological resources, as well as beautiful natural and rural landscapes. Over 350 sites and districts in the region are included on the National Register of Historic Places and the Virginia Landmarks Register, and hundreds of additional sites qualify for inclusion. The City of Richmond has over 150 entries on these registers, more than any other locality in the Commonwealth. These resources offer both tangible and intangible benefits, including generating tourism revenues and jobs, helping define our sense of community and sense of place, and offering matchless opportunities for education about the past. Yet many historic and scenic resources have been lost or are threatened.
as a result of development and transportation projects. For example, the National Trust for Historic Preservation has listed Jackson Ward as one of the most endangered historic places in the country due to previous highway projects and new development. In addition, Glendale in Henrico County was named one of the nation’s 10 most endangered battlefields due to encroaching development.

Sprawl threatens historic resources in two primary ways—by swallowing the countryside and by hollowing out established communities. Historic buildings and neighborhoods, battlefields, archaeological sites, and rural landscapes are being destroyed or transformed as sprawl spreads throughout the region. In addition, by pulling jobs, residents, and tax revenues away from established communities, far-flung suburbs drain the economic vitality of historic small towns, rural communities, and urban neighborhoods and often leads to the deterioration of historic areas.
Opportunities for Progress

The housing affordability, sprawl, and transportation challenges facing the Greater Richmond Area have received increasing attention as awareness of the dimensions and impacts of these challenges grows. Efforts to address these problems are expanding as well. There are a host of opportunities to promote quality, affordable housing, smarter growth, and greater transportation choices.

Potential for Change

The housing, land development, and transportation challenges facing the Greater Richmond Area are complex and are the result of many factors.

To some extent, these challenges are the result of market forces, driven by significant population and economic growth, as well as the fact that the region is a desirable place to live. For example, given rising incomes, more jobs, and increasing demand, it is not surprising that housing prices have risen. Higher housing prices have also been spurred by factors such as historically low mortgage rates, rising material costs, and speculative investment in real estate. It is important to recognize that many other regions of the state and around the country face similar challenges.

It also is important to understand that housing, development, and transportation decisions are
influenced by a host of governmental regulations and incentives. For example, local zoning ordinances often prohibit or limit some of the most affordable forms of housing, including multi-family units, townhouses, and accessory dwelling units (such as a basement apartment or a room above a garage). Minimum lot size, minimum setback, and minimum parking requirements all reduce the number of residences that can be built in an area, which in turn contributes to sprawl and drives up development costs, and ultimately raises housing prices. Minimum square footage requirements for each dwelling increase the cost of housing. And mandatory separation of commercial and residential uses into different areas effectively mandates auto-dependent sprawl, increasing housing and transportation costs, land consumption, and driving.

Impact fees also can raise housing costs. Impact fees are imposed on new construction to help pay for roads, parks, schools and other infrastructure, as well as for services that new development requires. Without such fees, there is less incentive to build where infrastructure already exists, and current homeowners may subsidize new ones, making existing housing less affordable. However, imposing these fees tends to increase the cost of new homes, making them less affordable.

In addition, investments of public funds in transportation at the state and local level have overwhelmingly favored one mode of transportation—driving. Tremendous outlays of taxpayers’ dollars have been made to build new and expanded roads, with comparatively little funding for other means of transportation. Roads can play a major role in determining where people live and work by opening new areas to development and by making it cheaper and easier to develop and to live farther from existing communities. Further, since spending has been concentrated so heavily on roads, the region’s transportation system offers few alternatives to driving. In most instances, people have no choice but to drive virtually everywhere for everything, increasing driving, congestion, gasoline consumption, pollution, and transportation costs.

Support for Change

There is growing awareness of the need to address the affordable housing, sprawl, and transportation challenges facing the region. A poll of Richmond residents, for example, found that almost 80% view sprawl as a serious problem in the area and 65% considered traffic congestion to be a serious problem. In addition, 90% viewed sprawl as a factor that has contributed to the decline of Richmond’s core.

Significant public support for changing current policies and practices is also evident. One statewide poll found that 83% of voters support policies that reinvest in older cities and towns in order to focus development, provide economic growth, and reduce traffic. Although traffic congestion is viewed as a serious problem, three-fourths of voters statewide agree that building more roads will
only lead to more development and congestion; instead, they favor halting sprawl, better planning, and more carefully managing growth. Three-fourths of Virginians also favor tax incentives for employees to use mass transit. The Richmond region’s transportation plans have acknowledged that “the transportation system must diversify … to ensure adequate access and mobility choices for all residents of the region.”

