

State of Washington, D.C.'s Neighborhoods 2010

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ABOUT THIS REPORT

The D.C. Office of Planning funded the first State of Washington, D.C.'s Neighborhoods report in 2008 with the purpose of tracking and measuring major demographic, economic, social, and environmental indicators in the District's wards and neighborhoods. In this second report, we have updated the original indicators with the most recent data available, as well as added new indicators that were not previously available. For instance, the environment chapter has the largest number of new indicators, such as access to transportation and healthy food, but we have also included indicators about foreclosure in the housing chapter, as it is now such a pressing national problem. When possible, we compare how the indicators have changed across the wards and neighborhoods between the time of the first report and the latest data available.

The purpose of tracking indicators is to identify broad patterns and trends across the city's neighborhoods. Understanding where neighborhoods have strengths or challenges can assist District agencies, nonprofits, and community member in strategizing and making informing decisions.

The report is organized into nine subject categories:

- Demographics
- Economy—Jobs and Income
- Economy—Housing
- Education
- Health
- Family, Youth, and Seniors
- Safety and Security
- Natural and Built Environment
- Transportation

Each section provides indicators meant to measure different aspects of the issue. The indicators are discussed in the text and presented in charts and maps, providing a citywide, ward, and neighborhood context for conditions and trends. The final concluding chapter highlights the neighborhoods that have undergone significant change since the first report based on subset of key indicators from the demographics, housing, and economy chapters.

A full set of data tables and comparison charts for the 39 neighborhood clusters (listed below and shown in the map) can be found in the report appendices. The ward and

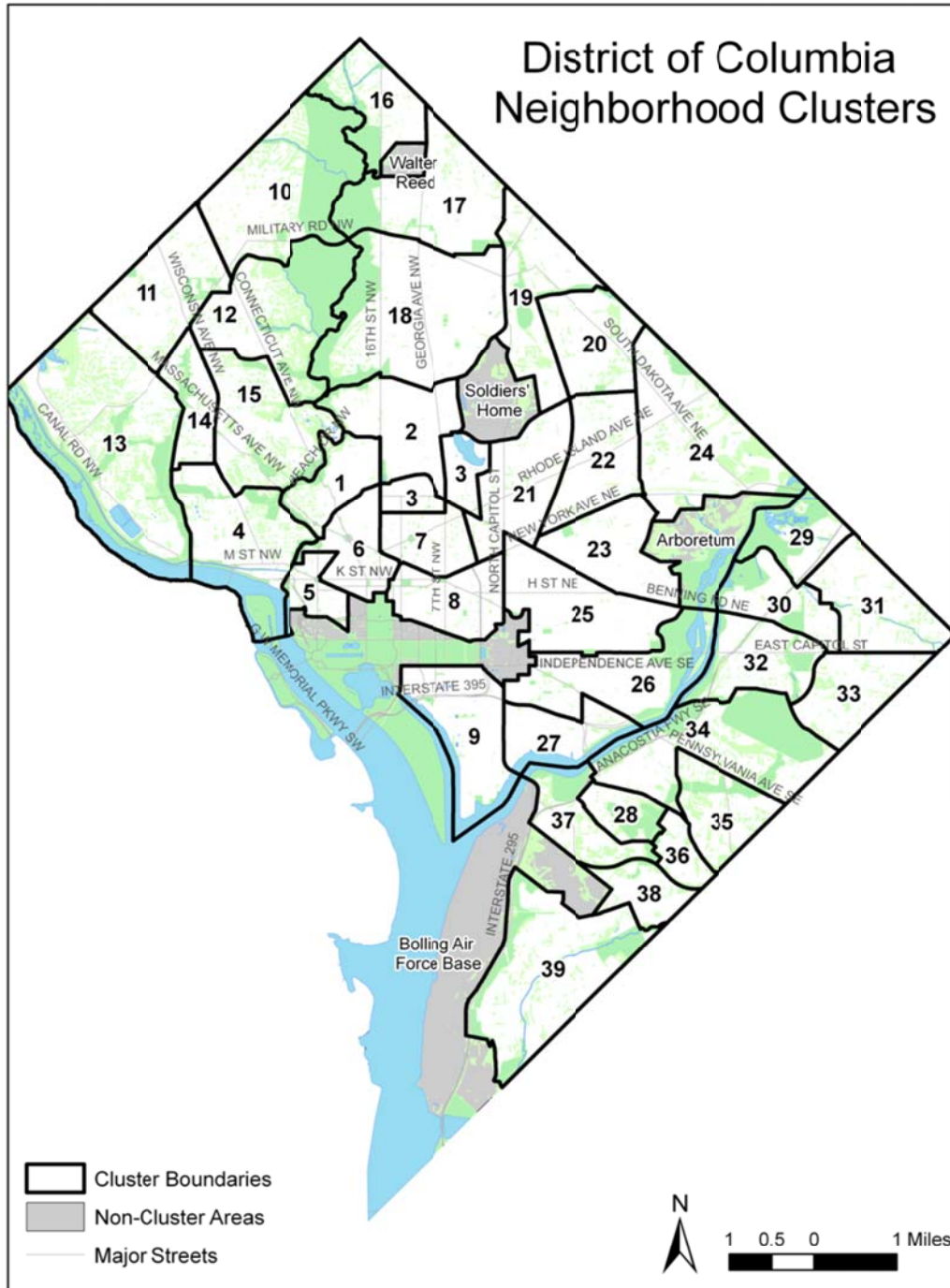


neighborhood cluster data have all been adjusted by NeighborhoodInfo DC to consistent geographic boundaries, even for older data. The ward boundaries used throughout this report are those established in 2002, according to the redistricting following the 2000 decennial census. The neighborhood cluster boundaries are those determined by the D.C. Office of Planning around this same time.



Neighborhood Clusters (full names)

- 1 Kalorama Heights, Adams Morgan, Lanier Heights
- 2 Columbia Heights, Mt. Pleasant, Pleasant Plains, Park View
- 3 Howard University, Le Droit Park, Cardozo/Shaw
- 4 Georgetown, Burleith/Hillandale
- 5 West End, Foggy Bottom, George Washington University (GW)
- 6 Dupont Circle, Connecticut Avenue/K Street
- 7 Shaw, Logan Circle
- 8 Downtown, Chinatown, Penn Quarters, Mount Vernon Square, North Capitol Street
- 9 Southwest Employment Area, Southwest/Waterfront, Fort McNair, Buzzard Point
- 10 Hawthorne, Barnaby Woods, Chevy Chase
- 11 Friendship Heights, American University Park, Tenleytown
- 12 North Cleveland Park, Forest Hills, Van Ness
- 13 Spring Valley, Palisades, Wesley Heights, Foxhall Crescent, Foxhall Village, Georgetown Reservoir
- 14 Cathedral Heights, McLean Gardens, Glover Park
- 15 Cleveland Park, Woodley Park, Massachusetts Avenue Heights, Woodland-Normanstone Terrace
- 16 Colonial Village, Shepherd Park, North Portal Estates
- 17 Takoma, Brightwood, Manor Park
- 18 Brightwood Park, Crestwood, Petworth
- 19 Lamond Riggs, Queens Chapel, Fort Totten, Pleasant Hill
- 20 North Michigan Park, Michigan Park, University Heights
- 21 Edgewood, Bloomingdale, Truxton Circle, Eckington
- 22 Brookland, Brentwood, Langdon
- 23 Ivy City, Arboretum, Trinidad, Carver Langston
- 24 Woodridge, Fort Lincoln, Gateway
- 25 NoMa, Union Station, Stanton Park, Kingman Park
- 26 Capitol Hill, Lincoln Park
- 27 Near Southeast, Navy Yard
- 28 Historic Anacostia
- 29 Eastland Gardens, Kenilworth
- 30 Mayfair, Hillbrook, Mahanang Heights
- 31 Deanwood, Burrville, Grant Park, Lincoln Heights, Fairmont Heights
- 32 River Terrace, Benning, Greenway, Dupont Park
- 33 Capitol View, Marshall Heights, Benning Heights
- 34 Twining, Fairlawn, Randle Highlands, Penn Branch, Fort Davis Park, Fort Dupont
- 35 Fairfax Village, Naylor Gardens, Hillcrest, Summit Park
- 36 Woodland/Fort Stanton, Garfield Heights, Knox Hill
- 37 Sheridan, Barry Farm, Buena Vista
- 38 Douglas, Shipley Terrace
- 39 Congress Heights, Bellevue, Washington Highlands





I. INTRODUCTION

Washington, D.C., has changed since the first edition of the *2008 State of Washington, D.C.'s Neighborhoods* report due in large part to the national economic downturn and housing market bubble burst. While the District was not one of the hardest hit cities, the crash did affect the local housing market. Citywide median home prices flattened and the sales of homes decreased dramatically by 43 percent between 2006 and 2009. The effect of the subprime market has escalated into a nationwide foreclosure crisis, and Washington, D.C.'s foreclosure rate has similarly risen from 14.8 notices per 1,000 single-family and condominium units in 2007 to 36.5 notices per 1,000 units in 2009 (although not to the alarming levels of cities like Las Vegas and Cape Corral-Fort Meyers, Florida).¹

The impacts of the national economic downturn have reverberated throughout the District in higher unemployment rates (10.0 percent in June 2010 compared with 6.4 percent in June 2008) and higher receipt of cash and food assistance (TANF receipt and Supplemental Nutrition Assistance Program) after years of decline. Low-income, historically disadvantaged neighborhoods in Ward 8 are being particularly hard hit with unemployment rates close to one third.

The slowed housing market affected the city's budget, as less revenue was generated from real property taxes, deed recordation taxes, and deed transfer taxes. The city had budgetary windfalls during the housing boom years; however, it now faces a potential \$100 million budget deficit, and the city government will have to make difficult choices as it attempts to maintain a balanced budget while providing services to District residents, who are increasingly in need of such services.

This balance will be particularly difficult as social service providers across the city and in the region report much higher demand for their services. Housing counseling services cannot keep up with the demand from at-risk homeowners and renters who worry about losing their housing and credit; food pantries report longer lines than usual as well as more affluent clients

¹ The foreclosure rate per 1,000 single-family and condominium units can also be expressed as 3.65 percent of all single-family and condominium units.



needing their assistance; and mental health social services report higher rates of depression (Hendey 2010).

While the overall economic and housing picture is more challenging than it was in 2008, Washington, D.C., as a whole has fared much better than other cities across the nation. The District's success is due to a strong economy fueled by high-skilled professional and technical jobs and its important role as the federal government center. Some cities, like Detroit, face staggering unemployment rates (15.2 percent in June 2010), while others, like Los Angeles, are struggling with public education budgetary shortfalls (\$640 million) that have shortened the school year and threaten to reduce the number of teachers hired.

Even in the face of recent economic challenges, Washington, D.C., continues to show many positive signs. Public school enrollment appears to have remained steady after two decades of steady decline and the spring 2009 DC Comprehensive Assessment System (DCCAS) test scores increased. Despite the recent development slowdown, the city has worked on several important commercial, residential, and infrastructure projects. For example, the H Street Corridor developed new streetcar tracks running from Union Station to Minnesota Ave Southeast; the Pennsylvania SE corridor in Ward 7 placed a new regional grocery store; and two new parks recently opened near Nationals Park baseball stadium. The District also continues to lead the nation in green building, as District agencies have relocated to more economically challenged sections of the city, such as Anacostia, the Southwest Waterfront, and north of Union Station near North of Massachusetts Avenue (NoMA), to help jumpstart commercial growth,

However, even with continued growth and development, ensuring equity and inclusion in all of the city's neighborhoods continues to be a challenge. The District's Master Plan embraces the new diversity, recognizes the disparities between neighborhoods, and makes a strong commitment to ensure new resources will improve conditions and opportunities for the city's lower-income residents. It also commits to ensuring that income diversity exists neighborhood by neighborhood, rather than over the city as a whole.

The following report takes a broad approach to track the improvements and declines of indicators across wards and neighborhoods. In many cases, the report tracks trends documented in the 2008 neighborhood report. However, we have also added new indicators, such as foreclosures, environmental indicators, and access to public and private transportation. We look forward to refining and adding to these indicators in future reports.



II. DEMOGRAPHICS

Like many east-coast cities, Washington, D.C., experienced a dramatic decline in population over the latter half of the 20th century. Now, at the start of the 21st century, those population losses are beginning to reverse and the city is growing again. As new residents discover the attraction of urban living, and as many long-term residents see their neighborhoods expand and revitalize, the District of Columbia has started shedding decades of decline and disinvestment.

Population

A city's population is its lifeblood. A growing population can indicate a city that is vibrant, desirable, and healthy, while a declining population can reflect a city losing vitality and resources.

The growth of Washington, D.C., as a major urban center began almost 70 years after the city's founding in 1790 (figure 2.1). At the start of the Civil War, the city's population was only 75,000, according to the 1860 decennial census. Over the next hundred years, the District of Columbia's population grew dramatically, with further accelerations coincided with the start of World War I and the U.S. entry into World War II in 1941. By the 1950 Census, the city had reached its peak population of 802,000.

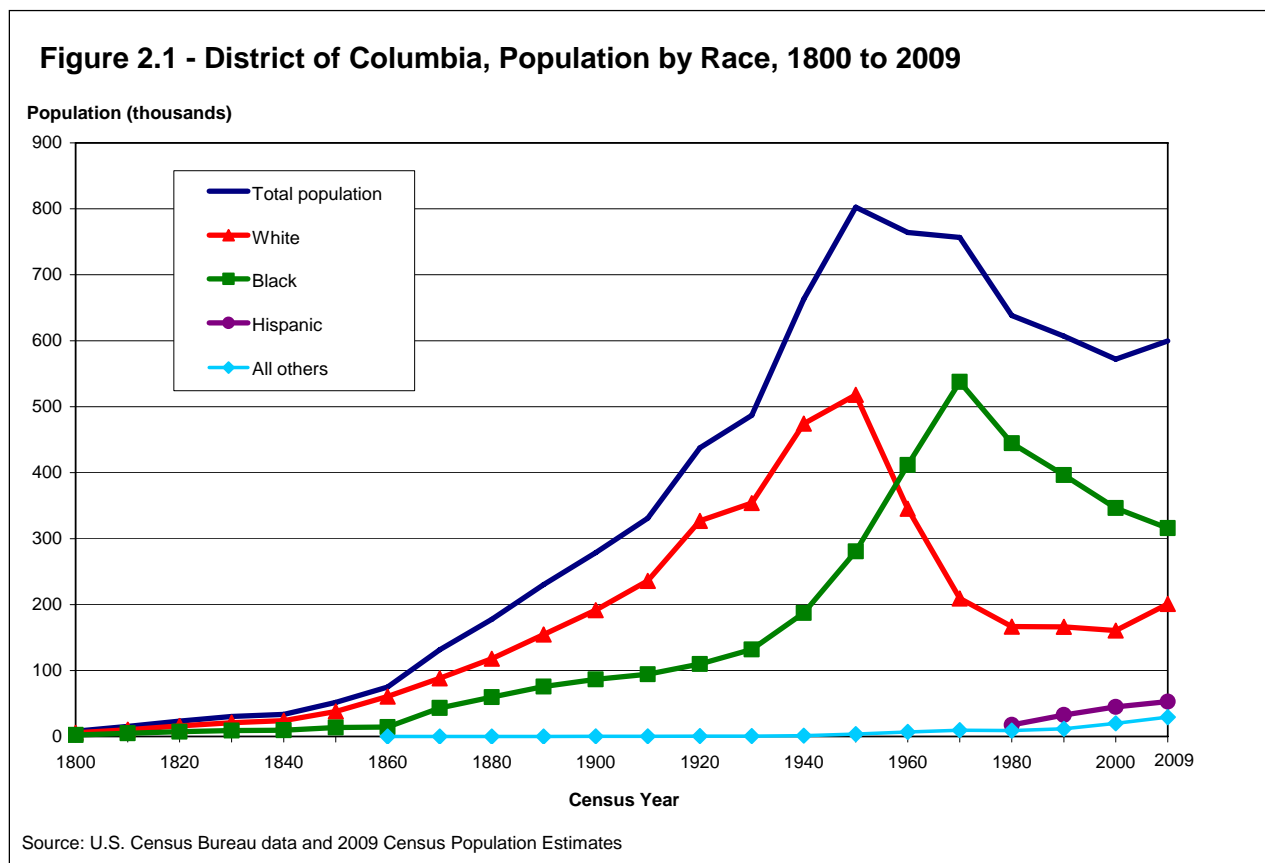
But while the first half of the 20th century was one of extraordinary growth for Washington, D.C., the second half was characterized by the city's declining fortunes. Starting around 1950, an enormous exodus of whites resulted in the city's first loss of population in its history. As African Americans from the south began moving to northern and Midwestern industrial cities in search of job opportunities, whites had greater access to the suburban fringe. The combination of these two occurrences, intensified by changes in auto transportation and highway systems, resulted in a dramatic white-flight outward migration pattern from cities. Between 1950 and 1970, the white population fell dramatically by over 300,000 persons. Much of this loss was offset by a growing influx of African-Americans to Washington, D.C., however, and the city's total population only declined by 50,000 persons as a result.

Unfortunately, the riots triggered by the assassination of Dr. Martin Luther King in 1968, and fueled by decades of frustration among the African-American population from a lack of progress in civil rights and economic equality, sent the city into a downward spiral. This time it was blacks, particularly the middle class, who began leaving the city. As a result, the District of Columbia's population plummeted, falling from 757,000 persons in 1970 to 572,000 persons as



of the most recent decennial census in 2000. Poverty rates increased from 16.7 percent in 1970 to 20.2 percent in 2000.

Today, the situation has changed dramatically. The latest estimates from the U.S. Census Bureau and the Bureau of Economic Analysis show that the city's population has been growing since the late 1990s, a marked change from the previous five decades. Since the 2000 census, the city's population has risen to almost 600,000 people (599,697) in 2009, an increase of 4.8 percent (figure 2.1). The white population not only stopped its decline but has been increasing. Growing numbers of Hispanic and Asian residents are also helping to fuel the city's new boom.

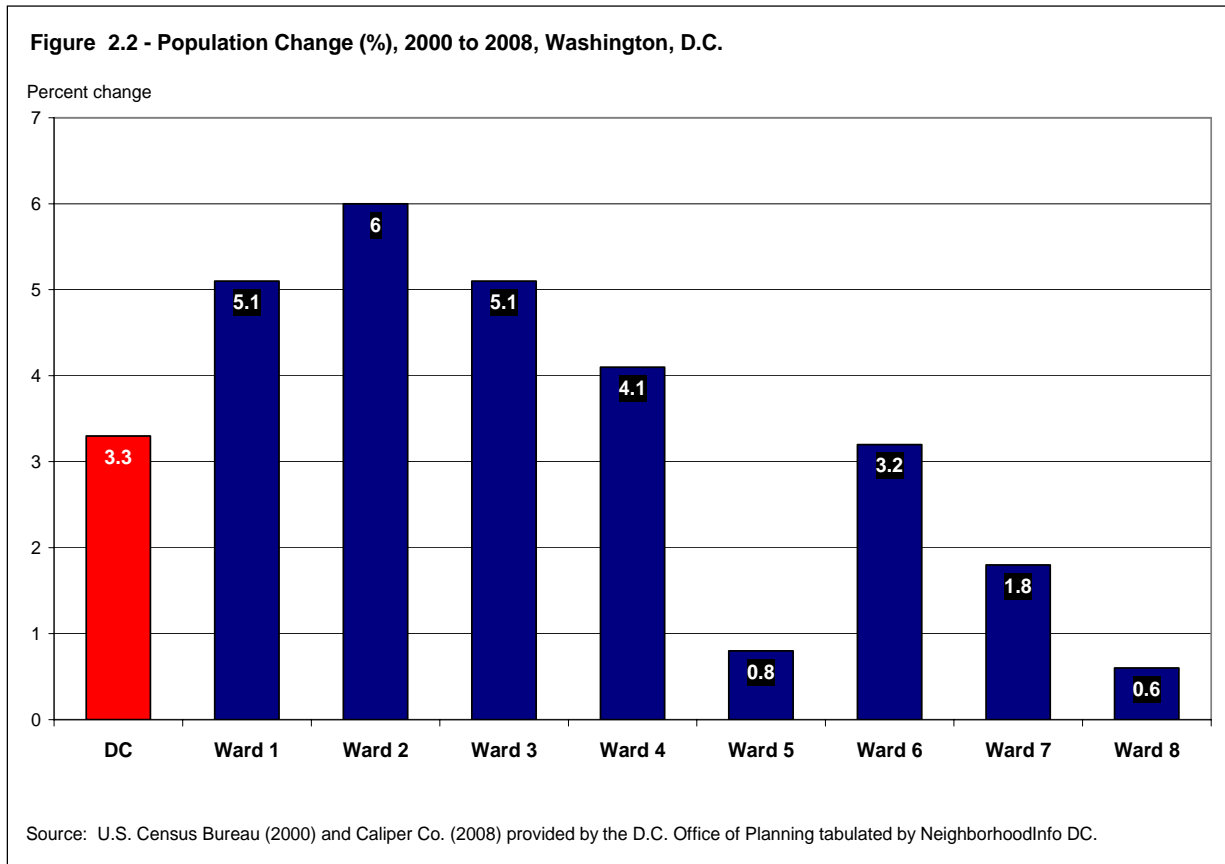


Not all parts of the city are experiencing these increases in population changes equally, however. Using population estimates developed by the Caliper Corporation and provided by the



D.C. Office of Planning, we are able to track the population changes between 2000 and 2008 at the ward and neighborhood cluster level.²

While all the wards experienced positive growth between 2000 and 2008, the wards with higher than average increases in population growth between 2000 and 2008 were Ward 2 (6 percent), Ward 1 (5.1 percent), Ward 3 (5.1 percent), and Ward 4 (4.1 percent) (figure 2.2). Ward 6's population growth was similar to the city average at 3.2 percent, and the remaining three wards (all with the highest poverty concentrations in the city) had population gains less than the city average. Ward 7 gained 1.8 percent population between 2000 and 2008, Ward 5 gained only 0.8 percent, and Ward 8 gained only 0.6 percent.



Turning to neighborhoods, the neighborhood cluster with by far the strongest population growth since 2000 is located in one of the lower growth wards (map 2.1). The population of Cluster 29 in Ward 7 is relatively small, only 2,700 people in 2008, but grew 14 percent (by 326 people) since 2000. This robust growth was most likely due to the recent construction of new

² As noted earlier, both Ward and Neighborhood Cluster boundaries are defined uniformly throughout this report, so that the population and other data comparisons are based on consistent geographic areas over time.



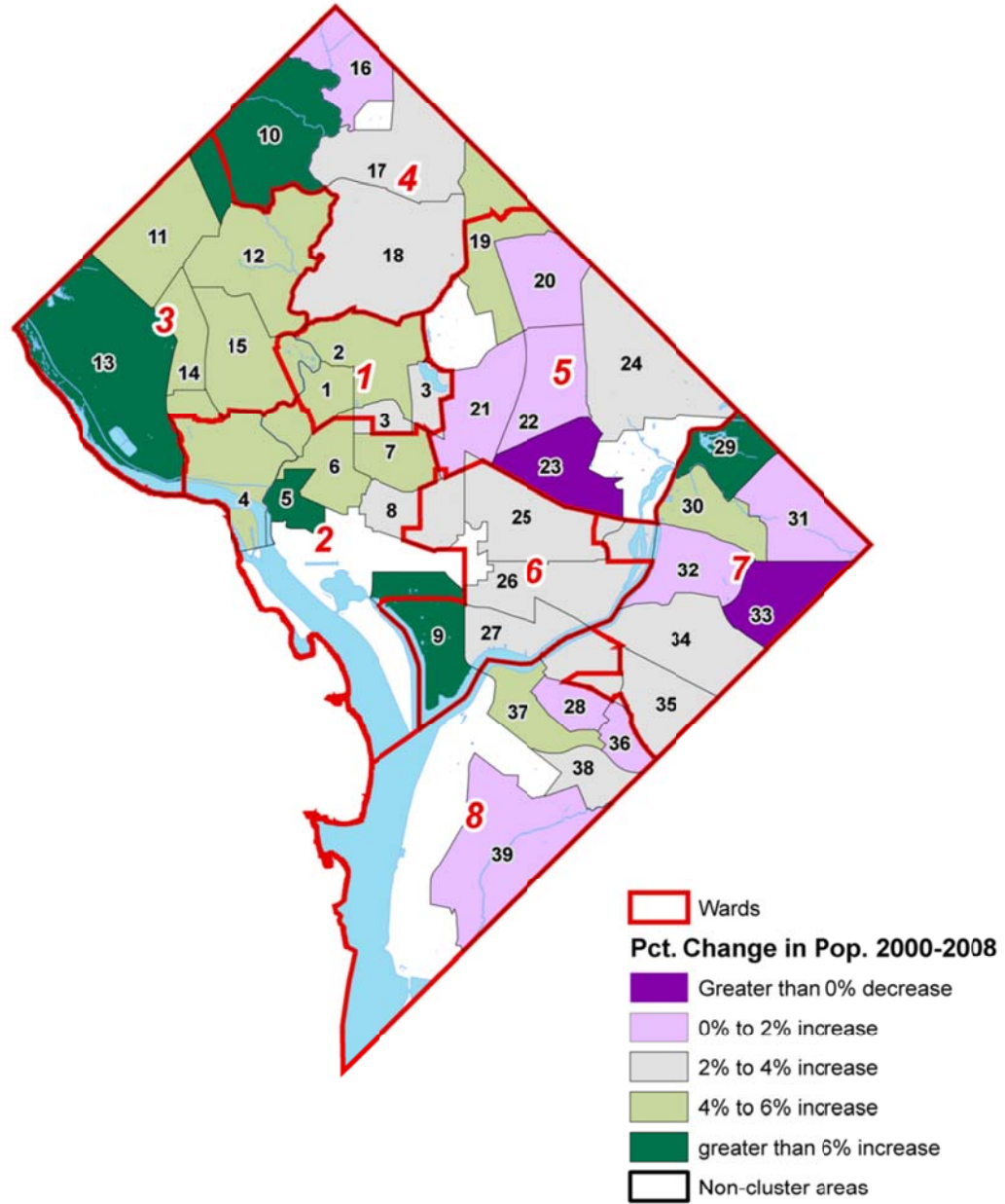
townhomes in this part of the city, such as the new workforce housing, Lotus Square, and Parkside Townhomes. For instance, the number of sales of single-family homes increased in this neighborhood cluster by 200 percent between 2000 and 2005 (from 5 single-family homes in 2000 to 15 in 2005).

The second highest population growth during this period was in Cluster 10 (Hawthorne, Barnaby Woods, Chevy Chase) in Ward 4. The population of Cluster 10 grew from 12,724 to 13,628 persons between 2000 and 2008, an increase of 7.1 percent. The next highest rates of population growth were Cluster 5 (West End, Foggy Bottom, GW) in Ward 2 with 6.8 percent growth, Cluster 13 (Spring Valley, Palisades) in Ward 3 with 6.5 percent, and Cluster 9 (Southwest Employment Area, Southwest/Waterfront) in Ward 6 with a 6.3 percent. While not the greatest percent increase in population growth, Cluster 2 (Columbia Heights, Mt. Pleasant) in Ward 1 increased by the most absolute number of people between 2000 and 2008 (2,496 people) and Cluster 18 (Brightwood Park, Petworth) in Ward 4 grew by 1,554 people during the same time period.

Only two clusters had negative population growth between 2000 and 2008: Cluster 33 (Capitol View, Marshall Heights) in Ward 7 had a -2.1 percent decline and Cluster 23 (Ivy City, Trinidad) in Ward 5 had less than a 1 percent decline (-0.3 percent) between 2000 and 2008.



**Map 2.1 - Population Change 2000–2008,
by Neighborhood Cluster
Washington, D.C.**



Source: U.S. Census Bureau (2000) and D.C. Office of Planning data (2008)
tabulated by NeighborhoodInfo DC.



Households

Households are groups of people—some are families, and some are not—who live together in the same home or apartment. The size of households in the city will affect the demand for the number and types of housing units, as well as affect public school enrollment and the need for other city services.

Recent estimates show that the average household size in Washington, D.C., increased between 2000 and 2008, a reverse of the declines experienced earlier in the decade. There were approximately 249,000 households in the city as of the 2000 Census, translating into an average of 2.16 persons per household. This was down from 2.5 persons per household in 1980 and 2.4 persons per household in 1990. According to the most recent 2008 American Community Survey, the household size increased to 2.23 persons, a 3.2 percent increase from 2000 (table 2.1). While the number of total households has remained relatively steady (increasing by only 0.6 percent between 2000 and 2008), the number of *persons* in households increased by 3.8 percent, which has fueled the increase in the persons per household. The increase in the number of persons is presumably a result of the District's recent baby boom (described later in the report).

Table 2.1. Changes in Household Size, 2000 to 2008

	2000	2008	Pct. change
Total persons	572,059	591,833	3.5
Persons in households	536,373	556,627	3.8
Households	248,590	249,996	0.6
Persons per household	2.16	2.23	3.2

Source: American Fact Finder, 2000 Census SF3 and 2008 American Community Survey

Wards 4, 5, 7, and 8 all had household sizes above the city average in 2000 (the latest data available at the ward level), ranging from 2.38 persons per household in Ward 7 to 2.73 persons per household in Ward 8. Ward 2, which encompasses the downtown cluster, had the smallest household sizes in 2000, with only 1.64 persons per household.

Neighborhood Cluster 29 (Eastland Gardens/Kenilworth) in Ward 7 and Cluster 37 (Sheridan/Barry Farm) in Ward 8 have the largest households in Washington, D.C., with an average household size of 3.11 persons. The next two clusters with the largest household sizes are both in Ward 8—Cluster 38 (Douglas/Shipleigh Terrace) and Cluster 28 (Historic Anacostia), with average household sizes of 2.86 and 2.80, respectively.



The neighborhoods with the smallest households are in Cluster 5 (West End, Foggy Bottom) in Ward 2 with an average of 1.35 persons per household. Cluster 6 (Dupont Circle/Connecticut Avenue/K Street) in Ward 2 and Cluster 14 (Cathedral Heights/McLean Gardens) in Ward 3 had the next lowest average household sizes at 1.42 persons and 1.48 persons per household, respectively.



III. ECONOMY—JOBS AND INCOME

The recent national economic downturn has halted the earlier economic boom that Washington, D.C., and the region experienced during the mid-2000s. The Washington, D.C., region had grown and expanded during the boom of the 2000s due to the fact that it had a strong and diverse economy fueled by high-skilled professional and technical jobs, most notably in homeland security and defense, but also in tourism and international finance (Turner et al. 2007). Over the past year, job growth slowed down significantly, although the region's dependence on federal government jobs and contracting has helped buffer the economic downturn. The annual number of employees in the metropolitan area reached almost 3 million at the height of the housing market in the Washington region in 2006 according to the Current Employment Statistics, an increase of 10.8 percent from 2000. By 2009, the number of those employed in the region held relatively steady, decreasing by only -.6 percent between 2006 to 2009.

Like metropolitan areas across the country, the Washington region's unemployment rate has increased. The region's unemployment rate in 2006 was 3.1 percent, a third below the 4.6 percent national average. However, by February 2010, it increased to 6.9 percent, much higher than the earlier economic boom times but still significantly below the national rate of 10.4 percent from the same time period (Department of Employment Services 2010).

While some areas of the Washington region have held steady since the national downturn, there are other areas of the District that have been affected significantly. The challenge for the city continues to be how to create conditions where more of the city's residents, particularly those who have lived here for a long time, can participate fully in our dynamic economy in Washington, D.C., and its region.

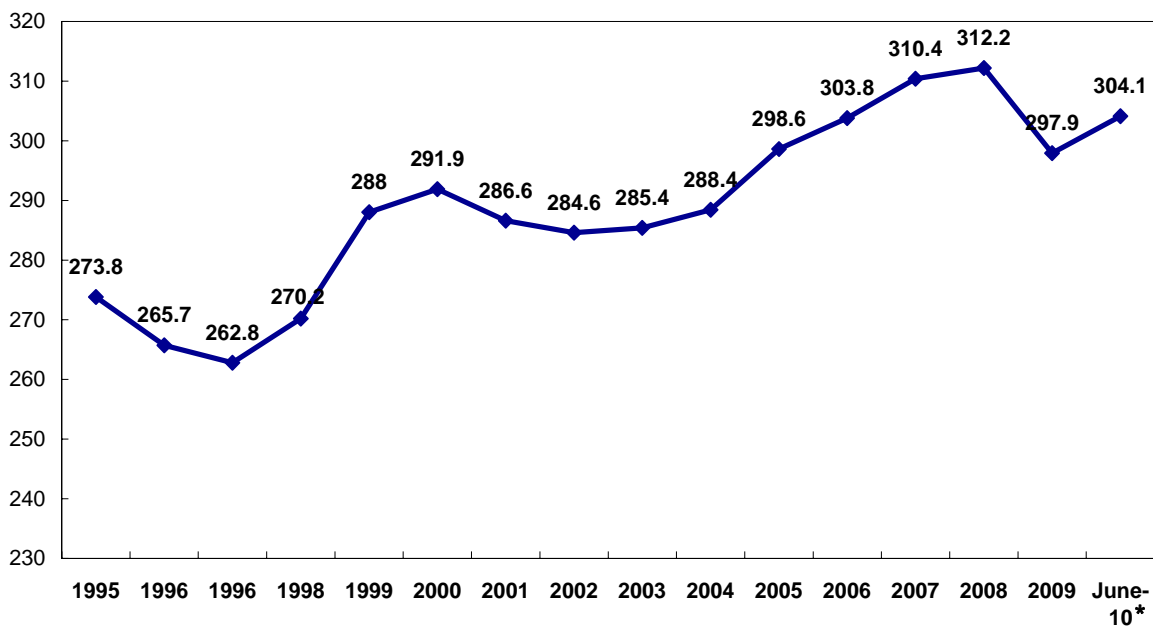
Employed Residents and Unemployment Rate

The number of employed residents and the unemployment rate measure the extent to which persons who live in Washington, D.C., are connected to the economic success of the city. Indicators from the 2008 report suggested that, after years of economic disconnection, either residents were starting to benefit from the city's economic growth or new, more affluent persons had moved into the city, inflating the statistics. However, with the recent national recession, the number of employed persons has decreased and particular subgroups of the population with historically higher unemployment rates are particularly worse off.



The number of employed residents rises and falls in relation to population changes and the national economy. For instance, consistent with the city's falling population between 1980 and 2000, the number of employed residents 16 years and older also fell from 319,735 to 294,952, a drop of 7.8 percent. However, between 1997 through 2000, the number of employed residents increased sharply but then dipped back down during the early 2000s during the national recession (figure 3.1). The number of employed residents started climbing back up starting in 2003, although dropped again during the latest economic downturn falling sharply to 297,900 in 2009 (latest annual data available). According to the U.S. Bureau of Labor Statistics, the number of employed residents in the District is estimated to have increased between 2009 and June 2010, reaching 304,100 persons.

Figure 3.1 - Number of Employed Residents (1,000s), 1995 to June 2010, Washington, D.C.



Source: U.S. Bureau of Labor Statistics, LAUS
* Note: June 2010 is a monthly preliminary estimate.



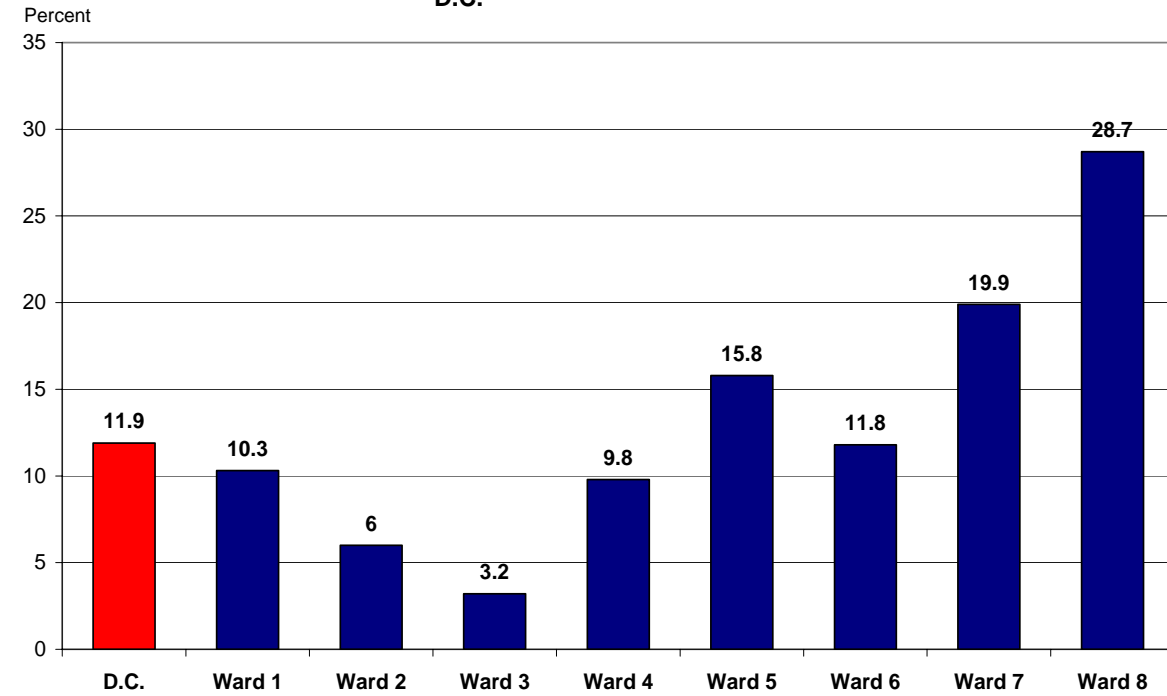
Similarly, the unemployment rate for Washington, D.C., residents had been steadily dropping during the housing boom period but then began rising again since the national recession. According to the U.S. Bureau of Labor, Local Area Unemployment Statistics (LAUS), the unemployment rate for Washington, D.C., in 2006 (the peak of the housing market) was 5.7 percent, the lowest of the decade. Since then, unemployment in the city reached 10.2 percent in 2009 and is estimated to be 10.5 percent as of June 2010. The national recession has clearly affected Washington, D.C., although the average city rate is not as severe as other harder-hit areas, such as Las Vegas-Parkside at 14.5 percent (June 2010) or Detroit-Warren-Livonia at 14.4 percent (June 2010).

While the District's unemployment rate has worsened on average, the impact has been particularly hard on older and minority workers. Younger workers in their mid-20s to mid-30s had an unemployment rate of only 7.7 percent while the unemployment rate of those 35 to 44 years old was 9.3 percent (December 2009). More dramatically, African Americans in the labor force had an unemployment rate of 15.6 percent as of December 2009 and Hispanics had an unemployment rate of 8.4 percent. The unemployment rate for non-Hispanic whites was only 4.7 percent.

The most recent ward-level unemployment rates from December 2009 also reflect the wide variation across the city and reflect the racial segregation in the city (D.C. Department of Employment Services) (figure 3.2). As of December 2009, the city's unemployment rate was 11.9 percent (higher than the June 2010 unemployment rate of 10.5 percent), and the wards with the highest unemployment rates were Ward 5 (15.8 percent unemployed), Ward 7 (19.9 percent), and Ward 8 (28.7 percent). Ward 3 had the lowest unemployment rate, at 3.2 percent.



Figure 3.2 - Unemployment Rates (%) by Ward, December 2009, Washington, D.C.



Source: D.C. Department of Employment Services, Office of Labor Market Research and Information.

The most recent neighborhood-level data on employment are only available from the 2000 decennial census. While the neighborhood-level data are out of date they mirror the ward patterns and show the large disparities in economic status of residents across neighborhoods. The number of residents in the civilian labor force was highest in Cluster 2 (Columbia Heights/Mount Pleasant) in Ward 1, with 24,114 residents in the labor force in 2000. The second highest was Cluster 18 (Brightwood Park/Crestwood) in Ward 4, with 18,206, followed by Cluster 25 (NoMa/Union Station/Stanton Park) in Ward 6 with 15,379. The largely residential neighborhoods in Ward 8 had some of the lowest numbers of residents in the labor force in the city, although Cluster 39 (Congress Heights/Bellevue) had 11,586 residents in the labor force, the highest among all clusters east of the Anacostia River.

Unemployment rates were generally highest east of the Anacostia River in Wards 7 and 8, although there were high levels of unemployment in some clusters in Wards 5 and 6 as well. The city's highest unemployment rate was in Cluster 38 (Douglas/Shipleigh Terrace) in Ward 8, where 14.5 percent of residents in the labor force were not working. This was more than double the overall city unemployment rate of 5.7 percent for 2000, and one can presume that Cluster 38's unemployment rate is much higher than the Ward 8 average of 28.7 percent since Cluster 38 had the highest unemployment rate of all the clusters in Ward 8 in 2000. Rates were similarly



quite high in clusters 37 (Sheridan/Barry Farm) at 13.5 percent, clusters 36 (Woodland/Fort Stanton) and 28 (Historic Anacostia), each at 11.5 percent, and Cluster 39 (Congress Heights/Bellevue) at 10.4 percent.

The highest unemployment rate in Ward 7 was in Cluster 29 (Eastland Gardens/Kenilworth) at 11.0 percent. Similarly high rates of unemployment were found in Cluster 27 (Near Southeast/Navy Yard) in Ward 6 at 11.4 percent, Cluster 8 (Chinatown, Penn Quarters) in Ward 6 at 10.5 percent, and Cluster 23 (Ivy City/Trinidad) in Ward 5 at 9.7 percent.

Household Income and Poverty

Household income and poverty are important measures of economic well-being. Federal poverty thresholds are set nationally and therefore are considered to understate the cost of living in higher-priced areas like the District of Columbia.

Between 1990 and 2000, median household income in the District fell 5.9 percent, from \$44,246 to \$41,625, in constant 1999 dollars. According to the latest American Community Survey, the median household income increased to \$58,710 in 2008 (\$44,831 in 1999 dollars). Looking at the distribution of household income by income brackets (table 3.1), we see that the median household income increased due to lower shares of households making less than \$100,000 and due to significant increases in the shares of those households making over \$150,000. For instance, between 2000 and 2008, the share of households making between \$150,000 and \$199,999 increased by 1.7 percentage points, and the share making more than \$200,000 a year also increased by 1.7 percentage points.

It is important to understand if the increase in the median household income is due to previously existing residents' incomes having increased over the decade or if it is because new, wealthier residents moved into the city. While it is impossible to determine this from the data we have, the fact that (1) the District experienced a housing boom in volume of new homes being sold and sales prices increased astronomically (as described in the next chapter), as well as (2) the share of wealthiest income brackets increased over time suggests that wealthier residents moved into the city.