More than two-thirds of people surveyed in a national poll expressed concern about housing costs in their communities and 71% would like to see government place a higher priority on making housing more affordable. Over 80% support building housing that is affordable to public employees such as teachers, police, and firefighters.

The broadening support for change is reflected in the priority of projects identified for the region by over 500 business, community, and government leaders the Greater Richmond Chamber of Commerce brought together in 2000. The top priorities for this decade included developing regional transportation solutions, implementing high-speed rail service between Richmond and Washington, developing a regional growth strategy, and enhancing regional policies—including policies to encourage both adequate affordable housing and green development.

Addressing the Region’s Challenges

To address cross-cutting affordable housing, sprawl, and transportation challenges in the region, a number of steps must be taken:

- We must reduce barriers to affordable housing and provide more housing choices;
- We must strengthen existing communities and carefully plan and design new development;
- We must offer more transportation choices while reducing the adverse impacts of roads and motor vehicles; and
- We must protect farmland, open space, and natural areas.

These steps are often complementary. For example, many of the most promising efforts to improve housing affordability in the region involve policy changes to promote more compact, less costly growth patterns. Although policies to guide development can put upward pressure on housing prices, properly crafted policies promote both affordable housing and more sensible development by encouraging higher density, mixed use communities that reduce sprawl and increase the supply of affordable housing.

Smarter growth policies also promote development patterns and transportation systems that support alternatives to driving, increasing the amount of household income that can be devoted to housing and increasing job access while reducing traffic congestion, air and water pollution, and the loss of farmland and open space, and promoting active, healthier lifestyles. In addition, less sprawling, more walkable communities will be increasingly important to provide access to goods, services, and activities for an aging population. More compact communities also require less public infrastructure, reducing the cost to serve growth and the pressure for higher taxes.

Strategies and solutions to promote affordable housing, smarter growth, and cleaner transportation choices are most effective when coordinated as part of a broader effort to promote more sensible growth. These strategies and solutions include the following steps:

Promote Alternatives for New Development.

Regulatory provisions that effectively mandate sprawl, prohibit more compact, traditional forms of development, and limit housing choices can be revised. Changing local zoning provisions such as minimum lot and house size, setback, and parking requirements can promote more compact development, expanding the supply and types of housing, and ultimately reducing housing costs. Revamping local ordinances that prohibit or severely restrict accessory dwelling units, multi-family housing, townhouses, and live-work units can increase the number and types of residences in an area, promoting more affordable housing and permitting a greater range of housing choices and prices. Further, changing zoning codes to reduce or eliminate the strict separation of land uses and to permit mixed use developments allows more jobs to be accessible by public transportation and
other alternatives. All of these measures improve the efficiency of land development, reduce sprawl, and create more walkable neighborhoods. These measures can be applied to all development in a locality or only to development in targeted areas.

In addition to removing regulatory barriers to higher density, mixed income, mixed use developments, these developments can be encouraged through a variety of incentives, including density bonuses, reduced impact fees, and expedited approval processes.

**Promote Infill Development.** Developing vacant land or redeveloping abandoned or blighted structures can increase the supply of affordable housing, reduce pressure to develop rural and natural areas, reduce the burden on taxpayers by encouraging development in areas already served by roads, schools, water, and sewer, and reduce traffic congestion by decreasing travel distances and making alternatives to driving more feasible. There are a variety of strategies to promote infill, including revising building code and zoning requirements, offering incentives to developers, acquiring vacant property and land, and cleaning up contaminated brownfields.

**Promote Renovation and Revitalization.** Rehabilitating older buildings and revitalizing communities can be a major source of affordable housing, and can help stem sprawl and reduce driving and traffic. Renovation and revitalization can be promoted through tools such as rehabilitation tax credits or loans, and building code provisions and programs that support rehabilitation. The state and localities also could devote a larger share of infrastructure spending to older areas (such as repairing and upgrading existing roads and schools). These steps would not only aid development of additional affordable housing, but would also help current owners and renters of affordable units, improving the quality of life for everyone. Richmond's Neighborhoods in Bloom program offers a promising model. Working with a range of private and non-profit partners, the City changed the way it allocated federal and city housing funds to focus expenditures on renovation, restoration, construction, and sales in neighborhoods most likely to benefit from such efforts. The program resulted in the building of 87 homes and the rehabilitation of 212 others between 1999 and 2003.

**Encourage Transit-Oriented Development.** Another tool to promote alternative development and transportation patterns is to guide development to areas with access to transit. Arlington County is a national leader in reducing sprawl and traffic congestion using transit-oriented development, having worked for over 20 years to revamp zoning provisions and to offer incentives to create pedestrian-oriented development surrounding transit stations. Today, virtually all of the office space and about two-thirds of the County's retail space is within walking distance of transit, and the County has the highest rate of transit commuting in Virginia.

An obvious impediment to transit-oriented development in the Richmond region is the absence of an effective regional transit network. Nonetheless, opportunities currently do exist, and
many comparable regions are encouraging transit-oriented development and expanding their transit systems.

**Conduct Education Campaigns.** Resistance to building housing that lower income households can afford to purchase or rent and to higher density development can be powerful barriers to affordable housing by creating costly delays for projects or blocking them altogether. This resistance, commonly referred to as the “Not In My Backyard” (NIMBY) syndrome, is frequently fueled by fear of the unknown, misperceptions of affordable housing (such as the belief that it will decrease property values and increase crime), prejudice, and other factors. Negative impacts can occur, and affordable housing and denser development must be well-planned and well-designed. Education campaigns that highlight the “face of public housing,” and provide information about the benefits of affordable housing can help build support for projects.91 Education campaigns that clarify the costs and alternatives to current development and transportation patterns similarly can help overcome misperceptions about sprawl, public transportation, and green building, and can help build support for the policy changes needed to promote more sensible growth and more sustainable transportation.

**Encourage Better Design.** Affordable housing should not be poor quality housing. Badly-designed buildings and neighborhoods stigmatize residents, undermine communities, and make it more difficult for projects to gain approval. Affordable housing can be carefully designed to be compatible with the surrounding community and to be attractive and safe. In a national survey, over 80% of people support constructing affordable housing for people to rent or purchase in their community if buildings fit with the area and are attractive.92

The Affordable Housing Design Advisor is a clearinghouse that provides a wealth of information to improve the design of affordable housing,93 and a number of areas have created or supported community design centers to help produce high quality design. One of the best examples of the potential for quality design in the region is Winchester Greens. The Richmond Better Housing Coalition converted a deteriorating apartment complex located off of Jefferson Davis Highway in Chesterfield County into a mixed use, pedestrian-oriented community with 240 rental townhouses, a childcare center, a community center, sidewalks and other amenities.94 Winchester Greens is a mixed-income community that won a national award for affordable housing.

**Promote Greener Building.** New and existing buildings can be made healthier, cleaner, and more energy efficient. Greener housing can significantly reduce residents’ utility bills through steps such as adequate insulation and energy and water efficient appliances that cut energy and water consumption and make housing more affordable in the long run. In addition, it can create healthier places to live by improving indoor air quality as a result of eliminating toxic paint, finishes, and other materials. Green building also can protect the environment by using products and technologies that significantly reduce pollution and reduce energy, water, and material use. Localities can adopt a variety of measures to encourage green building, including information and technical assistance programs, grants and loans, streamlined permitting, and requirements that all public buildings meet certain standards of sustainability.

**Adopt Inclusionary Housing Programs.** There are a variety of voluntary or mandatory alternatives designed to include affordable housing in new developments. For example, developers could be required by a locality to include a certain percentage of affordable homes or rental units—or to make a contribution to a housing affordability fund—when they build projects above a certain size.95 In return, developers could receive incentives such as density bonuses that allow more units to be built or streamlined development approvals. Mandatory approaches, however, are controversial. Alternatively, a voluntary inclusionary housing approach would offer incentives to encourage developers to add affordable units to their projects. Although less controversial, voluntary programs typically result in the creation of fewer affordable units.