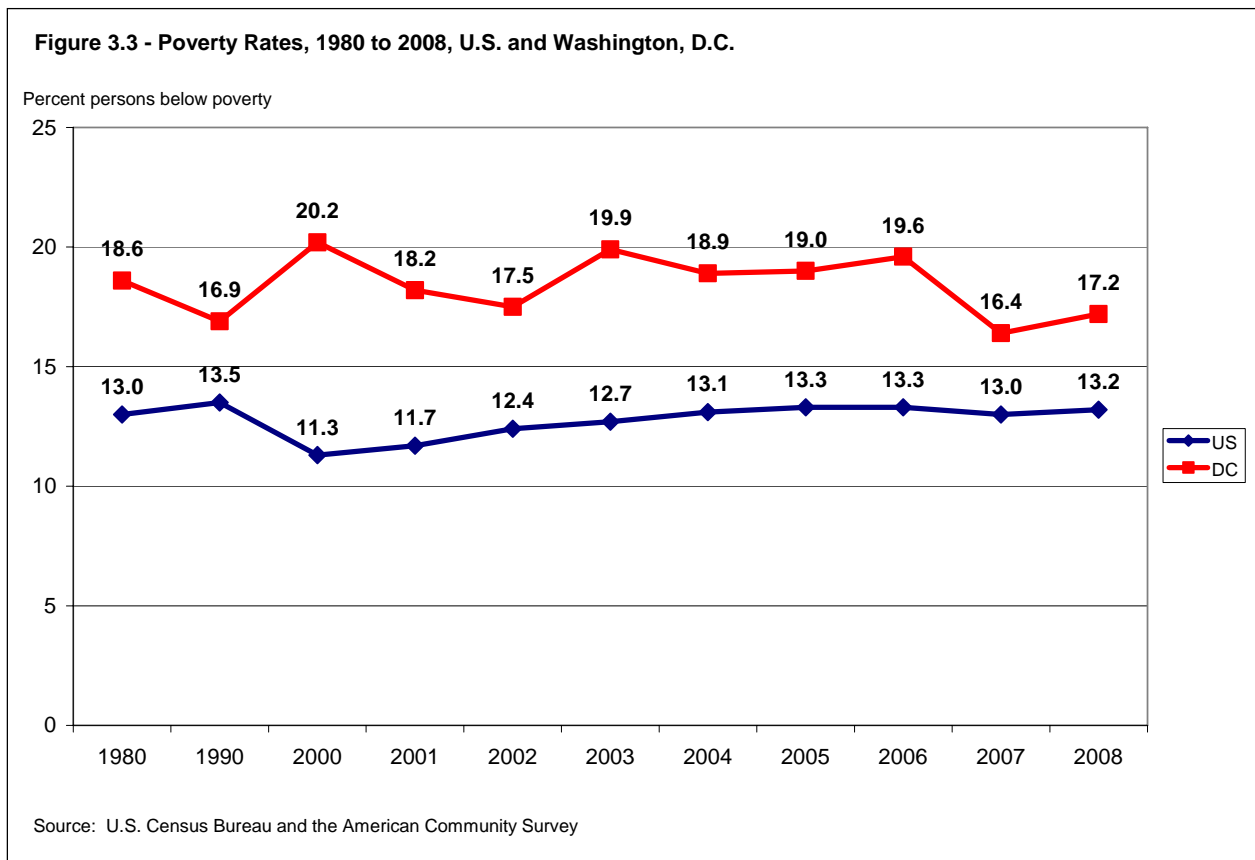
**Table 3.1. Distribution of Household Income, 2000 and 2008**

	2000 (%)	2008 (%)	Percentage Point Change
Less than \$10,000	12.2	11.1	-1.1
\$10,000 to \$14,999	5.1	4.5	-0.6
\$15,000 to \$24,999	8.5	7.9	-0.6
\$25,000 to \$34,999	9.9	8.5	-1.4
\$35,000 to \$49,999	13.2	12.3	-1.0
\$50,000 to \$74,999	16.2	15.5	-0.7
\$75,000 to \$99,999	10.6	11.6	1.0
\$100,000 to \$149,999	11.1	12.0	0.9
\$150,000 to \$199,999	4.7	6.4	1.7
\$200,000 or more	8.4	10.1	1.7
<i>Note:</i> 2000 incomes adjusted to 2008 dollars <i>Source:</i> Integrated Public Use Microdata Series (IPUMS)			

Wide disparities in median household incomes have historically existed across the city. For instance, in 2000 (the most recent ward-level data available), Ward 3 was home to the highest median income (\$84,609), and Ward 8 the lowest (\$22,410). These disparities are evident even within wards. In Ward 6, Cluster 27 (Near Southeast/Navy Yard) had the lowest median income in the city in 2000 (\$16,556), compared to Cluster 26 (Capitol Hill/Lincoln Park), which had a median income of \$54,240, in 1999 dollars. Cluster 13 (Spring Valley/Palisades) and Cluster 11 (Friendship Heights/American University Park) had the highest median incomes in the city—\$109,487 and \$106,477, respectively.



National poverty rates steadily crept upward between 2000 and 2006 with only a small dip between 2006 and 2007 and then reverted back to almost the same level in 2008. Poverty rates in Washington, D.C., however, have not held such a steady pattern (figure 3.3). Poverty rates in the city dipped substantially between 2000 and 2002 (by 2.7 percentage points) before rising back up in 2003 and holding relatively steady for the next three years. There was a significant dip in poverty rates between 2006 and 2007 (a decrease of 3.2 percentage points) but the poverty rate increased again by 2008 to 17.2 percent.



The most recent available poverty data at the neighborhood level are from the 2000 Census. Generally, Wards 3 and 4 had the lowest poverty rates, and Wards 7 and 8 the highest. The extent of poverty varied drastically across the city's neighborhoods, from 3.5 percent in Cluster 11 (Friendship Heights/American University Park, Ward 3) to 50 percent in Cluster 27 (Near Southeast/Navy Yard, Ward 6).³ Other neighborhoods with very high poverty levels as of

³ However, Cluster 27 has undergone significant changes during the past decade, as noted in the conclusion.



the 2000 Census included Cluster 36 (Woodland/Fort Stanton) 47 percent), Cluster 38 (Douglas/Shipleigh Terrace, 46 percent), and Cluster 37 (Sheridan/Barry Farm, 46 percent), all in Ward 8.

Some wards had neighborhood clusters with varying poverty rates within the same wards but the differences were not meaningful. For instance, in Ward 8, Cluster 28 (Historic Anacostia) had an average poverty rate of 37.7 percent in 2000 and Cluster 36 (Woodland/For Stanton, Garfield Heights) had an average poverty rate that was almost 10 percentage points higher at 47.3 percent. While a 10 percentage point difference is large, once neighborhoods surpass a threshold of 30 percent poverty, they are defined as being locations of concentrated poverty. Neighborhoods with concentrated poverty typically have high crime and violence, few jobs, and low-quality schools, all of which have profound negative effects on the long-term life chances of adults and children (Turner and Rawlings 2005).

Ward 6 is an example of where there were large and meaningful differences in poverty rates between the neighborhoods within the ward. For instance, Cluster 8 (Chinatown, Penn Quarters) in Ward 6 had an average poverty rate of 33.4 percent and Cluster 27 (Near Southeast, Navy Yard) had an average poverty rate of 50.3 percent in 2000. Both clusters were home to public housing developments, Sursum Corda in Cluster 8, which was targeted as a “new community” by the city in 2005 and is now in the process of redevelopment (called Northwest One), and Arthur Capper/Carrollsbury in Cluster 27, which received a HOPE VI grant beginning in 2001 to demolish and rehab the former public housing into a mixture of market rate and subsidized housing. At the other end of the spectrum is Cluster 25 (NoMa, Union Station), which has a poverty rate of only 16.7 percent and some of the more expensive housing around the U.S. Capitol. While these differences are great in Ward 6, it will be telling how the neighborhoods have changed over the past decade due to the increases in home prices and reinvestment in many of the Ward 6 neighborhoods as measured by the 2010 Census and recent American Community Survey.

Public Assistance

The number of residents receiving public assistance, in the form of Supplemental Nutrition Assistance Program (SNAP or food stamps) or Temporary Assistance to Needy Families (TANF), indicates the level of economic distress in the community. It also measures the ability of the public benefit programs to reach those in need. For example, an increase in food stamp participation may be a combination of economic distress and improved access to the food stamp program. Nevertheless, food stamp participation tends to increase in tough economic times, and decrease as the economy improves.

Nationally, participation in the food stamp program, now known as the Supplemental Nutrition Assistance Program (SNAP), almost doubled between 2000 and 2009, from 17.2 to 33.7 million persons (Food and Nutrition Service 2010). The greatest annual increase in

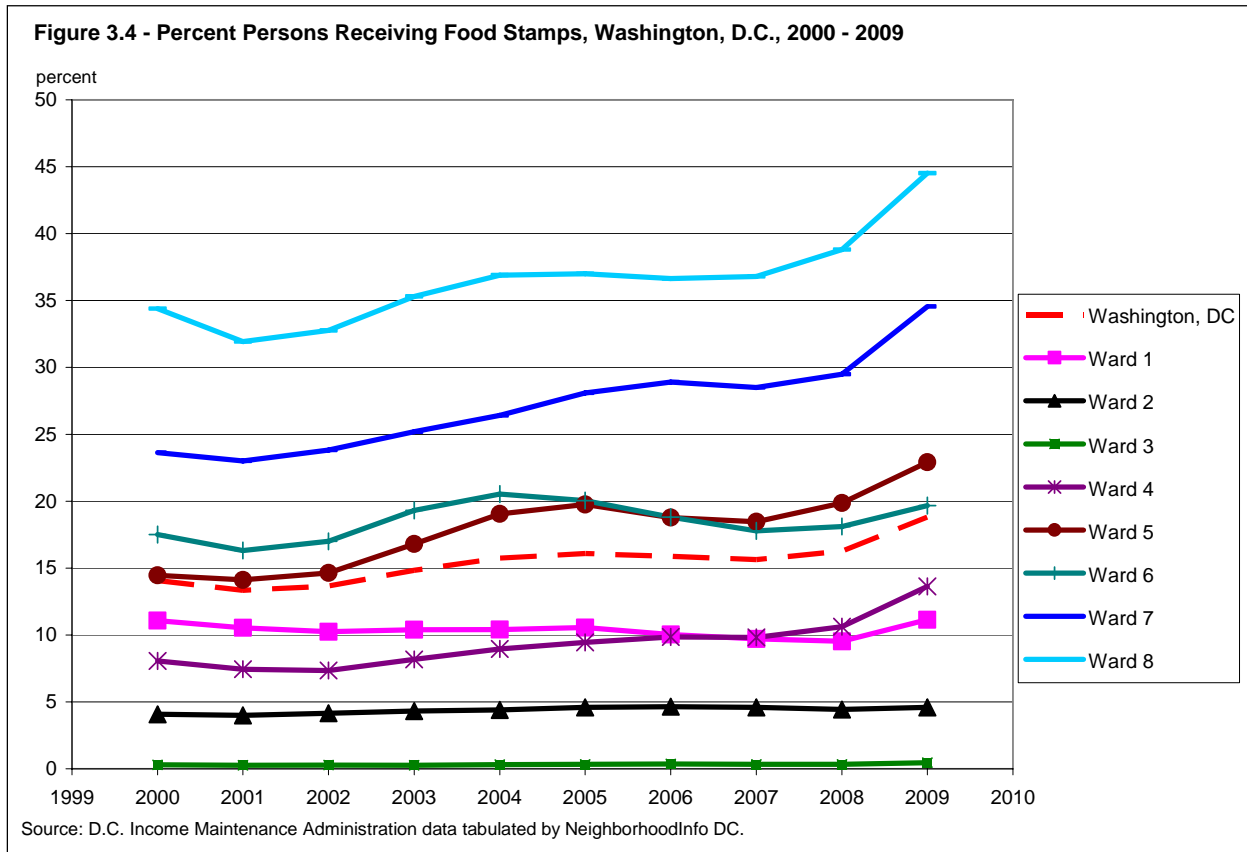


participation occurred between 2008 and 2009, an increase of 19 percent alone. At the same time, the average national benefit per person was increased to more adequately cover families' food costs, from \$90.47 to \$124.45, in 2009 dollars, an increase of 38 percent.

Washington, D.C., has followed the national trend in increasing SNAP participation, with a particularly sharp uptick between 2008 and 2009 coinciding with the start of the national economic downturn. Overall, the share of D.C. residents receiving food stamps increased from 14 percent of the population in 2000 to 16 percent in 2005, and held steady during 2006 and 2007 (figure 3.4). Participation substantially increased between 2008 and 2009, however, reaching 19 percent by 2009.

While the number of families participating in SNAP has increased, the financial benefits for SNAP families in Washington, D.C. have recently increased as well. The average per person monthly benefit for food stamp participants in the District increased from \$103.16 in fiscal year 2006 (in 2009 dollars) to \$128.66 in fiscal year 2009, an increase of 25 percent (Food and Nutrition Service 2010). This is a needed change as the amount of the benefit had actually decreased in real dollar terms between 2006 and 2008.

Despite overall increases in food stamp participation, ward and neighborhood trends have varied considerably. While relatively few residents in Wards 2 and 3 received food stamps in 2009 (4.6 percent and 0.3 percent), consistent with earlier years (see figure 3.4), the rates in Wards 5 through 8 were much higher, ranging from 11 to 45 percent of all persons. It is also worth noting that the rank order of the some of the wards' food stamp participation changed beginning in 2006 and 2007. Food stamp participation in Ward 4 had been lower than Ward 1 until 2007 when the share in Ward 4 began increasing more rapidly. The same is true between Wards 5 and 6: food stamp usage in Ward 5 increased by 4.1 percentage points between 2006 and 2009 surpassing the share of usage in Ward 6.



The highest participation rates were found in Ward 8 (45 percent overall), and participation exceeded 42 percent in every cluster in the ward in 2009. In Cluster 28 (Historic Anacostia), 69 percent of the residents received food stamps (the highest participation rate of all the neighborhoods in that ward and in the city), while the next highest rate was 57 percent in Cluster 37 (Sheridan/Barry Farm). Ward 7 had the next highest share of participation at 35 percent in 2009. Cluster 29 (Eastland Gardens, Kenilworth) had the highest share of residents at the neighborhood level within Ward 7 at 55 percent followed next by Cluster 31 (Deanwood, Burrville) at 41 percent of the population participating in SNAP in 2009.

Other wards showed more variation. In Ward 5, the share with food stamps ranged from 10 percent in Cluster 20 (North Michigan Park/Michigan Park) to 43 percent in Cluster 23 (Ivy City/Trinidad). In Ward 6, participation rates varied from 6 percent in Cluster 26 (Capitol Hill/Lincoln Park) to 32 percent in Cluster 8 (Chinatown/Penn Quarters).

The second major income support program examined in this section is Temporary Assistance to Needy Families (TANF). Nationally, TANF participation has dropped each year from 2000 through 2008 falling to 3.8 people in 2008. However, between 2008 and 2009, the national TANF caseload rose to 4.2 million (Office of Family Assistance 2008). In contrast, TANF participation in Washington, D.C., has held fairly steady between 2000 and 2009. The

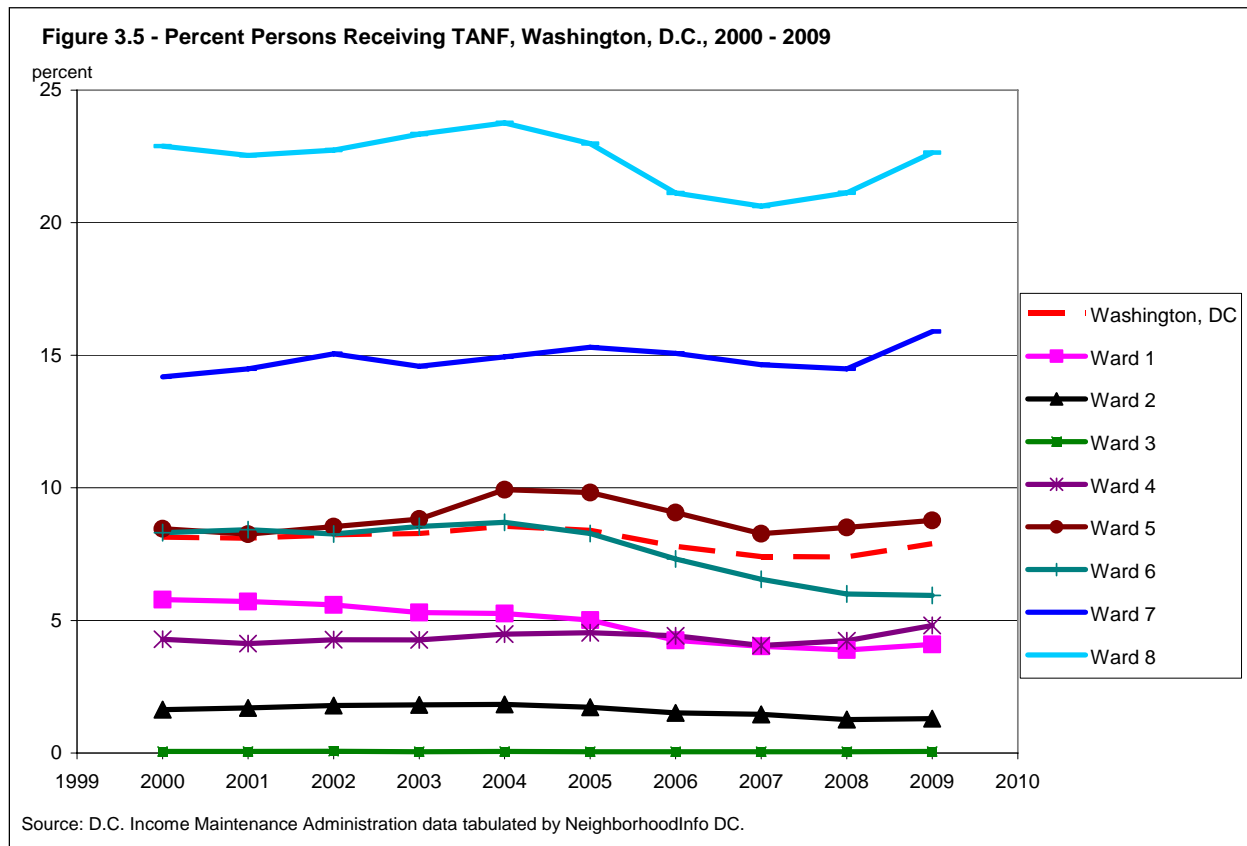


share of D.C. residents receiving TANF varied between 7 and 9 percent of the total population from 2000 to 2009, with a slight downward trend in 2007 and 2008 and a slight increase in 2009 (figure 3.5). By 2009, the share of residents participating in TANF was 8 percent.

The share of residents receiving TANF increased in every ward between 2007 (data reported in original report) and 2009 except for Ward 6, where the share decreased from 7 percent in 2007 to 6 percent in 2009 (see figure 3.5). The share of TANF participants continues to be concentrated in Wards 7 and 8, while very few persons in Wards 1, 2, 3, and 4 receive TANF benefits.

TANF participation has been historically highest in Ward 8, with 23 percent of persons in that ward receiving benefits in 2009. While the concentrations are very high in Ward 8, there was a decrease in the share of the population receiving TANF benefits in Ward 8 between 2006 and 2008. The second highest participation rate has been in Ward 7, where 16 percent of persons were receiving TANF benefits in 2009.

The rank order of a few wards receiving TANF shifted similar to the trends found in food stamp usage. The share of persons receiving TANF was similar between Wards 5 and 6 from 2000 and 2003 until Ward 5 usage began increasing in 2004 and Ward 6 usage began declining. There was also been a change in rank order between Wards 1 and 4 although the differences are not as extreme. TANF usage in Ward 4 had been lower than the share of usage in Ward 1 until 2008, when the Ward 1 share surpassed the Ward 4 share.



The neighborhoods with the highest rates of TANF participation in 2009 were Cluster 39 (Congress Heights) in Ward 8 at 33 percent and Cluster 38 (Douglas, Shipley Terrace), also in Ward 8, at 32 percent. Third highest was Cluster 34 (Twining, Fairlawn) in Ward 7, with a 2009 participation rate of 31 percent. While TANF participation is high across all neighborhoods in Ward 8 and most in Ward 7, some areas of Ward 7 have relatively low rates—Cluster 29 (Eastland Gardens, Kenilworth) and Cluster 30 (Mayfair, Hillbrook) have participation rates of 7 and 11 percent, respectively.

Levels of TANF participation have not changed dramatically in most neighborhoods, except for Cluster 27 (Near Southeast/Navy Yard) in Ward 6, where TANF participation fell by half, from 25 to 11 percent, between 2000 and 2009. The dramatic drop in TANF participation, which mirrors the drop in food stamp participation in this cluster, is likely a result of the Arthur Capper/Carrollsborg public housing development on the east side of the cluster that was demolished and its former very low income residents being relocated under a HOPE VI grant. In addition, the western portion of the cluster has experienced an influx of new residents as major neighborhood revitalization is under way with brand new high-rise buildings anchored by the new Nationals baseball stadium.



IV. ECONOMY—HOUSING

Earlier in the decade, economic development in the city and the region drove an unprecedented period of growth in Washington, D.C.'s housing market that lasted through the first half of the 2000s. Home prices in the city experienced annual double-digit appreciation, rental vacancy rates fell, and a rapid pace of new housing construction had a significant impact on many neighborhoods that had previously experienced disinvestment.

More recently, however, the city's housing market has entered a slowdown, triggered by a decline in the national housing market, a tightening of mortgage credit, and financial difficulties for both homeowners and mortgage lenders brought on by the subprime lending crisis and the national economic recession. Starting around 2006, the volume of home sales in Washington, D.C., slowed (e.g., total home sales decreased by over 50 percent between 2005 and 2009) and prices in nearly all clusters fell and have continued to decrease according to the most recent 2009 data.⁴

The indicators in this chapter examine the changes that have taken place in the city's housing market over the past decade, with a particular emphasis on how conditions and trends differ across wards and neighborhoods. It further looks at the condition of the local housing market in the years since the foreclosure crisis and the drop in home values began.

Home and Condominium Sales

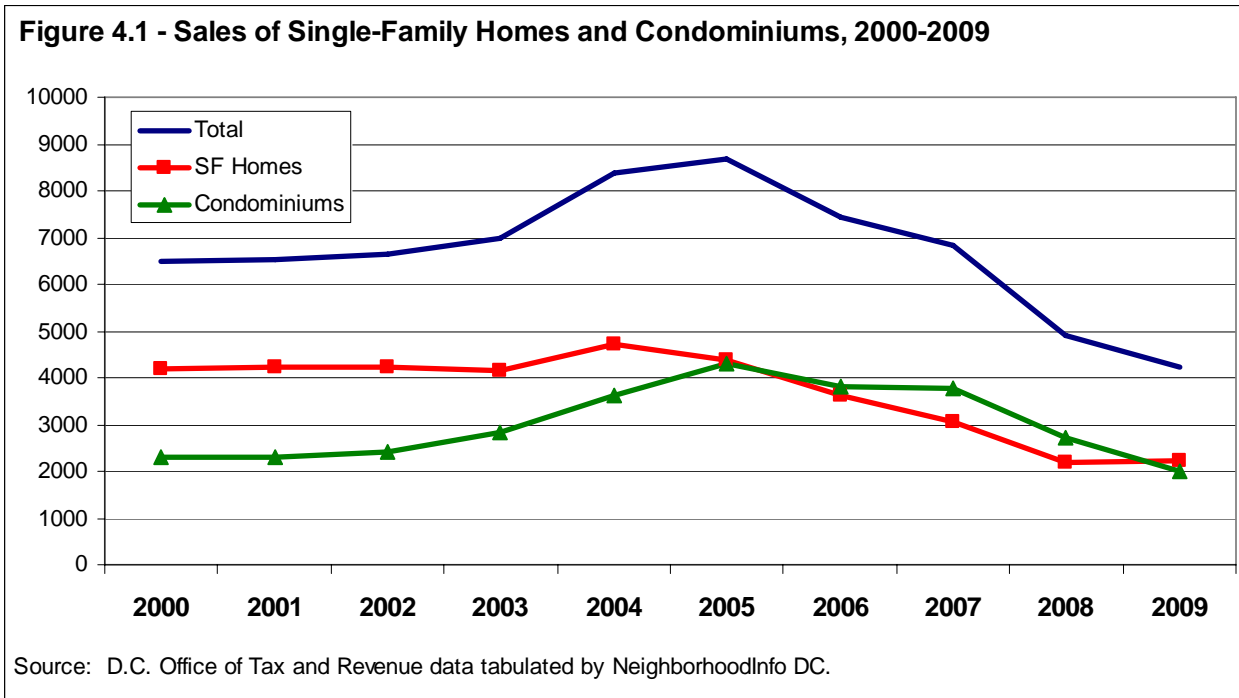
The volume of single-family home and condominium sales is an important indicator of the strength of the local housing market. Higher sales volume can indicate greater interest in particular wards and neighborhoods.

Following national trends, housing sales in the District of Columbia have fallen off substantially from the mid-decade housing market boom. Housing sales volume increased dramatically between 2000 and 2005, with most of this growth fueled by sales of new and existing condominium units (figure 4.1). Sales of single-family homes in the city rose by 13 percent between 2000 and 2005, while condominium sales increased by 86 percent during the

⁴ Data on the number of home sales and sales prices come from the Office of Tax and Revenue's Real Property Sales Database and therefore include both the resale of existing homes and initial sales of new construction. We hope to provide sales data disaggregated by new units and re-sales in future reports.



same period. Signs of the market downturn began in 2005 when the number of single-family home sales dropped by 7 percent (from 4,730 to 4,389 sales) and condominium sales dropped 11 percent (from 4,297 to 3,818 sales) between 2005 and 2006. More recently, citywide sales of single-family homes decreased by 53 percent between 2004 and 2009, and condominium sales decreased by 53 percent between 2005 and 2009. Sales for both single homes and condominiums are currently below their 2000 levels.



The cluster trends in sales volumes have been quite varied, with some neighborhoods more affected than others by the housing boom and subsequent slowdown. Even so, nearly all clusters have experienced a decline in sales of single homes and condominiums from their respective peaks. Single-family home sales in Cluster 37 (Sheridan, Barry Farm) decreased from 36 sales in 2002 to 5 sales in 2009, a decrease of 86 percent. Demonstrating the great variance in neighborhood conditions, Cluster 27 (Near Southeast, Navy Yard) saw single-family home sales go from 30 in 2004 to 57 sales in 2009, an increase of 90 percent. The average length of ownership of single-family homes sold since 1995 throughout the city's clusters is between three and five years, with a citywide average of just over four years.

Only 3 percent of the city's single-family and condominium housing stock transferred ownership in 2009, a ten-year low. That number peaked in 2005 at 7 percent for the year. Like



sales, this number varied by cluster. The highest percentage of housing stock that was sold in 2009 was in Cluster 27 (Near Southeast, Navy Yard), where 16 percent of single-family homes and condominiums transferred ownership. This is likely due to the large number of new housing development in that part of the city. Cluster 27 saw a 42 percent increase in its housing stock since 2007, far exceeding other clusters during this time. The lowest percent housing stock sold was in Cluster 35 (Fairfax Village, Naylor Gardens), which saw only 8 total sales, or 0.4 percent of its single-family and condominium housing stock.

As might be expected from citywide trends, clusters that experienced a boom in condominium development in the earlier part of the decade have also experienced the most extreme fluctuations since the market decline. One of the most dramatic transformations has been in Cluster 8 (Chinatown, Penn Quarters) in Ward 6, where condominiums have been the focus of recent residential development (single-family homes are almost nonexistent in this cluster). In this cluster, condominium sales increased by more than 30 times between 2000 and 2005, due to new condominium construction and other development activity that has made this area a more desirable location for many people. More recently, however, the combination of the overall housing market slowdown and the national economic recession has greatly affected the number of sales in this cluster, with only 214 condominium sales recorded in 2009, a drop of 70 percent from 2005.

Other big drops in condominium sales took place in Clusters 35 (Fairfax Village, Naylor Gardens) and Cluster 11 (Friendship Heights, American University Park), which both saw sales drop by over 90 percent between 2005 and 2009. Similar to Cluster 8, Cluster 11 saw the vast majority (91 percent) of its condominiums delivered after 2000, reflecting the increased demand of the housing boom. Since then, condominiums are less competitive on the housing market. Prices have gone down on average more than single-family homes, and construction of new units has decreased considerably. The change in sales in Cluster 35, in Ward 7, was probably because of fewer buyers. This cluster did not see the same increase in new condominium construction that occurred elsewhere in the city. Its only condominiums are found in the neighborhood of Fairfax Village. This neighborhood saw rapid turnover as many long-term residents took advantage of the rapid rise in sales prices (discussed below), but sales dropped dramatically after peaking in 2006.

Neighborhood Clusters with the largest decreases in annual condominium sales

- 280 Cluster 6 (Dupont Circle, Connecticut Avenue/K Street)
- 215 Cluster 8 (Downtown, Chinatown)
- 199 Cluster 7 (Shaw, Logan Circle)

Note: Decrease in average number of sales per year from 2004–2005 to 2008–2009 (two-year averages).



Despite a drop in condominium sales following the collapse of the housing market, several clusters experienced a brief rebound in condominium sales in 2006 and 2007. For example, Cluster 8 (Chinatown, Penn Quarters) condominium sales grew from 308 sales in 2006 to 505 sales in 2007 before dropping back down to 214 condominium sales in 2009. Similar trends occurred in Cluster 7 (Shaw, Logan Circle) and Cluster 9 (Southwest Employment Area, Southwest/Waterfront). Increases in sales can be the result of the delivery of several condominium projects. Spikes in sales in certain neighborhoods are often the effect of projects like the Yale Laundry Condominiums or the Madrigal Lofts in Cluster 8.⁵

Home Sale Prices

The median sales prices of single-family homes and condominiums are another key measure of the relative strength of the housing markets in wards and neighborhoods. Higher sales prices indicate housing that is more valued by the market, reflecting not only the quality of the homes but also the amenities and conditions of the surrounding neighborhood. Very high median prices, however, can also be a sign of a lack of housing affordable to working families and poorer residents. In addition, recent price increases were also partially a result of a nationwide relaxing of lending standards, which increased the pool of potential homebuyers in the first half of the decade but did not lead to sustainable homeownership for many people.

Because of increasing demand for housing in the city, particularly in neighborhoods where new development has been strongest, home sales prices rose sharply between 2000 and 2007. While the increase in prices signals more demand and a higher value on housing in the District of Columbia, house prices rose much faster than household incomes because housing demand far exceeded the supply in many parts of the city. Until 2007, there was less than six months' supply of homes for resale. The disparity between home price and income growth led to an unsustainable inflation in home values, which led to a rapid decrease in the rate of home value appreciation. Starting in 2006, however, prices in most of the city began to flatten and then decrease as the supply of homes for sale exceeded six months' supply. Since then, only a few clusters have seen even a modest increase in prices in 2009.

The median price of a single-family home in Washington, D.C., in 2000 was \$193,100 (in constant 2009 dollars).⁶ The median price grew to \$497,400 in 2008, dropping only slightly in 2009 to \$494,500. Even with the slight recent decline, inflation-adjusted home prices rose an average of 11 percent per year between 2000 and 2009.

⁵ With new construction, sales are often negotiated and executed a year or more before delivery but are not recorded in the tax records until the project is completed. This results in a spike of sales in years when large projects were delivered.

⁶ All prices are adjusted to constant 2009 dollars using the consumer price index.



Generally, clusters with the highest priced homes also have the widest spread between lowest and highest prices. The 20 clusters with the highest 75th percentile single-family home price are the same as those with the widest spread between the 75th and 25th percentiles. The biggest spread occurs in Clusters 1 (Kalorama Heights, Adams Morgan), 13 (Spring Valley, Palisades), and 4 (Georgetown, Burleith/Hillandale), which saw a 25th and 75th percentile spread of \$815,000, \$691,000, and \$603,000, respectively.

Prices for condominiums experienced a similar growth prior to the national economic crisis but have flattened in the recent slowdown. The median price of a condominium unit in 2000 was \$171,300 (in 2009 dollars) and rose to a high of \$408,600 in 2005, before falling to \$363,000 in 2009. The inflation-adjusted price increase for condominiums more than doubled (112 percent) between 2000 and 2009. Since 2005, however, prices for condominiums have dropped 11 percent.

Median prices differ dramatically across wards (figure 4.2). The highest median home prices continued to be in Wards 2 and 3. After experiencing a slight decline following peak prices in 2005, Ward 2 median prices rebounded strongly to surpass its previous high, at \$1.05 million in 2008. This has since deflated to \$975,000 in 2009. The remaining wards constitute the low- and mid-priced housing markets in the city but, as can be seen in the figure, distinct differences emerged between these areas as the housing boom progressed and continue to play out as the housing market transitions.

Neighborhood Clusters with largest average annual decreases in median condominium prices	
-1.7%	Cluster 17 (Takoma, Brightwood, Manor Park)
-1.64%	Cluster 15 (Cleveland Park, Woodley Park, Massachusetts Avenue Heights, Woodland-Normanstone Terrace)
-1.52%	Cluster 12 (North Cleveland Park, Forest Hills, Van Ness)
<i>Note: Real price change from 2004–2006 to 2007–2009 (three-year averages).</i>	

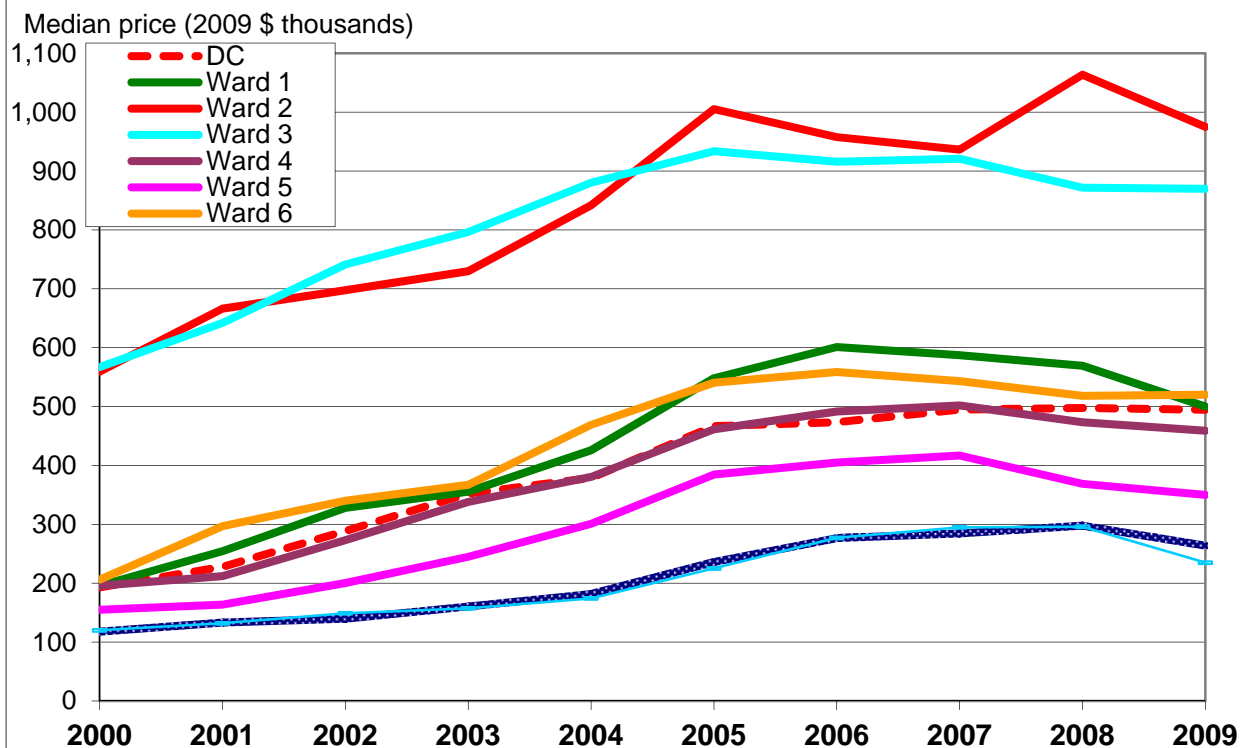
At the start of the rapid price increases in 1999 and 2000, all wards except Wards 2 and 3 were very closely grouped together, with a price spread of less than \$100,000 between them. Now, Wards 1, 4, and 6 are solidly in the middle of the city's home price distribution while Wards 5, 7, and 8 are much lower priced.

Several wards' home values began dipping significantly since 2007. The highest percent drop in median home prices between 2007 and 2009 was seen in Ward 8, where prices dropped 20 percent. Ward 5 prices have decreased by 16 percent between 2007 and 2009. More recently, Ward 2, which experienced the largest absolute dollar gains between 2000 and 2005 also experienced the greatest decrease between 2008 and 2009, dropping from \$1.06



million to \$975,000. This decrease of 8 percent may indicate a slowing market for these types of high-priced homes even in the strongest areas of the city.

Figure 4.2 - Single-Family Home Price Trends by Ward, 2000–2009, Washington, D.C.



Source: D.C. Office of Tax and Revenue data tabulated by NeighborhoodInfo DC.

Neighborhoods mirror many of the ward-level trends illustrated by figure 4.2. Twenty-two neighborhood clusters experienced price declines between 2005 and 2009, with 11 clusters seeing drops of over 10 percent. The biggest decreases in home prices during this time occurred in Cluster 15 (Cleveland Park, Woodley Park) in Ward 3 with a price decrease of 15 percent, Cluster 22 (Brookland, Brentwood) in Ward 5 of 16 percent, Cluster 14 (Cathedral Heights, McLean Gardens) in Ward 3 with a 17 percent decrease, and Cluster 23 (Ivy City, Trinidad) in Ward 5, which decreased by 25 percent.

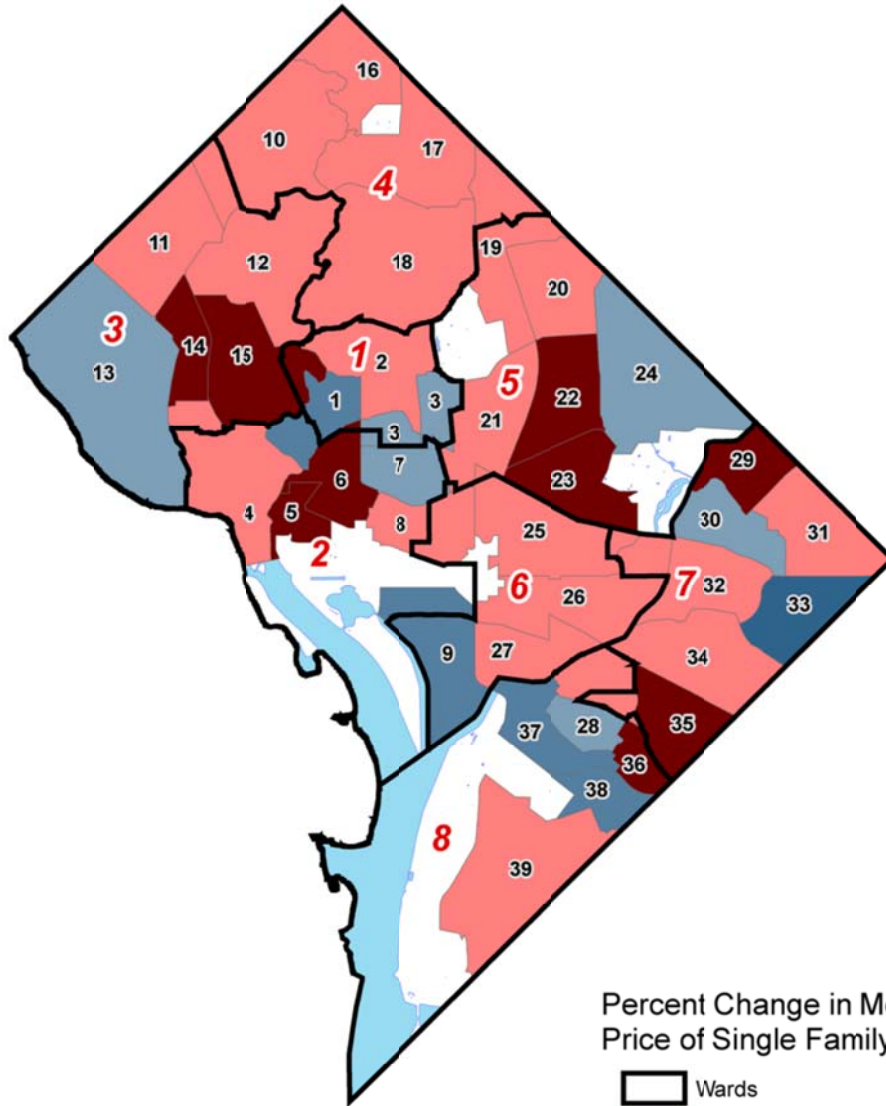
Not all clusters experienced price declines, however. Clusters with the strongest price growth between 2005 and 2009 include Clusters 1 (Kalorama Heights, Adams Morgan) in Ward 1 with a 23 percent increase, Cluster 33 (Capitol View, Marshall Heights) in Ward 7 with a 33 percent increase, Cluster 38 (Douglas, Shipley Terrace) in Ward 8 with 26 percent increase,



and Cluster 37 (Sheridan, Barry Farms) in Ward 8 with 23 percent increase. While Clusters 33, 38, and 37 had the greatest median price increase since the national downturn, their median prices were still quite low in 2009—\$315,000, \$285,000, and \$219,000, respectively—compared to other clusters in the city. Map 4.1 shows the changes in home prices by neighborhood cluster between 2005 and 2009.



Map 4.1- Percent Change in Median Sales Price of Single Family Homes, 2005-2009, by Neighborhood Cluster



Percent Change in Median Sales Price of Single Family Homes

- Wards
- Greater than 15 percent decrease
- 0 to 15 percent decrease
- Less than 15 percent increase
- 15 to 30 percent increase
- Greater than 30 percent increase
- Non-cluster areas

Source: DC Office of Tax and Revenue data tabulaied by NeighborhoodInfo DC
Note: Clusters 5, 6, 8, 29, 30, 35, and 36 had fewer than 10 sales during 2009.
Trends in these neighborhoods should be interpreted with caution.



In spite of a three-year flattening or declining of home prices, the median prices of many neighborhoods have grown significantly since the beginning of the decade (2000). Fifteen of the city's 39 neighborhood clusters experienced price growth of more than 100 percent between 2000 and 2009, adjusting for inflation. The strongest percent growth occurred in Cluster 7 (Shaw, Logan Circle), which saw median price increase from \$176,300 to \$572,000, an average annual increase of 14 percent. This indicates that the housing market slowdown has not substantially reduced prices over the past ten years. While this may be good news for current homeowners, it does not improve the affordable housing situation for lower- and even moderate-income homebuyers.

To address the affordability issues created by rapidly rising home prices, the city raised the Housing Purchase Assistance Program (HPAP) price limits, though these limits were reduced in fiscal year 2009 due to city budget constraints. In addition, initiatives such as the \$5,000 federal tax credit for first-time homebuyers in Washington, D.C., and groups like Manna Mortgage, a nonprofit broker that targets low- and moderate-income homebuyers, have provided further assistance to lower income homebuyers in the city.

Mortgage Lending

Indicators of mortgage lending activity offer further information about the strength and nature of the city's housing market. In particular, data obtained through the Home Mortgage Disclosure Act (HMDA) provide information about the types of mortgage loans being made, as well as the characteristics of homebuyers taking out those loans.

Similar to trends in home sales, the volume of mortgage lending activity increased dramatically between 1997 and 2005. In 1997, before the start of the housing boom, there were 6,093 home purchase mortgage loans made to persons buying property in Washington, D.C. By 2005, the volume of loans had more than doubled to 16,175 home purchase loans.

These trends have largely reversed since 2005 as the market corrected itself of over-inflated prices. Home purchase mortgage originations plummeted by 57 percent between 2005 and 2008 to 6,591 mortgages, just slightly above the 1997 level. A drop in demand and prices has resulted in fewer investment purchases, as well. Loans made to nonresident buyers have dropped 8 percent between 2005 and 2008.

The decline in home purchase mortgage originations has not been uniform across wards or neighborhood clusters. Home mortgage originations declined by 69 percent between 2005 and 2008 in Ward 7, while Ward 6 mortgages fell by 48 percent, both indicative of a significant weakening of the housing market in these areas.



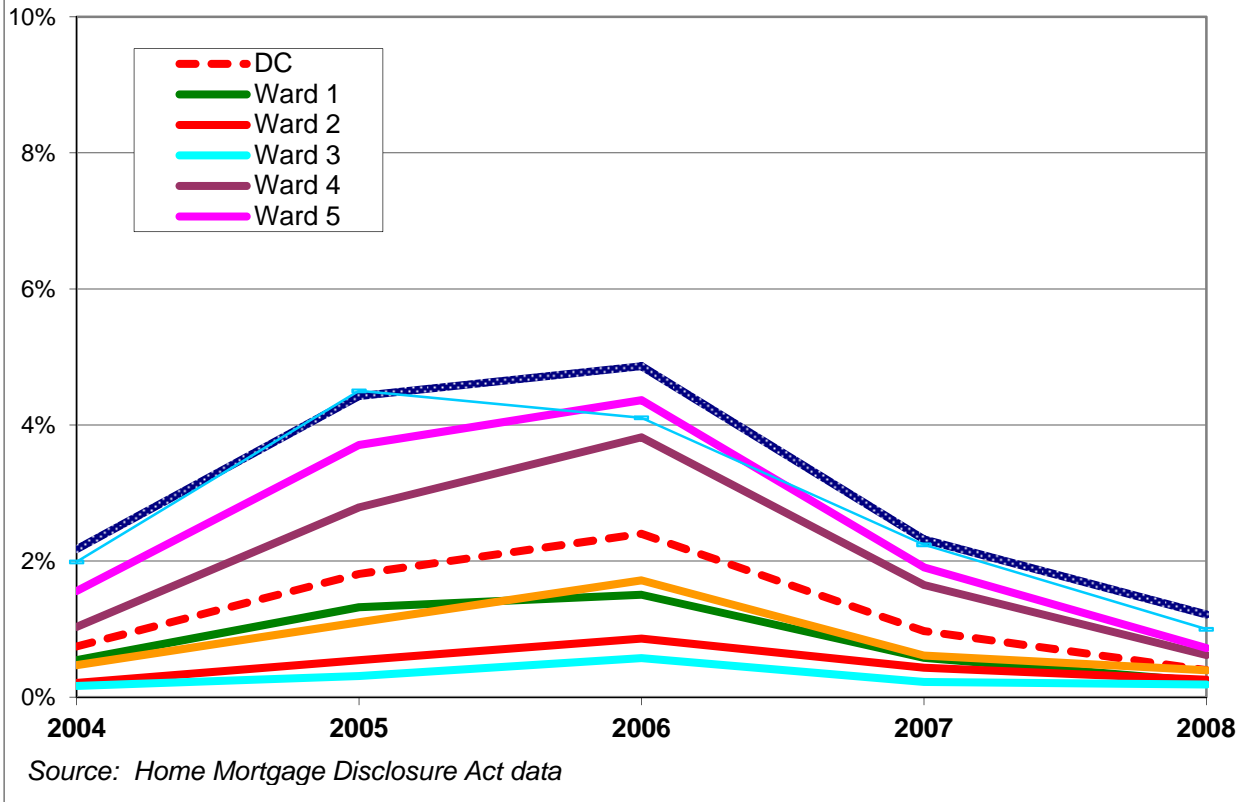
The range of change in mortgage originations was far more varied across neighborhood clusters. Seven clusters experienced a drop of over 70 percent in mortgage originations, including Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 and Cluster 31 (Deanwood, Burrville, Grant Park) in Ward 8, which both dropped by 81 percent. This is far different than Cluster 27 (Near Southeast/Navy Yard) in Ward 6, which saw mortgage originations increase by over 200 percent between 2005 and 2008, from 54 to 168 originations, most likely as a result of the growing development around the new baseball stadium.

Another phenomenon that accompanied the housing market boom was the increase in the use of high-cost mortgage products. These are loans with higher interest rates or other costs, compared with prime-rate loans. A type of subprime loan, high-cost loans are intended for persons with imperfect or no established credit who may be ineligible for a prime rate loan. HMDA data have been tracking the incidence of such loans since 2004.

The frequency of high-cost loans rose steadily from 2004 and peaked in 2006 (figure 4.3). Between these years, the percent of all home loans that were high cost increased from 7 to 24 percent. The prevalence of high cost mortgages varied considerably across the city, however. In 2006, nearly half (48 percent) of Ward 7 home loans were high cost while only 6 percent of Ward 3 loans were high cost.



Figure 4.3 - Percent High Cost Loans of Total Home Mortgage Originations by Ward, 2004–2008, Washington, D.C.



Among neighborhoods, five neighborhood clusters east of the Anacostia River experienced increases of over 50 percent in high-cost loans between 2004 and 2006, including Clusters 33 (Capitol View, Marshall Heights), Cluster 32 (River Terrace, Benning), Cluster 28 (Historic Anacostia), and Cluster 34 (Twining, Fairlawn) (map 4.2). The greatest increase was in Cluster 23 (Ivy City, Trinidad) in Ward 5 where 60 percent of home loans were high cost. Less than 5 percent of home loans were high cost in Cluster 5 (West End, Foggy Bottom) and Cluster 11 (Friendship Heights, American University Park), in the high-priced, low-income neighborhoods of the city.

The use of high-cost loan products had two important consequences. First, high-cost loans (as well as other types of subprime loans) were too frequently given to people who were not able to afford the monthly payments over the entire life of the loan. This was particularly the case with adjustable-rate loans, which often had a very low initial rate that would balloon to a much higher rate after two to three years. As a result, many borrowers with these loans went into default and, eventually, into foreclosure. The increase in foreclosures in the District of

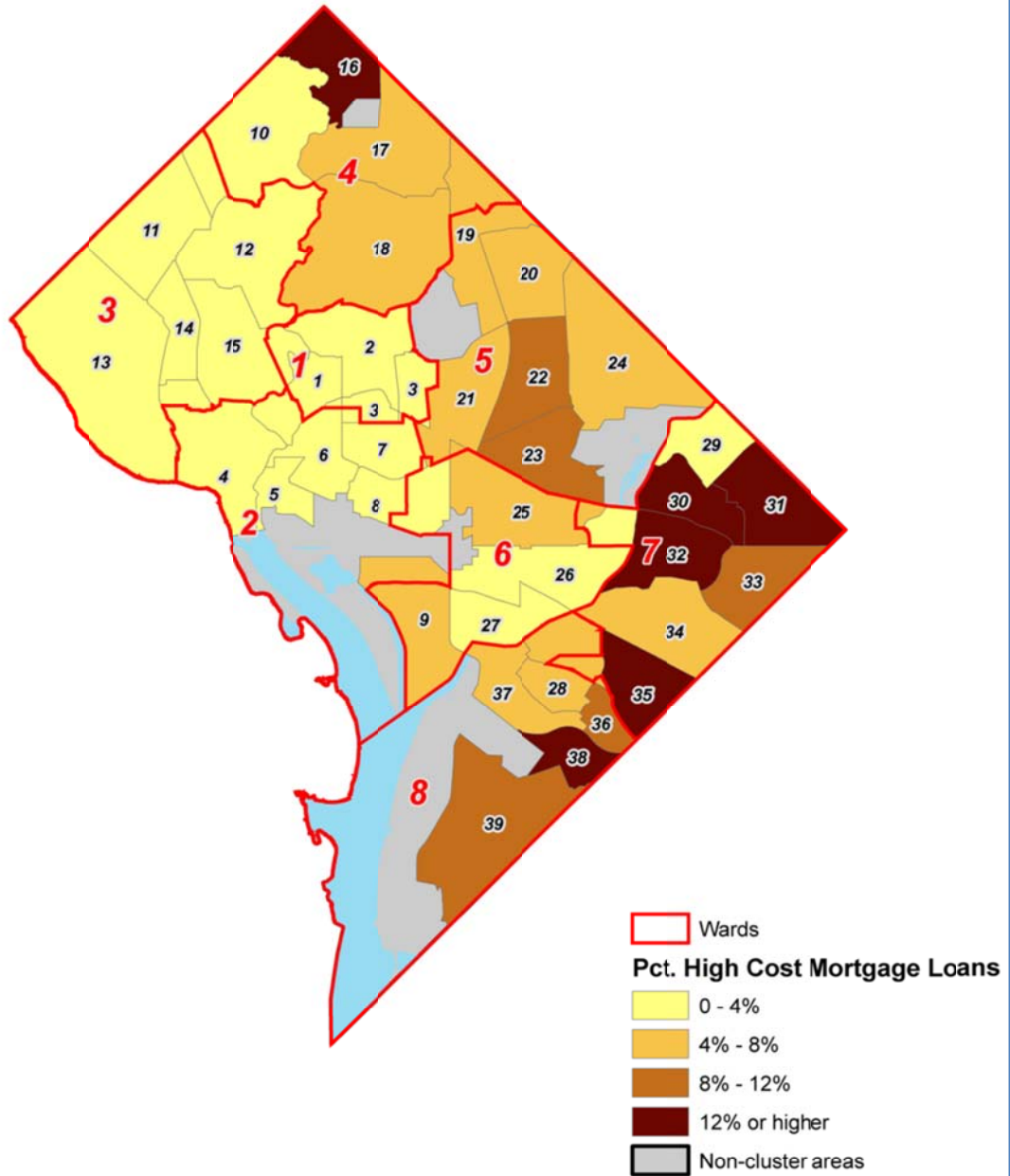


Columbia, which like the rest of the country had its origins in subprime lending, is discussed later in this chapter.

The second consequence is that, with the virtual elimination of high-cost and subprime loans from the mortgage lending market, homebuyers who do not qualify for prime loans have very few options for obtaining mortgage credit. As a result, home buying opportunities for such persons, in the District and elsewhere, have been severely diminished.



Map 4.2 - Percentage of High Cost Mortgage Loans by Neighborhood Cluster Washington, D.C., 2008



Source: Home Mortgage Disclosure Act (HMDA) data tabulated by NeighborhoodInfo DC.
Notes: High cost interest rate loans have annual percentage interest rates exceeding the comparable U.S. Treasury yield by 3 percentage points or more, for first liens, and by 5 points or more, for second liens.



Incomes of Homebuyers

The incomes of persons buying homes in a ward or neighborhood can be a signal as to whether the neighborhood is attracting market investment. Shifts in the income profiles of homebuyers may be a sign of significant changes that are under way in a neighborhood. While a larger share of high-income homebuyers may bring new capital and resources to neighborhoods that have experienced long-term disinvestment, the presence of more affluent homeowners may also increase the likelihood of current residents being displaced.

For this report, we track the shares of homebuyers with high, moderate, low, and very low incomes for loans made to owner-occupants (investor loans are excluded). These categories are derived from HUD designations for income levels, which are based on the area median income. The area median income is updated annually. In 2009, the area median income for a four-person household in the Washington region was \$102,700.⁷

During the housing market boom, the shares of very low and low-income homebuyers declined, while those with high and middle incomes increased (figure 4.4). In 1997, the largest share of homebuyers in Washington, D.C., 42 percent, had low and very low incomes, while 23 percent were middle income and 36 percent were high income. By 2005, the positions of high- and low-income buyers had switched, with the largest share of homebuyers, 47 percent, coming from the high-income group and the smallest, 23 percent, from the very low and low-income groups. Some of the greatest drops of low-income buyers happened in places like Cluster 27 in Ward 6 (Near Southeast/Navy Yard) and Cluster 21 in Ward 5 (Edgewood/Bloomingdale). The share of moderate-income homebuyers grew modestly, to 30 percent in 2005. These changes reflected the rapidly growing house prices across the city, which were outpacing the rate of increase in household incomes.

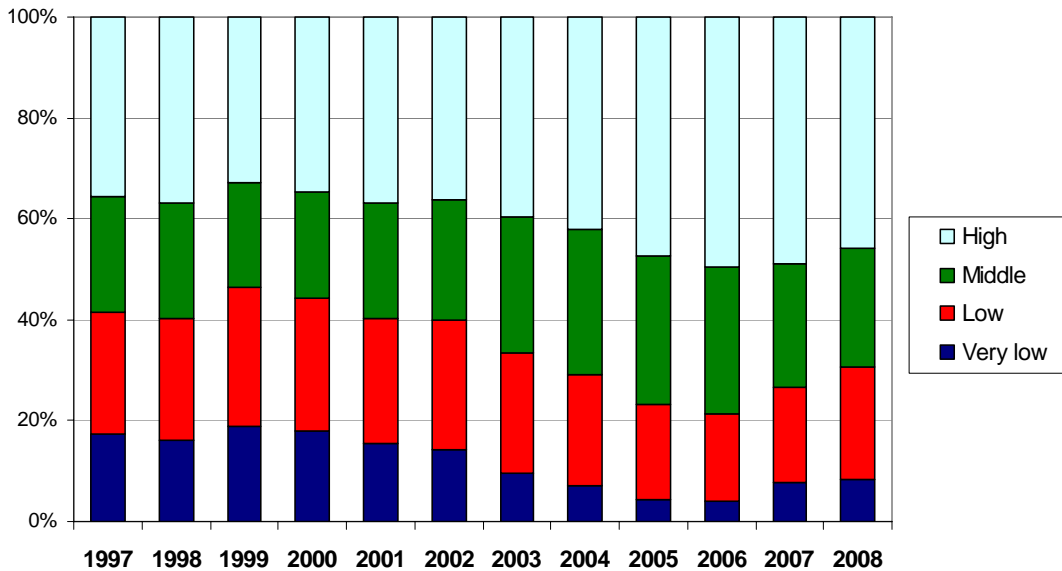
There has been a small shift in low- and very low income homebuyers between the housing peak in 2005 and the most recent data available in 2008. Low-income homebuyers increased from 19 to 22 percent of all homebuyers between 2005 and 2008, and very low income borrowers increased from 4 to 8 percent.

⁷ Homebuyers in the low-income group are those falling under 80 percent of the area median income, or \$82,160 for a four-person household in 2009. Middle-income buyers are those between 80 to 120 percent of area median, while high-income buyers are those above 120 percent.



Figure 4.4 - Home Purchase Mortgage Loans by Homebuyer Income, 1997 to 2008, Washington, D.C.

Percentage of home purchase loans



Source: Home Mortgage Disclosure Act data tabulated by DataPlace and NeighborhoodInfo DC.

Note: Incomes are classified according to HUD income categories, which are based on household size and area median income (AMI): very low = under 50% AMI; low = 50 to 80% AMI; middle = 80 to 120% AMI; high = above 120% AMI.

The growth in lower income borrowers between 2005 and 2008 is more telling looking at the individual wards. Though all wards generally saw an increase in low-income borrowers beginning in 2006, Ward 7 and Ward 4 each experienced a 13 percent increase in low-income borrowers, and in Ward 5, low-income borrowers increased by 16 percent. In Ward 5, 78 percent of homebuyers were low income in 1999, which declined to 26 percent in 2005. By 2008, however, low-income borrowers comprised 42 percent.

Five clusters saw an increase in the share of low-income borrowers of over 25 percentage points between 2005 and 2008 (map 4.3). These included Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7, Cluster 21 (Edgewood, Bloomingdale Eckington) in Ward 5, Cluster 19 (Lamond Riggs, Queens Chapel) in Ward 5, Cluster 28 (Historic Anacostia) in Ward 8,

Neighborhood Clusters with largest increase in share of homebuyers with very low or low incomes

38 to 85%	Cluster 36 (Woodland/Fort Stanton, Garfield Heights, Knox Hill)
58 to 91%	Cluster 28 (Historic Anacostia)
36 to 61%	Cluster 19 (Lamond Riggs, Queens Chapel, Fort Totten, Pleasant Hill)

Note: Largest percentage point change, 2005 to 2008.



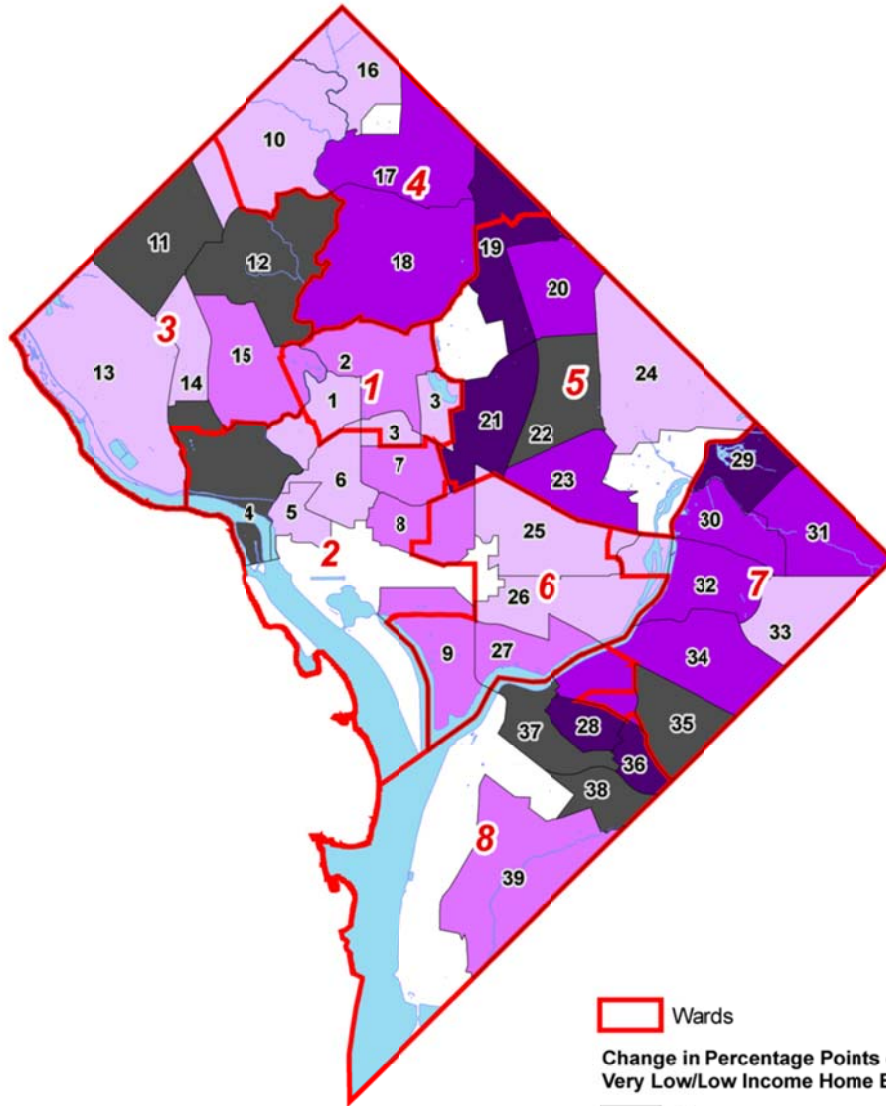
and Cluster 36 (Woodland/Fort Stanton, Garfield Heights) in Ward 8. Both Cluster 28 (Historic Anacostia) and Cluster 19 (Lamond Riggs, Queens Chapel) had the lowest-priced single-family homes in the city. In Cluster 36 (Woodland/Fort Stanton, Garfield Heights), only five single homes were sold, but the median price of these was also among the lowest in the city. As such, the data should be observed with caution.

Correspondingly, the biggest increase in high-income homebuyers could be found mostly in the northwest, where prices are the highest. Cluster 11 (Friendship Heights, American University Park), saw an 18.5 percentage point jump in high income homebuyers, to 88 percent between 2005 and 2008. Other notable increases were recorded in Cluster 3 (Howard University, Le Droit Park) with 8 percent point increase and Clusters 10 (Hawthorne, Barnaby Woods) and 35 (Fairfax Village, Naylor Gardens), both with 6 percentage point increases in high-income homebuyers.

There is a natural correlation between clusters that began attracting high-income buyers and those that experienced strong price increases. For instance, Cluster 3 (Howard University, Le Droit Park) saw the third highest appreciation in prices since 2000, and between 1997 and 2008, high-income purchasers in this cluster went from 24 percent of borrowers to 66 percent of borrowers. Clusters 21 (Edgewood, Bloomingdale), 22 (Brookland, Brentwood), 23 (Ivy City, Arboretum), and 24 (Woodridge, Fort Lincoln) in Ward 5 also saw large increases in the percent of high-income borrowers and similar price appreciation. The popular Fort Lincoln townhouse development in Cluster 21 was part of this shift. However, since 2006, both Wards 4 and 5 saw a significant drop in the number of high-income borrowers, by approximately 13 percentage points each. Wards 7 and 8, which saw more modest increases in high-income purchasers through 2005 and 2006, have since experienced a slight decline as well.



Map 4.3 - Change in Percentage of Very Low and Low-Income Home Buyers 2005 to 2008, by Neighborhood Cluster



Wards

Change in Percentage Points of Percentage of Very Low/Low Income Home Buyers

- Greater than 0 percent decrease
- 0 to 8 percent increase
- 8 to 16 percent increase
- 16 to 24 percent increase
- Greater than 24 percent increase
- Non-cluster areas

Source: Home Mortgage Disclosure Act data tabulated by DataPlace and NeighborhoodInfo DC



Race/Ethnicity of Homebuyers

As with homebuyer incomes, the race/ethnicity of homebuyers can be an important indicator of shifts in the demographic profile of a neighborhood.

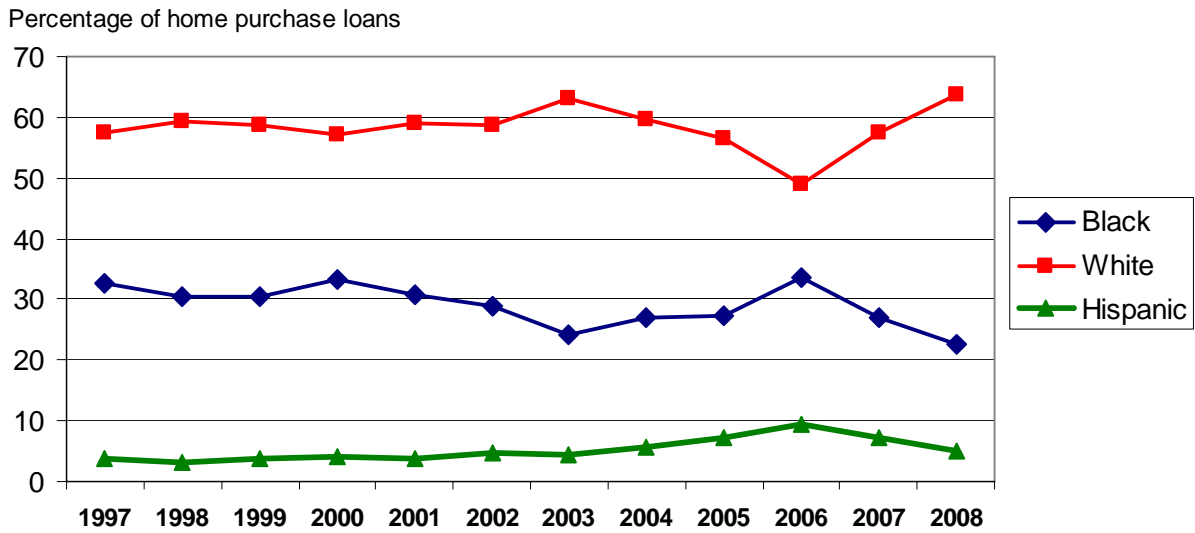
Overall, non-Hispanic whites make up the majority of homebuyers in Washington, D.C., with blacks constituting the second highest share, and Hispanic homebuyers a smaller percentage (figure 4.5). The share of black homebuyers increased during the housing market boom from 2003 to 2005, rising from 24 to 27 percent. Over this same period, the share of Hispanic homebuyers grew from 4 to 7 percent.

The growth in shares of black and Hispanic homebuyers during this period coincides with the increase in subprime lending in Washington, D.C.. A rise in black and Hispanic home ownership was likely driven by increasing access to financing products, such as subprime and high-cost loans, targeted at low-income borrowers. While high-cost loans may have been helpful in boosting homeownership for these two groups, subsequent foreclosure problems related to subprime mortgages have eroded gains that might have been made. (This will be discussed further in the section on foreclosures, later in this chapter.)

Since the start of the subprime crisis in 2006, the share of Hispanic and black home purchasers has dropped steadily while the share of non-Hispanic white borrowers has grown. In 2006, the share of white borrowers was 49 percent and increased to 64 percent by 2008. For black and Hispanic borrowers, however, shares during this time period decreased by 11 and 5 percentage points, respectively. This is likely due to the subprime lending crisis, which inordinately affected minority homebuyers. As lenders retracted from riskier lending practices and as home values stopped increasing, subprime mortgage opportunities decreased, having a correspondingly large impact on potential minority buyers.



Figure 4.5 - Home Purchase Mortgage Loans by Homebuyer Race/Ethnicity, 1997 to 2008, Washington, D.C.



Source: Home Mortgage Disclosure Act data tabulated by DataPlace and NeighborhoodInfo DC.

Whites represent the majority of homebuyers in Wards 1, 2, 3, and 6, and this has not changed over the past decade. Since foreclosures began increasing in 2006, though, the portion of white borrowers has increased notably in Ward 4, going from 27 to 51 percent of home purchasers. The highest shares of white homebuyers were in neighborhoods in Ward 3, where all neighborhood clusters had at least 75 percent white homebuyers in 2008. The highest share was in Cluster 15 (Cleveland Park/Woodley Park), where 91 percent of all homebuyers were non-Hispanic white in 2008.

Wards 4, 5, 7, and 8 have been the primary locations for African-American homebuyers in Washington, D.C. This is reflected in the HMDA data, which show that these areas have the highest shares of black homebuyers, particularly in Wards 7 and 8. For instance, Cluster 29 (Eastland Gardens/Kenilworth) in Ward 7 had only black homebuyers in 2005 and 2008, although the overall loan volume in this ward was quite low. Cluster 39 (Congress Heights/Bellevue) in Ward 8, which has a higher level of mortgage lending activity, also had 100 percent black homebuyers in 2008.

The presence of Hispanic homebuyers had increased dramatically in all wards of the city between 1997 and 2006, especially in Ward 4, where the share went up almost 21 percentage points. Since 2006, shares of Hispanic borrowers have decreased in all wards except Ward 6, where share of Hispanic borrowers has essentially remained flat. The share of Hispanic home purchasers in Ward 4 fell from 29 to 10 percent between 2006 and 2008. As of



2008, the clusters with the highest percent of Hispanic home purchasers were in Wards 4 and 5 and include Cluster 22 (Brookland, Brentwood) in Ward 5 and Cluster 18 (Brightwood Park, Crestwood) in Ward 4, both with 13 percent, and Cluster 19 (Lamond Riggs, Queens Chapel) in Ward 5, with 16 percent.

Foreclosures

A foreclosure is a legal process whereby a lender can take possession of a home if the owner has failed to meet the terms of a mortgage taken out on the property. High numbers of foreclosures in a neighborhood can depress property values. Furthermore, if foreclosed homes are not resold quickly, they can fall into disuse or disrepair and become nuisance properties in a neighborhood. There are also links between high foreclosure rates and decreasing home values and increased crime (Immergluck and Smith 2006b).

Here we look at the number of notices of foreclosure sale per 1,000 single-family homes and condominiums. There are several steps in the foreclosure process in the District of Columbia. Through two sources of city administrative records, we track several key steps in the process and report on the incidence and trends in foreclosure activity in different parts of the city. Notices of foreclosure sale mark the beginning of the foreclosure process by a mortgage lender. This is the lender's official notice to the borrower that ownership of the home will be transferred and can result in several outcomes, including a foreclosure being "cured" without transfer of ownership. Though the outcome is indefinite, this indicator allows us to track where homeowners are near to losing their property. Later in this section, we look at incidence of actual sales that have resulted from homeowners being in distress and foreclosure.

The fallout from the subprime lending boom and the subsequent economic crisis continues to affect many homeowners around the country who find that they can no longer afford to make the payments on their mortgages. Increased delinquency and foreclosure rates were initially the result of resets to adjustable-rate loans that were made with a low "teaser" rate initially affordable to the borrower. Nationally, subprime adjustable-rate mortgages accounted for 7 percent of mortgages outstanding, but 43 percent of all foreclosures initiated in the third quarter of 2007 (Stokes and Mechem 2007). Since then, defaults and foreclosures have continued to worsen significantly as unemployment rates have risen and persisted, leaving many homeowners, even those without subprime or high-cost loans, with less income and ability to make their monthly mortgage payments.

Consistent with national trends, the increase in subprime lending in Washington, D.C., has been followed by a recent surge in home foreclosures. The foreclosure rate, defined as the number of single-family homes and condominium units with a notice of foreclosure sale filed per 1,000 existing housing units, has continued to rise since the start of the crisis. Since 2005, the foreclosure rate has climbed steadily to 9.4 in 2006 and 14.8 in 2007. In 2009, the foreclosure rate in Washington, D.C. hit 36.5 notices per 1,000 housing units, over double the highest rate



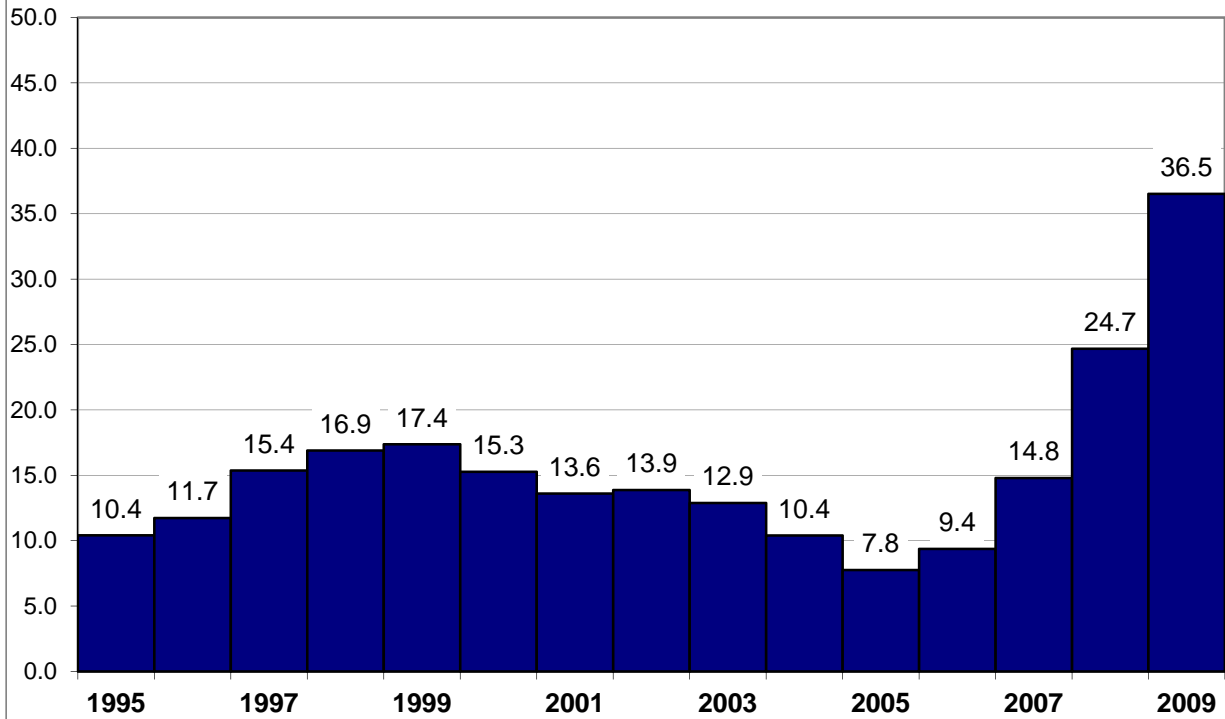
seen prior to 2005. (The foreclosure rate per 1,000 single-family and condominium units can also be expressed as 3.65 percent of all single-family and condominium units.) There is little indication that the rate of foreclosures is decreasing.

Although the city's relatively stable housing market has protected it from the large-scale foreclosures occurring in some U.S. cities, the situation can be serious for homeowners living in wards and neighborhoods where foreclosures are concentrated. Many of these neighborhoods, such as those east of the Anacostia River, had exhibited strong home price growth, indicating a renewed interest in these communities. The recent flattening or dropping of prices may very well keep foreclosure rates high in some of these areas as people cannot sell to get enough equity in their properties. Large concentrations of foreclosures could set back efforts to increase homeownership and attract investment to these neighborhoods.

The highest rates of foreclosure sale notices were in neighborhoods in Wards 5, 7, and 8 (figure 4.6), although six clusters in Wards 1, 3, 4, and 6 had foreclosure rates higher than the 2009 city average of 36.5 notices per 1,000 single-family homes and condominiums (map 4.4). Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 and Cluster 14 (Cathedral Heights, Glover Park) in Ward 3 had the two highest foreclosure rates among all clusters in 2009 at 100.0 and 118.1 per 1,000 units, respectively. It must be noted, however, that the high rate of foreclosures in Cluster 14 is the result of two condominium developments with more than 300 units entering foreclosure. The first development was in foreclosure only temporarily and was cured several months afterward without a trustee's deed sale taking place. Cluster 28 (Historic Anacostia) in Ward 8 was also quite high at 87.9 per 1,000 units, as was Cluster 23 (Ivy City, Trinidad) in Ward 5 at 78.8 notices per 1,000 units and Cluster 31 (Deanwood, Burrville) in Ward 7 at 78.7 foreclosure notices per 1,000 units.



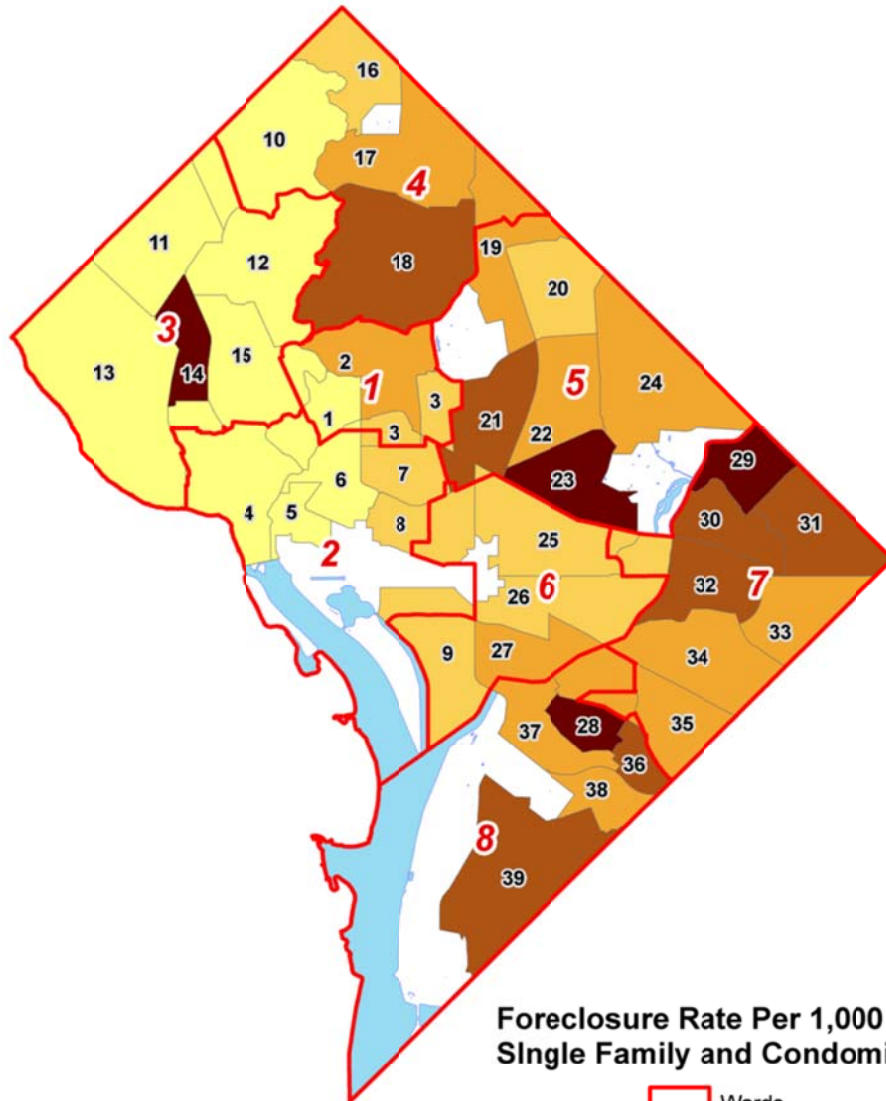
Figure 4.6 - Number of Notices of Foreclosure Sale per 1,000 Single Family Homes and Condominiums, 1995-2009, Washington, D.C.



Source: D.C. Recorder of Deeds data tabulated by DataPlace and NeighborhoodInfo DC.



Map 4.4 - Notices of Foreclosure Sale Per 1,000 Single Family and Condominium Units by Neighborhood Cluster, 2009



Foreclosure Rate Per 1,000 Single Family and Condominium Units

-  Wards
-  0 to 15
-  15 to 35
-  35 to 55
-  55 to 80
-  80 to 120
-  Non-cluster areas

Source: Recorder of Deeds data tabulated by DataPlace and NeighborhoodInfo DC

Note: The high incidence of foreclosure starts in Cluster 14 (Cathedral Heights, McLean Gardens) are due to the two large multi-unit developments that entered into foreclosure temporarily. Both developments averted a foreclosure sale and were removed from the foreclosure inventory a few months later.



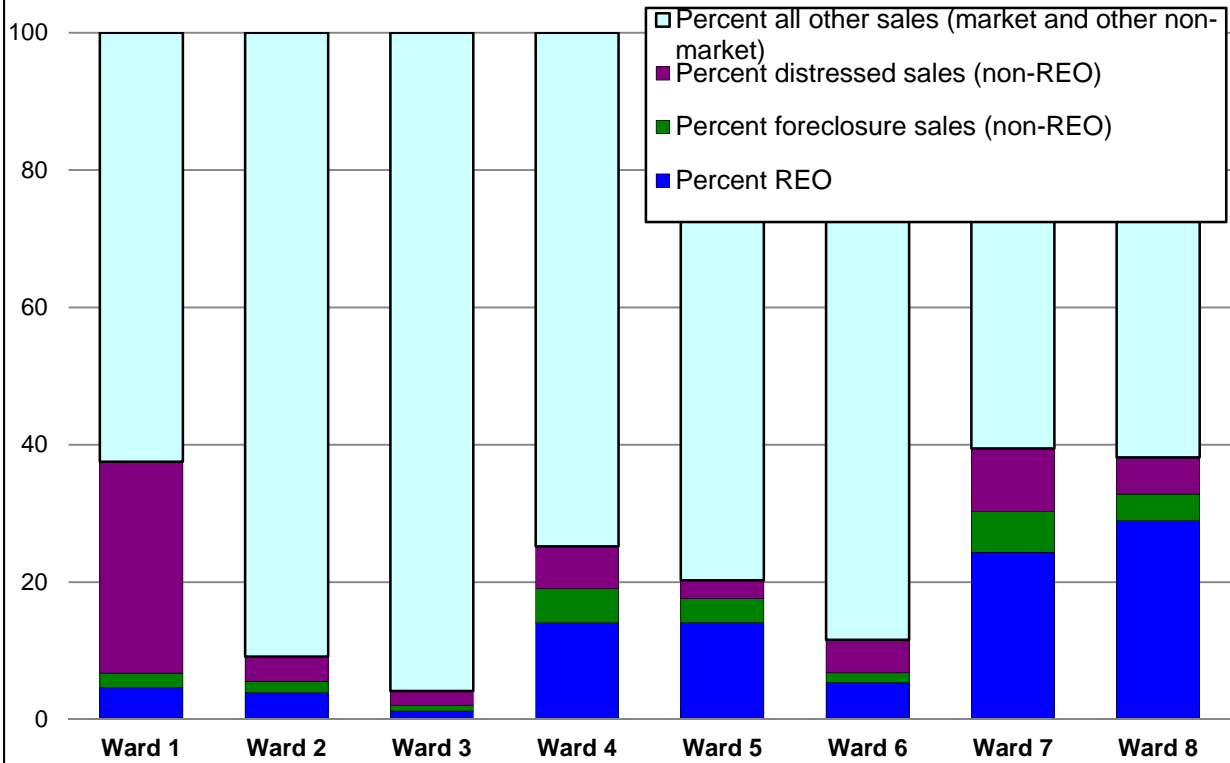
The extent to which foreclosures have become more prevalent in certain parts of the city can also have broader consequences for residential property sales. Foreclosure sales have impacted the housing market most in Wards 1, 7, and 8, where over 40 percent of single-family home and condominium sales resulted from foreclosure completions or owners selling under distress (that is, while in foreclosure) (figure 4.7).⁸ Understanding the different types of sales that occurred after a household receives a foreclosure notice is significant. While Ward 1 is seeing a large portion of foreclosure-related real estate transactions, this is mostly dominated by distressed sales (a sale after a bank/lender begins the foreclosure process but before a transfer of ownership takes place), rather than foreclosure completions (when the title is actually transferred to the bank/lender). Many homeowners in Ward 1 still appear to be able to sell the property if they need to walk away from their mortgage payments. In Wards 7 and 8, however, owners do not have that option, probably because the housing markets are relatively weaker in these wards, and therefore more homeowners are forced into foreclosure sales.

Real estate owned (REO) sales, moreover, may indicate other neighborhood problems. These properties are acquired by banks—not individual owners—at the conclusion of a foreclosure process. There is a growing concern that large numbers of REO properties can have negative impacts on neighborhoods. For example, REO properties may be more likely to be vacant. Many community development and housing experts believe that vacant properties are associated with an increased incidence of property crimes and decreases in home values in the surrounding neighborhood (Immergluck and Smith 2006a, b). Of note, 24 and 29 percent of sales in Wards 7 and 8 were REO, suggesting that any risks of negative neighborhood impacts associated with such sales would be greatest in these parts of the city.

⁸ Distressed sales can include short sales or deed-in-lieu transactions. While these may be preferable to a foreclosure sale, they still result in the owner losing his or her home.



Figure 4.7 - Percent of Single-Family Home and Condominium Sales, Washington, D.C., 1st Quarter 2010 by Type



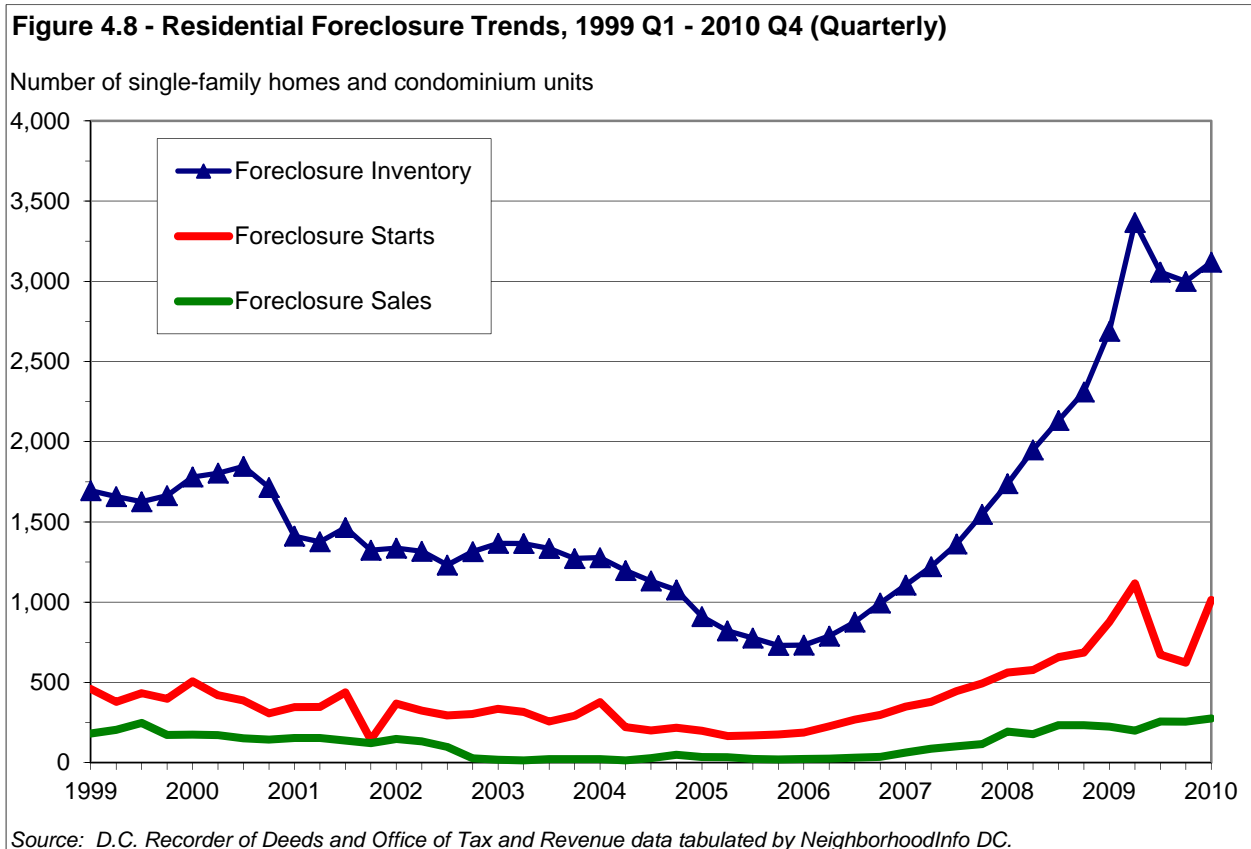
Source: D.C. Recorder of Deeds and Office of Tax and Revenue data tabulated by NeighborhoodInfo DC.

In figure 4.8, we get a clearer picture of the dramatic increase in foreclosure activity over the past decade. This chart shows quarterly foreclosure starts, foreclosure sales, and the total foreclosure inventory (or the number of single-family homes and condominiums currently in foreclosure). Foreclosure starts are when a lender first notifies a homeowner that proceedings have begun for the lender to end an owner's title to a property to satisfy an outstanding mortgage debt. A foreclosure sale is when the property transfers ownership as a result of foreclosure to either a servicer or private owner and the property owner has lost the title to the home. The foreclosure inventory is the total number of properties currently in the foreclosure process; that is, a notice of foreclosure sale had been previously sent to the property owner but no foreclosure sale has yet been completed and the owner still retains title to the property. Property owners who received a foreclosure notice within the past year, but for which no other final outcome (such as a foreclosure sale) has been reported, are recorded as being in the foreclosure inventory.