**Offer Location Efficient Mortgages.** A promising strategy developed in recent years establishes a program to include the savings on transportation
costs realized by people who live near public transit when calculating housing affordability, enabling them to qualify for a larger loan. The location efficient mortgage, or LEM, recognizes that selecting a home in a location that allows a household’s vehicle expenditures to be lowered will leave more money for mortgage payments. LEMs thus expand household purchasing power and provide an incentive for purchasing more efficient housing.96

**Increase Funding for Affordable Housing.** There is a pressing need for all levels of government to increase funding for successful programs and partnerships that are helping to provide affordable housing in the region; such programs offer assistance with down payments on home purchases, assistance with rent, financing assistance for affordable housing construction, build affordable housing, and employ other approaches. Localities can also work with employers to offer incentives to help employees purchase homes, such as grants for down payments and low-interest loans. Community land trusts are another promising tool. Run by a non-profit organization or local government, a trust accumulates land donated, acquired, or already-owned and holds it to be used for affordable housing.97

**Guide Growth to Targeted Areas.** Every locality in the region – at least to some degree – has sought to guide growth to certain areas. In most cases, this is done to protect other areas from being overwhelmed by development. Growth can also be guided to job centers and to areas served by transit. If done properly, establishing development areas and targeting growth can help preserve rural areas, reduce the burden on taxpayers to serve new development by promoting more efficient growth, provide a balance between the location of jobs and housing, and reduce subsidies for sprawl. Such efforts, however, can place limitations on the land available for development, and like any such limitation they may put upward pressure on housing costs. As a result, these measures should be used carefully and in concert with measures to improve housing affordability.

**Protect Rural and Natural Areas.** In addition to strategies to guide growth to targeted areas and to promote more compact development, one of the most effective tools for preserving the rural areas and natural, historic, and scenic resources that help define the region is the conservation easement. These easements are a voluntary agreement between a land owner and a private non-profit organization or government agency that limits certain uses of land in order to protect its conservation value. Another approach that protects land while leaving it in private hands is for a locality to establish a program to purchase development rights from willing sellers. The state and localities could also do more to protect land and provide important opportunities for recreation by increasing funding for parks, which has lagged behind the commitment of neighboring states and...
other regions. Further, investments could be made to establish greenways—corridors of land that can connect parks, schools, neighborhoods, jobs, shopping, and historic and natural areas—and to protect and restore the region’s waterways.

**Provide Greater Transportation Choices.** The Greater Richmond Area lags behind many similarly-sized areas in developing a balanced, truly regional transportation system. State, regional, and local transportation expenditures need to be reoriented to give people meaningful alternatives to driving in order to reduce congestion, gas consumption, pollution, and transportation costs, as well as to provide better services for elderly, disabled, and low income citizens. Developing a multi-modal, regional transportation system could include steps such as high speed rail service connecting Richmond with Washington, Hampton Roads, and Raleigh, light rail service connecting key areas (such as downtown Richmond and the Airport, Short Pump, Ashland, and Petersburg), improved freight rail, enhanced and extended bus service (particularly service to reach major job centers in the counties), and improved pedestrian and bicycle facilities.

A significant portion of taxpayers’ funds spent on transportation is likely to continue to go to road projects. These funds could, however, be shifted from sprawl-inducing projects that expand road capacity in outlying areas to improving and linking existing roads. This would protect taxpayers’ investment in current infrastructure and make existing communities more attractive for development. Further, building a more complete street network would offer drivers more choices of routes, reducing congestion. Road projects that are built can be undertaken with greater consideration of their impact on nearby residents and the natural, historic, scenic, and cultural aspects of the surrounding area. More flexible, context sensitive design could be used for all new roads.

**Develop Regional Coalitions.** The range of organizations and individuals seeking to promote more affordable housing, sensible growth, and transportation choices in the region has broadened considerably. Business, development, housing, community, planning, environmental, historic preservation, and other organizations all have a tremendous stake in these issues and have begun to recognize their common interests and to work together to build consensus and support for change. Greater coordination – preferably in one or more regional coalitions – is needed to promote understanding and action on these issues. Several new groups have formed in the region that may ultimately be able to fulfill at least part of this role, including the Partnership for Smarter Growth, the Partnership for Workforce Homes, and the Alliance for Quality Growth in the Richmond Region.

**Act Regionally.** Regional cooperation and partnerships are necessary to address the region’s challenges—challenges that do not respect or
The comprehensive solutions needed require regional action. Alternatives for housing include creation of a regional housing authority or regional housing trust fund, or a regional fair share agreement. Poverty and affordable housing currently are concentrated in the City. This unequal distribution is not healthy for the region as a whole, and no jurisdiction should have to support a disproportionate share of citizens with the greatest needs. There needs to be more affordable housing and a more balanced distribution of affordable housing among localities in the region, as a matter of equity, to de-concentrate poverty, and to provide affordable housing close to jobs. Regional solutions are needed to address our transportation challenges as well, including developing a meaningful regional transportation system and a regional transportation authority.