Foreclosure starts and the inventory of all homes in foreclosure have been on the rise since the third quarter of 2005. By the second quarter of 2009, foreclosure starts and consequently the foreclosure inventory had reached a peak. To some extent, the spike in



foreclosure starts in 2009 was due to the two large multi-unit developments in Cluster 14 (Cathedral Heights, McLean Gardens) that entered into foreclosure temporarily (see Map 4.4). Both developments averted a foreclosure sale and were removed from the foreclosure inventory a few months later (hence the decline in the foreclosure inventory). Despite a drop in the number of homes in the foreclosure inventory following early 2009, the foreclosure inventory leveled off and even started increasing again in the first quarter of 2010. These data on foreclosure activity in the District are consistent with national trends and indicate that the foreclosure crisis is not yet subsiding.



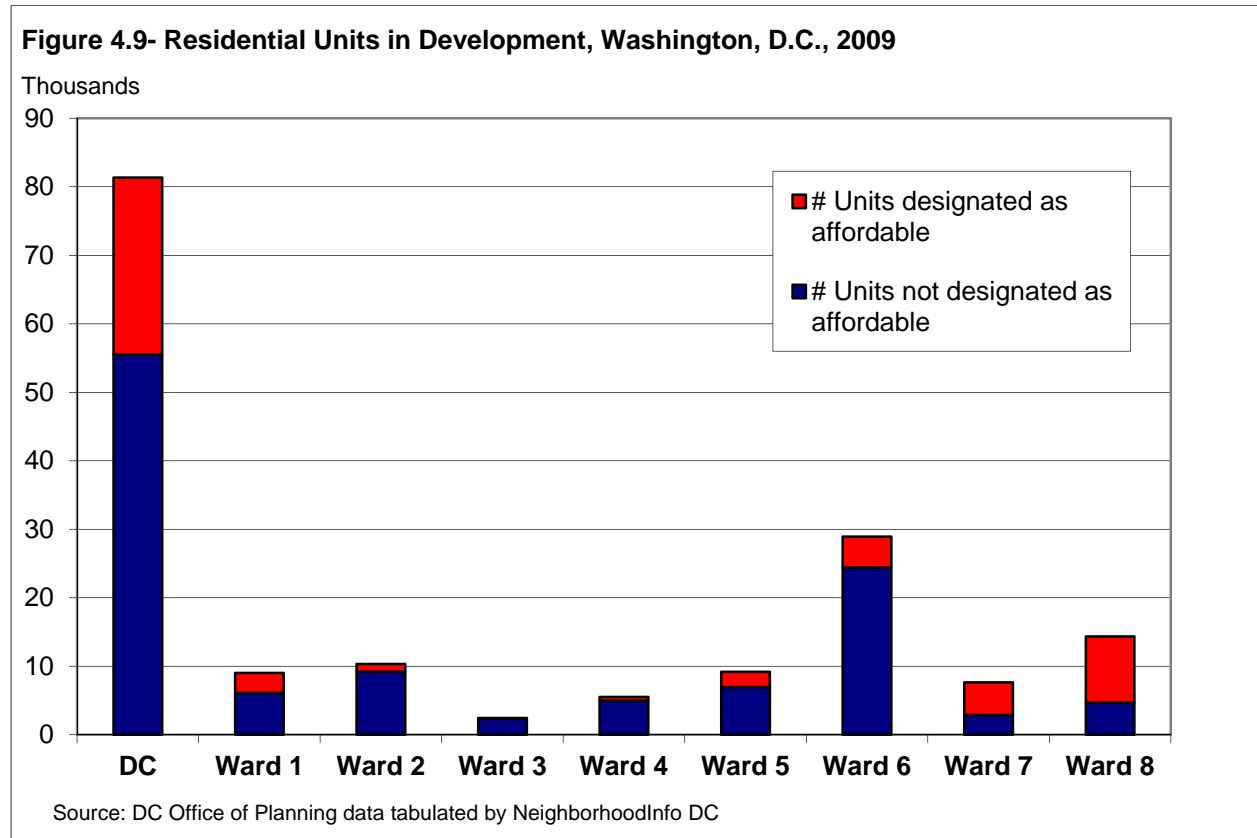
Housing Development Pipeline

The D.C. Office of Planning collects information on buildings that are under construction, planned, and proposed throughout the District from a variety of sources. Such sources include development review case files, building permits, the Office of the Deputy Mayor for Planning and Economic Development Pipeline Report, newspaper articles, and other public sources. Notably, the data do not include properties rehabilitated in place, only new developments. We



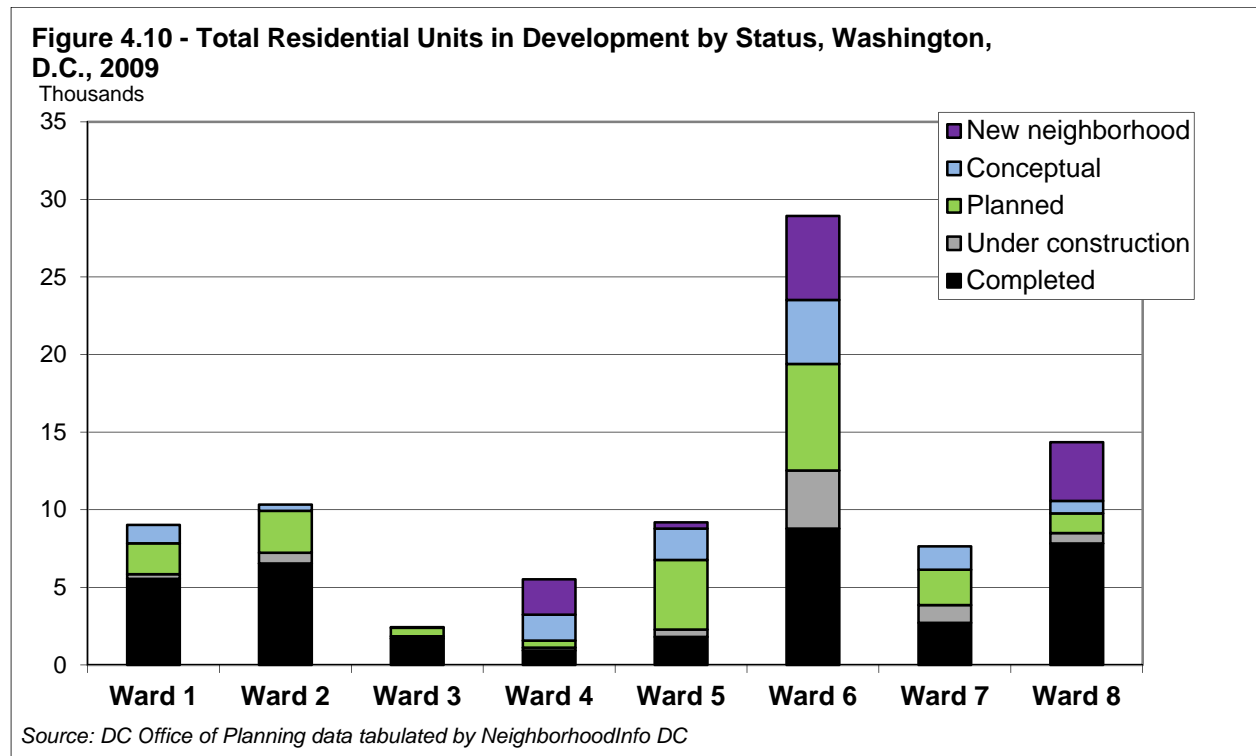
have summarized these data for all residential units known and broken them down by development status: completed, under construction, planned/under review, in the conceptual phase, and projected for new, undeveloped neighborhoods. We also disaggregated the units expected to be affordable to households making 80 percent of the Area Median Income. While the data may not perfectly capture the entirety of projects or the timing of their completion, the information can provide a picture of where housing is being developed and where it will be affordable to low-income residents.

Throughout the District, there are approximately 87,000 total housing units either conceived, planned, under construction, or awaiting first tenants. Thirty percent of these units (26,000 units) will to be made affordable to low-income residents. The bulk of residential development is occurring in Ward 6, where 29,000 units are under development and 17 percent will be affordable (figure 4.9). Though less development is projected in Ward 8, 67 percent of its 14,000 units are expected to be affordable, the most units of any ward. Notably, this ward has the largest number of existing subsidized housing units in the city. In Ward 7, 62 percent of development is expected to be affordable.





It is also worth noting how far along in the actual development these units are (whether it is completed, under construction, in the review phase, in the conceptual phase, or part of a large-scale new neighborhood development plan). Figure 4.10 shows by ward where development is already under way and where it is more conceptual.



Ward 6 has the highest total development, projected at 29,000 units, but less than half of these have made it beyond the city's review process. Even so, the number of units completed or under construction is still higher than total projected units in every ward except Ward 8. This also shows that Ward 6 will be seeing continued development in the future. Notably, Wards 1, 2, and 5 have similar total units projected at roughly 9,000 to 10,000 each. Only 25 percent of Ward 5 projected development has been approved, though, while 65 and 70 percent of projected development has been completed or is under construction in Wards 1 and 2, respectively. This may suggest that Ward 5, like Ward 6, will see continued development going into the future.

By clusters, Cluster 8 (Chinatown, Penn Quarters) in Ward 6 will have the most residential development in the city, with 9,200 units in the pipeline. This is followed closely by Cluster 27 (Near Southeast, Navy Yard), which will see 8,000 units. Approximately half of the development in these two clusters has already begun construction. Only two clusters, Clusters 16 (Colonial Village, Shepherd Park) and 29 (Eastland Gardens, Kenilworth) have no recorded residential units in development.



There is a wide variation in the proportion of housing units in development that will be affordable across clusters. Some clusters in poorer sections of the city have a notably high proportion of affordable units, while other areas have small proportions or even none at all. Of the five clusters where over 70 percent of units in the pipeline will be affordable, all are located east of the Anacostia River. These include Cluster 38 (Douglas, Shipley Terrace) in Ward 8, Cluster 39 (Congress Heights, Bellevue) in Ward 8, Cluster 36 (Woodland/Fort Stanton, Garfield Heights) in Ward 8, Cluster 33 (Capitol View, Marshall Heights) in Ward 7, and Cluster 32 (River Terrace, Benning) in Ward 7. In Cluster 32, 100 percent of the units in development will be affordable.

By comparison, there are 14 clusters with over 100 total units in development but with less than 10 percent of those designated as affordable. Five of the clusters with greater than 100 units in development have no new affordable housing units. These clusters include Cluster 35 (Fairfax Village, Naylor Gardens) in Ward 7, Cluster 12 (North Cleveland Park, Van Ness) in Ward 3, Cluster 10 (Hawthorne, Chevy Chase) in Ward 4, Cluster 6 (Dupont Circle, Connecticut Avenue/K Street) in Ward 2, and Cluster 4 (Georgetown, Burleith/Hillandale) in Ward 1. Once again, units in this database do not include in-place rehabilitation projects where affordable units are often created, so this analysis may undercount where affordable housing is in the pipeline.

Examining the status of this projected development, we find that in eight clusters, over 90 percent of units in development have already broken ground or are completed. Of these, those with over 1,000 units under construction or completed include Cluster 5 (West End, Foggy Bottom) in Ward 2, Cluster 33 (Capitol View, Marshall Heights) in Ward 7, Cluster 38 (Douglas, Shipley Terrace) in Ward 8, and Cluster 32 (River Terrace, Benning) in Ward 7.

Several clusters with the highest development activity have yet to see ground broken for a large majority of units, indicating development activity is strong, but not yet materializing. Clusters 26 (Capitol Hill, Lincoln Park) in Ward 6 and 37 (Sheridan, Barry Farm) in Ward 8 are ranked among the top 10 clusters with the most projected development—3,761 and 4,244 units, respectively. Less than 15 percent of these units have begun construction, however.



V. EDUCATION

Washington, D.C.'s public school system has gone through tremendous change in the past 10 years due to the skyrocketing increases in the public charter sector and substantial organizational changes in D.C. Public Schools (DCPS). Enrollment in DCPS, the traditional public school system, declined rapidly in the 2000s while enrollment in public charter schools (first authorized in 1997) has increased exponentially every year. As of the 2009–10 school year, more than a third (38 percent) of public school students were enrolled in public charter schools. Families in the District of Columbia have a wide array of options of where to enroll their children in public school, beyond just public charter schools. Students may attend the DCPS school that is in their residential catchment area (boundaries determined by DCPS), children may apply through a lottery process to attend a public charter school (there are no neighborhood boundaries or preferences for the public charters), or students can attend an out-of-boundary DCPS public school by applying through the out-of-boundary DCPS lottery process. Fifty-one percent of all DCPS elementary school students in school year 2008–09 attended an out-of-boundary DCPS school, and when we take into account out-of-boundary DCPS enrollment and public charter enrollment, almost three-fourths of public school students in D.C. attended a public school other than their neighborhood DCPS school of right.

The Fenty administration brought about substantial system-wide reorganization of the public schools starting in 2007. As of 2007, the mayor is directly responsible for DCPS, which had been under the control of the D.C. Board of Education, and the mayor appointed a new DCPS chancellor in June 2007.

These changes in the public school system are all intended to revamp school operations and improve academic performance. Washington, D.C., had consistently ranked at or near the bottom on standardized test scores compared with other U.S. cities. Every few years, the National Center for Education Statistics (NCES) administers the National Assessment of Educational Progress (NAEP) to a sample of public students in every state plus the District of Columbia. In 2009, District 4th grade students tested higher in mathematics (5 percentage points) and reading (5 percentage points) than they had in 2007. (There was no meaningful increase for 8th grade District students who were tested.) In addition, NCES administers the Trial Urban District Assessment (TUDA) that samples students in 11 selected urban district public schools. Fourth graders in Washington, D.C., ranked higher than three other cities in the



2009 TUDA test (Cleveland, Detroit, and Fresno), an improvement from 2007 when District students ranked last among all tested cities.

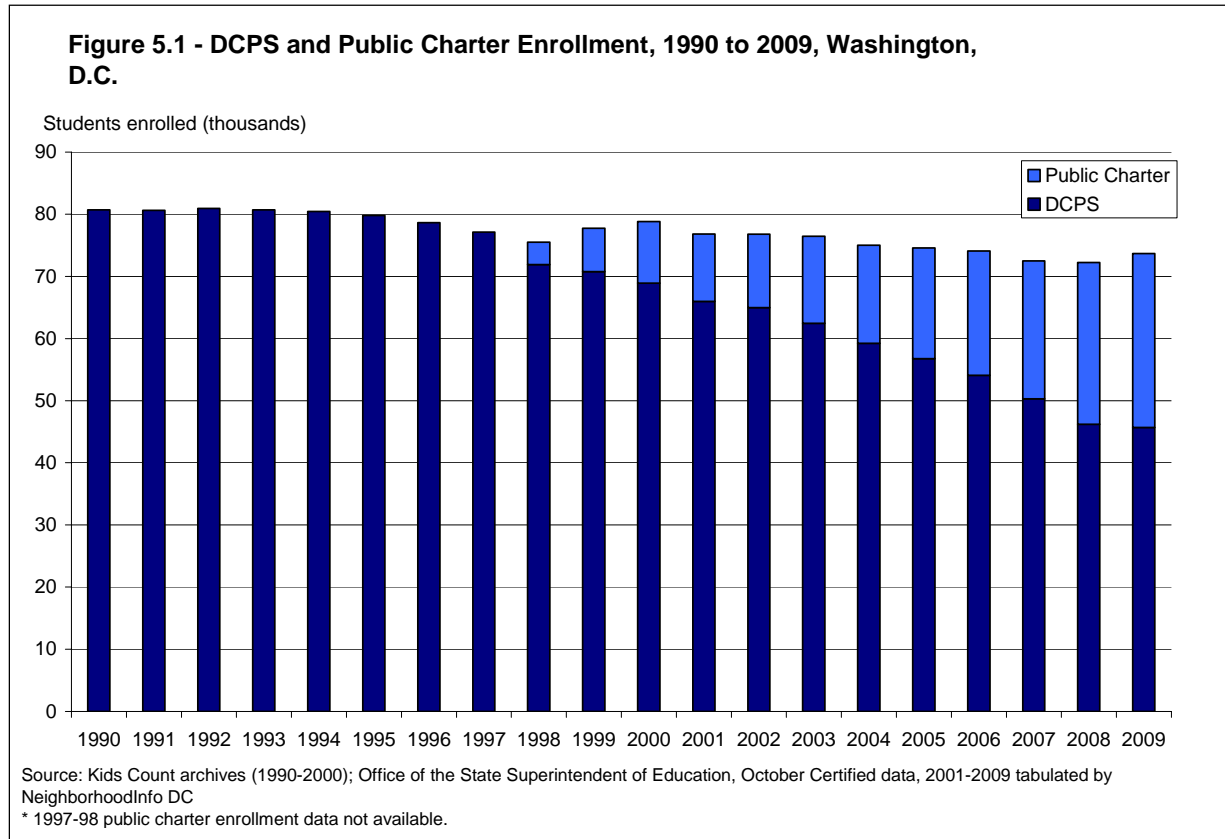
Public School Enrollment

To measure the changes in public school enrollment over time, we counted the number of students enrolled at DCPS and public charter schools as of the official October reported count of each year. (This number is slightly higher than the audit of the October count overseen by the Office of the State Superintendent of Education.) Ward-level and neighborhood-cluster public school enrollments are based on the location of the public schools as opposed to where the students live. DCPS elementary students tend to attend school close to their home, while public charter elementary students tend to travel further. Middle school and high school students attending DCPS or public charter schools also tend to travel outside their neighborhood to attend school. The change in the number of students enrolled in public schools over time reflects a number of factors: changes in the supply of public schools (new public charter schools open or existing public charters change location, and DCPS schools occasionally change location), differences in growth patterns between DCPS and public charter schools, changes in school-age population, and confidence in the public school system as a whole.

The number of public school children (DCPS and public charter) in the District has been declining throughout the 2000s; however, total public school enrollment increased in 2009 for the first time in eight years. Total public school enrollment declined between 2001 and 2006, held relatively steady in 2007 and 2008, and increased by 1.9 percent between 2008 and 2009 (figure 5.1). The recent overall increases in enrollments have been driven primarily from increases in the early education grades (preschool and pre-kindergarten.) The increases in these early nonmandatory grades are due mainly to the fact that demand for these slots are high (the District is unique in that they offer free, full-day early education to children from any income level) and DCPS and public charter elementary schools are providing more classes in this grade band. DCPS enrollment declined 36 percent between 1997 and 2008 (an average decline of approximately 3.6 percent per year), and the number of schools has correspondingly decreased as well from 159 schools in 2001 to 134 schools in 2009. But between 2008 and 2009, DCPS enrollment decreased by only 1.1 percent, significantly less than in earlier years. Public charter schools, on the other hand, have been averaging increases of 62 percent per year since their inception. There were 30 public charter schools or campuses in the city in 2001 and 98 public charter schools or campuses by 2009. By 2009, 38 percent of all public school



students attended public charters.

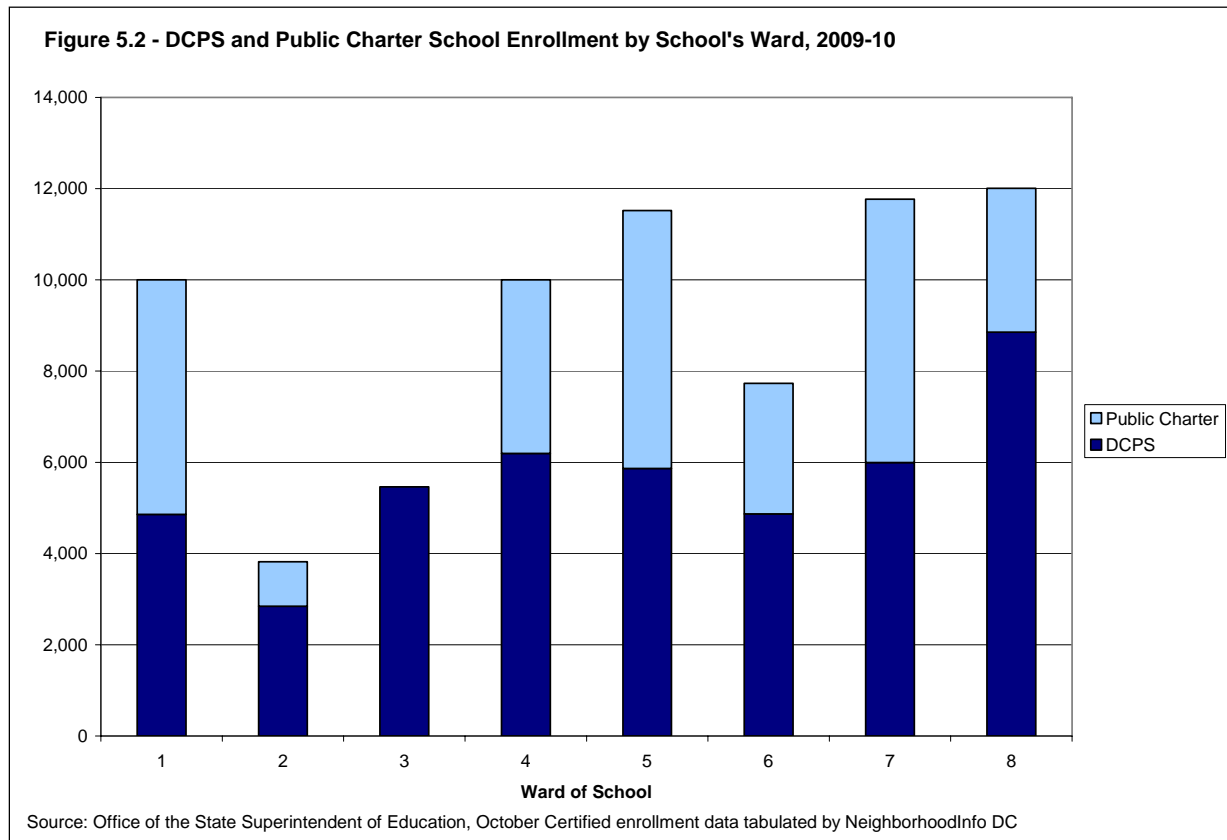


Looking at where public schools (DCPS and public charter) are located, we find that the location and scale of enrollment somewhat mirror the population of children in the District. Public schools in Ward 8 have the largest total enrollment in 2009 at 12,009 students, and public schools in Ward 7 are close behind with 11,769 students (figure 5.2). Public schools in Ward 5 have the next largest enrollment at 11,520 students in 2009, although we would expect Ward 4 to have the next largest enrollment since they have a larger number of children than Ward 5. Public schools in Ward 2 have the lowest total enrollment at only 3,822 students in 2009 followed next by public schools in Ward 3 with only 5,460 students.

In Ward 1, 51 percent of students attending public school in the ward were enrolled in public charters and almost half of the students from the schools in Ward 5 and Ward 7 were also public charter students (49 percent each). Alternatively, Ward 3 did not have any public charter schools located in its boundary in 2009; hence it had no public charter enrollment in



2009.⁹ In Ward 2 and Ward 8, 26 percent of public school enrollment was in public charter schools in 2009.



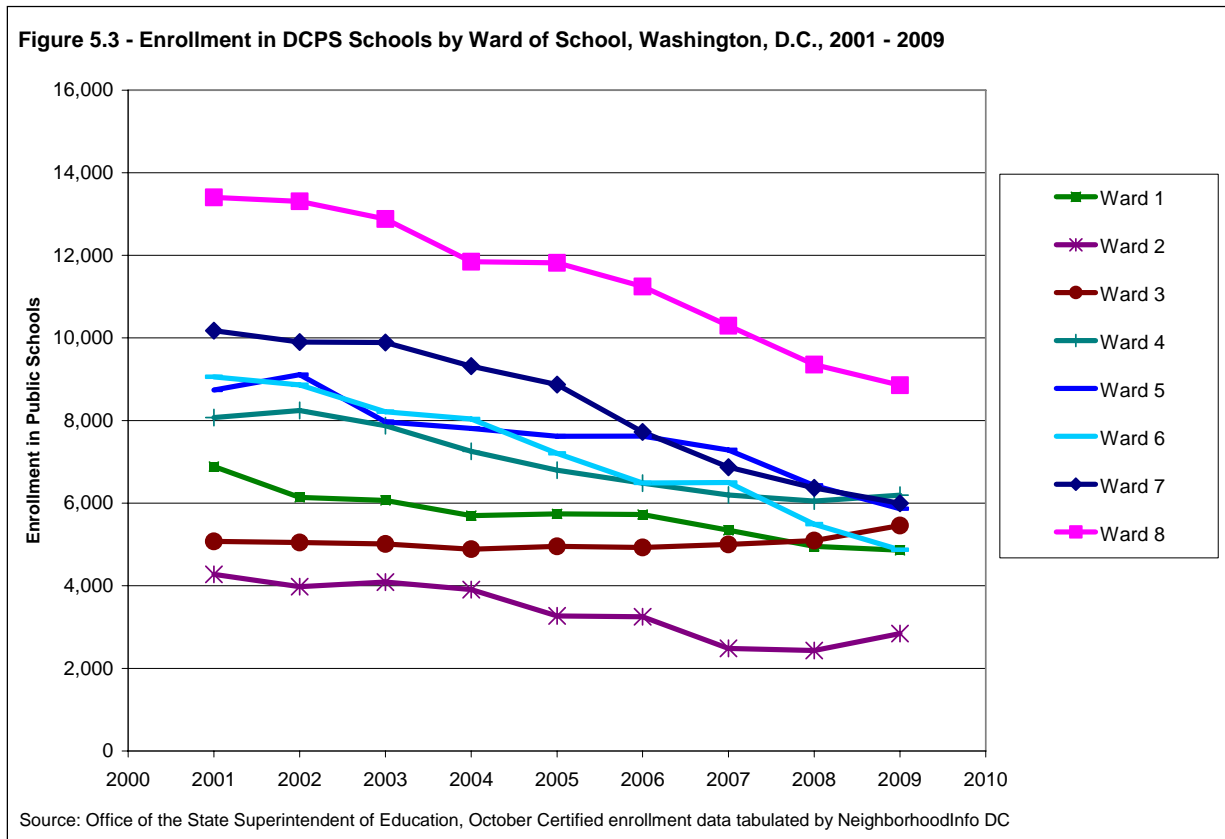
Also telling is the change in public school enrollment over time by ward. (This tracks the enrollment by the location of the school as opposed to where students actually live.) Changes in enrollment reflect a number of factors: schools opening, closing, and changing their grades offered; schools moving locations (more typical of public charter schools but also happens to DCPS schools during renovations); students switching sectors between DCPS and public charter schools; and changes in the student-age population.

Figure 5.3 shows the enrollment trends for DCPS schools by the ward where the schools are located. Since DCPS enrollments have decreased overall, it is unsurprising that DCPS school enrollment has also decreased in almost all wards and, for six of the eight wards, there is a marked decrease in enrollment from 2001. Moreover, while DCPS enrollment varied

⁹ Washington Latin Public Charter was located in Ward 3 in 2007; however, its lower and upper campuses were located in Ward 4 by 2009.



considerably by ward early in the decade, by 2009, DCPS enrollment in six of the wards (Wards 1, 3, 4, 5, 6, and 7) had converged to a range of just 1,400 students. The wards with the most severe declines are Ward 6, which decreased by 46 percent between 2001 and 2009, and Ward 7, which decreased by 41 percent. The significant decrease in Ward 6 can be explained by a number of DCPS school closings, such as Van Ness Elementary School in 2006 due to the redevelopment of the Arthur Capper/Carrollsborg public housing development, the closing of Gibbs and Bowen Elementary Schools and Hine Middle School in 2008 as part of the larger DCPS school closing and consolidation effort, and the recent reduction in enrollment at Eastern High School in 2008 and 2009 while it underwent significant physical and programmatic renovations. The decreases in Ward 6 DCPS schools are not particularly due to competition from public charter schools. Public charter enrollment in Ward 6 increased by only 21 percent, the second lowest increase over time across all the wards (figure 5.4).

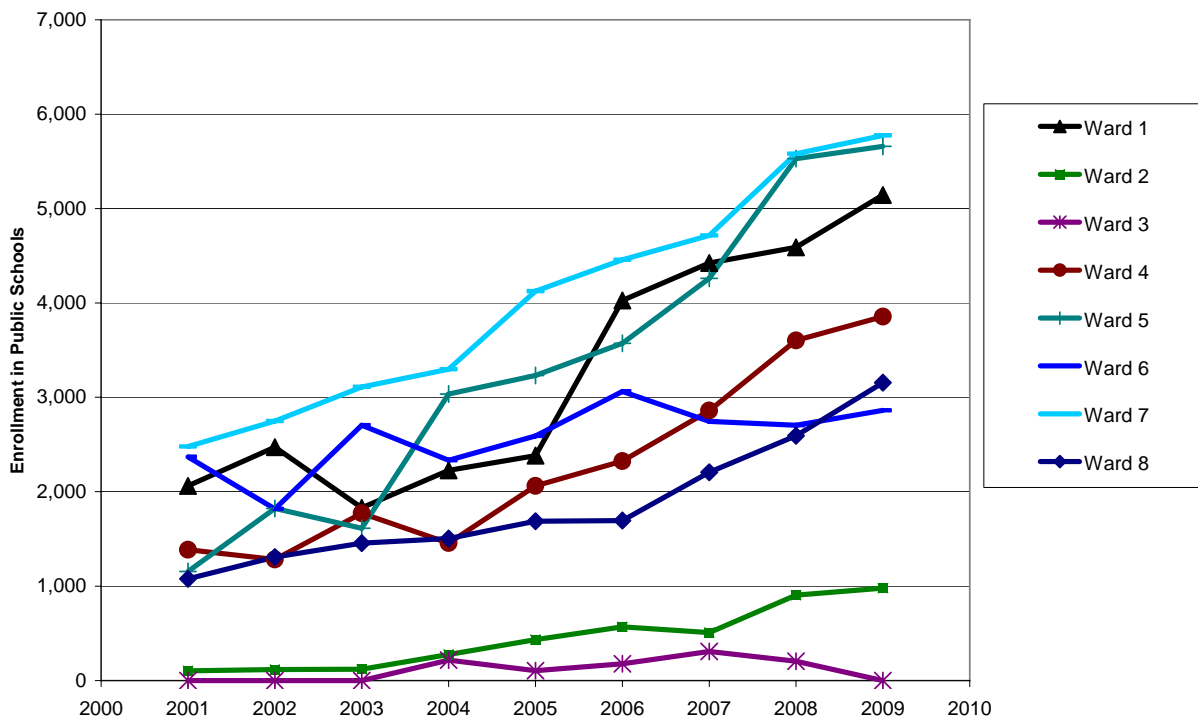


Ward 7's DCPS enrollment decrease of 41 percent can be mostly attributed to a significant presence of public charter schools in that ward. Since 2001, public charter schools in Ward 7 had the highest enrollment and continued to do so in 2009 at almost 5,800 students. In addition, public charter enrollment has steadily increased in Ward 7 between 2001 and 2009 (a 139 percent increase), although the increase is not larger than the citywide average (figure 5.4).



Ward 5 has the next largest enrollment of public charter schools at approximately 5,600 students in 2009 and has had the greatest increase in enrollment of all the wards between 2001 and 2009 at 389 percent. Public charter schools in Ward 1 have the third largest enrollment at approximately 5,100 students. Ward 8 has had a higher than average increase in enrollment at public charter schools in its ward between 2001 and 2009 (193 percent), which is driven primarily from new schools locating there in the past few years. In 2001, only one public charter school was in Ward 8, but by 2009, it had 13 public charter schools.

Figure 5.4 - Enrollment in Public Charter Schools by Ward, Washington, D.C., 2001 - 2009



Source: Office of the State Superintendent of Education, October Certified enrollment data tabulated by NeighborhoodInfo DC

Wards 3 and 6 have had declines in public charter school enrollment over the period, unlike any other ward. For instance, public charter enrollment in Ward 6 decreased between 2003 and 2004 and between 2006 and 2007 mainly due to the fact that DC KIPP relocated from Ward 6 to Ward 7 and Washington Academy closed, which had campuses near Eastern Market and the Navy Yard.

Ward 3 is unlike any other ward in that it has had only one public charter school located within its boundary, Washington Latin Public Charter, which relocated to Ward 4 in 2009 (hence the 0 enrollment in 2009). The reasons why there is so little public charter school presence in Ward 3 are multifaceted: school-age children are relatively few, private school enrollment is



high, DCPS schools perform relatively well compared to other District public schools, and real estate is particularly expensive.

Neighborhoods with public schools (DCPS or public charter) with the largest enrollments in 2009 were Cluster 2 (Columbia Heights, Mt. Pleasant) in Ward 1 with an enrollment of 7,413 students (DCPS or public charter), Cluster 39 (Congress Heights, Bellevue) in Ward 8 with an enrollment of 6,840 students, Cluster 18 (Brightwood Park, Petworth) in Ward 4 with an enrollment of 5,460 students, and Cluster 21 (Edgewood, Bloomingdale) in Ward 5 with 4,868 students. Alternatively, there were seven neighborhood clusters that had public schools with enrollments less than 500 students, such as Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 with only 185 public school students, Cluster 28 (Historic Anacostia) in Ward 8 with only 259 students, and finally Cluster 12 (North Cleveland Park, Van Ness) in Ward 3, which did not have any public schools (DCPS or public charters) within its boundary so it had 0 enrollment in 2009.

Focusing just on neighborhood clusters home to public charter schools with large enrollments in 2009, Cluster 2 (Columbia Heights, Mt Pleasant) in Ward 1 had the greatest number at 3,750 students (51 percent of all students located in public schools in that cluster). Cluster 21 (Edgewood, Bloomingdale) in Ward 5 had the next greatest number of public charter students at 2,864 students (59 percent of all students enrolled in schools there), and Cluster 30 (Mayfair, Hillbrook) in Ward 7 had the third highest at 1,959 public charter students (81 percent of all students enrolled in schools there). Thirteen neighborhood clusters did not have any public charters schools in 2009, and therefore had no enrollment. Five of those clusters were located in Ward 3 and three were located in Ward 8.

Proficiency in Reading and Math

According to the federal No Child Left Behind Act (NCLB), public schools must meet basic educational standards and their adequate yearly progress (AYP) requirements. All District public school students in grades 3rd through 8th and 10th grade take an annual assessment exam for math and reading, the D.C. Comprehensive Assessment System (DCCAS) test, which contributes to whether a school meets their AYP. AYP is based in part on the share of students testing at “proficient” or “advanced” level on DCCAS and whether that share increased as targeted. The data provided here are the aggregated average shares of students testing proficient and advanced from each DCPS and public charter school from school year 2006–07 through school year 2008–09 (tests taken in spring 2007, 2008, and 2009). As with the public school enrollment section above, the ward and neighborhood cluster test score information describes the location of the school, not the student.

The average public school student tests poorly on the DCCAS test, although the test scores have been improving in recent years. On average, 47 percent of all public school students (both DCPS and public charter) tested proficient or advanced in reading and 46 percent tested proficient in math on the spring 2009 test across the seven grades tested.



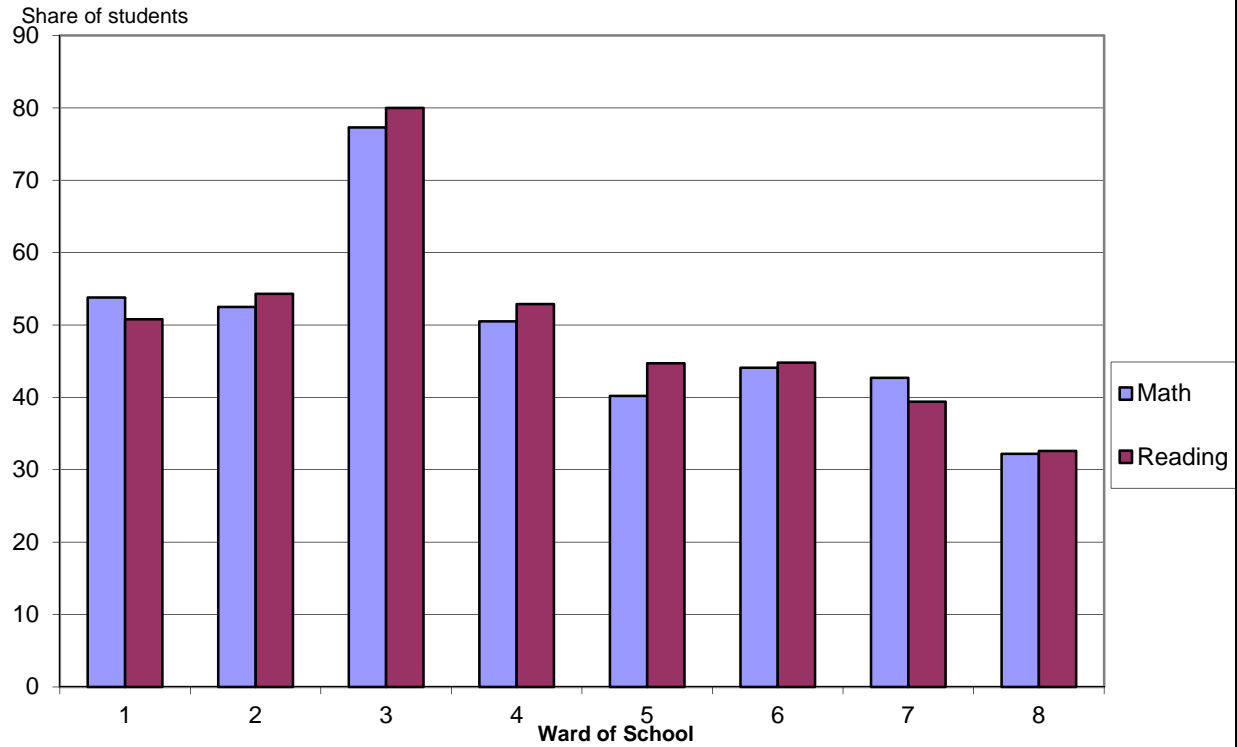
However, these low test scores are an improvement over the DCCAS test score averages from two years ago (the first time the DCCAS test was administered in the District). The spring 2009 reading average increased by nine points compared with spring 2007. The increases are even greater on the math portion of the DCCAS test: public school students in the District increased their average math score by 14 points between spring 2007 and spring 2009.

There is variation across the wards reflecting the fact that high-performing schools are not distributed evenly across the city. Public schools in Ward 3 (there was only one public charter school located in Ward 3 in spring 2009) outperform the average public schools in all other wards by an extremely large margin. More than three-fourths of all students in Ward 3 public schools (80 percent) tested proficient or advanced in reading, and 77 percent tested proficient or advanced in math (figure 5.5). The next highest average test score in public schools was in Ward 2, averaging 54 percent proficient or advanced in reading and 53 percent proficient or advanced in math. This is a difference of 25 percentage points between the first and second ranked wards and 24 percentage points in math. Ward 4 schools are not far behind at 53 percent in reading and 51 percent in math.

Ward 8 public schools had the lowest average share of students testing at required standards—only 33 percent in reading and 32 percent in math. The difference in average test scores between Ward 3 public schools and Ward 8 public schools was 47 percentage points in reading and 45 percentage points in math. While the Ward 8 school average test scores are extremely low, they have made notable gains. In spring 2007, the average Ward 8 public school had only 26 percent of student proficient or advanced in reading and only 19 percent in math.



Figure 5.5 - Share of All Public School Students Testing Proficient or Advanced on DCCAS, Spring 2009



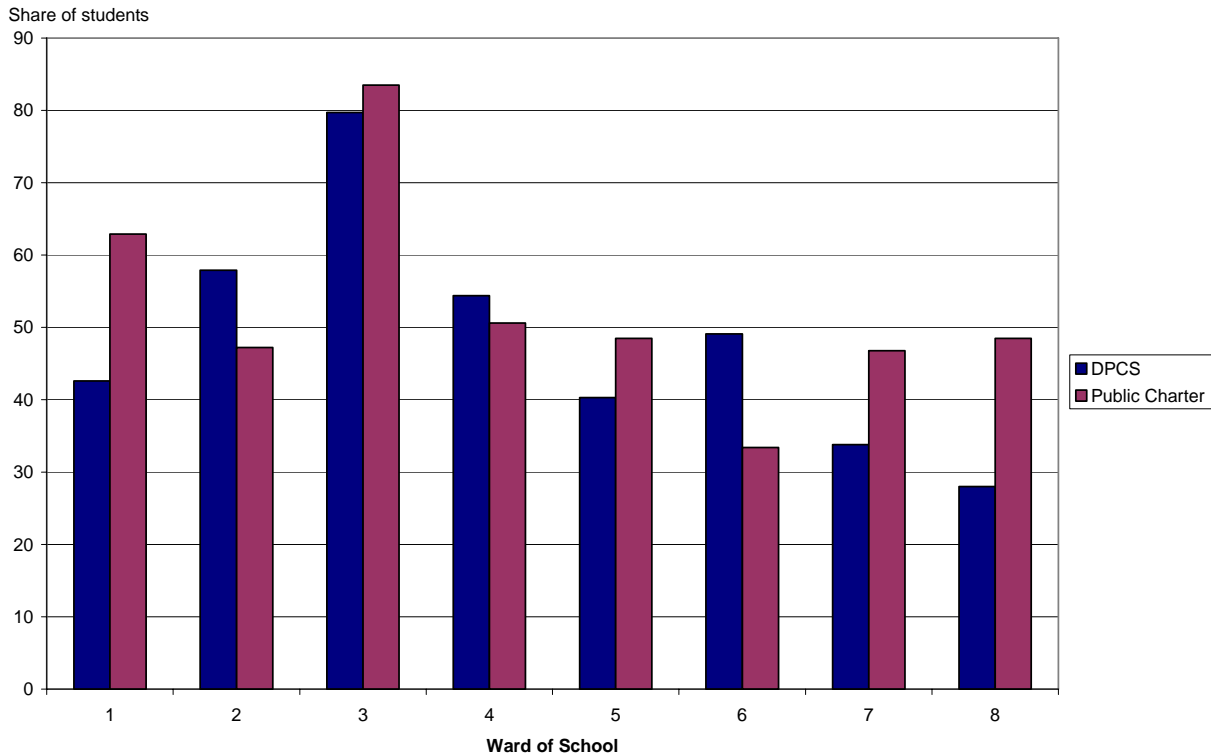
Source: Office of the State Superintendent of Education tabulated by NeighborhoodInfo DC

Looking at the differences in test scores between DCPS and public charter schools using the reading portion of the DCCAS test as an example (all grades averaged together), we find that the traditional DCPS schools perform better in two wards and the average public charter school outperforms the average DCPS school in four wards (figure 5.6). The average reading test scores of DCPS schools located in Ward 2 and Ward 6 in spring 2009 were significantly higher than the average test scores of public charter schools in the same wards (an 11 percentage point difference for Ward 2 and a 16 percentage point difference for Ward 6). In Ward 1 and Ward 8, the average public charter school outperformed the average DCPS school by 20 and 21 percentage points, respectively. In Ward 7, the average public charter scored 13 percentage points higher than the average DCPS school. The average public charter in Ward 3 in spring 2009 tested approximately the same as Ward 3 DCPS schools.¹⁰ The differences between the average DCPS and public charter school test scores in math by ward followed the same pattern.

¹⁰ Washington Latin Public Charter had one campus in Ward 3 in the spring of 2009 (school year 2008–09).