**Conclusion**

Adopting these and other steps would produce high-quality development that offers a wide variety of housing sizes and prices, addressing the dearth of walkable, attractive, affordable, mixed-income communities. These strategies should be adapted to fit different localities and areas, and supplemented by comprehensive regional solutions and cooperation to ensure that affordable housing and transportation choices are widespread.

These changes will not be easy to make. The stakes, however, are high.

The interrelated challenges of housing affordability, sprawl, and transportation must be addressed if the Greater Richmond Area is to enjoy long term economic growth, vibrant and diverse communities, a healthy environment, and a strong quality of life for all citizens. We need communities and buildings that are affordable and sustainable.

The time to act is now.
ENDNOTES

1 Different sources of data define the region differently. This report will focus on the City of Richmond and the Counties of Chesterfield, Henrico, Hanover, Goochland, and Powhatan.

2 Data based on U.S. Census, purchased from Environmental Systems Research Institute (ESRI), Business Analyst Online (www.esri.com/bao).

3 Ibid.

4 Carol Hazard, “Homes Sell Best Right Here,” Richmond Times-Dispatch, June 1, 2007.


8 Except where otherwise specified, the data in this chapter and the next chapter are derived from the U.S. Census and Census information purchased from Environmental Systems Research Institute (ESRI), Business Analyst Online (www.esri.com/bao). 2005 data is used where available; however, for many data sets the most recent, reliable information is from 2000.

9 See www.dataplace.org.


13 U.S. Census Bureau, 2005 American Community Survey.


16 Richmond Area Realtors, Multiple Listing System (as of October 1, 2006).

17 See C. Theodore Koebel and Kevin R. Byrd, Affordable Housing Demand in Henrico County, Chesterfield County and City of Richmond 1 (January, 2004).

18 Among the challenges are the likelihood that population is likely to continue to increase in the region, and to increase most rapidly among the younger population just entering the job market that is most likely to rent or to have limited ability to purchase a home, and among the aging population that will often be on a fixed income.

19 Rex Springston, “Area Now Champion of Sprawl: Land Development is Fastest in State,” Richmond Times-Dispatch, Feb. 12, 2001 (analysis performed by U.S. Department of Agriculture, Natural Resource Conservation Service)(this study defined the Richmond area as the City of Richmond and Chesterfield, Henrico, Goochland, Powhatan, Hanover and New Kent counties. Northern Virginia was defined as Fairfax, Prince William, Stafford, Loudoun and Fauquier; Hampton Roads as Virginia Beach, Chesapeake, Portsmouth, Suffolk and Isle of Wight and York).

20 Even more land will be developed if the recent rate of land consumption for each new resident were to continue. Rex Springston, “Experts Say Sprawl Still Spreading: Efforts to Control it Locally Faulted,” Richmond Times-Dispatch Nov. 18, 2001.

21 Land loss data from Natural Resource Conservation Service; population data from The Weldon Cooper Center for Public Service.

22 Glenn Larson, Assistant Director, Chesterfield County Planning Department, October 23, 2006. See also, Chesterfield County Planning Department, Chesterfield County Growth Analysis, p. 2 (Feb. 2004).

23 U.S. Census Bureau, Median and Average Square Feet of Floor Area in New One-Family Houses Completed by Location (http://www.census.gov/const/C25Ann/sftotalmedavgsqft.pdf).

24 The average American household spends roughly 3.5 percent of income on energy low income households spend 14%. U.S. Department of Energy, Energy Efficiency and Renewable Energy, “Low Income Programs” (www.eere.energy.gov/states/alternatives/low_income_prog.cfm). However, weather, volatile energy prices, and individual circumstances can result in a far higher percentage of income going to energy bills.


32 Unemployment rates vary widely among localities as well. In April 2007, unemployment ranged from 2.2% to 2.6% in the counties of the region, and was 4.0% in Richmond. Virginia Employment Commission, Virginia Electronic Labor Market Access (http://velma.virtualmlmi.com).