Figure 5.6 - Average DCPS and Public Charter DCCAS Reading Scores by Ward of School, Spring 2009



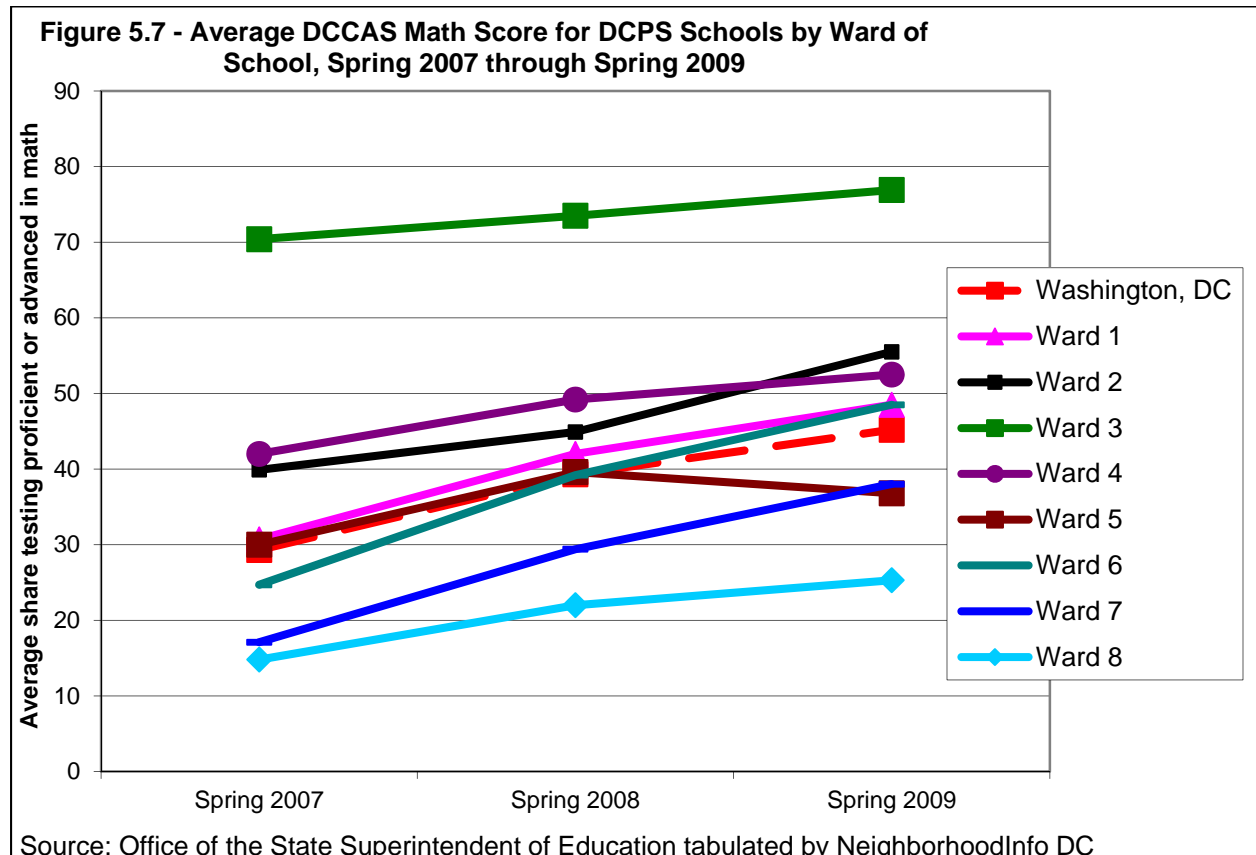
Source: Office of the State Superintendent of Education tabulated by NeighborhoodInfo DC

The increase in citywide DCCAS test scores has been well publicized. However, what is less known is how some wards have schools that have increased their share of proficient and advanced students more than other wards. Using the average share of students who tested proficient or advanced in math between 2007 (the first year the DCCAS test was administered) and 2009 (from the 2008–09 school year), DCPS schools in Ward 6 made the greatest gains, of 24 percentage points, followed by DCPS schools in Ward 7 with gains of 21 percentage points (figure 5.7). These two wards had percentage point increases that were more than double the increases in the three wards with the smallest increases: Wards 3, 5, and 8. The increase for DCPS schools in Ward 7 is striking as it had average test scores that were comparable to Ward 8's low test scores in spring 2007.

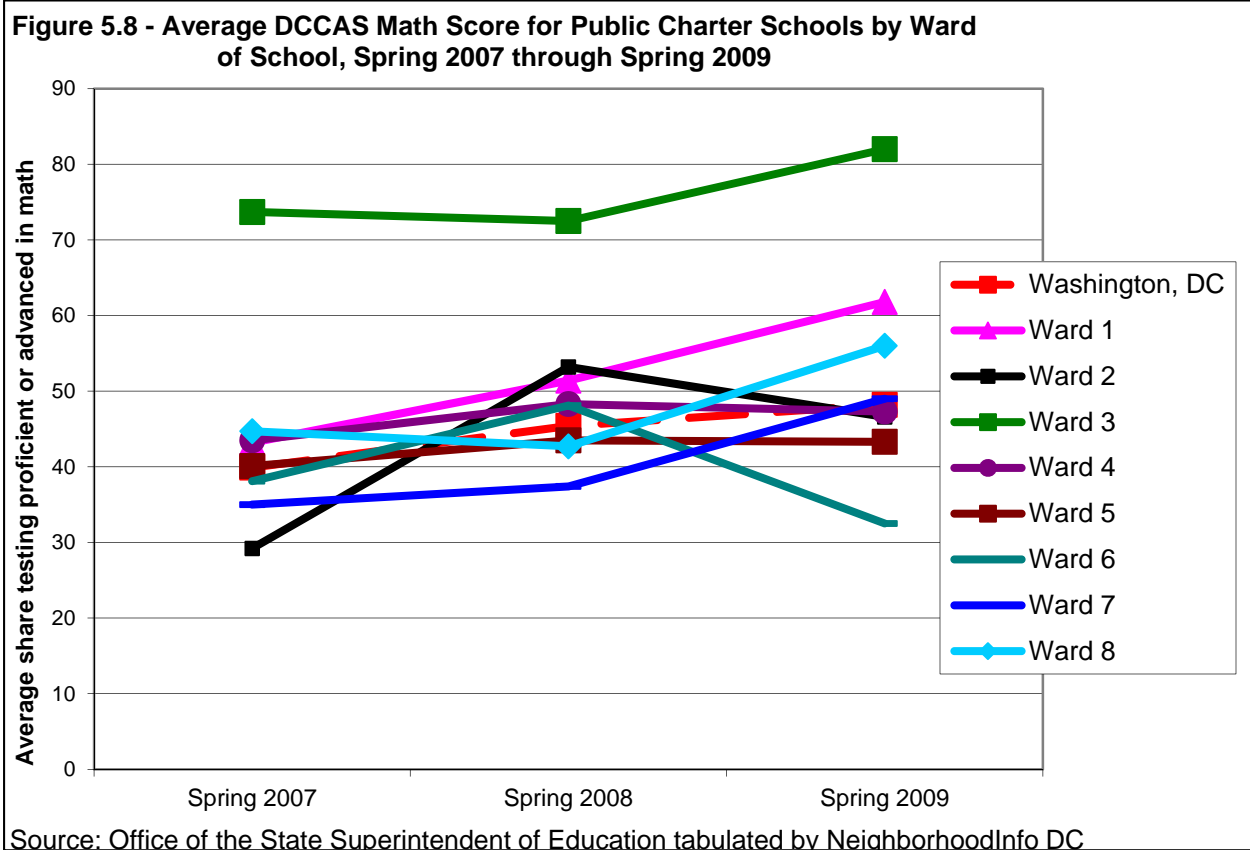
DCPS schools in Ward 3 had the smallest percentage point gain between the time period, only 6.5 percentage points, but since such a large share of the students were already testing at proficient or advanced levels, this small increase is expected. DCPS schools in Ward 5 had the next smallest gains in average math test scores of only 6.8 percentage points. DCPS schools in Ward 5 have also been suffering from underenrollment (this ward has a large presence of public charter schools) and in 2008, two schools were closed and consolidated with neighboring schools (Webb consolidated into Wheatley and Brookland into Bunker Hill). DCPS



schools in Ward 8 also had a relatively small increase in average math test scores of only 11 percentage points.



Looking at the change in test scores for public charter schools located across the wards, the increase in test scores for public charter schools was smaller on average than the increase in DCPS schools. Public charter schools in Wards 1 and 2 made the greatest gains at 19 and 17 percentage points, respectively (figure 5.8). The gains in these two wards were much higher than the average public charter gain of 8 percentage points. Public charter schools in Ward 8 made the third highest gain at 11 percentage points. The wards with the smallest gains were Ward 4, with a gain of only 4 percentage points, and Ward 5, with a gain of 3 percentage points. The share of students testing proficient or advanced in math in public schools located in Ward 6 actually decreased between spring 2007 and spring 2009 by 6 percentage points, although there was an increase between spring 2007 and spring 2008.



Looking at the average test score of all public schools (DCPS and public charter) at the neighborhood cluster level, the trends there mimic the ward-level trends (i.e., test scores are higher in more affluent clusters in upper northwest and lower in schools east of the Anacostia River), although there are exceptions. The highest share of students testing proficient or advanced in reading was in Cluster 10 (Hawthorne/Barnaby Woods) in Ward 4 at 90 percent for reading and 89 percent for math, and the second highest average public school test score was in Cluster 13 (Spring Valley/Palisades) in Ward 3 at 88 percent testing proficient and advanced in both reading and math. The next highest neighborhood cluster that was not in Wards 2 or 3 was Cluster 16 (Colonia Village, Shepherd Park) in Ward 4 at 77 percent testing proficient or advanced in reading and 76 percent in math. The lowest share of students testing at proficient levels was in Cluster 38 (Douglas, Shipley Terrace) in Ward 8 at only 15 percent proficient or advanced in reading and 14 percent for math.

The wide variation in performance at the neighborhood level, even with recent gains in DCCAS test scores, illustrates the continued need to ensure that all schools in all neighborhoods are high performing. Currently, many of the higher performing schools, especially higher performing DCPS schools, are located in areas of the city with relatively few



school-age children, such as neighborhoods in Ward 3. In contrast, the areas with the largest shares of school-age children, Wards 7 and 8, have relatively few high performing schools. This spatial mismatch presents unique challenges to ensuring that every child has access to a quality education.



VI. HEALTH

The following section reviews the health of the youngest District residents, infants, and reviews the leading causes of death in the District for people of all ages, which includes heart disease, cancer, and violent deaths. The health of pregnant mothers and their infants are closely related to the socioeconomic status of the mother; hence, pregnant women and their newborns fare better in Wards 2 and 3 compared with pregnant women and infants in Wards 7 and 8. Alternatively, the leading causes of death—cancer and heart disease—are more closely related to age. The greatest share of the elderly (seniors age 65 and older) live in Wards 4 and 5. Therefore, some of the highest numbers of mortality for cancer and heart disease also occur in these wards. The numbers of violent deaths are related to socioeconomic status as opposed to age, so some of the highest rates occur in Wards 7 and 8 as well as sections of Wards 5 and 6.

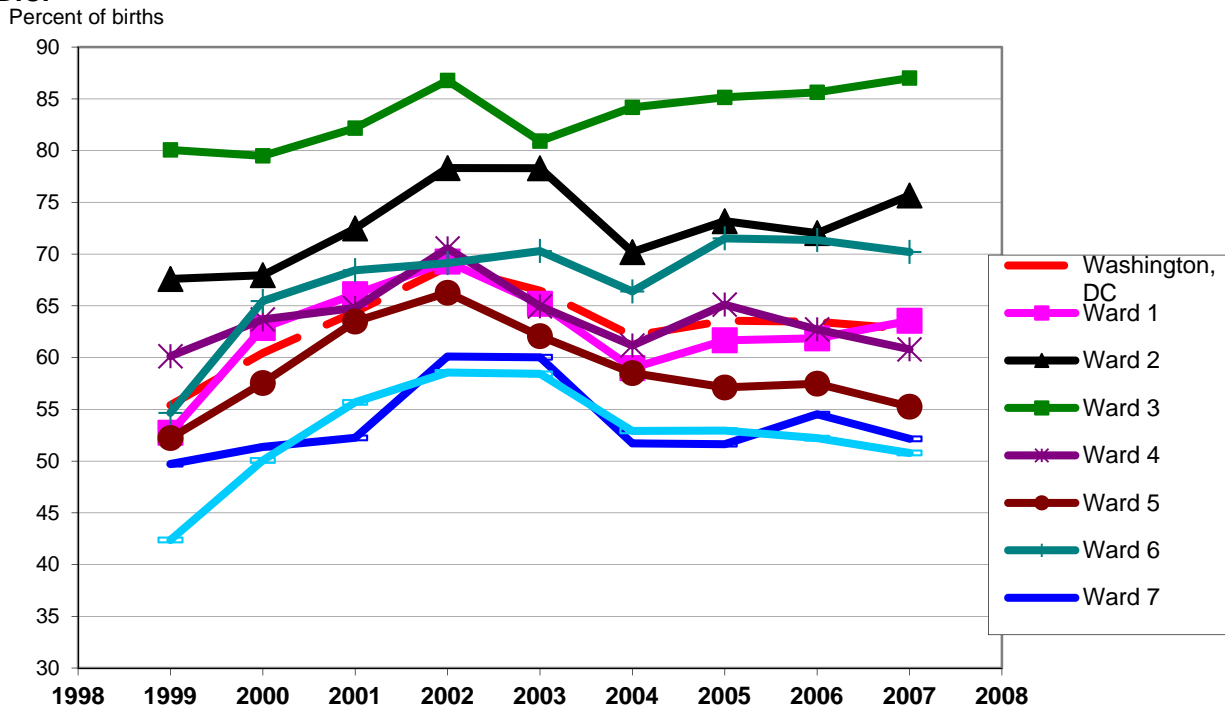
Births to Mothers Who Received Adequate Prenatal Care

One way to help ensure a healthy pregnancy and newborn is that pregnant mothers receive adequate prenatal medical care. Adequate prenatal care is defined in this report by the Kessner Index criteria, which is based on the number and timing of prenatal visits during the trimesters of pregnancy. (The criteria measure the frequency of prenatal doctor visits, not the quality of the prenatal care.) Mothers who do not receive any prenatal care during their pregnancy are more likely to have their infant die at birth than mothers who receive care.

Levels of adequate prenatal care have fluctuated over time in the city. Citywide the share of mothers receiving adequate prenatal care gradually rose between 1999 and 2002, peaking at 69 percent of all mothers in 2002, dropped to 62 percent in 2004, rose slightly to 64 percent by 2006, and has stayed relatively steady since (figure 6.1). By 2007 (the latest data available), the share of mothers receiving adequate prenatal care was 63 percent of all mothers. There is wide variation of the share of pregnant women who received adequate prenatal care at the ward level. Wards 1, 2, 3, and 6 all had shares of prenatal care that were higher than the city average. Mothers in Ward 3, living in the most affluent neighborhoods of the city, had the highest level of adequate prenatal care at 87 percent in 2007, followed next by Ward 2 with 76 percent, and Ward 6 with 70 percent. Ward 1 barely surpassed the citywide average at 64 percent of all pregnant mothers having adequate prenatal care. On the opposite end of the spectrum, roughly half of the pregnant mothers in Wards 5, 7, and 8 received adequate prenatal care in 2007, at 55, 52, and 52 percent, respectively.



Figure 6.1 - Births with Adequate Prenatal Care, 1999 to 2007, Washington, D.C.



Source: D.C. Department of Health data tabulated by NeighborhoodInfo DC.

The variation is even more extreme at the neighborhood cluster level. Fourteen of the 39 neighborhood clusters had shares of more than 75 percent of the pregnant mothers receiving adequate prenatal care, such as Cluster 10 (Hawthorne/Barnaby Woods), which had the highest share at 90 percent, and Cluster 11 (Friendship Heights/American University Park) and Cluster 4 (Georgetown), which had the next highest shares at 88 percent each. (Clusters 10 and 11 are in Ward 3 and Cluster 4 is in Ward 2.) In eight clusters, fewer than half of the pregnant women living there received adequate prenatal care, such as Cluster 23 (Ivy City, Trinidad) at 42 percent, Cluster 29 (Eastland Gardens/Kenilworth) at 43 percent, and Cluster 28 (Historic Anacostia) at 44 percent.

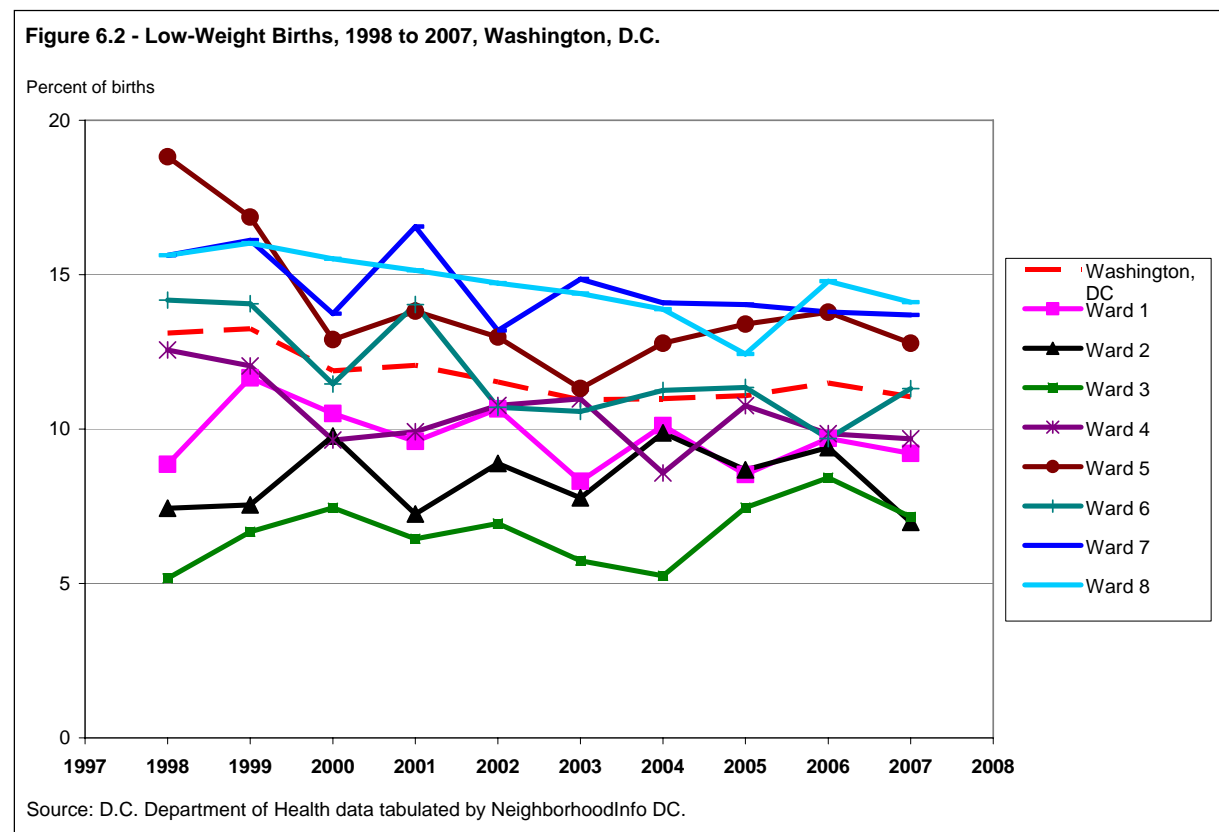
Low-Weight Births

Another indicator that helps predict healthy newborns is low birth weight. Low-weight infants are those born weighing less than 5.5 pounds. Research has shown that low-birth-weight babies are



at a greater risk of death within the first month of life and are at an increased risk for later developmental disabilities and illnesses.

The share of low-weight births in the District was 11 percent in 2007, a number that has remained relatively steady over the past four years but is generally lower than in the late 1990s (figure 6.2). However, the District's share of low-weight births is higher than the national average of 8 percent. Ward 3 has had the lowest share of all births under 5.5 pounds from 1998 to 2007, although it has fluctuated between 5 and 8 percent. Ward 5 had the highest share of low-weight births in 1998 at 19 percent of all births, and while it has fluctuated up and down, it reached 13 percent of all births by 2007. Ward 8 also had a downward trend in low-weight births between 1999 and 2005, and although it spiked in 2006, the share dropped back down to 14 percent by 2007. All wards either held steady or decreased between 2006 and 2007, except for Ward 6, which increased by 2 percentage points.



There is some variation across neighborhood clusters within the same ward for the share of low-weight births. For instance, Cluster 3 (Howard University, Le Droit Park) has a low-weight birth of 15 percent, much higher than the Ward 1 average rate of 9 percent. Similarly, 11 percent of births in Cluster 14 (Cathedral Heights, Glover Park) are low-weight births, much higher than the Ward 3 average of 7 percent. While there are these anomalies, the clusters with



the lowest share of low-weight births tend to be in the higher income wards, such as Cluster 4 (Georgetown, Burleith/Hillandale) in Ward 2 at 3 percent, Cluster 11 (Friendship Heights, American University Park) in Ward 3 at 5 percent, and Cluster 12 (North Cleveland Park, Van Ness) also in Ward 3 at 6 percent. Clusters with the highest shares of low-birth-weight babies were in Wards 5, 6, and 8. Cluster 20 (North Michigan Park) in Ward 5 had the highest share of low-birth-weight babies at 17 percent, followed next by Cluster 9 (Southwest Employment Area) in Ward 6 at 16 percent, and Clusters 38 (Congress Heights) in Ward 8 also at 16 percent.

Births to Teenage Mothers

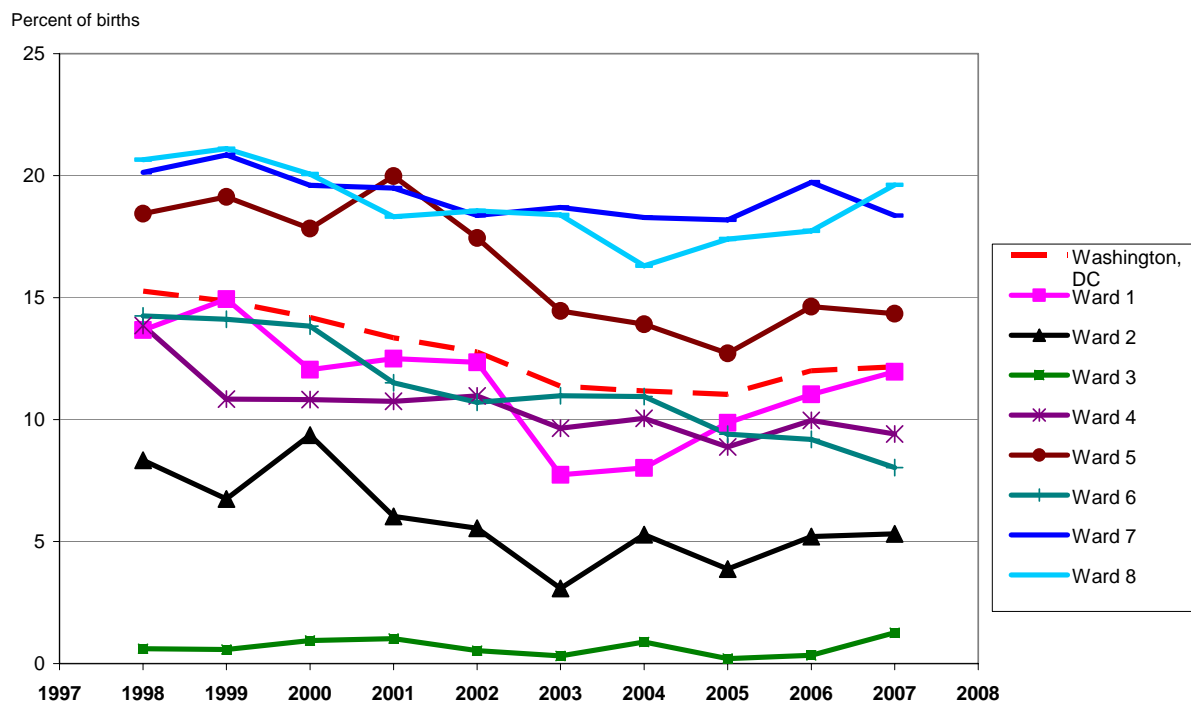
Teenage mothers (age 19 and under) are more likely to face significant challenges raising their children compared with older mothers. Teenage mothers are more likely to be high school dropouts, unmarried, and poor. In addition, they are typically unprepared for the emotional and psychological challenges of child rearing. There are health and developmental consequences for children born to teenage mothers on average as well. Children born to teenage mothers are more likely to be born prematurely, have low birth weights, and die as infants. As the children of teenage mothers grow and develop, they are more likely to have lower academic performance and behavioral problems than children born to older mothers.

Births to teenage mothers in the District steadily decreased between 1998 and 2005, but began rising again in 2006 and stayed steady in 2007 (latest data available) (figure 6.3). The difference in the share of teenage births across the wards is striking. Almost a fifth of all births in Ward 7 (18 percent) and Ward 8 (19 percent) in 2007 were to teenage mothers, compared with only 1 percent of all births in Ward 3. Wards 7 and 8 have consistently had the highest shares, while Ward 8 had lower shares compared to Ward 7 between 2004 and 2006, the share in Ward 8 surpassed Ward 7 in 2007.

Ward 5 has the next highest share of teenage births at 14 percent of all births. Ward 5 had a significant decrease in teenage births, a decrease of 5.7 percentage points between 1998 and 2005, although the shares increased over the past few years. The share of teenage births also declined in Ward 4 over the period, a decrease of 4.5 percentage points. Ward 6 had the greatest decrease across all the wards of 6.3 percentage points between 1998 and 2007. Ward 3 has had a consistently very small share of teenage births.



Figure 6.3 - Share of Births to Teenage Mothers, 1998 to 2007, Washington, D.C.



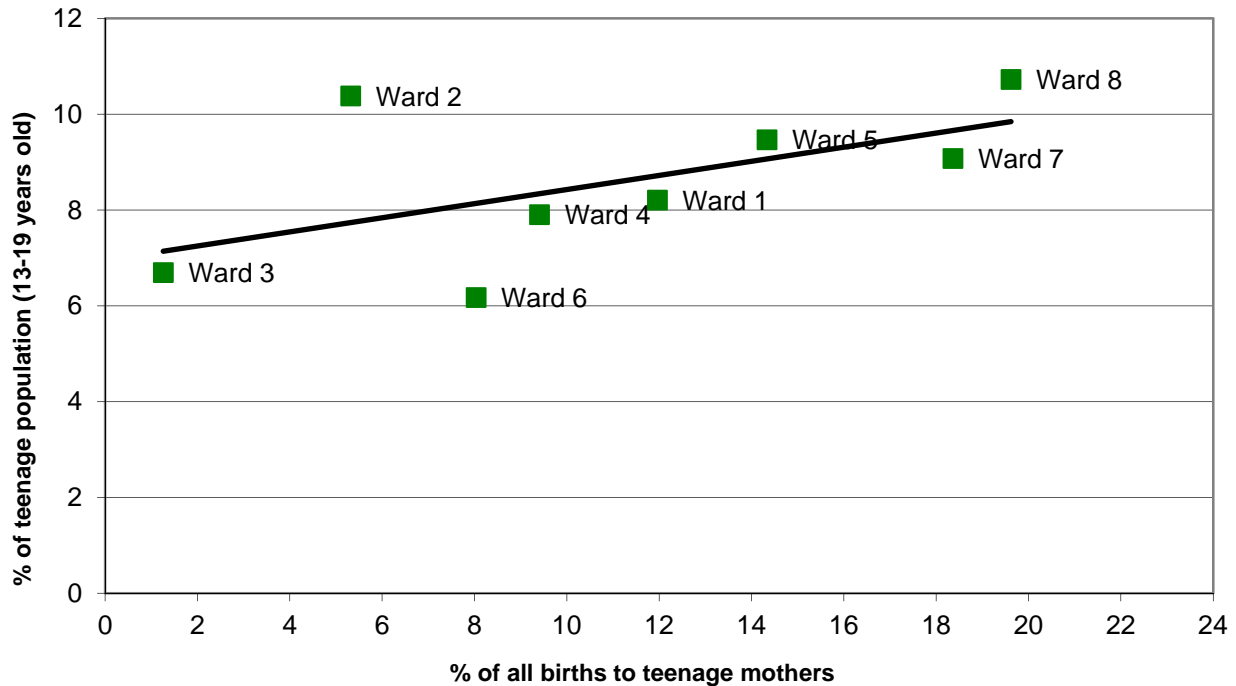
Source: D.C. Department of Health data tabulated by NeighborhoodInfo DC.

Comparing the share of births to teenage mothers and the share of teenage population within the ward reveals some surprises (figure 6.4). Wards 2 and 8 have the greater share of teenage population in the city compared with other wards, according to the 2000 Census, at 10.4 and 10.7 percent, respectively. (The three-year American Community Survey data estimate that Wards 7 and 8 (PUMA 104) have a teenage population slightly higher at 12.6 percent, so the 2000 Census may be undercounting what the actual population is today.) The demographics of these two wards are extremely different. The high share of teenagers in Ward 2 is presumably driven by enrollments at Georgetown University and George Washington University. The share of teenagers in Ward 8 is primarily low-income youth who presumably grew up in the District (or nearby). The share of births to teenagers from 2007 is similarly very different.

While Ward 2 has a high share of the teenage population within its ward (10.4 percent), it has a disproportionately low share of births to teenage mothers (5.3 percent). The share of births to teenagers in Ward 8 is more proportional to its teenage population: 10.7 percent of Ward 8's population are teenagers and 19.6 percent of all births are to teenage mothers. Ward 6 has a disproportionately high share of teenage births compared with its share of teenagers.



Figure 6.4: Comparison of Share of Births to Teenagers to Share of Teenage Population by Ward, 2007



Note: Linear trend line included in the figure.
Source: D.C. Department of Health tabulated by NeighborhoodInfo DC.

There are some neighborhood clusters with a very high share of teenage births. Five of the 39 neighborhood clusters had shares of births to teenagers surpassing 20 percent of all births. For instance, in Cluster 27 (Near Southeast, Navy Yard) in Ward 6, 29 percent of all births were to teenagers (a significant increase from the year before, when only 16 percent of all births were to teenagers), and in Cluster 28 (Historic Anacostia) in Ward 8, 27 percent of all births were to teenagers. In Cluster 29 (Eastland Gardens) in Ward 7, 24 percent of all births were to teenage mothers. Alternatively, in four clusters, there was only one birth to a teenager in 2007, and in another cluster (Cluster 10, Hawthorne, Chevy Chase) in Ward 4, there were no births to teenage mothers in 2007. The clusters with only one teenage birth were Cluster 4 (Georgetown/Burleith) in Ward 2 and, in Ward 3, Cluster 11 (Friendship Heights/American University Park), Cluster 12 (North Cleveland Park/Forest Hills), and Cluster 14 (Cathedral Heights/McLean Gardens).

Infant Deaths

One of the more extreme measures of infant health is the number of infant deaths. For this indicator, we count the number of infant deaths under one-year old per 1,000 live births.



Because the number of deaths is relatively low, especially when analyzed at the neighborhood cluster level, we averaged three years' worth of data to minimize any extreme fluctuations. So, the number of infant deaths per 1,000 births in 2007 includes 2005, 2006, and 2007 data.

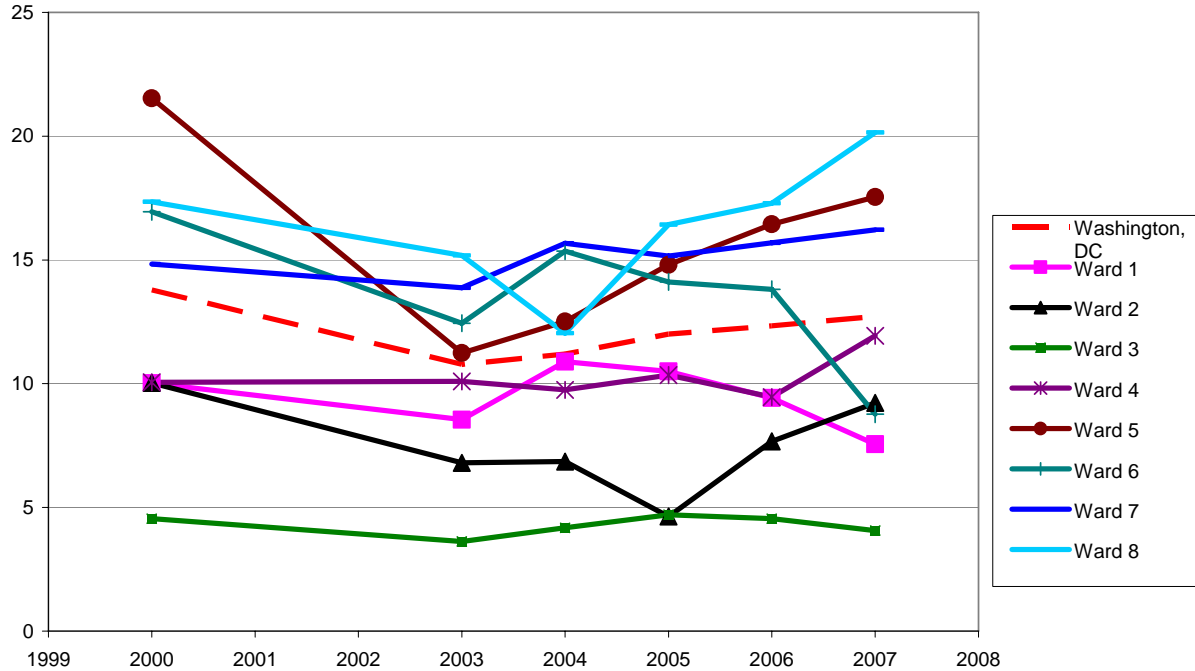
The number of infant deaths per 1,000 births had steadily decreased between 2000 and 2003, falling from 14 to 11 infant deaths (figure 6.5). However, the number of infant deaths began increasing in 2004, and by 2007, reached 13 infant deaths per 1,000 live births. There were a total of 107 deaths in 2007 (a three-year average).

As with the other indicators, there is wide variation of infant deaths by ward, which appears to be closely associated with income. In Wards 5, 7, and 8 the number of infant deaths was much higher than the city average at 16, 16, and 20 deaths per 1,000 births, respectively. Ward 3 has had a consistently low number of infant deaths per 1,000 births—only 4 deaths per 1,000 births in 2007. More wards experienced increases in the number of infant deaths than declines between 2006 and 2007. Wards 2, 4, 5, 7, and 8 all experienced increases of between 2006 and 2007. In fact, Wards 5 and 8 have experienced increases over the past three years. Wards 1 and 6 each experienced declines in infant mortality between 2006 and 2007. Ward 6 experienced a 7 percentage point decrease between 2004 and 2007, and Ward 1 experienced a 3 percentage point decrease over the same period. Infant deaths per 1,000 births in Ward 3 have remained virtually constant over time.



Figure 6.5 - Infant Deaths, 2000 to 2007, Washington, D.C., 2000 - 2007

Deaths to infants per 1,000 births (3-year average)



Source: D.C. Department of Health data tabulated by NeighborhoodInfo DC.

As with the other indicators, the neighborhood clusters in the predominately low-income wards (such as Wards 5, 7, and 8) tend to have more infant deaths than the more affluent wards (such as Wards 2 and 3). Cluster 36 (Woodland/Fort Stanton) in Ward 8 had the highest number of infant deaths in 2007 at 51 deaths per 1,000 births. This is the second year in a row that Cluster 36 has the highest number of infant deaths per 1,000 births, although it should be noted that there were relatively few births (only five) resulting in a high average number. Another neighborhood with a high share was Cluster 20 (North Michigan Park, Michigan Park) in Ward 5 with 30 deaths per 1,000 births and Cluster 33 (Capitol View/Marshall Heights) with 28 deaths per 1,000 births in Ward 7. In comparison, Cluster 4 (Georgetown, Burleith/Hillandale) in Ward 2 and Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 (bucking the overall trend) had no infant deaths in 2007, and Cluster 11 (Friendship Heights, American University) in Ward 3 had only 2 deaths per 1,000 births in 2007. (While Ward 3 has the lowest share of infant deaths of 4 per 1,000 births, two clusters have relatively high shares of infant deaths: Cluster 14 (Cathedral Heights, McLean Gardens) and Cluster 15 (Cleveland Park, Woodley Park), at 7 and 8 deaths, respectively.)

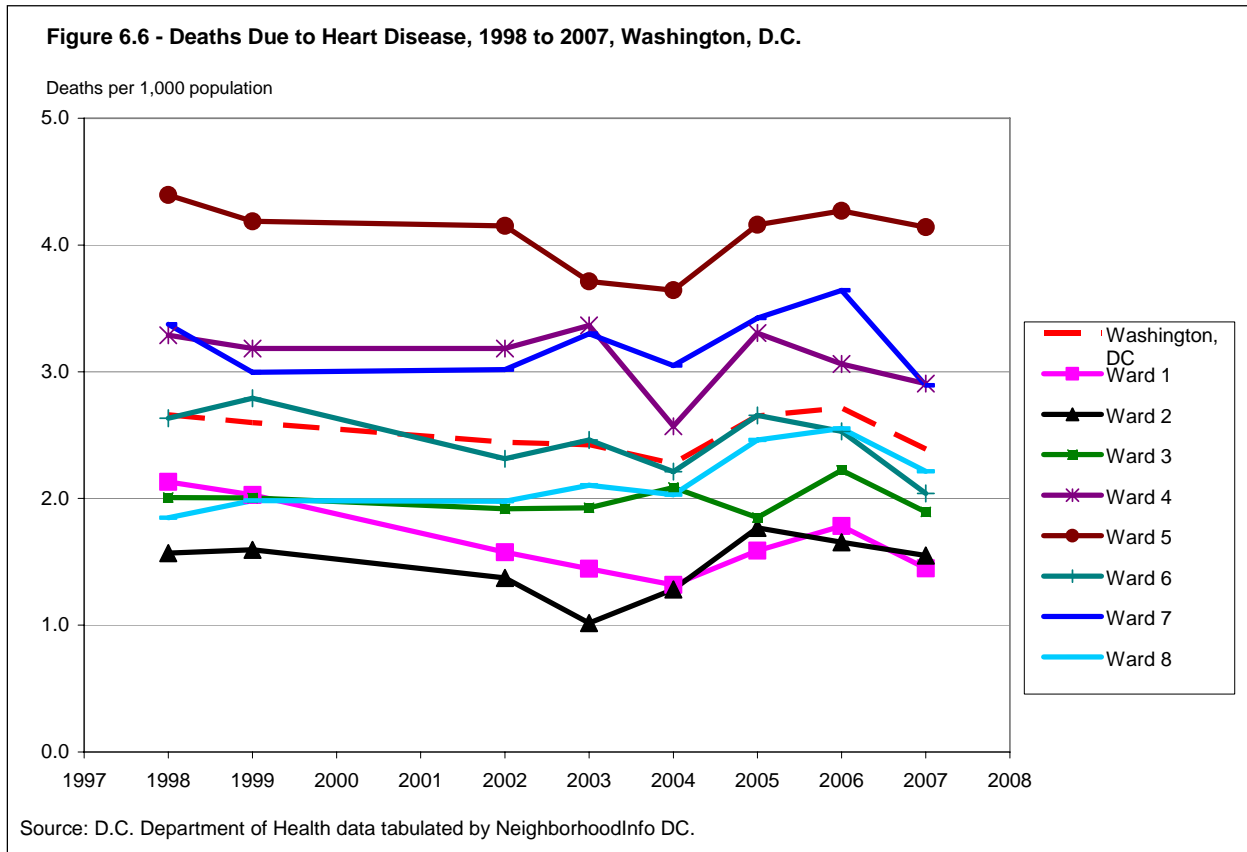


Deaths from Heart Disease

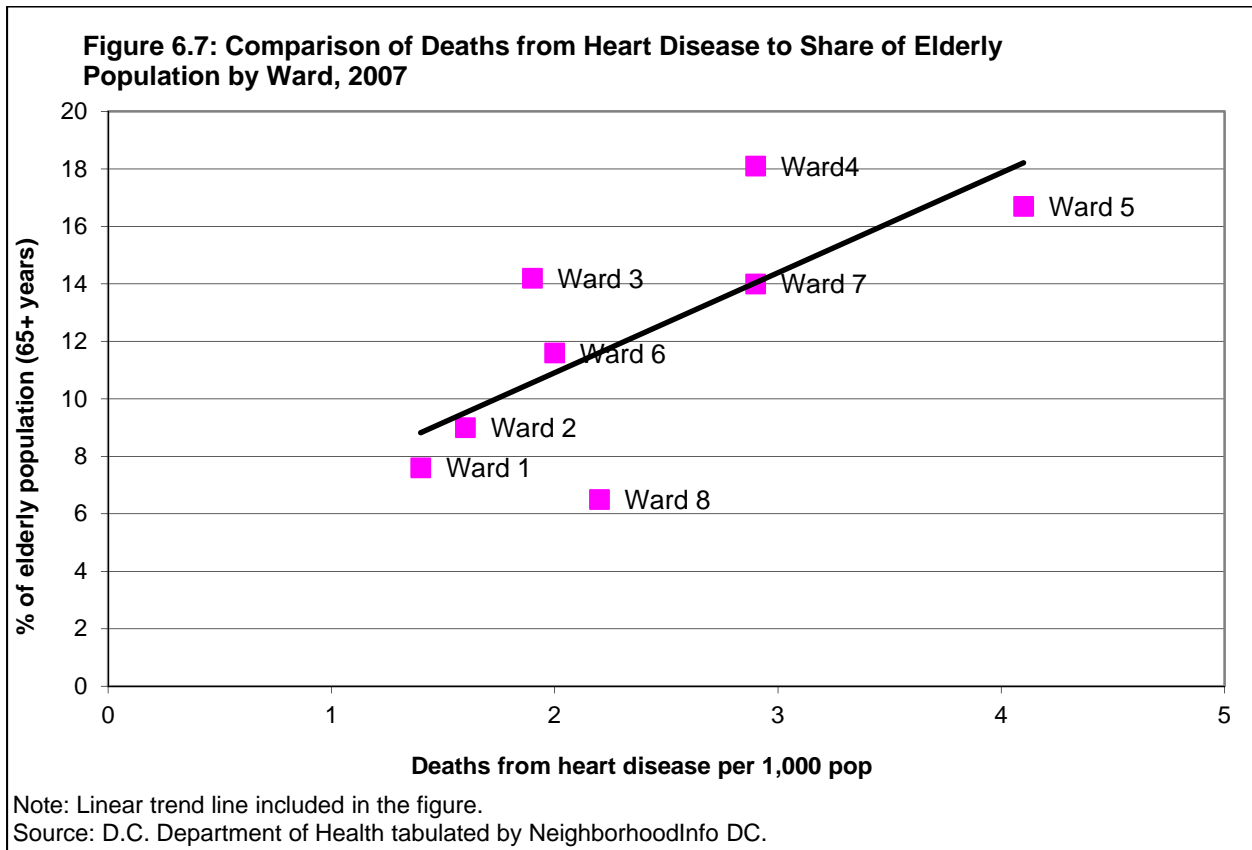
Heart disease has been the leading cause of death in the United States for the past 80 years according to the Centers for Disease Control and Prevention (CDC). The good news is that the CDC reported that the District was among the top 10 cities reporting the lowest prevalence rates for heart disease in the nation. In 2005, between 4.0 and 4.4 percent of District respondents reported a history of various heart diseases, compared with 6.5 percent of respondents nationwide. The following section shows the number of deaths for men and women who died from heart disease per 1,000 people.

While rates of heart disease may be low in the District compared with the nation, the number of deaths due to heart disease had decreased between 2000 and 2004 but then increased between 2004 and 2006. Fortunately, deaths due to heart disease decreased again citywide between 2006 and 2007 from 2.7 deaths per 1,000 residents to 2.4 deaths per 1,000 residents (figure 6.6).

Ward 5 has consistently had the highest number of deaths compared with the other wards, even though it has fluctuated over time. In 2007, Ward 5 had 4.1 deaths per 1,000 people, followed by Ward 7 with 2.9 deaths and Ward 4 with 2.9 deaths per 1,000 people. Wards 1 and 2 had the lowest number of deaths due to heart disease at 1.4 and 1.6 deaths per 1,000 people, respectively, followed by Ward 3 with 1.8 deaths. All wards experienced a decrease between 2006 and 2007 in the number of deaths due to heart disease.



One factor associated with mortality due to heart disease is the age of the population in each ward. Therefore, it is not surprising that wards with a greater elderly population would have more deaths due to heart disease. Figure 6.7 shows the relationship at the ward level between its share of elderly population (65 years and older according to the 2000 Census) and the number of deaths to heart disease. Ward 4 and 5 have the highest shares of elderly population at 18.1 and 16.7 percent, respectively. However, as shown in figure 6.6, Ward 4 has a much lower number of deaths due to heart disease relative to the share of elderly population in the ward (as shown by the far distance from trend line), and Ward 5 has a slightly higher number of deaths due to heart disease in relation to its elderly population. Ward 3 has fewer deaths due to heart disease than expected with its share of elderly population as well. Ward 8 has the lowest share of elderly population in the city (only 6.5 percent of the population); however, its number of deaths due to heart disease is higher than would be expected.



The number of deaths due to heart disease was higher in the neighborhood clusters with a greater share of elderly. For instance, Cluster 24 (Woodridge/Fort Lincoln), the cluster with the highest share of elderly in the District, also had the greatest number of deaths due to heart disease at 5.5 deaths per 1,000 people in 2007, down from 6.3 deaths per 1,000 residents in 2005. The cluster with the next greatest number of deaths was Cluster 8 (Chinatown, Penn Quarters) with 5.3 deaths, followed by Cluster 19 (Lamond Riggs/Queen Chapel) with 4.1 deaths per 1,000 people.

Clusters with low numbers of death due to heart disease in 2007 include Cluster 1 (Kalorama Heights, Adams Morgan) with 0.4 deaths, Cluster 6 (Dupont Circle/Connecticut Ave) with 0.8 deaths, and Cluster 26 (Capitol Hill, Lincoln) with 0.9 deaths per 1,000 population. Again, these clusters also had a relatively small share of the elderly in their population.



VII. FAMILY, YOUTH, AND SENIORS

A diverse city should include an array of household types—singles, childless couples, families with children, and retired singles and couples. Neighborhoods benefit from having different generations living together because it adds to the dynamics of the community, as well as making it more likely that the neighborhood will remain stable as the population ages or as new “baby boom” cycles emerge.

Figures 7.1 and 7.2 are the “population pyramids” for the United States and Washington, D.C., for 2000 and 2008. These charts display the distribution of the population by age and show how those distributions differ between the District of Columbia and the nation and how they have changed over time.

Between 2000 and 2008, the population in the United States has seen the largest increase in the share of persons 45 to 69 years old, reflecting the aging of the baby boom generation. The share of this age group grew by 4 percentage points over this period, comprising 29 percent of the U.S. population in 2008. (The same trend was reported in the “State of Washington, D.C.’s Neighborhoods” report using 2006 data.) Younger workers have stayed relatively steady nationwide between 2000 and 2008. The share of young workers age 25 to 29 remained at 7 percent in 2008 (and was 7 percent in 2000). The older 30 to 34 age group declined slightly nationwide between 2000 to 2008, from 7 percent in 2000 to 6 percent in 2008.

Compared with the United States as a whole, Washington, D.C., has a substantially larger young adult profile, and the share of young adult workers is increasing. In 2008, 10.2 percent of District residents were between the ages of 25 and 29, up from 9.2 percent in 2000. This is a much higher share than the 7 percent of 25- to 29-year-old persons nationally. This larger share of young adults in the city is expected as Washington, D.C., attracts many young workers and has several higher learning institutions. The share of workers 30 to 34 years old is also greater in the District than for the nation overall, but it too decreased slightly, similar to national trends, from 8.6 percent in 2000 to 8.1 percent in 2008.

The larger shares of young adults age 25 to 29 in the District are partially offset, however, by lower shares of children 0 to 19 years old (combining the age brackets of under 5 years, 5 to 9 years, 10 to 14 years, and 15 to 19 years old). Only 23 percent of the District’s population consisted of children under 19 years old, compared with the national share of 27 percent. Both the District and national shares children under 19 years decreased between 2000



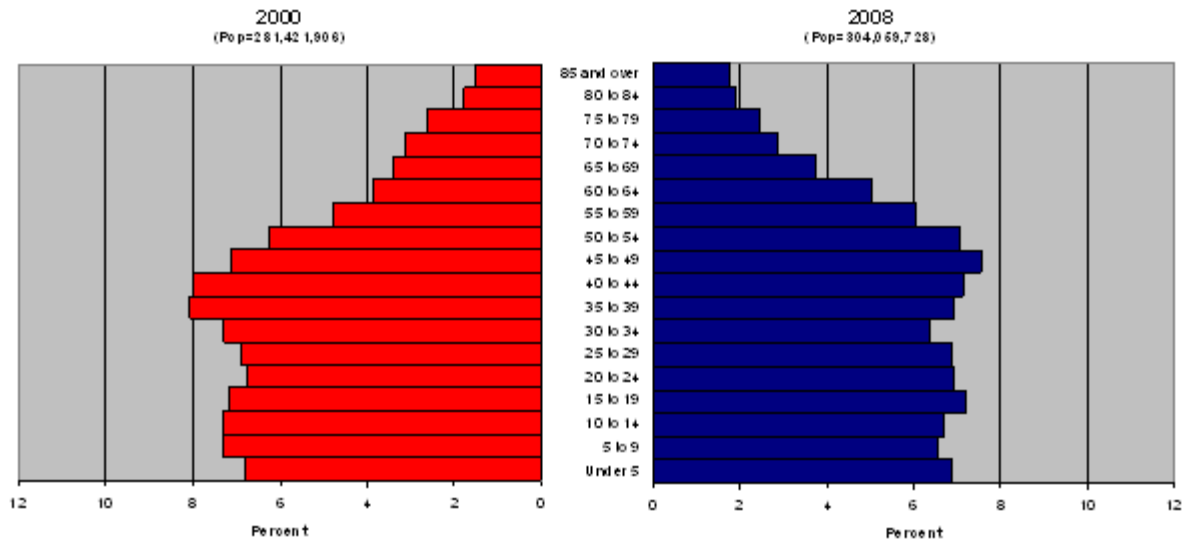
and 2008, although the national share decreased by 1.3 percentage points and the District's share decreased by only 0.6 percentage points.

The story is more nuanced when we look at the individual age brackets within the 0 to 19 age category. The share of under 5 years old increased by 0.5 percentage points between 2000 and 2008 in the District, and the share of 15- to 19-year-olds increased by 0.8 percentage points during the same period. The shares of children 5 to 9 years old in the District declined by 1.5 percentage points, and the share of 10- to 14-year-olds declined by 0.4 percentage points. These figures suggest that the city has had difficulty retaining families with children at the elementary and middle-school age.

The share of persons 80 and older also increased slightly in the District from 2000 to 2008, growing 0.4 percentage points; persons 80 and older comprised 3.7 percent of the city's population in 2008.

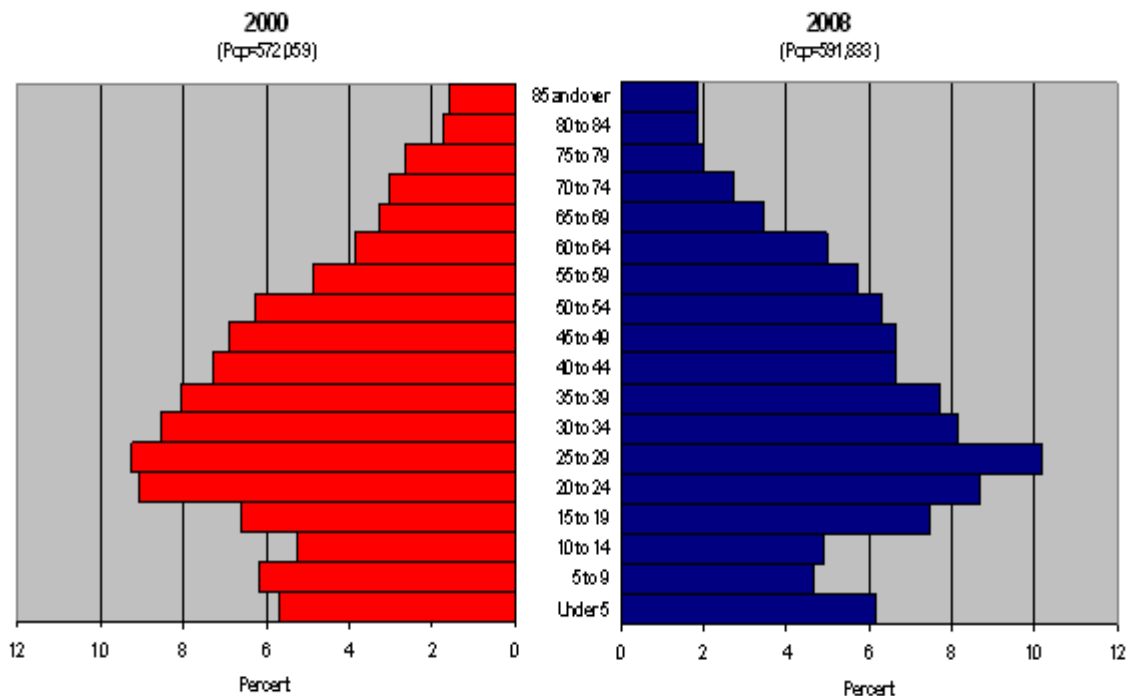


Figure 7.1 – Total Population by Age for the United States, 2000 and 2008



Source: Decennial Census (2000) and American Community Survey (2008)

Figure 7.2 – Total Population by Age for Washington, D.C., 2000 and 2008





Household Types

The types of households and families that make up a city's population are one measure of the diversity of its population. We categorize households as families with children, including those headed by married couples as well as single parents; nonfamily households, which include single adults living separately or in shared housing; and elderly households.

Table 7.1 shows the share of household types for Washington, D.C., for 2000 and 2008. Over a third of households (37 percent) in 2008 consisted of single, nonelderly persons living alone; this share increased from 34 percent in 2000. Other types of nonfamily households (two or more unrelated persons living together) increased as well, from 8 to 10 percent. Nonelderly, childless couples stayed at 10 percent of all households between 2000 and 2008.

The share of families with children held relatively steady between 2000 and 2008. Single

Table 7.1 – Households by Type, Washington, D.C., 2000 and 2008

	2000	2008
Total households	248,308	249,996
% by household type		
<i>Nonfamily households (nonelderly)</i>		
Single persons living alone	34	37
Other nonfamily households	8	10
Childless married couples (nonelderly)	10	10
<i>Families with children</i>		
Married couples with children	8	8
Single mothers	10	9
Single fathers	1	2
Other families (nonelderly)	8	7
<i>Elderly householder without children</i>		
No spouse present	16	15
With spouse	4	5

Notes: Excludes persons living in group quarters.

Source: Decennial Census (2000), American Community Survey (2008)



mothers (no spouse present) were the largest group of families with children, but their share fell slightly from 10 to 9 percent over this period. Married couples were the second largest group of families with children at 8 percent (the same share as in 2000). Single fathers with children were only 2 percent of households in Washington, D.C., although they increased from 1 percent in 2000.

Elderly householders without children were 20 percent of all households in 2000 and 2008. Three out of every four elderly householders do not live with a spouse. The share of empty nesters without a spouse declined slightly between 2000 and 2008, from 16 to 15 percent of all District households.

The most recent data on household types by ward and neighborhood cluster are only available as of the last decennial census. The highest shares of married couples with children in 2000 were in Wards 3 and 4, both 13 percent of all households in the ward. The highest shares of single parents with children were in Ward 7 (21 percent) and Ward 8 (31 percent). Nonfamily households (singles and unrelated persons) were the majority in Ward 2 (76 percent), Ward 3 (62 percent), and Wards 1 and 6 (each 60 percent).

At the neighborhood level, the highest shares of married couples with children were in Cluster 10 (Hawthorne/Barnaby Woods) in Ward 4, with 26 percent of all households consisting of married families. The second highest share was in Cluster 11 (Friendship Heights/American University Park) in Ward 3, at 24 percent.

Single-parents with children were most prevalent in Cluster 37 (Sheridan/Barry Farm) and Cluster 38 (Douglas/Shipleigh Terrace) in Ward 8, comprising 43 and 39 percent of all households in those wards, respectively. In fact, the four highest Clusters on this indicator were all in Ward 8. Fifth highest was Cluster 29 (Eastland Gardens/Kenilworth) in Ward 7, with 33 percent all households being single-parent families.

Nonfamily households (singles and groups of unrelated persons) were the most common household type in 14 neighborhood clusters in 2000. The highest shares were in Cluster 5 (West End/Foggy Bottom) and Cluster 6 (Dupont Circle/Connecticut Avenue/K Street), both in Ward 2, with 86 and 85 percent nonfamily households, respectively. Third highest was Cluster 14 (Cathedral Heights/McLean Gardens) in Ward 3, with 77 percent.

Child and Elderly Poverty

Children and the elderly are two of the most vulnerable population groups, and in the United States, they typically have higher rates of poverty than persons in other age groups. Although in a high-cost area like Washington, D.C., the poverty rate likely understates the extent of persons and families in need, tracking poverty over time and comparing poverty across wards and neighborhoods can give a relative measure of economic hardship.



About 20 percent of persons living in Washington, D.C., in 2000 were children under 18 years old. This was up from 19 percent in 1990, but down from 23 percent in 1980. According to the 2008 American Community Survey, the most recent data available, the share of children in the city's population decreased slightly to 19 percent (a dip from 2006 that estimated 20 percent of the population was children).

Wards 7 and 8 had the highest percentages of children in 2000, with over a third (36 percent) of Ward 8 residents and 28 percent of Ward 8 residents being under 18 years old. Within these wards, the neighborhood clusters with the highest shares of children were Cluster 37 (Sheridan/Barry Farm) with 43 percent, Cluster 38 (Douglas/Shipleigh Terrace) with 41 percent, and Cluster 29 (Eastland Gardens/Kenilworth) with 39 percent.

As measured by the 2000 Census, the child poverty rate (the percentage of children in families with incomes below the federal poverty level), was 32 percent in Washington, D.C. This was an increase from 26 percent in 1990. The child poverty rate in 2000 ranged from a low of 3 percent in Ward 3 to a high of 47 percent in Ward 8. The highest neighborhood cluster child poverty rate, however, was in Cluster 27 (Near Southeast/Navy Yard) in Ward 6, where over two-thirds (67 percent) of children were below the federal poverty level. Similarly high levels of child poverty could be found in Cluster 36 (Woodland/Fort Stanton) and Cluster 37 (Sheridan/Barry Farm) in Ward 8, with rates of 61 and 59 percent, respectively.

Elderly persons (age 65 and older) were 12 percent of the population in Washington, D.C., in 2000 and 2006. This percentage has been relatively constant over the past two and a half decades, with only a slight increase to 13 percent in 1990. Wards 4 and 5 had the highest shares of elderly persons in 2000, with 18 and 17 percent, respectively. The lowest shares were in Ward 8, with 7 percent, and Ward 1, with 8 percent. At the neighborhood level, more than one in four persons (27 percent) were elderly in Cluster 24 (Woodridge/Fort Lincoln) in Ward 5, the highest share among all Clusters. Second highest was Cluster 10 (Hawthorne/Barnaby Woods) in Ward 4, with 24 percent, followed by Cluster 20 (North Michigan Park/Michigan Park) in Ward 5, with 23 percent.

The elderly poverty rate in Washington, D.C., was about half that of the child poverty rate in 2000, with 16 percent of persons 65 and older having incomes below the federal poverty level. The elderly poverty rate varied dramatically across the city, however, from a high of 25 percent in Ward 6 to a low of 4 percent in Ward 3. At the neighborhood level, the highest elderly poverty rate was in Cluster 27 (Near Southeast/Navy Yard) in Ward 6, where almost two-thirds (62 percent) of elderly persons were poor. The next highest elderly poverty rates were in Cluster 36 (Woodland/Fort Stanton) in Ward 8 and Cluster 7 (Shaw/Logan Circle) in Ward 2, both at 42 percent.



Births

Births and deaths are the natural components of population change. Together with in- and out-migration, they determine whether a city or neighborhood is growing or declining. The (crude) birth rate is the number of births divided by the total population. Areas with rising birth rates may be experiencing population growth, but if persons having children migrate out after their offspring reach a certain age, then the community may not benefit from the influx of new families.

Birth rates in Washington, D.C., have continued to rise over the past few years. Between 1998 and 2005, the birth rate fluctuated between 13 and 14 births per 1,000 residents (figure 7.3). However, the more recent data indicate show an increase in the birth rate, from 14.9 births per 1,000 in 2006 to 15.5 births per 1,000 residents in 2007.

Wards 1, 4, 7, and 8 all have above-average birth rates. Ward 8 has by far the highest birth rates in the city at 21.8 births per 1,000 residents in 2007. However, the birth rate in Ward 8 decreased between 1998 and 2005, and only in the past few years has it climbed upward again. In contrast, births in Ward 7 fell from 15.4 to 13.1 between 1998 and 2002, but started to rise again in 2003, surpassing the 1998 level and reaching 17.1 births per 1,000 residents in 2007.

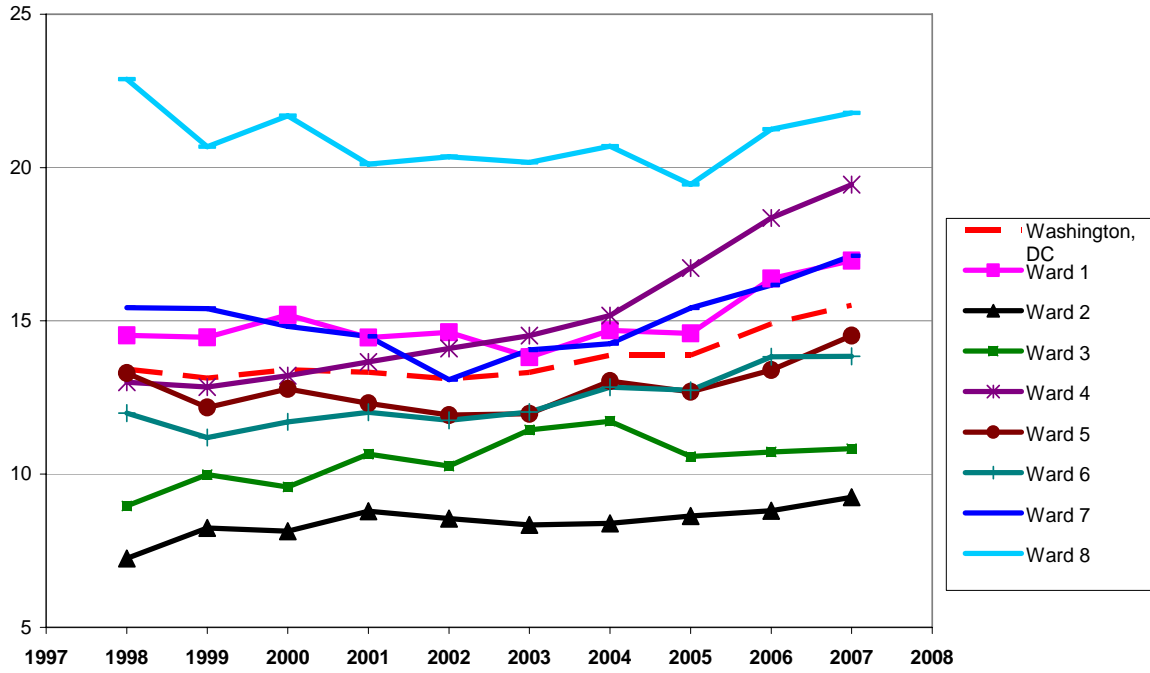
Ward 4 had the biggest rise in birth rates over the entire period. The birth rate in Ward 4 grew from 13.0 births per 1,000 residents in 1998 (fifth highest among all wards) to 19.4 in 2007 (second highest). Although Ward 1's birth rate is relatively low, it also experienced sizeable gains over the past two years, rising from 14.5 births per 1,000 residents in 1998 to 17.0 births per 1,000 in 2007.

The highest birth rates among neighborhood clusters in 2007 were concentrated in Ward 8: Cluster 37 (Woodland/Fort Stanton) with a birth rate of 27.0, Cluster 28 (Historic Anacostia) with a birth rate of 25.2, and Cluster 38 (Douglas, Shipley Terrace) with a birth rate of 24.8 (map 7.1). Cluster 30 (Mayfair, Hillbrook) in Ward 7 also had a high rate of 22.7 births per 1,000 residents in 2007. Clusters 17 (Takoma, Brightwood) and 18 (Brightwood Park, Petworth) in Ward 4 also had above average birth rates at 21.6 and 21.2 births per 1,000 residents, respectively.



Figure 7.3 - Birth Rate, 1998 to 2007, Washington, D.C.

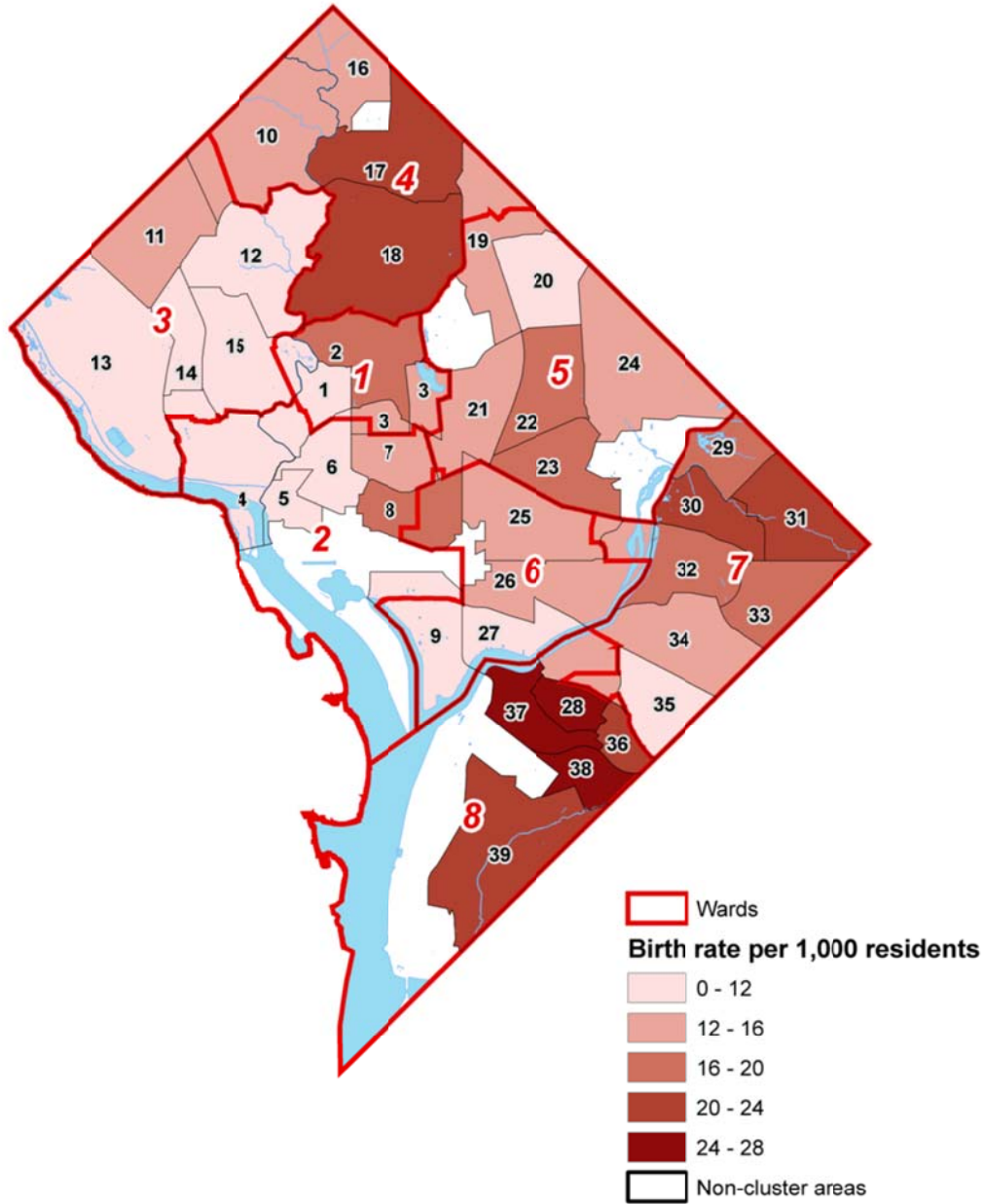
Births per 1,000 population



Source: D.C. Department of Health data tabulated by NeighborhoodInfo DC.



**Map 7.1 - Birth Rate per 1,000 Residents
by Neighborhood Cluster, 2007
Washington, D.C.**



Source: DC Department of Health and State Center for Health Statistics (2007) data tabulated by NeighborhoodInfo DC



VIII. SAFETY AND SECURITY

According to the Bureau of Justice Statistics, national rates of violent crime have dropped dramatically since 1994, and this trend has continued even during the recession. The national rate was 7.1 violent crimes per 1,000 residents in 1994, but fell to two-thirds of that level, 4.7 crimes per 1,000 residents, by 2005, and to 4.5 crimes by 2008. Similarly, property crimes have declined steadily since the early 1990s. In 1994, the property crime rate was 47 per 1,000 persons nationally, but by 2005 that figure had decreased to 34 (Federal Bureau of Investigation 2005). That number decreased further in 2008 to 32. The latest estimates for 2009 indicate an even further downward slide for both property and violent crimes.

Consistent with national trends, Washington, D.C., has also experienced a dramatic improvement in public safety in recent years. Once known as the “murder capital of the United States” because of the high numbers of homicides in the early 1990s, Washington, D.C., has since become a much safer place. Both violent and property crime rates have decreased significantly since 2000. Nevertheless, concerns about crime persist and the city must continue to address public safety and security to attract and retain a diverse population.

Violent Crime Rate

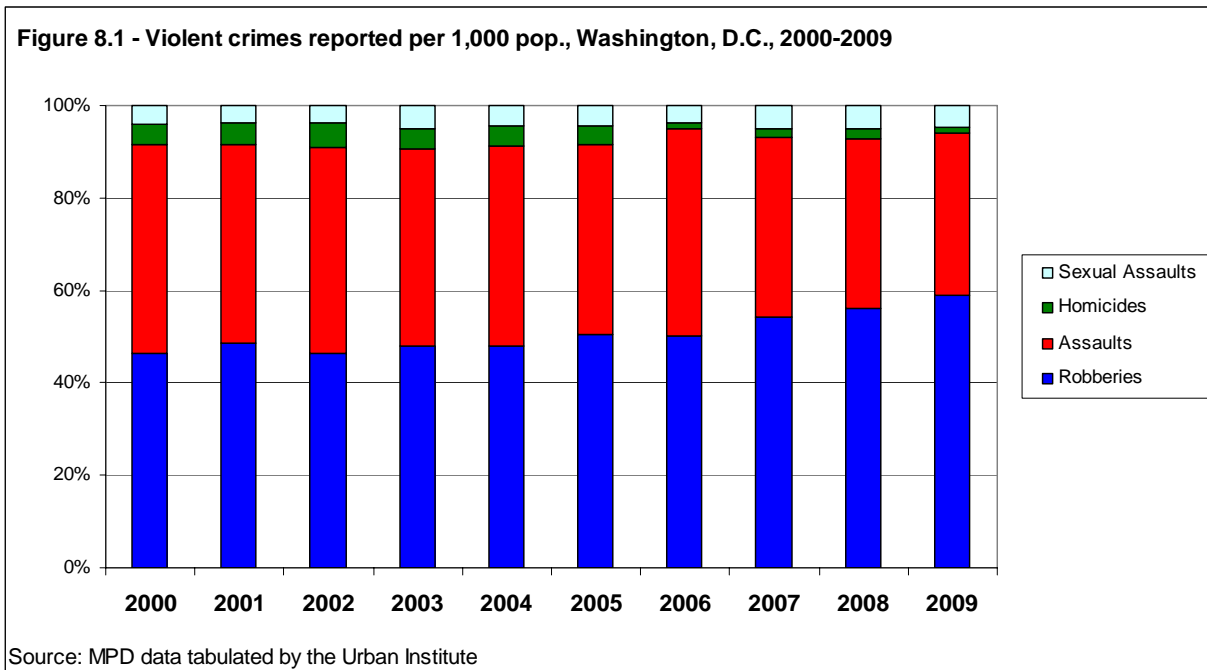
Violent crime includes homicide, sexual assault, assault, and robbery. The violent crime rate is the number of such crimes reported to the Metropolitan Police Department each year, divided by the population in the city, ward, or neighborhood cluster. While an important measure of public safety, the violent crime rate reflects only crimes reported to the police. Increases, or decreases, in reporting can cause crime rates to rise, or fall, without necessarily reflecting the true change in criminal activity.

The violent crime rate in Washington, D.C., has declined in recent years. Prior to 2004, the district's rate was consistently above 15 crimes per 1,000 residents. Since 2004, it has remained below 14 crimes per 1,000 residents, with the exception of 2007, when it rose to 14.4 crimes. In 2006, the number of reported homicides, 169, was also the lowest annual total since 1988 (Metropolitan Police Department 2008). Even despite an increase in homicides between 2006 and 2008, the 2009 total for homicides, 143, was the lowest since 1966.

The vast majority of violent crimes consist of assault and robbery (figure 8.1). Notably, between 2006 and 2009, robberies as a portion of violent crimes have increased from half of all



violent crimes to 60 percent. Assault has dropped from 45 to 35 percent of all violent crimes during this time. Homicides and sexual assault consistently comprise the smallest portion of violent crimes. Both have fluctuated only slightly as a portion of violent crimes in recent years, though sexual assault has increased as a portion of violent crime by 1 percent.

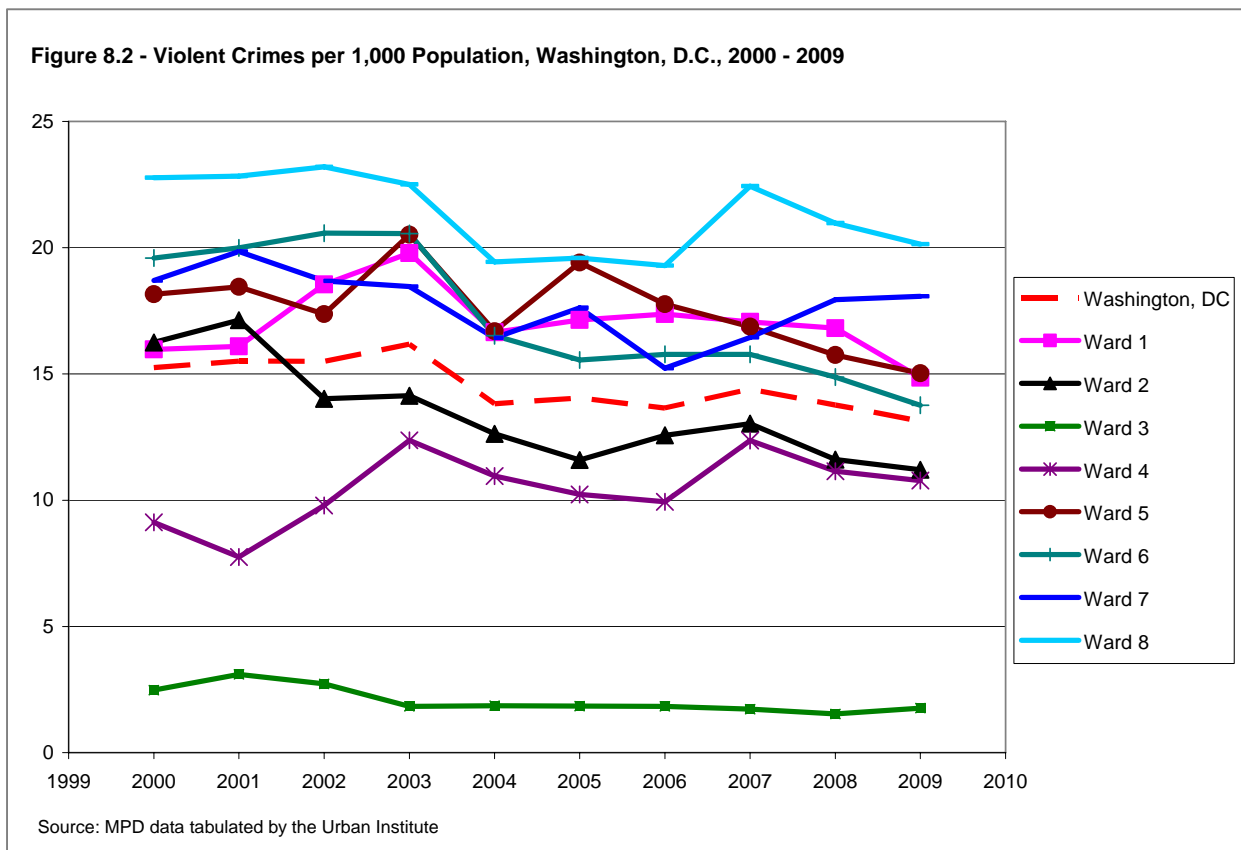


Generally, violent crime rates have improved throughout the city between 2006 and 2009 (the first state of Washington, D.C. report had crime data from 2006). Wards 1, 2, 5, and 6 all saw modest drops in violent crime; 17 clusters experienced a drop of over one violent crime per 1,000 people; and five clusters dropped by over five crimes per 1,000 people (figure 8.2). The neighborhood clusters with the greatest decreases of violent crime between 2006 and 2009 were in predominantly high-crime neighborhoods. Cluster 23 (Ivy City, Trinidad) in Ward 5 had the greatest decrease of 6.5 crimes per 1,000 people, which is a large improvement after a spate of shootings and drug trafficking in the summer of 2008; Cluster 3 (Howard University, Le Droit Park) in Ward 1 had a decrease of 6.4 crimes per 1,000 people; Cluster 28 (Historic Anacostia) had a decrease of 6 crimes per 1,000 people; Cluster 9 (Southwest Employment Area, Southwest Waterfront) in Ward 6 had a decrease of 5.6 crimes; and Cluster 36 (Woodland/Fort Stanton, Garfield Heights) in Ward 8 had a decrease of 5.3 crimes. The lowest levels of violent crime are in Ward 3, which had annual violent crime rates well under 5 crimes per 1,000 people in every year studied.



Despite the overall good news for the city, data suggest that violent crime may be rising in some neighborhoods. Ward 7 saw an increase of 2.9 crimes per 1,000 people between 2006 and 2009. During this time, the rate of violent crime in Clusters 30 (Mayfair, Hillbrook) and Cluster 31 (Deanwood, Burrville) in Ward 7 increased by over 9 crimes per 1,000 people to about 27 crimes. Since 2000, Ward 4 saw the greatest increase in violent crime (1.8 percentage points), though the rate has dropped since 2007.

Wards 4 and 8 both experienced upticks in violent crime between 2006 and 2007, but the violent crime rates have since decreased between 2007 and 2009.



Among neighborhoods, Cluster 8 (Chinatown, Penn Quarters) in Ward 6 had the highest violent crime rate in the city in 2009, 31 violent crimes per 1,000 residents. This high rate may be explained by the relatively low population of this part of the city, as measured by the decennial census. While the census only counts people based on where they live, the neighborhoods of Cluster 8 have a much larger daytime population (from office workers) and nighttime population (from patrons of bars, restaurants, and clubs), when compared with the census population total. These visitors present additional opportunities for crime that may inflate the crime rate for the cluster.



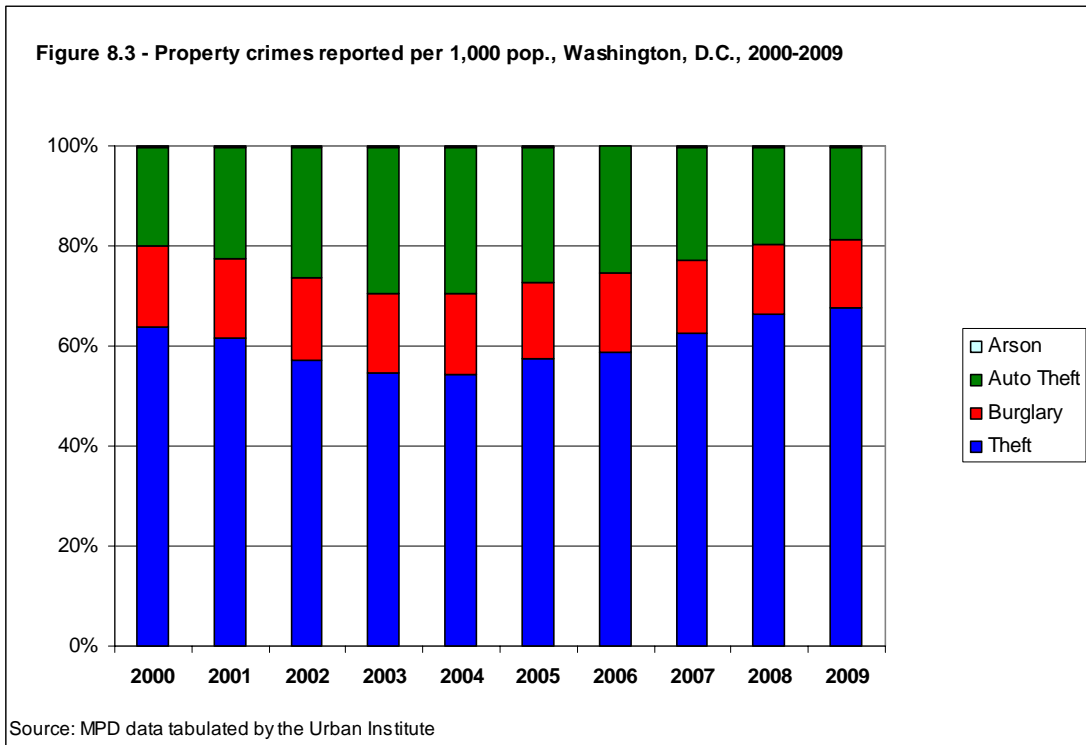
Besides Cluster 8, eight clusters experienced violent crime rates of over 20 per 1,000 residents. All but two of them are east of the Anacostia River in Wards 7 and 8, including Cluster 31 (Deanwood, Burrville), Cluster 30 (Mayfair, Hillbrook), Cluster 39 (Congress Heights, Bellevue), Cluster 37 (Sheridan, Barry Farm), Cluster 29 (Eastland Gardens, Kenilworth), and Cluster 36 (Woodland/Fort Stanton). Clusters 23 (Ivy City, Trinidad) in Ward 5 and Cluster 3 (Howard University, LeDroit Park) in Ward 1 also experienced high rates of violent crime, both at 23 crimes per 1,000 people.

The safest neighborhoods in the city were in Cluster 10 (Hawthorn, Chevy Chase) in Ward 4, Cluster 13 (Spring Valley, Palisades) in Ward 3, and Cluster 4 (Georgetown, Burleith/Hillandale) in Ward 2. All three of these clusters had fewer than one reported violent crime per 1,000 residents in 2008.

Property Crime Rate

Property crimes include burglary, theft, motor vehicle theft, and arson. The property crime rate is the number of such crimes reported to the Metropolitan Police Department each year, divided by the population in the city, ward, or neighborhood cluster. As with violent crime, property crime rates are also subject to variable reporting, which can affect the accuracy of the indicator.

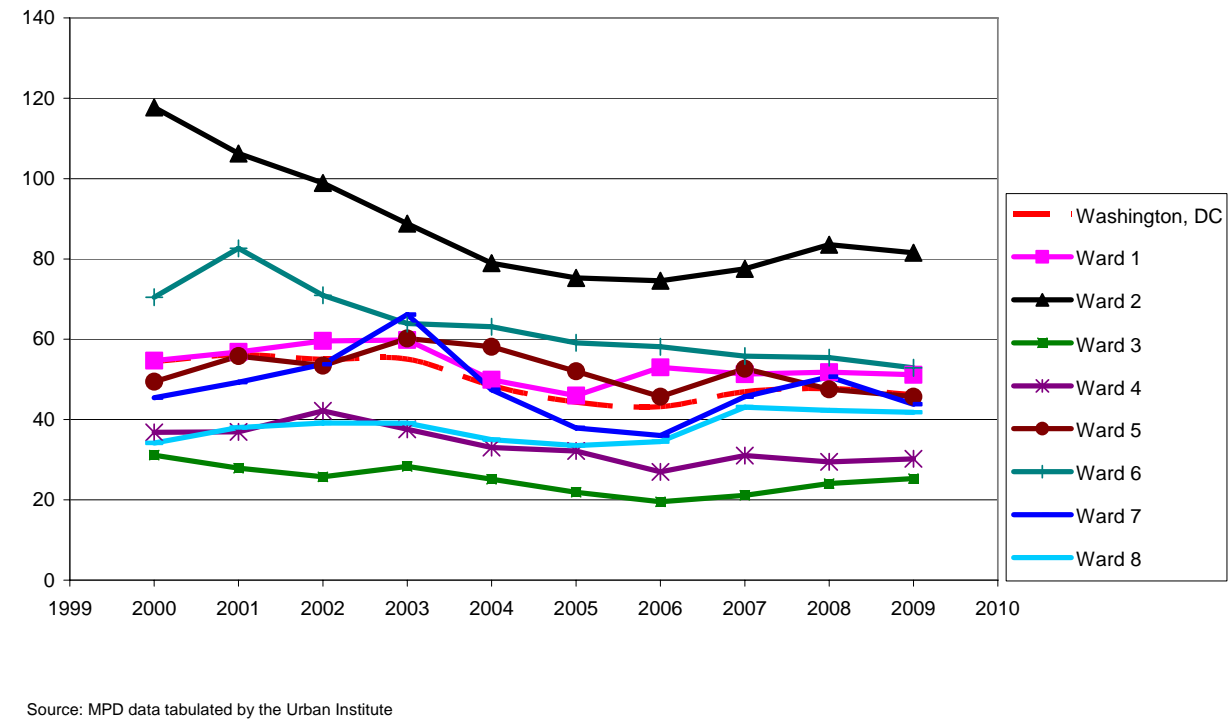
The property crime rate for Washington, D.C., in 2009 was 46 crimes per 1,000 residents. The property crime rate had declined slightly between 2000 and 2006, but experienced a slight uptick in 2007 and 2008. Though 2009 rate is slightly lower than the 2008 rate, the 2009 property crime rate is still higher than in 2006 (the time period from the last state of D.C. neighborhoods report). Theft has increased as a portion of property crime steadily since 2004, making up 68 percent of property crimes in 2009 (figure 8.3). Arson consistently comprises the smallest portion of property crimes.



The city's increase in property crimes can be attributed mostly to the steep rise in crimes in Ward 7 between 2006 and 2008 from 36 to 51 crimes per 1,000 people (figure 8.4). In 2009, Ward 7's property crime rate decreased to 44 crimes per 1,000 people. Other wards that experienced increases in property crimes were Ward 2 and Ward 8, which experienced increases of 8 and 7 crimes per 1,000 population, respectively.



Figure 8.4 - Property Crimes per 1,000 Population, Washington, D.C., 2000 - 2009



Ward 2, though experiencing a dramatic decline in property crime until 2005, had the highest incidence of property crimes in the city in 2009, at 82 crimes per 1,000 population. This may be due to a low resident population in business areas. Low evening populations provide more opportunities for vandalism and theft than in neighborhoods with more residents. Similar trends are also found in the business districts of other major cities. New York's Midtown and Financial District both have the highest rates of property crimes in the city (*State of New York City's Housing and Neighborhoods 2007*). Another explanation for Ward 2's high rate of property crime is that it includes two prime nighttime entertainment areas, Georgetown and Dupont Circle, as well as the Shaw and Logan Circle neighborhoods, which include the U Street entertainment corridor. These areas and the late-night crowds they attract may increase opportunities for property crimes in the ward.

A closer look at two neighborhoods located in Ward 2—Clusters 6 (Dupont Circle, Connecticut Avenue/K Street) and Cluster 8 (Chinatown, Penn Quarters)—may provide a clearer picture. Cluster 6, a neighborhood that has consistently had a vibrant nightlife, has also consistently had a much lower property crime rate than Cluster 8: 106 property crimes per 1,000 residents, compared with 174 property crimes. Since 2000, Cluster 6 has had approximately half the property crime compared with Cluster 8. During the past decade, Cluster 8 has had a



marked increase in the development of entertainment venues, such as the Verizon Center, and surrounding shops and theaters that has sparked increased nighttime activity. While the property crimes are higher in Cluster 8 compared with Cluster 6, Cluster 8 experienced a greater decrease in property crime from 2000 to 2009 (44 percent) compared with Cluster 6 (38 percent).

As with violent crimes, Ward 3 had the lowest levels of property crimes among all wards. The property crime rate in Ward 3 has increased, however, from 20 to 25 crimes per 1,000 people between 2006 and 2009.

The neighborhood cluster with the highest property crime rate, by far, was again Cluster 8 (Chinatown, Penn Quarters) in Ward 6. The property crime rate for the cluster in 2009 was 174 crimes per 1,000 people, nine crimes above the rate in 2006. The next highest property crime rate was 106 in Cluster 6 (Dupont Circle, Connecticut Avenue/K Street) in Ward 2, followed by Cluster 3 (Howard University, Le Droit Park) in Ward 2, with a rate of 104 property crimes per 1,000 population.