33 Bureau of Economic Analysis, note 31.


35 FHWA, Office of Highway Policy Information, Highway Statistics 2004, Table HM-72 (note that the data in this paragraph are for what FHWA considers the “urbanized area.” For the Richmond area, that is slightly larger than the area that is the focus of this report).

36 Texas Transportation Institute, 2005 Urban Mobility Report (http://mobility.tamu.edu/ums).


39 Ibid.

40 Ibid.
41 2001 National Household Travel Survey, daily trip file, U.S. Department of Transportation.
42 Texas Transportation Institute, note 36.
43 Census 2000.
46 Virginia Department of Transportation, Richmond Regional Bicycle and Pedestrian Plan, p. 2 (July 2004).
50 Center for Neighborhood Technology and Surface Transportation Policy Project, Driven to Spend: Pumping Dollars out of Our Households and Communities (June 2005).
51 Ibid.
56 Canby, p. 5.
57 AARP, Enhancing Mobility Options for Older Americans, p. 2 (Jan. 2005); see also, Surface Transportation Policy Project, Aging Americans: Stranded Without Options (April 2004).
58 Richmond Regional Planning District Commission, Public Transportation for the Elderly, Disabled, and Low Income, p. 36 (Feb. 2006).
61 U.S. Department of Agriculture, National Agricultural Statistics Service, 1997 Census of Agriculture (note that a decline in farm acreage does not necessarily mean that the same number of acres were developed).
63 Texas Transportation Institute, note 36.
64 American Farmland Trust, Fact Sheet on Cost of Community Services Studies (www.farmland.org).
65 Chesterfield County Planning Department, Chesterfield County Growth Analysis, p. 16 (Feb. 2004).
67 Virginia Department of Environmental Quality; see http://www.deq.state.va.us/ozone.
68 Surface Transportation Policy Project, Clearing the Air, Public Health Threats from Cars and Heavy Duty Vehicles (2003).
71 Tom Pakuris, Hands Across the Lake, Impact of Runoff Pollution 8/25/02-9/2/002 on Swift Creek Reservoir, November 12, 2002.
72 Surface Transportation Policy Project, note 68.
73 American Lung Association, State of the Air 2006 (http://lunaction.org/reports/sota06_full.html). As noted above, there were 122 violations of the current ozone health standard in the Richmond region between 2000 and 2006. These figures probably underestimate the extent of the problem since many localities do not have monitors, and every area that has a monitor has recorded violations.
81 Civil War Preservation Trust, History Under Siege (2006). Gaines’ Mill/Cold Harbor in Hanover was previously identified as an “at risk” battlefield since “housing developments litter the perimeter of Gaines’ Mill and the upper half of Cold Harbor battlefield is lost beyond recall,” America’s Most Endangered Battlefields (Feb. 2003).
84 Ibid.
85 Richmond Area Metropolitan Planning Organization, 2026...
National Association of Realtors, National Housing Opportunity Survey (conducted August 13-17, 2003). Although there is increasing support for affordable housing, particularly for “workforce housing,” resistance to public housing provided or subsidized by the government continues to be fairly strong.


A number of promising projects already have been undertaken; it is beyond the scope of this report, however, to summarize these efforts. See Trip Pollard, *Where Are We Growing? Land Use and Transportation in the Greater Richmond Region* (2003) (www.southernenvironment.org) for a more complete discussion of steps undertaken in the region. Other resources for useful strategies and examples include The Washington Area Housing Partnership, *Toolkit for Affordable Housing Development* (2005) (www.wahpdc.org); Smart Growth Network and National Neighborhood Coalition, *Affordable Housing and Smart Growth: Making the Connection* (2001).


David M. Sacks, then Acting Deputy Director, Department of Community Development, City of Richmond, October 2003. See also, Local Initiatives Support Corporation, *The Ripple Effect: Economic Impacts of Targeted Community Investments* (2005).

See Koebel, Land, and Danielson, *Community Acceptance of Affordable Housing*, National Association of Realtors (June 2004).

National Association of Realtors, National Housing Opportunity Survey (conducted August 13-17, 2003).

See www.designadvisor.org.

Richmond Better Housing Coalition (www.betterhousingcoalition.org).

A locality currently would have to receive authorization from the General Assembly to adopt such a requirement.

See www.locationefficiency.com for general information on location efficient mortgages.

For more information on community land trusts, see the Institute for Community Economics website at www.iceclt.org.