The safest neighborhoods in the city, with respect to property crimes, were again in Wards 3 and 4. Cluster 13 (Spring Valley/Palisades) in Ward 3 had a 2006 property crime rate of 13 crimes per 1,000 residents, three times higher than the cluster's rate in 2006. Cluster 14 (Cathedral Heights, Glover Park) in Ward 4 had a rate of 15 crimes per 1,000 residents, slightly higher than its 2006 crime rate.

The biggest increases in property crime were seen in Cluster 11 (Friendship Heights, American University), which went from 37 to 61 property crimes per 1,000 people between 2006 and 2009.



IX. NATURAL AND BUILT ENVIRONMENT

A city's physical environment can affect its resident's health and well-being and contribute to the quality of life in a neighborhood. The District benefits from several distinct natural features, such as large national parks (The Mall, Rock Creek Park, Fort Dupont Park, the U.S. National Arboretum, and the Kenilworth Park and Aquatic Garden) and an extensive network of city parks. The city has implemented programs and initiatives to improve the natural environment, such as restoring wetland habitat, increasing the tree canopy in the city, and reducing greenhouse gas emissions and pollutants by encouraging green buildings, green roofs, and renewable energy.

Access to recreational and educational amenities, such as libraries and recreation centers, and access to healthy food options, such as large grocery stores and farmers markets, are other aspects of the built environment that affect residents' quality of life and positively affect neighborhoods. The challenge continues to be how to ensure that these amenities are equally distributed and as accessible to residents in low-income neighborhoods as they are to residents in high-income neighborhoods. We look forward to refining and adding to the environment section for future reports.

Tree Coverage and Health

Trees, along with other green plants, convert carbon dioxide to oxygen and thus help reduce greenhouse gases. Trees also filter harmful pollutants from the air, which can improve the health of city residents. Trees can shade homes in the summer, reducing cooling costs, and contribute to the aesthetic appeal of neighborhoods, enhancing property values. Two indicators are included in this section, the tree canopy located along the sidewalks and curbs of the city's streets and tree condition. According to Casey Trees, the causes of tree loss and poor tree condition include "budget shortfalls and neglect, tree-unfriendly design and development practices, ineffective tree protection during construction, and physical damage and diseases, such as Dutch elm disease" (Casey Trees 2007a).

The tree coverage along the city's streets was measured in the city, a ward, or a neighborhood as the percentage of total area covered by the tree canopy, that is, the outermost layer of a tree's leaves. The data for this indicator were originally provided by Casey Trees, as of 2006 (Casey Trees 2007b). (More recent tree canopy data are not currently available through OCTO's GIS data catalogue.) Overall, 37 percent of the city's land area in 2006 was covered by



tree canopy (map 9.1). The coverage varies by ward, with a low of 25 percent in Ward 2 and a high of 45 percent in Ward 7.

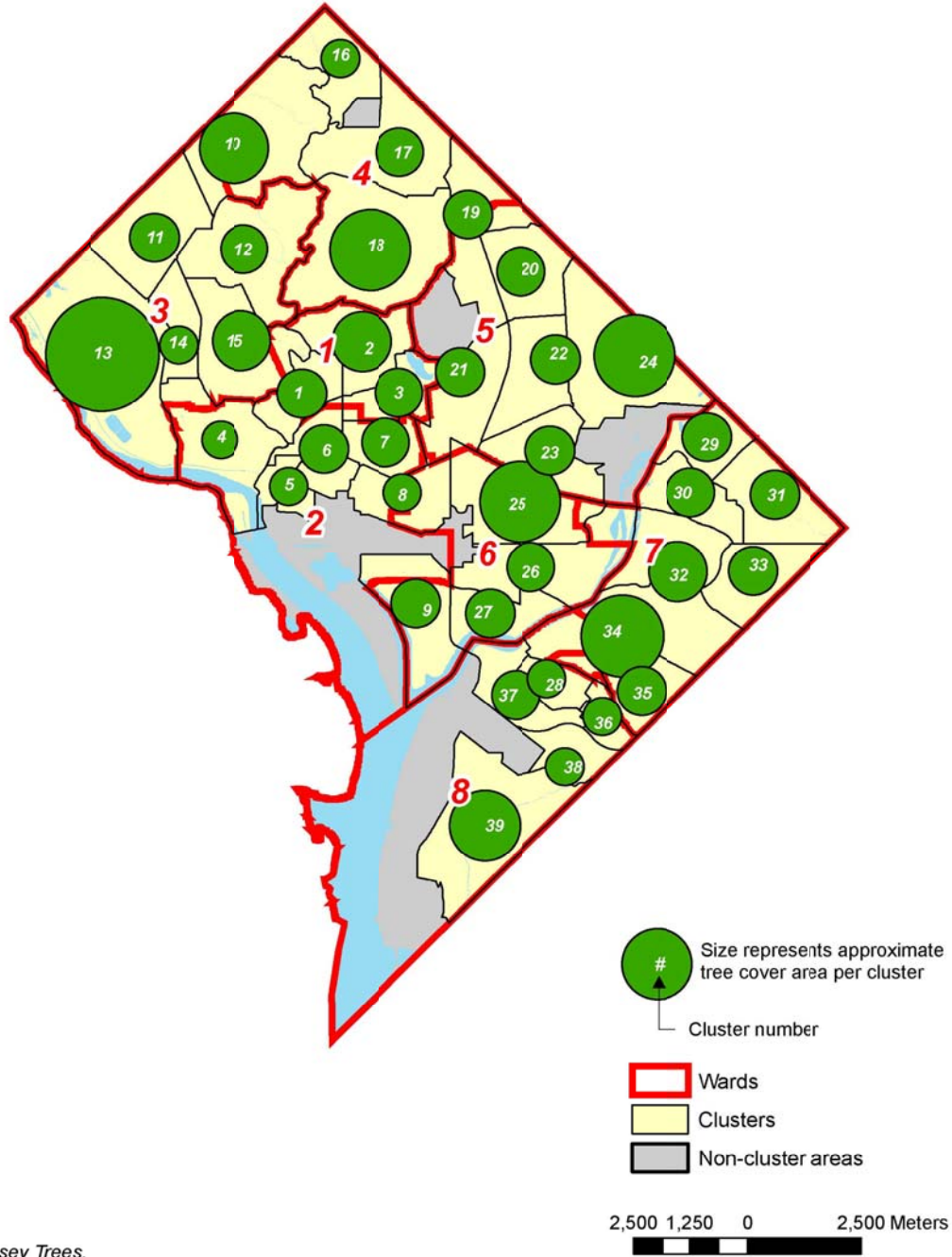
The neighborhood clusters with the most tree canopy are Cluster 25 (NoMa/Union Station/Stanton Park) in Ward 6, with 64 percent of the area covered by trees, followed by Cluster 27 (Near Southeast/Navy Yard), also in Ward 6, with 58 percent, and Cluster 24 (Woodridge/Fort Lincoln) in Ward 5, with 54 percent. The neighborhoods with the smallest tree coverage are Cluster 8 (Downtown/North Capitol Street) in Ward 6 (10 percent), Cluster 4 (Georgetown/Burleith) in Ward 2 (11 percent), and Cluster 17 (Takoma/Brightwood) in Ward 4 (15 percent). We look forward to including more recent tree coverage information in future reports.

The Department of Transportation's Urban Forestry Administration maintains a database measuring the health of public street trees and notes where there are tree sites (tree boxes and other potentially plantable public spaces along streets) that have no trees, a dead tree, or just a trunk or stump. This information was last updated in May 2010. (This database was originally maintained by Casey Trees.) Three-fourths of all street trees measured were in excellent or good condition, an improvement from the last report when only 72 percent of the street trees were rated excellent or good. The wards with the healthiest street trees included Wards 1, 3, 4, and 7. Ward 7's street trees improved significantly compared with 2008. In 2008, only 69 percent of Ward 7's street trees were excellent or good compared with 78 percent in 2010. Ward 5 had the lowest share of highly rated street trees in 2010 at only 62 percent. The neighborhood clusters with the healthiest street trees include Cluster 17 (Takoma/Brightwood) in Ward 4 with 85 percent followed by Cluster 4 (Georgetown, Burleith) in Ward 2 and Cluster 12 (North Cleveland Park) in Ward 3 with 85 percent each.

The neighborhoods with the lowest shares of trees in good or excellent condition are in Cluster 5 (West End, Foggy Bottom) in Ward 2, 65 percent; Cluster 21 (Edgewood, Bloomingdale) in Ward 5, 58 percent; and Cluster 23 (Ivy City, Trinidad) in Ward 7, 53 percent.



**Map 9.1 - Tree Canopy Coverage Area
by Neighborhood Cluster, Washington, D.C., 2006**



Source: Casey Trees.



Location of Green Site Buildings

Washington, D.C., is a national leader in promoting green development. There were 631 green buildings located in the city as of 2010: 469 buildings were either certified or registered under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ offered by the nonprofit U.S. Green Building Council, and another 162 buildings had received the U.S. Environmental Protection Agency's ENERGY STAR approval. The District has several programs and laws to promote more sustainable development, such as the Green Building Act of 2006, the Clean and Affordable Energy Act of 2008, the RiverSmart program to reduce storm water pollution from private residences, and the Renewable Energy Demonstration Project to provide grant funds to assist in the installation of a renewable energy generation systems, to name a few. As map 9.2 shows, some green development sites have multiple green programs coexisting together, such as green buildings and green roofs. In this report, we define green site buildings as those that are LEED certified or ENERGY STAR approved. The data on these green sites are provided by the District Department of the Environment via the Department of Planning.

In 2010, there were 631 green building sites (469 LEED buildings and 162 ENERGY STAR buildings) (map 9.2). More than half (55 percent) of all the green building sites were located in Ward 2, which is unsurprising since this area has a concentration of public and private office buildings and is also where more recent office development is occurring. Ward 6 had the next highest number of green sites at 99 buildings. Ward 3 had the third highest number of green buildings at 80 buildings. Ward 8 had 28 green buildings and the remaining wards had less than 10 green buildings each.

The three neighborhood clusters with the greatest concentration of green site buildings were Cluster 8 (Chinatown, Penn Quarters) at 160 green buildings, Cluster 6 (Dupont Circle, Logan Circle) at 150 buildings, and Cluster 13 (Springs Valley, Palisades) at 67 buildings. Only five clusters do not currently have any green building sites at all.



Location of Green Roofs

Another variation of the green building is to install a “green roof” on a building. Creating a green roof involves planting vegetation on a specially modified roof structure. When properly constructed, green roofs can extend the life of the roof by protecting it from the elements. Green roofs can also reduce heating and cooling costs in buildings by providing a natural layer of additional insulation. Furthermore, green roofs can reduce the amount of impervious surfaces in a setting by increasing the total green space in a city, help lower carbon dioxide and other greenhouse gases, reduce storm water pollution into rivers and streams, and provide more habitats for wildlife. The city has begun promoting green roofs as a way of promoting energy efficiency and reducing pollution.

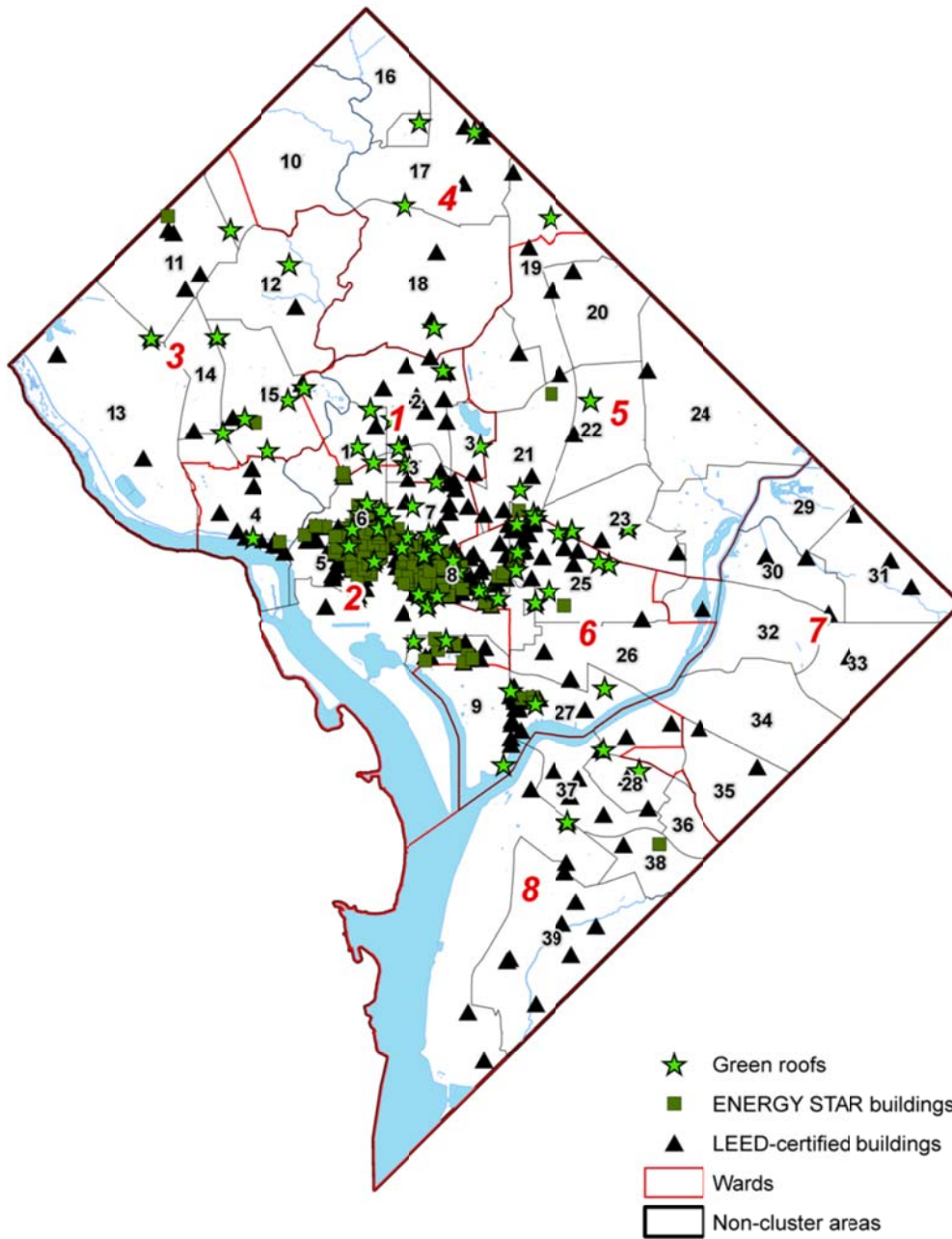
Green roofs are a relatively new phenomenon in cities like Washington, D.C., although the numbers have been substantially growing. The District Department of the Environment lists 83 buildings in the city as of 2009 that currently have green roofs (map 9.2). The majority of these roofs are installed on private buildings (67.5 percent), 22.9 percent were installed on federal buildings as demonstration sites, and 9.6 percent were installed on D.C. municipal buildings. Examples of green roofs on private buildings include new condominium buildings, hotels, schools, universities, and Nationals Park (baseball stadium). Green roofs are also installed on such federal buildings as the Smithsonian Zoo, the IRS building, the USDA office, and the FBI building. Municipal buildings include D.C. recreation centers, the Department of Public Works garage, and the 911 call center.

Ward 2 has the highest number of green roofs in the city (29 roofs in 2009), a finding similar to the location of green buildings. Ward 6 has the next highest number of green roofs at 18 green roofs, and Ward 1 had 14 green roofs in 2009. Ward 8 had four green roofs (three in private buildings and one in a municipal building) and Ward 7 has no buildings with green roofs as of 2009.

Clusters with the greatest number of green roofs are located in high-development areas of Cluster 8 (Chinatown, Penn Quarter) with 13 green roofs and Cluster 6 (Dupont Circle, Connecticut/K Street) and Cluster 25 (NoMa, Union Station) with 9 green roofs each. There are 17 neighborhood clusters with no green roofs, predominantly in Wards 7 and 8.



**Map 9.2 - LEED-Certified and ENERGY STAR Buildings,
and Green Roofs
Washington, D.C., 2010**



Source: District Department of the Environment's Energy Office (2010) for green roofs, and Department of Planning (2010) for LEED and Energy Star buildings.
Data tabulated by NeighborhoodInfo DC.



Location of Aquatic Habitats and Wetlands

Aquatic habitats and wetlands, which we call aquatic sites, are recognized by the U.S. Environmental Protection Agency as positively contributing to the overall environmental health of an area as well as the entire ecosystem of an area. Aquatic habitats are typically described as areas possessing special ecological characteristics of productivity, habitat, wildlife protection or other important and easily disrupted ecological values. Wetlands act as buffers by slowing the pollutants from storm water runoff through the absorption and filtering of the vegetation in the wetland. The Chesapeake Bay watershed (the land from which all the water drains into the Chesapeake Bay) is more than 64,000 square miles and encompasses all of Washington, D.C., and parts of six surrounding states. Maintaining the health of the aquatic habitats in these areas, in particular in Washington, D.C., is critical to maintaining the vitality of the Chesapeake Bay.

The two rivers that run through Washington, D.C.—the Potomac River and the Anacostia River—provide ample opportunity for aquatic sites and wetlands. The Anacostia River stretches for nine miles through the southwest, southeast, and northeast portions of the city. The Anacostia Waterfront Initiative, a federal and local initiative headed by the D.C. Department of Planning, is one example of how the city is trying to improve the environmental quality of the Anacostia River while also providing vibrant parks and waterfront recreation. Another initiative is the mandatory 5 cent plastic bag tax passed in January 2010 by the Council of the District of Columbia. In addition to reducing pollution, revenue generated from the tax will be used to clean the Anacostia River.

Aquatic habitats and wetlands are located in the wards and neighborhoods banking the rivers. According to the District Department of the Environment via the Office of the Chief Technology Officer's GIS Data Catalogue from May 2009, there are 15 aquatic sites in the city: 9 are aquatic habitats and 6 are wetlands, and the majority of sites (10) are along the Anacostia River. Ward 8 has the greatest concentration of aquatic sites at five sites in total (four aquatic habitats and one wetland). Ward 7 also has five sites, all wetland sites located in or near the Kingman and Heritage Islands. Ward 6 has two aquatic habitats, one along the Anacostia River and the other in East Potomac Park on the Potomac River. Ward 2 has two aquatic habitats along the Potomac River. Two neighborhood clusters with the largest number of aquatic sites each had one aquatic habitat and one aquatic wetland, Cluster 37 (Sheridan, Barry Farm) and Cluster 26 (Capitol Hill, Lincoln Park).

Impervious Surface Coverage

Impervious surfaces are mainly artificial structures, such as roads, sidewalks, parking lots, and rooftops, that are covered by impenetrable materials, such as asphalt, concrete, and brick. These impervious surfaces restrict rainwater from seeping through the ground, reducing the amount of water naturally collected below ground as well as reducing the natural filtration



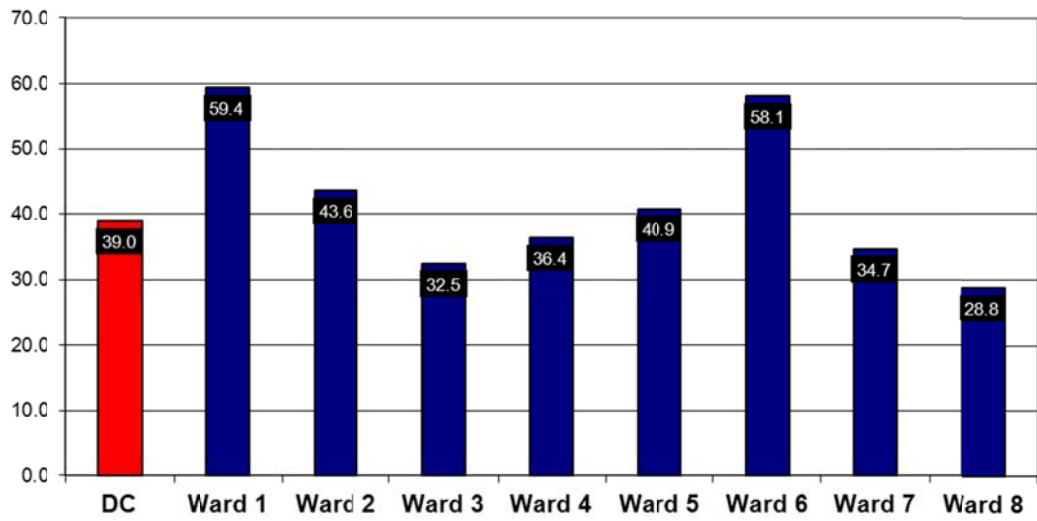
process in which vegetation and the ground filters out impurities. In Washington, D.C., this negatively affects the Chesapeake Bay by introducing more contaminants through storm water runoff. Impervious surfaces can also increase solar heat, contributing to hotter temperatures, which leads to more energy consumption in buildings. On the other hand, many environmentalists see residential and commercial density as a desirable outcome. While density need not result in more impervious surfaces (smart planning and new building practices like green roofs can allow for more environmentally friendly development), impervious surface area does appear to be a close proxy for residential and commercial density in the District. We do not have historical records of impervious surfaces, so this year's data will serve as a baseline for future reporting.

In the District, 39 percent of land is impervious as of 2008 according to data from Office of the Chief Technology Officer GIS Data Catalogue (see map 9.3). The share of impervious surfaces ranges between approximately 60 percent in Wards 1 and 6 and 30 percent in Ward 8 (figure 9.1). This reveals the relative development of each area. The share of impervious surfaces is often greatly affected by the presence of large parks or waterfront areas. Though Ward 2 is considered the densest area of the city and would be expected to have a high share of impervious surfaces, its portion is lower than expected due to the National Mall and the Potomac River waterfront. The highest ranked wards—Wards 1 and 6—are without any large parks, while spaces such as Rock Creek Park in Wards 3 and 4 and the U.S. National Arboretum in Ward 5, bring down the percentage significantly.

By neighborhood cluster, similar patterns emerge. Three neighborhood clusters have less than 30 percent impervious surface and are located in neighborhoods with significant areas dedicated to park land. These include Cluster 29 (Eastland Gardens, Kenilworth) where only 17 percent of surfaces are impervious, since Kenilworth Park and Aquatic Gardens and Anacostia Park are located there; Cluster 32 (River Terrace, Benning) with 29 percent impervious surfaces in the cluster home to Fort Dupont Park; and Cluster 13 (Spring Valley, Palisades) with 27 percent impervious surfaces, where Little Falls Park is located. On the opposite end of the spectrum are the most densely developed neighborhood clusters. All of the clusters with greater than 70 percent impervious surfaces are in Ward 2. Clusters 6 (Dupont Circle, Connecticut Avenue/K Street) and 8 (Chinatown, Penn Quarters) both have over 80 percent impervious surfaces, at 82 and 85 percent, respectively.



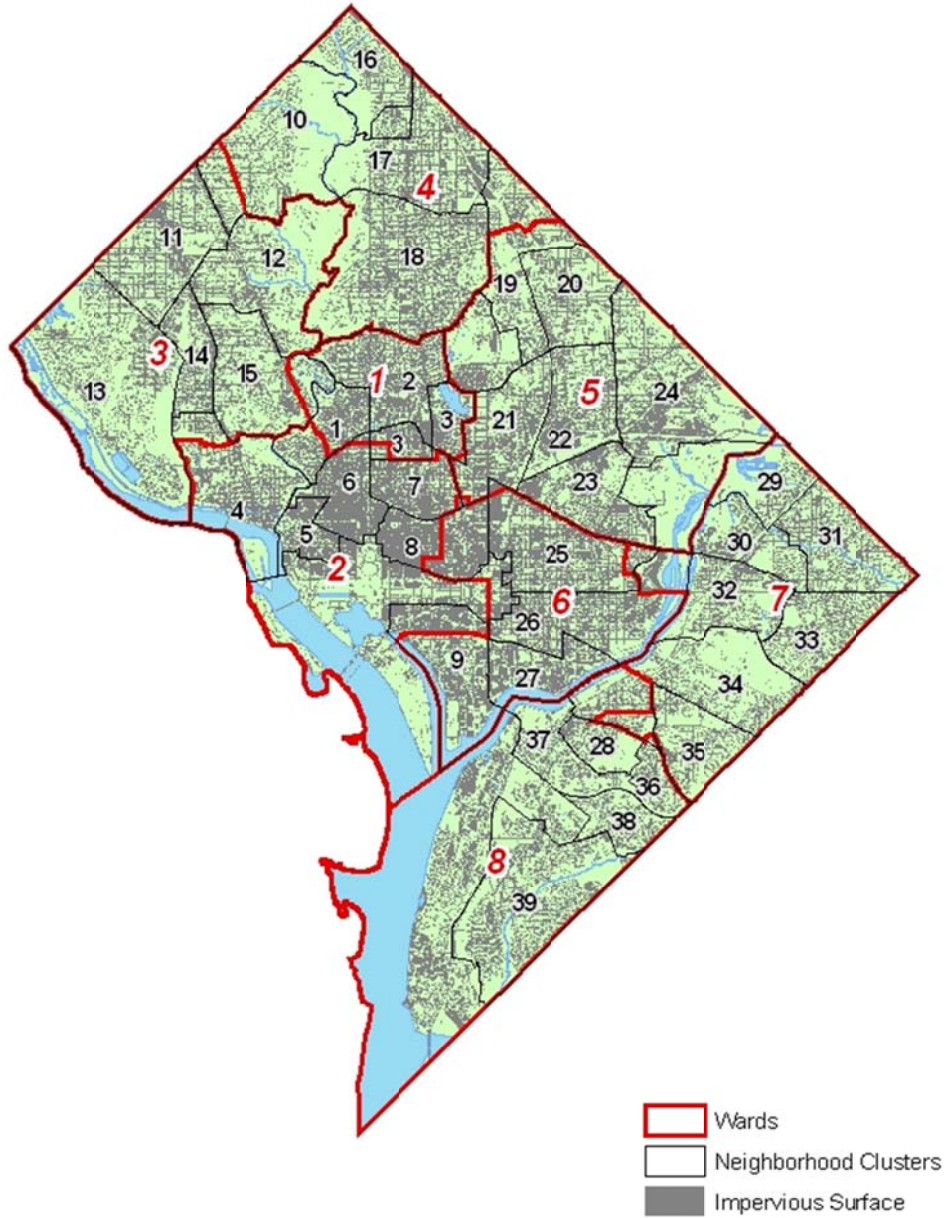
Figure 9.1 - Percent Impervious Surface by Ward, 2008, Washington, D.C.



Source: DC Office of Planning data tabulated by the Urban Institute



**Map 9.3 - Impervious surface area, 2008,
Washington, D.C.**



Source: D.C. Office of Planning (2008)



Location of Alternative Energy Sites

Alternative energy is typically defined as energy sources that are not based on fossil fuels and therefore do not produce high carbon dioxide emissions that contribute to global warming. Alternative energy defined here includes geothermal energy (energy from the heat stored in the earth), solar energy (energy derived from the sun), and wind energy.

According to the District Department of the Environment via the Office of the Chief Technology Officer's GIS Data Catalogue from May 2009, there were 10 alternative energy sites in the city—7 solar energy sites, 2 wind energy sites, and 1 geothermal site. The vast majority of these sites were co-located with public or private learning institutions. Of the seven solar energy sites, four were located in Ward 3 (at American University, University of the District of Columbia, and Sidwell Friends private school). There were two solar sites in Ward 5, one at the U.S. National Arboretum and one at the DCPS vocational school, Phelps Architecture, Construction, and Engineering High School. (The Phelps school also has a wind turbine). There was one solar site located in Ward 1, a residential building located in Mt. Pleasant. There were two wind energy sites, one in Ward 6 at the U.S. Botanic Gardens and another in Ward 3 at the University of the District of Columbia Farmer's Market. Finally, there was one geothermal site located in Ward 2 near the Mall, where a set of geothermal wells heat and cool the air of some of the Mall's retail and food kiosks, as well as provide power for commercial refrigerators. The District Department of the Environment estimates that these geothermal wells reduce energy costs to the commercial locations by 50 percent.

Access to Healthy Food

The lack of access to large grocery stores in poor urban neighborhoods has garnered more attention as the obesity epidemic has steadily worsened in the United States. Often low-income urban neighborhoods and rural areas are "food deserts" or places where residents have little or no access to fresh fruits, vegetables, and meats typically found in larger grocery stores (Gallagher 2006). The presence of supermarkets offering these types of healthy foods increases the likelihood of fruit and vegetable consumption and results in better resident health and wellness (Lewis et al. 2005). Instead, residents in food deserts typically have access to inexpensive, high-caloric, low nutritional value processed food found in fast food restaurants or corner stores. To address these issues, this section will explore the presence of large grocery stores and fast food restaurants at the ward and neighborhood level.

The D.C. Office of Planning compiled a list of all large grocery stores (characterized as having fresh fruits, vegetables, and meats) and fast food restaurants as of 2009. There were 43 large grocery stores recognized as offering fresh fruits, vegetables, and meats across the city in 2009 (map 9.4). However, the distribution of grocery stores across the wards was skewed to the



denser and more affluent wards. Ward 3 had 12 large grocery stores in 2009, the largest number across the wards. Ward 2 had the second highest number at eight grocery stores, and Wards 1 and 6 had six large grocery stores apiece. Wards 4, 5, and 7 had three large grocery stores each and Ward 8 had the least at only two large grocery stores. Ward 8 did not have any large national-chain grocery stores until 2007, when the new retail development in the Congress Heights neighborhood, The Shops at Park Village, included a new 65,000 square foot Giant grocery store. Previous to 2007, the only large grocery store in Ward 8 was Murry's, a regional grocery store chain that does offer fresh foods, although it is smaller than the new Giant.

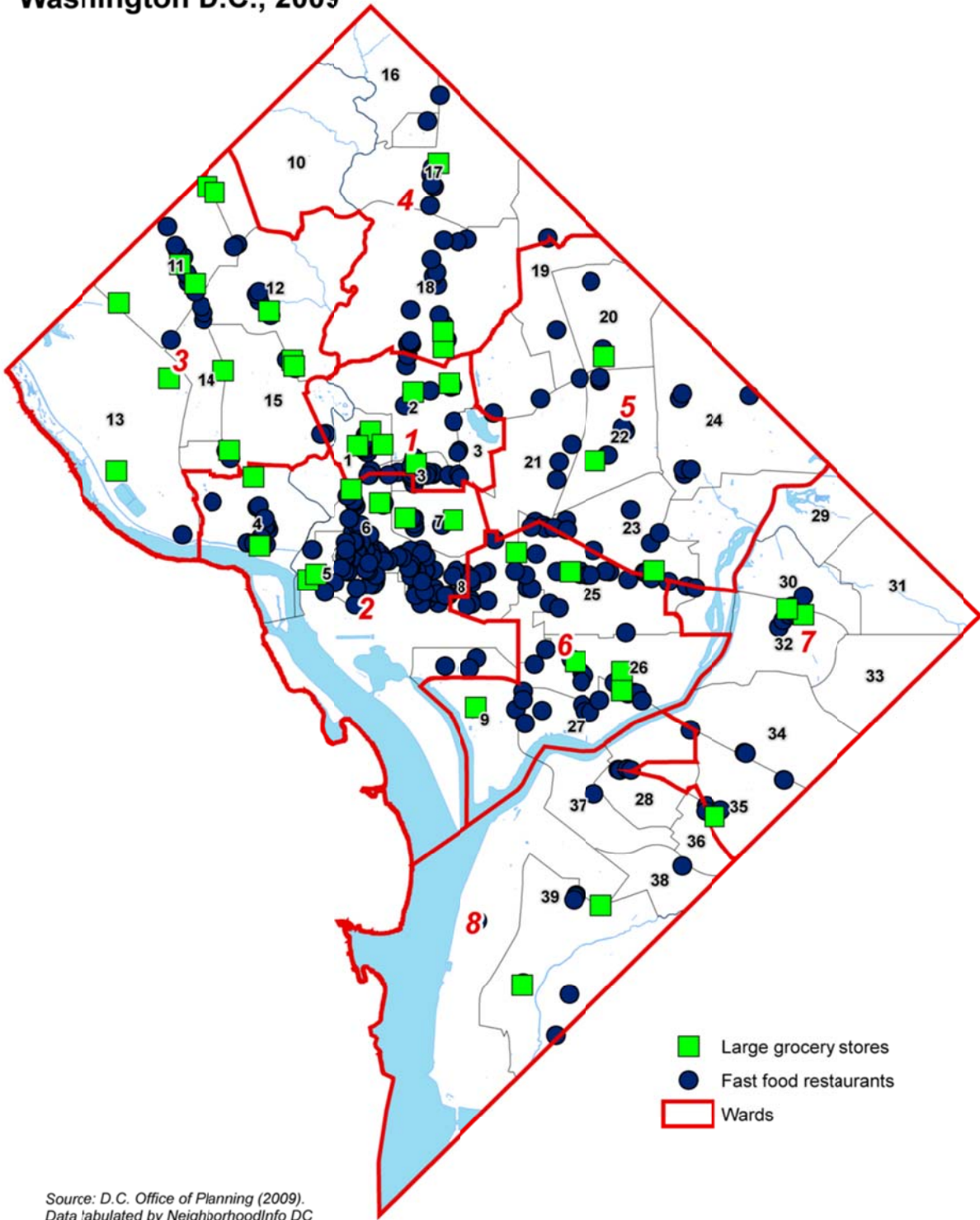
More telling is the average distance residents need to travel to reach a grocery store weighted by population. The average resident living in the city would have to travel 2,836 feet to reach a large grocery store that offered fruits, vegetables, and meats (over nine football fields). The average resident living in Wards 1 and 2 only needed to travel a much smaller average distance of 1,520 and 1,534 feet, respectively, while residents in Wards 3 and 6 only needed to travel a distance of 2,059 and 1,867 feet, respectively. Residents in Wards 4, 5, 7, and 8 all had travel distances further than 3,700 feet, the longest being for the average Ward 7 resident, who has to travel an average of 4,767 feet (almost 16 football fields).

The average resident living in Cluster 1 (Kalorama Heights, Adams Morgan) in Ward 1 had the shortest distance to travel to a large grocery store offering fresh food at only 1,520 feet. The average resident living in Cluster 6 (Dupont Circle, Connecticut Avenue/K Street) and Cluster 7 (Shaw, Logan Circle) both in Ward 2 also had very short distances to travel, only 1,254 and 1,272 feet, respectively. At the opposite extreme, the average resident living in Cluster 31 (Deanwood, Burville) in Ward 7, which has no large grocery store in its cluster, has to travel 6,578 feet to the nearest large store.

There were 357 fast food restaurants located in the District as of 2009 (map 9.4). Ward 2 had the greatest number by far at 133 fast food restaurants, which is more than a third of all the fast food establishments in the city. The next highest number of fast food establishments was in Ward 6 at 65 restaurants. Wards 7 and 8 had the fewest at 15 and 16, respectively. The distance that an average resident from each ward would have to travel to reach a fast food restaurant followed similar patterns to the location of large grocery stores. The average resident in Ward 2 only had to travel 836 feet to eat fast food, the shortest distance of all the wards, while the average residents in Ward 1 only needs to travel 1,015 feet.



**Map 9.4 - Grocery Stores and Fast Food Establishments
Washington D.C., 2009**





While Ward 8 has relatively few fast food restaurants, they are relatively spaced throughout the ward so the average resident of Ward 8 only needs to travel 1,855 feet (further than residents in Wards 3 and 4 at 2,306 and 2,046 feet, respectively). The average resident in Ward 7 has by far the farthest to travel to reach fast food—a whopping 3,879 feet.

In seven out of the eight wards in the city, residents are closer to fast food restaurants than large grocery stores, which could have a negative impact on residents' health (table 9.1). Only in Ward 3 do residents have a shorter distance to reach a large grocery store with healthy food options as opposed to a fast food restaurant (a grocery store was 247 feet closer, less than a football field). The largest discrepancy between access to grocery stores and fast food restaurants was in Ward 5, where fast food restaurants were 2,225 feet closer than grocery stores. The average resident in Ward 7 had to travel equally far to get fresh food or fast food—over 3,500 feet for each.

Table 9.1. Distance Average Resident Must Travel to Grocery Store and Fast Food, Washington, D.C., 2009

	Average Distance to Grocery Store (feet)	Average Distance to Fast Food Establishment (feet)	Difference Between Distance to Grocery and Fast Food (feet)
Washington, DC	2,836	1,833	1,003
Ward 1	1,520	1,015	505
Ward 2	1,534	836	698
Ward 3	2,059	2,306	-247
Ward 4	3,788	2,046	1,742
Ward 5	3,716	1,491	2,225
Ward 6	1,867	1,194	673
Ward 7	4,767	3,879	888
Ward 8	3,385	1,855	1,530

Location of Farmers Markets and Community Gardens

Farmers markets are typically outside markets in public spaces where small and medium sized farmers sell directly to the public. These markets tend to occur once a week—either during the week or on weekends year round or just during the growing season. Farmers markets provide an opportunity for residents to purchase fresh, local foods, particularly in neighborhoods that lack large grocery stores. Farmers markets can help create vibrant communities by acting as places for gathering and socializing. Farmers at the markets will often participate in federally



subsidized food programs, such as the Supplemental Nutrition Assistance Program (SNAP); Women, Infants, and Children (WIC); and the Farmers' Market Nutrition Program (FMNP). The U.S. Department of Agriculture (USDA) has been tracking the number of farmers markets since 1994, when there were only 1,755 markets nationally. In 2010, the USDA counted 6,132 markets, a 249 percent increase from 1994 and a 16 percent increase from 2009 (USDA 2010). First Lady Michelle Obama also has drawn attention to farmers markets and the importance of eating fresh fruits and vegetables when she planted a garden on the White House lawn and helped publicize a new farmers market near the White House in 2010.

While there are many benefits of farmers markets, they are criticized as being targeted to higher income communities. Local and organic produce is often more expensive than conventional produce due to more demand and smaller scales of operations, so prices can be out of reach for low-income communities. Not all farmers may participate in the federal food subsidy programs such as SNAP and WIC. Farmers markets are not typically constructed as a replacement for large grocery stores as the selections are limited and often not open year round.

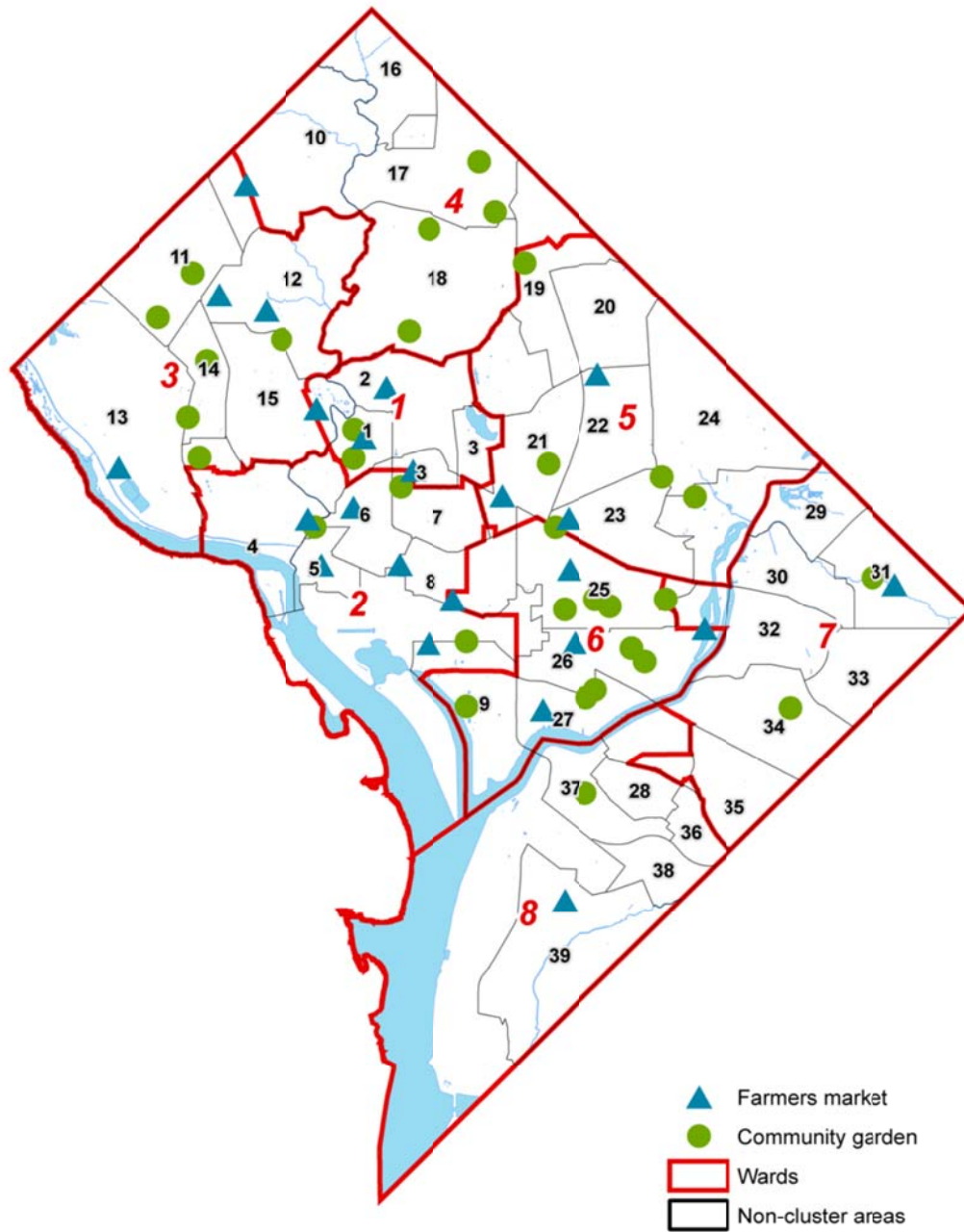
Community gardens have become more popular as the organic and local food movement has continued to grow. Community gardens are defined as a shared piece of land gardened collectively by a group. Urban community gardens are often started on vacant or blighted land and provide access to healthy fruits and vegetables, improve the underused space, build a connection to the land, promote an active lifestyle, and are often used to introduce children to healthy eating in an effort to reduce obesity.

According to the District Department of the Environment via the Office of the Chief Technology Officer's GIS Data Catalogue from 2009, there were 23 farmers markets in the city (map 9.5). The location of the farmers markets mirrors the pattern of large grocery stores—higher income areas are more likely to have more farmers markets than low-income areas. Ward 2 had five farmers markets, the most of all the wards. Wards 1, 3, and 6 had the next greatest amount at four farmers markets each, and Ward 5 had three farmers markets. Ward 7 has two farmers markets and Ward 8 had just one farmers market. Ward 8 previously had another farmers market in Anacostia that was run by the Capital Area Food Bank since 1999 but it closed operation in 2009 because it was unable to be economically viable. Only Ward 4 had no farmers markets.

Also according to the District Department of the Environment via the Office of the Chief Technology Officer's GIS Data Catalogue, there were 32 community gardens in the city (map 9.5). Ward 6 had the most community gardens at nine gardens. In part, this is due to the fact that the Capitol Hill Community Land Trust has been working to obtain vacant land in tax arrears for the land bank to transform into community gardens. Ward 3 had the next largest number of community gardens at six, and Ward 5 had five community gardens. While Ward 4 had no farmers markets, it did have four community gardens, and Wards 1, 2, and 7 had two gardens each. Ward 8 had just one community garden.



Map 9.5 - Farmers Markets and Community Gardens Washington, D.C., 2009



Source: D.C. Office of the Chief Technology Officer (2009)
data tabulated by NeighborhoodInfo DC



Access to Parks

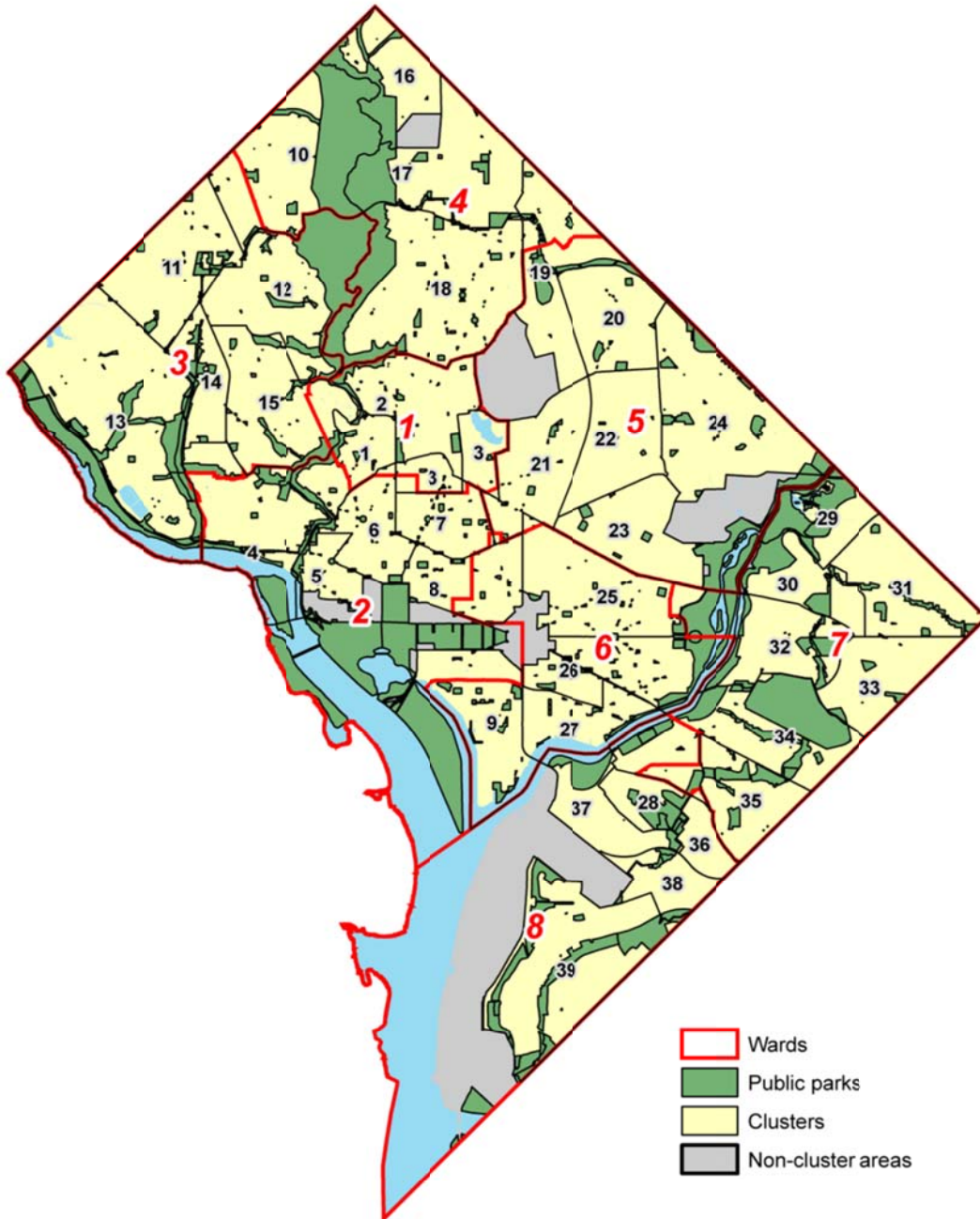
Public parks provide places for recreation, and they beautify and enhance the quality of neighborhoods. In a “green” city, residents living in all neighborhoods should be within easy walking or biking distance of a safe and well-maintained public park. We measured access to parks using a population-weighted distance measure, which expresses the average distance to the nearest public park (federal and local) in the city, a ward, or a neighborhood. While this indicator reflects how close federal and local parks are to the average resident, we do not have any information to measure the quality or safety of the parks themselves.

For the average person living in Washington, D.C., in 2010, the distance to the nearest public park is 552 feet, (map 9.6), an average that has not changed since the last neighborhood report. Given a typical walking speed of 4.11 feet per second, this means an average person in the city could walk to the nearest park in a little over two minutes. While there has been no change in the average distance between the last report and now, the average distances within wards has changed slightly. Ward 1 previously has the shortest distance average distance. Today, Ward 6 has the shortest average distance at 417 feet compared to Ward 1, which has an average distance of 433 feet. Ward 8 continues to have the farthest average distance to a park at 832 feet, which is almost three football fields.

Among neighborhood clusters, the neighborhoods with the closest and farthest distance to a park are both in Ward 8. Persons living in Cluster 28 (Historic Anacostia) have the smallest average distance to the nearest park, 303 feet. Nearby parks for residents of Anacostia include Anacostia Park (along the river), Fort Davis Park, and Fort Stanton Park. Persons living in Cluster 36 (Woodland/Fort Stanton), in contrast, have the largest average distance to travel, 955 feet, or 3.9 minutes walking time, approximately three football fields away. The clusters with the second and third longest distances to parks are also in Ward 8. Residents of Cluster 37 (Sheridan/Barry Farm) have an average distance of 908 feet to the nearest park, while those living in Cluster 38 (Douglas/Shipleigh Terrace) must travel an average of 902 feet.



**Map 9.6 - Public Parks and Neighborhood Clusters
Washington, D.C., 2008**



Source: National Parks Service and DC Department of Parks and Recreation data tabulated by the D.C. Office of the Chief Technology Officer (DC GIS)



Access to Public Libraries and Recreation Centers

Public libraries and recreation centers provide positive amenities to residents of all ages in the city's neighborhoods. Neighborhood public libraries provide free access to books, periodicals, and the Internet, as well as offering a quiet place for students to study and a place for activities for elderly residents. Recreation centers managed by D.C. Parks and Recreation provide an equally important role in the community in offering safe places to play, exercise, and socialize. We measured access to public libraries and recreation centers using a population-weighted distance measure, which expresses the average distance to the nearest public library or recreation center for persons living in the city, a ward, or a neighborhood.¹¹

For the average person living in Washington, D.C., in 2009, the distance to the nearest public library was 3,170 feet. The average resident in Ward 2 had the shortest distance to travel, only 2,334 feet, followed by the average Ward 6 resident (2,489 feet) and the average Ward 1 resident (2,672 feet). Residents of Ward 5 had the farthest distance to travel at 4,347 feet. Ward 8, which often has some of the worse-off indicators, fares relatively well at 3,185 feet.

Among neighborhood clusters, the average resident able to travel relatively short distances to a public library include Cluster 8 (Chinatown, Penn Quarters) in Ward 6 at 1,559 feet, Cluster 9 (Southwest Employment Area) at 1,566 feet, Cluster 7 (Shaw, Logan Circle) in Ward 2 at 1,784 feet, Cluster 5 (West End, Foggy Bottom) in Ward 2 at 1,928 feet, and Cluster 38 (Douglas, Shipley Terrace) in Ward 8 at 1,941 feet.

Residents that have the farthest to travel to a public library are from neighborhoods in Ward 5, 7, and 8. Residents from Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 have the farthest to travel at 6,160 feet, Cluster 23 (Ivy City, Trinidad) in Ward 5 at 5,796 feet, and Cluster 21 (Edgewood, Bloomingdale) in Ward 5 at 4,432 feet.

The average citywide resident has to travel a much shorter distance to access to a public recreation center compared to a public library in 2009, only 1,960 feet. In addition, the ward-level differences are not as disparate for average distance to recreation centers as other indicators; recreation centers are evenly located across the city. The average resident in Ward 1 has the shortest distance to travel at 1,545 feet followed by the average resident in Ward 2 at 1,815 feet. The average resident in Ward 3 has the farthest to travel to a recreation center at 2,338 feet.

The average resident from the neighborhood with the shortest distance to travel to a recreation center is from Cluster 1 (Kalorama Heights, Adams Morgan) in Ward 1 at 1,045 feet.

¹¹ Data on recreation area locations and D.C. Public Library branches were obtained from D.C. Office of the Chief Technology Officer. Note that these data have no measures of quality or usability, only of locations.



Alternatively, the average resident from Cluster 16 (Colonial Village, Shepherd Park) in Ward 4 has the farthest to travel at 5,597 feet.



X. PUBLIC AND PRIVATE TRANSPORTATION

Fast, efficient, and extensive public transportation systems in urban regions are an important factor in determining residents' quality of life. Extensive transportation systems can connect residents to a wider array of employment opportunities, cultural amenities, and social services beyond what is available in their neighborhoods. This is reflected in the fact that shorter commute times to job centers are often associated with higher home values. In addition to increased job and service access, transportation has important environmental implications. Public transit is more energy efficient compared with driving and minimizes carbon byproducts. Increased investment in more environmentally friendly public transportation is often heralded as a solution to both the inequities produced by inadequate access to jobs and amenities and the negative environmental impacts produced by individual car usage.

The importance of transportation to quality of life, economic development, and environmental stewardship is reflected in the recent collaboration between the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and the U.S. Environmental Protection Agency in the Sustainable Communities Initiative. This collaboration encourages more deliberate and systematic federal efforts to connect transportation plans and investments with goals for economic security, environmental quality, and social equity.

The Washington, D.C., region boasts a world class Metro system. Washington, D.C., ranked as the seventh most walkable city in the United States in 2008, according to Walk Score™. In 2008, 13 percent of workers commuted via public transportation in the metropolitan area, compared to an average of 9 percent in the nation's largest 280 metropolitan areas (2008 American Community Survey), suggesting that the region has above average infrastructure and a high demand for rail and bus routes. Even so, costs of transportation as a percentage of household income are also high. Throughout all major metropolitan areas, the average working household spends 28 percent of its monthly income on transportation, while in the D.C. metro area, households spend an average of 32 percent (Center for Housing Policy 2006).

In this section, we focus on the location of metro and bus stops, as well as the variation in use of Metro stations for morning weekday commutes. We also explore the variation of registered vehicles across the city. Although transportation has become an increasingly important component of local and regional policymaking, methods for assessing quality and usage are still debated. For this report, we have attempted to gather readily available transportation data for the city and produce a rough picture of access and service. We



recognize that more data are needed to track the city's progress on these issues and we hope to include additional indicators in future reports. These indicators offer an overview of the transportation options within the District and do not present a comprehensive, detailed transportation planning analysis.

Access to Metrorail

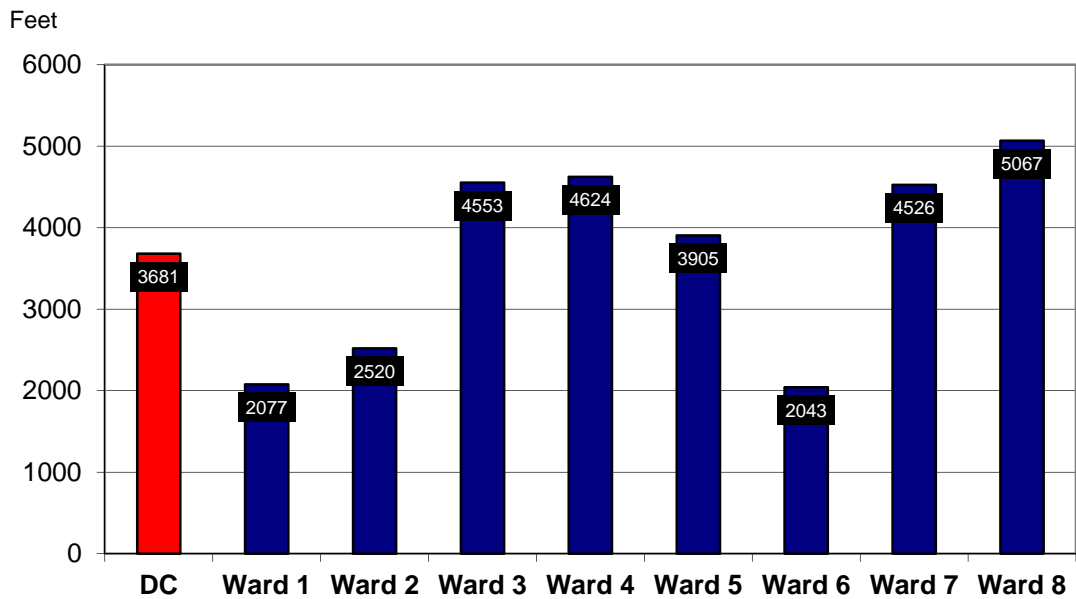
Metrorail, Washington's fully grade-separated heavy rail subway system, is a fast and efficient means of providing transportation to residents due to its relatively low energy costs per rider. However, this type of infrastructure is expensive in terms of fixed costs to the city and the Washington Metropolitan Transit Authority (WMATA). WMATA has several means of increasing capacity: increasing coverage through construction of new rails and stations or improving upon existing stations and increasing train frequency. Notably, WMATA is a regional transit authority funded by multiple jurisdictions with varying interests in public transportation. Because of this and the significant costs of construction and operation, the city cannot easily increase Metrorail coverage. As fuel prices surge, however, many residents have switched from commuting by car to less expensive public transportation. This, combined with regional population growth, has resulted in heightened demand, an increasingly strained operating budget, fare hikes, and concerns about decreased service. Budget shortfalls leave little room for addressing discrepancies in access through the city and metropolitan area. In addition, there have been concerns with train and rail maintenance, operation, and safety after the Red Line crash that took place in June 2009, which resulted in nine deaths and over 76 injuries.

As of 2007, the city had 40 Metrorail stations, with most located in Wards 6 and 2, serving the city's central core and key employment areas. At the other end of the spectrum, primarily residential Ward 4 at the northern portion of the city and Ward 8 at the southern end have only two stations each. There are 18 neighborhood clusters without any Metro stops, and half of these are located in Wards 7 and 8. Three-fourths of the neighborhood clusters (9 out of 12 clusters) in Wards 7 and 8 do not have any Metro stops. The clusters with the highest number of stops include Cluster 26 (Capitol Hill, Lincoln Park) in Ward 6 where there are four Metro stops and Cluster 8 (Chinatown, Penn Quarters) in Ward 2 where there are five Metro stops. Additionally, there are several Metrorail stations just outside of the District of Columbia that were not included in this analysis, but do offer close service for District residents. These stations include Silver Spring Station (Ward 4), Capitol Heights Station (Ward 7), Naylor Road Station (Wards 7 and 8), and Southern Ave. Station (Ward 8).

We also calculated the distance to the nearest Metrorail stations for the average person in the District. The distance to a Metrorail station for the average person in the city is 3,681 feet, while in Wards 1 and 6, it is nearly half of this at 2,077 feet and 2,043 feet, respectively (figure 10.1).



Fig. 10.1 - Average Distance to Metrorail Station by Ward, 2007, Washington, D.C.



Source: Washington Metropolitan Area Transit Authority

The average resident living in six clusters close to the city's center were approximately 1,500 feet to the nearest station, including Cluster 7 (Shaw, Logan Circle), Cluster 8 (Chinatown, Penn Quarters), Cluster 9 (Southwest Employment Area, Southwest/Waterfront), Cluster 27 (Near Southeast, Navy Yard), Cluster 26 (Capitol Hill, Lincoln Park), and Cluster 5 (West End, Foggy Bottom), which had the shortest distance of 1,242 feet. Clusters with a greater average distance than 7,000 feet (approximately double the city average) and that were located in neighborhoods much farther from the center of the city include Cluster 24 (Woodridge, Fort Lincoln) in Ward 5, Cluster 13 (Spring Valley, Palisades) in Ward 3, and Cluster 35 (Fairfax Village, Naylor Gardens) in Ward 8 with an average distance of 8,569 feet.

Relative usage among Metrorail stations can be observed by looking at rush hour travel patterns. Here we use the average number of morning weekday boardings (that is, the number of people who enter the system) per ward and neighborhood cluster to see where residents use the Metro for morning commutes most often. Some of this data may involve non-District residents boarding trains within the District. Friendship Heights station, for example, is located adjacent to the Maryland border and is a large transfer point for bus riders. Similarly, Union



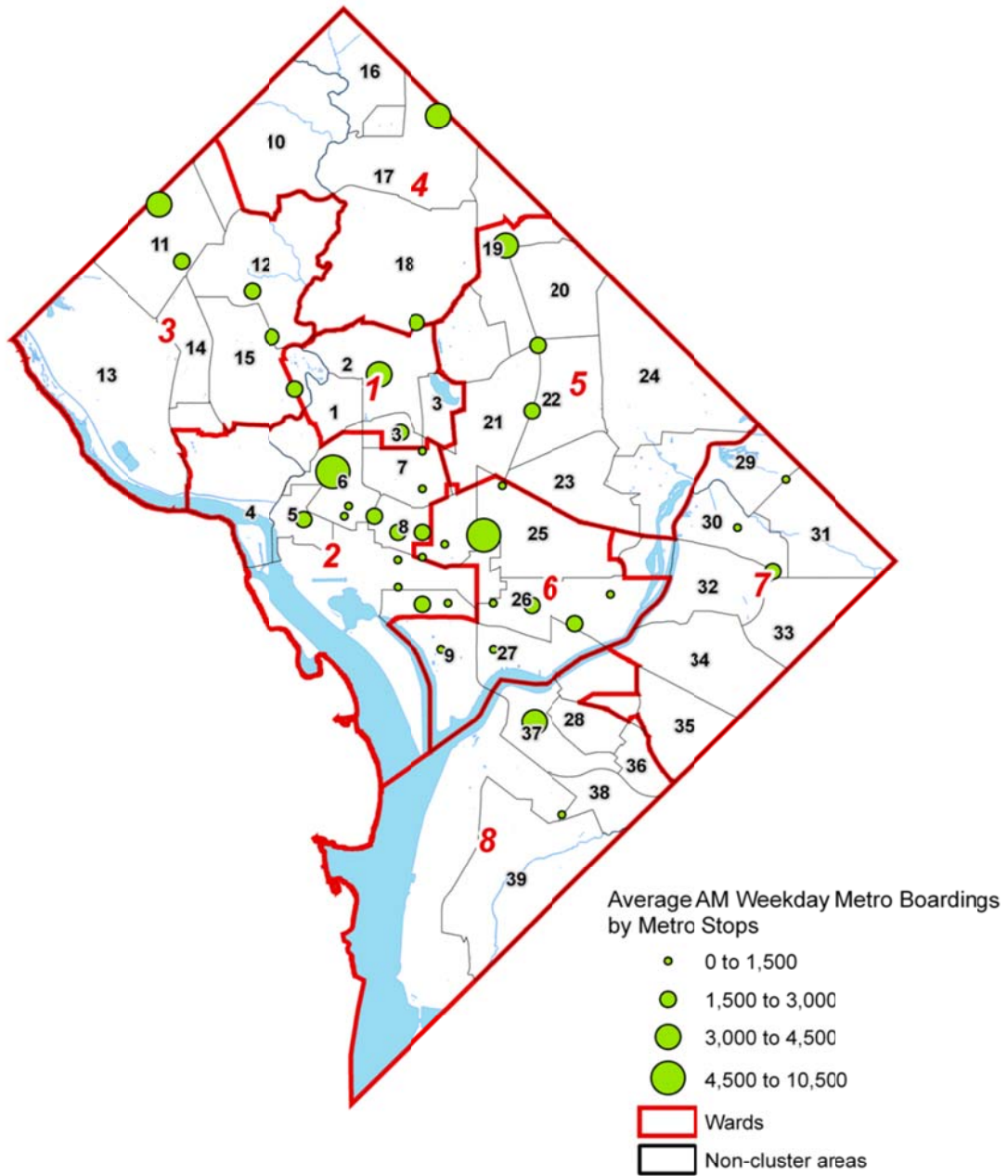
Station in Ward 6 sees high ridership thanks to commuter rail passengers transferring to Metrorail during the morning rush hour.

On an average weekday morning in FY2010, 84,501 riders board a Metrorail train within the District. By far, the highest ridership of Metrorail is found in Wards 2 and 6, each with over 20,000 riders entering stations (map 10.1). These are also the wards with the most stations. The least use could be found in Ward 7 Metrorail stations, where only 3,937 riders, on average, boarded trains each weekday morning.

Neighborhood clusters with the highest morning rush hour usage included Cluster 11 (Friendship Heights, Tenleytown) in Ward 3, where over 11,000 riders board on a typical weekday morning, averaging 5,600 passengers per each of the two Metrorail stations in the cluster, the highest average single station usage in the city. Cluster 31 (Deanwood, Burrville) in Ward 7 and Cluster 27 (Near Southeast, Navy Yard) in Ward 6, each with a single station, have the lowest Metrorail usage at 944 and 902 passengers, respectively. This is also the lowest per-station usage in the city.



Map 10.1 - AM Metro Boardings by Metro Stop Washington, D.C., FY2010



Source: Washington Metropolitan Area Transit Authority (2009)
data tabulated by NeighborhoodInfo DC.



Access to Buses

Buses are another component of a public transportation system. They are a flexible and efficient means for cities to provide public transportation. The moving stock of buses can be quickly scaled up or down to match demand in different neighborhoods without the high fixed cost needed to develop more intensive infrastructure, such as rails or subways. Thus, if a transit agency monitors and responds to changing usage patterns, it can change bus service at fairly low costs (compared to Metrorail) to distribute service more evenly throughout the city.

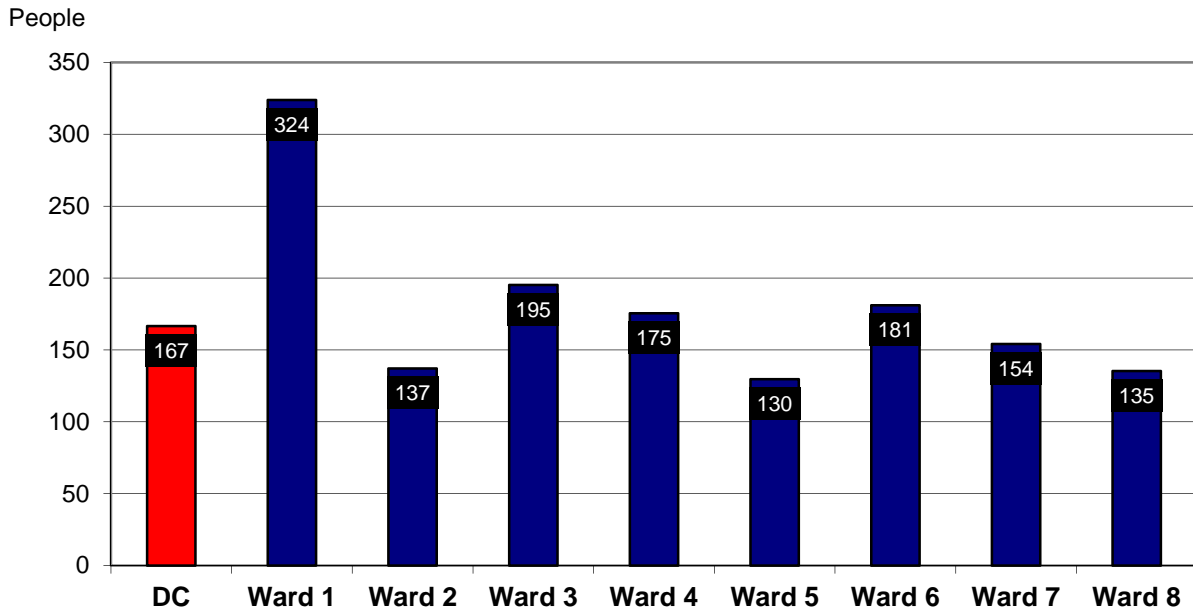
In 2006, the District had 3,550 designated bus stops, though the number within each ward varies widely. Ward 1 has a total of 238 stops while Ward 5 has 557. This can obviously be attributed to differences in geographic size, however. Across the more similarly sized neighborhoods, the number of bus stops ranges between 16 in Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 and 178 in Cluster 18 (Brightwood Park, Crestwood, Petworth) in Ward 4.

Another way of analyzing bus access is to consider the number of bus stops relative to population—people per bus stop. Neighborhoods with a low population per stop may have a higher level of service, although these types of neighborhoods may also have fewer bus lines and less frequent service. Frequency of bus service plays a more significant role in the overall level of transit service a neighborhood receives, but the required data were unavailable for this report. We hope to include such data in future reports.

Using population estimates for 2008, we find that there is an average of 167 people per bus stop throughout the city (figure 10.2). Looking at this by ward, Ward 5 had 130 people per stop, indicating the number of bus stops is higher than the city average per person. This is in contrast with Ward 1, where there are 324 people for every stop. Neighborhoods also ranged widely, from 64 people per stop in Cluster 8 (Chinatown, Penn Quarters) to 432 people per stop in Cluster 5 (West End, Foggy Bottom). Other clusters with more than 300 people per stop include Clusters 14 (Cathedral Heights, McLean Gardens), 2 (Columbia Heights, Mt. Pleasant), and 1 (Kalorama Heights, Adams Morgan), all of which are located in the more affluent northwest quadrant of the city. Neighborhoods with fewer than 100 people per stop include Clusters 22 (Brookland, Brentwood), 24 (Woodridge, Fort Lincoln), and 35 (Fairfax Village, Naylor Gardens), all located in the less affluent northeast and southeast quadrants.



Fig. 10.2 - People per Metrobus Stop by Ward, 2006, Washington, D.C.

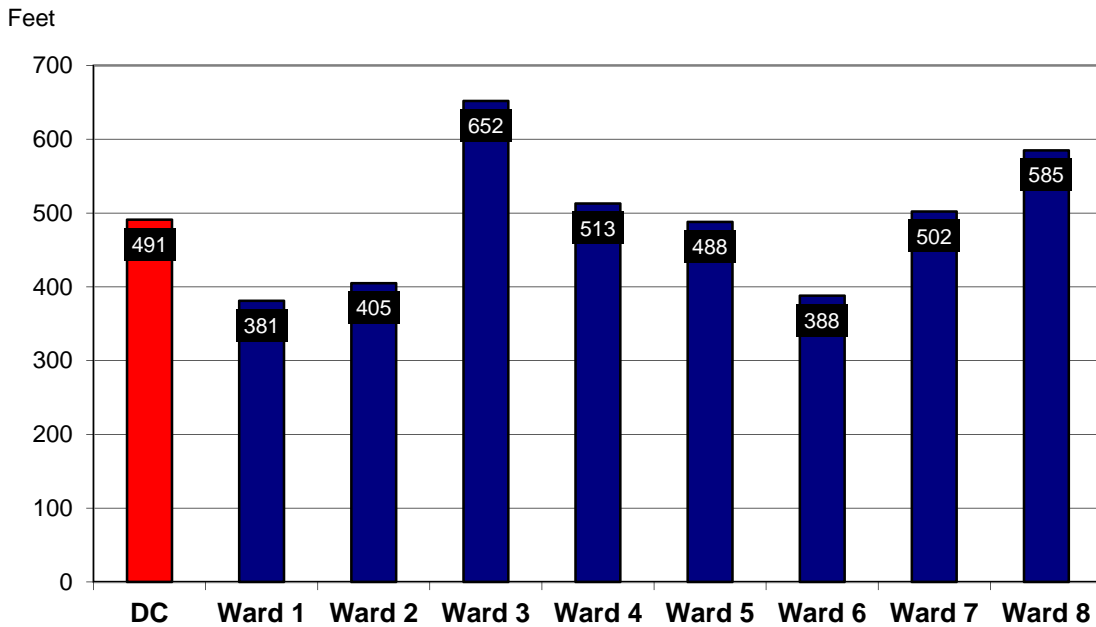


Source: Washington Metropolitan Area Transit Authority and Caliper Co. (2008) provided by the Office of Planning, tabulated by Neighborhood Info DC.

Another indicator for assessing bus access is the average distance from stops to people's residences. There is less variation here but there are notable trends. Measured by the average distance weighted by population from census blocks to bus stops, the average person living in the city is 491 feet from a bus stop. By ward, this ranges from 381 feet in Ward 1 to 652 feet in Ward 3 (figure 10.3).



Fig. 10.3 - Average Distance to Metrobus Stop by Ward, 2006, Washington, D.C.



Source: Washington Metropolitan Area Transit Authority

Neighborhoods measuring less than an average 491 feet to a bus stop include Cluster 7 (Shaw, Logan Circle) in Ward 2, Cluster 37 (Sheridan, Barry Farm) in Ward 8, and Cluster 8 (Chinatown, Penn Quarters) in Ward 6, all neighborhoods closer to the central city. Clusters with distances significantly over the city average all hug the city's perimeter and include Cluster 11 (Friendship Heights, American University Park) in Ward 3, Cluster 29 (Eastland Gardens) in Ward 7, Cluster 16 (Colonial Village, Shepherd Park) in Ward 4, Cluster 12 (North Cleveland Park, Van Ness) in Ward 3, and Cluster 13 (Spring Valley, Palisades) in Ward 3. This difference between neighborhood clusters close to downtown and those along the city's border presumably reflects the differences in residential and commercial density.



Access to Private Vehicles

Public transportation is not the only means for traveling across the city. Another option for some is ownership of private vehicles. Here we look at the number of private vehicle registrations by ward and neighborhood cluster and the percentage of the population over 18 who have access to a vehicle.

As of 2010, there are 201,792 vehicles registered in the District, an average of three people per car according to data provided by the Department of Planning. Ward 3 has, by far, the highest number of registrations, with 41,230 vehicle registrations, or two people per car. Less affluent Ward 8 has the lowest number of registrations at 15,587, an average of five people per car. Neighborhoods with a large number of registrations of more than 10,000 vehicle registrations include Cluster 25 (Union Station, Stanton Park) in Ward 6, Cluster 2 (Columbia Heights, Mt. Pleasant) in Ward 1, and Cluster 18 (Brightwood Park, Crestwood, Petworth) in Ward 4, which has 14,356 registrations. Cluster 27 (Near Southeast, Navy Yard) in Ward 6 and Cluster 29 (Eastland Gardens, Kenilworth) in Ward 7 have the fewest registrations in all the clusters with 970 and 694 registrations, respectively.

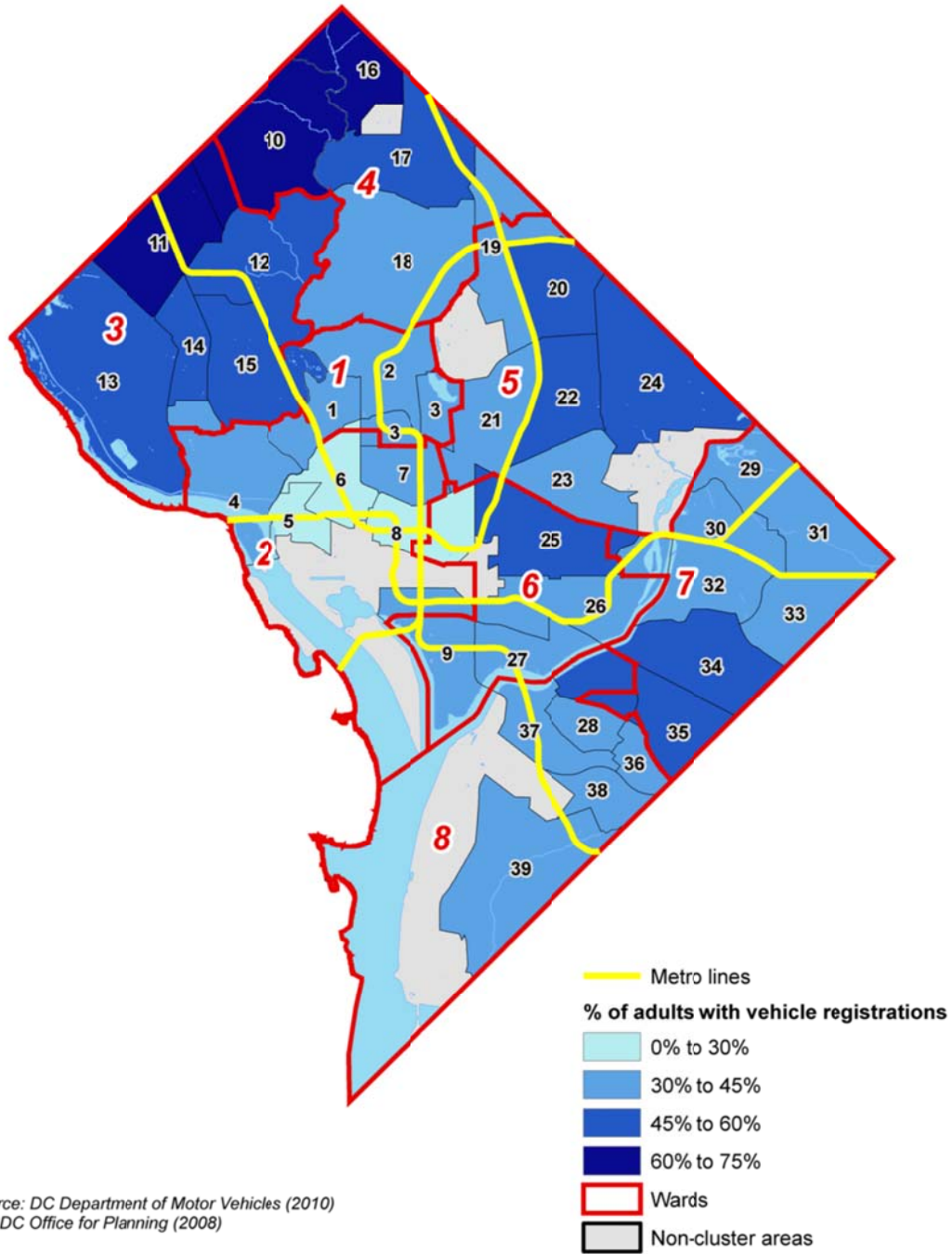
More telling is the percentage of the total population over 18 with vehicle registrations. Citywide, 43 percent of adults have a registered vehicle, though this number varies strikingly across wards.¹² Ward 2 has the lowest percentage of adults with a registered vehicle at 30 percent, compared with 60 percent of adults in Ward 3 (map 10.2). Ward 2 has significant density of housing and people and correspondingly much less parking opportunities than other parts of the city. Ward 3 is less dense and more likely to have parking, as well as higher incomes that permit the expense of an additional car. Wards 1 and 8 had the second lowest share of adult population with a registered vehicle at 34 percent each.

The spread is even greater among neighborhoods. Neighborhoods close to the city center tend to have low shares of registered vehicles: Cluster 5 (West End, Foggy Bottom) in Ward 2 has merely 14 percent, Cluster 6 (Dupont Circle, Connecticut Avenue/K Street) and Cluster 8 (Chinatown, Penn Quarters) all in Ward 2 each have 27 percent. On the other end of the spectrum, less dense and more affluent neighborhoods that are farther from the city center have higher vehicle registration, such as Cluster 10 (Hawthorne, Chevy Chase) in Ward 4, Cluster 11 (Friendship Heights, Tenleytown) in Ward 3, and Cluster 16 (Colonial Village, Shepherd Park) in Ward 4, each of which had over 60 percent of adults with registered vehicles. Causes for this trend may vary and include average income levels, access to parking, access to public transit, and proportion of households with children.

¹² This assumes that each adult in the city registers for only one car. The vehicle registration data do not allow us to determine where one adult has multiple cars registered in his or her name.



Map 10.2 - Share of Adults with Registered Vehicles by Neighborhood Cluster Washington, D.C., 2010



Source: DC Department of Motor Vehicles (2010)
and DC Office for Planning (2008)



XI. CONCLUSION

This report is the second in a series to track neighborhood conditions throughout the city. By continuing to update these indicators, city leaders of Washington, D.C., can measure the changes occurring across a range of domains. We conclude by noting three neighborhood clusters that have made improvements in varying degrees over the past decade: Cluster 27 (Near Southeast/Navy Yard), Cluster 8 (Chinatown, Penn Quarters), and Cluster 29 (Eastland Gardens, Kenilworth). All were severely distressed at the start of the decade, but in recent years have undergone significant changes.

Cluster 27 (Near Southeast/Navy Yard). This cluster in Ward 6 had high rates of unemployment, poverty, TANF receipt, and teenage births, as well as a low median household income in 2000. Since 2000, however, it has experienced one of the largest drops among all clusters in households receiving food stamps and TANF benefits as well as violent crime rates, and has had large increases in the volume of home sales as well as home sale prices through 2009, even during the recent housing market slow down. In fact, some of the improvements in Ward 6 averages over the decade were driven by improvements in Cluster 27. This cluster is projected to have very high residential development in the coming years. Despite these positive conditions, Cluster 27 has had a relatively high and growing foreclosure rate.

Much of the changes in Cluster 27's indicators are due to recent developments, including the demolition of the Arthur Capper and Carrollsburg Dwelling public housing development to create the HOPE VI mixed-income site and the development of the new baseball stadium and surrounding office and residential areas. Arthur Capper and Carrollsburg Dwellings was a 23-acre 758-unit public housing complex across from the Navy yard. The previous properties were old and obsolete, and the high concentration of low-income units, combined with the barracks-style architecture of the developments, deterred any significant investment in the community. As a result, much of the housing was demolished to make way for a new, mixed-income community. The \$34.9 million Federal HOPE VI grant awarded has leveraged a total of over \$424 million for the creation of 1,562 rental and home ownership units, office space, neighborhood retail space, and a community center. The housing strategy will replace the demolished units with 707 public housing units, 525 affordable rental units, and 330 market rate homes for purchase, for a total of 1,562 new units. By replacing all occupied public housing units, the Arthur Capper and Carrollsburg development will be the first HOPE VI site in the country to provide one-for-one replacement of demolished public housing units.



The Capitol Riverfront and Baseball District in Cluster 27 includes the new Nationals Park, home of the Washington Nationals, and 60 acres surrounding the stadium, bound by the Anacostia River and South Capitol Street, New Jersey Avenue, and M Street, SE (Cluster 27). Plans call for a neighborhood with a diverse mix of retail, entertainment, residential, and office uses. The new stadium will act as a catalyst for the development of a waterfront entertainment destination for neighborhood residents and visitors to enjoy year-round. The revitalization of the Capitol Riverfront also includes the recently opened Anacostia Riverwalk between the ballpark and the Washington Navy Yard, which will include a five-acre public park at the Southeast Federal Center and a new ferry pier at the foot of First Street, SE.

The Yards contemplates the development of 5.5 million square feet of retail, housing, office and civic uses on 42 acres of the former Southeast Federal Center site along the Anacostia River. The Yards is located between Nationals Park and the Navy Yard (Cluster 27), on the Green Line. The Yards is the largest project under construction in the District of Columbia and will offer restaurants, shops, waterfront park, new office space, and market rate and affordable housing, as well as a Low Impact Development (LID) streetscape system, designed to help clean up the Anacostia River.

Cluster 8 (Chinatown, Penn Quarters). This neighborhood cluster, also located in Ward 6, consists of a wide range of neighborhood types: from dense, vibrant mixed-use space in the Penn Quarter and Verizon Center area to a previously high-crime public housing development, Sursum Corda. In the beginning of the decade, Cluster 8 had the highest violent crime rate in the city, as well as high unemployment rates, high poverty rates, and high TANF and food stamp receipt. However, many changes over the past decade have contributed to the improvements for this neighborhood cluster and Ward 6. For instance, the public housing development, Sursum Corda, was targeted as a “new community” by the city in 2005 and is now in the process of redevelopment (called Northwest One). Phase I has been completed: public housing units have been demolished and a new educational facility, Walker Jones Education Campus, has been built, which includes a new elementary and middle school, a community recreation center, new athletic fields, and a new library. A few blocks away, closer to Penn Quarter, condominium development skyrocketed during the housing boom, driven by two projects in particular: Yale Laundry Condominiums and the Madrigal Lofts.

The commercial development around the Verizon Center and Gallery Place has grown significantly over the past decade, and Cluster 8 ranks as having the most LEED-certified or Energy STAR buildings across the city. Cluster 8 is also expected to have the most residential development in the city, with 9,200 units. Violent crime rates have been reduced by 40 percent in the neighborhood cluster since 2000, although the violent crime rate is still much higher than the city average. It should be noted that recent food stamp and TANF receipt are still high in Cluster 8.



Cluster 29 (Eastland Gardens, Kenilworth). Cluster 29, located in Ward 7, also had very high rates of poverty, unemployment, TANF, and food stamp receipt in 2000. And still, Cluster 29's residents struggle with continued high TANF and food stamp receipt, high crime rates, high teenage birth rates, and low prenatal care for pregnant mothers. However, Cluster 29 has also experienced promising changes. New residential units have been built in the past decade, such as a new workforce housing development (Lotus Square) along the 295 corridor as well as the Parkside Townhomes (100 units) built near the new state-of-the-art Cesar Chavez Public Charter Parkside campus for middle and high school students. The new residential development has led to an above average increase in mortgage originations, particularly to low-income borrowers, and the greatest increase in population (14 percent) between 2000 and 2008 across the city. Unfortunately, the foreclosure rates have also been high. Cluster 29 continues to be highly isolated and residents have limited access to many public amenities, such as public transportation (including cars), public libraries, and large grocery stores. However, the District of Columbia Promise Neighborhood Initiative (DCPNI) was recently awarded one of the coveted U.S. Department of Education Promise Neighborhood planning grants in the fall of 2010. DCPNI intends to target its educational and socioeconomic improvement programs to the residents of Cluster 29.



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APPENDIX A—DATA SOURCES AND NOTES

Demographics

Population and households. U.S. Census Bureau (1790–2000 city level); CensusCD/Neighborhood Change Database (1980–2000, ward and neighborhood cluster level); Caliper Co. (2008 estimates provided by Office of Planning).

Economy – Jobs and Income

Employed residents and unemployment rate. CensusCD/Neighborhood Change Database (1980–2000, ward and neighborhood cluster level); U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics (1995–2009); D.C. Department of Employment Services (December 2009).

Poverty and household income. CensusCD/Neighborhood Change Database (1980–2000, ward and neighborhood cluster level); U.S. Census Bureau (2000, 2008 (American Community Survey), city level).

Public assistance (TANF and Food Stamps). D.C. Department of Human Services, Income Maintenance Administration (2000–2009).

Economy—Housing

Home and condominium sales and sale prices. D.C. Office of Tax and Revenue, Real Property Database (1995–2009, provided by the D.C. Office of the Chief Technology Officer, DC GIS).

Mortgage lending and homebuyer characteristics. Home Mortgage Disclosure Act (1997–2008, provided by Dataplace.org).

Foreclosures. D.C. Recorder of Deeds (1995–2009).

Housing development pipeline. D.C. Office of Planning (2009)

Education

Public school enrollment. Office of the State Superintendent of Education tabulated by NeighborhoodInfo DC (2001-2009).

Proficiency in reading and math. Office of the State Superintendent of Education tabulated by NeighborhoodInfo DC (2006-2009).



Health

Births with prenatal care, low-weight births, births to teenage mothers. D.C. Department of Health, State Center for Health Statistics (1998–2007).

Infant deaths, deaths from cancer, heart disease, and violent causes. D.C. Department of Health, State Center for Health Statistics (1998–2007).

Family, Youth, and Seniors

Household types, child and elderly poverty. CensusCD/Neighborhood Change Database (1980–2000, ward and neighborhood cluster level); U.S. Census Bureau (2000–2008 (American Community Survey), city level).

Births. D.C. Department of Health, State Center for Health Statistics (1999–2007).

Safety and Security

Violent and property crime rates. Metropolitan Police Department (2000–2009).

Environment

Tree coverage. Casey Trees (2006).

Tree health. District Department of Transportation, Urban Forestry Administration (2010 provided by the D.C. Office of the Chief Technology Officer, DC GIS).

Parks. National Park Service and D.C. Department of Parks (2007, provided by the D.C. Office of the Chief Technology Officer, DC GIS).

Libraries and recreation centers. D.C. Office of Tax and Revenue. Real Property Database (2007-2009, provided by the D.C. Office of the Chief Technology Officer, DC GIS).

Green roofs, aquatic habitats and wetlands, alternative energy sites, farmers markets, community gardens. District Department of the Environment (2009, provided by the D.C. Office of the Chief Technology Officer, DC GIS).

LEED and ENERGY STAR buildings. District Department of the Environment (2010 provided by D. C. Office of Planning).

Impervious surface area. D.C. Office of Planning (2008).

Grocery stores and fast food restaurants. D.C. Office of Planning (2009).

Transportation

Metrobus and Metrorail locations. Washington Metropolitan Area Transit Authority (2006-2009, provided by the D.C. Office of the Chief Technology Officer, DC GIS).



Metrorail boardings. Washington Metropolitan Area Transit Authority (FY2010 provided by the D.C. Office of Planning).

Vehicle registrations. D.C. Department of Motor Vehicles (2010 provided by the D.C. Office of Planning).



APPENDIX B—DATA TABLES AND CHARTS