

**Multifamily Housing in the Washington, DC Region:
Demand and Supply Trends**

By:

Kathryn Howell, PhD

2013 Kettler Scholar

George Mason University School of Public Policy

Center for Regional Analysis

Arlington, Virginia 22201



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Executive Summary

The housing boom of the early 2000s led to growth in new home construction, urban core development, and suburban single-family development that had not been experienced since the 1950s. Although, nationally, the demand for housing and neighborhoods is changing to a more urban model of development, more residents still continue to live in the suburbs than cities. However, cities are increasingly a staple for the recent college graduates delaying marriage and child-bearing. These households are living in increasingly dense, walkable communities for more extended periods. Meanwhile, the baby-boomer generation has started to age into retirement and is remaining in the suburban communities in which they have lived for decades. Nevertheless, there is a growing interest in walkable communities with smaller yards and improved access to shopping, work, and public spaces, while retaining the interest in homeownership that has been a hallmark of the past half century of American success.

The Washington, DC region now attracts a growing number of young, childless professionals, even as the number of retirees from government and other sectors grows. At the same time, core jurisdictions like the District of Columbia and Arlington and Montgomery Counties have promoted schools, parks and other amenities for children and families to encourage them to remain in the core rather than moving to the suburbs for family formation. Moreover, unlike the larger east coast cities that have long focused on multifamily housing as a means of providing access to jobs centers, the Washington region has had access to land to provide single-family housing that has access to highways and transit. However, rising population and housing demand, combined with zoning laws to preserve farm land and open space, have also changed the cost of land for housing. Finally, the volatility of the government sector, including changes in federal employment and federal contracting, have changed the consumption patterns of new single-family housing.

This research examines the existing stock of multifamily housing in the Washington, DC region, the projections for population, and the demand for multifamily housing units regionally as demographic, market demand and housing finance options shift. Four main questions are investigated in this research:

1. What are the characteristics of the existing stock of multifamily housing by jurisdiction?
2. Who lives in multifamily housing and what are the characteristics of the communities in which multifamily housing is concentrated?
3. How will the regional population change over the next five to ten years and where will they live?
4. What is in the pipeline for multifamily construction and how will this serve the residents who will move in, form families, and age in place in the region?

Summary of Key Findings:

Between 2013 and 2020, the Washington, DC region is expected to add more than 700,000 new residents, including almost 85,000 children and more than 400,000 residents over the age of 65. This includes both those moving to region for jobs, as well as those who remain and age in place. As the structure of jobs changes, and more residents age, the housing patterns will shift.

Key Findings

- The existing supply of multifamily housing has been largely concentrated in the urban core jurisdictions within the Beltway. However, there has been significant growth in traditional multifamily (two-or-more units in the building) along transit corridors and new city center

development in places like Loudoun and Fairfax Counties. However, the higher-than-average growth of attached single-family housing in less-dense communities suggests a change of demand, as well as greater acceptance of different types of suburban density.

- Although new rental housing construction increased over the past three years, it has been increasingly high-end rental units located in particular submarkets. Further, due to fears of overbuilding in those sub-regions, the pipeline for multifamily housing has slowed.
- Rental housing is dominated by single-family homes in the suburban jurisdictions and small multifamily units in the urban core. As a result, families looking for rental housing typically have limited options beyond single-family homes. Owner-occupied multifamily housing grew fastest in emerging markets in outlying counties and Washington, DC.
- Rents and home values continue to increase, particularly in the core jurisdictions of the Washington, DC region, where new demand has made the competition for new units high. Owner-occupied multifamily, after a precipitous decline during the housing bust, is making a slow recovery in both prices and development across the region.
- The number of seniors will grow significantly across the region, while the number of children in the District will increase rapidly. Both trends may present challenges for housing as families form and seniors retire.

Introduction and Background

In spite of having missed the strongest effects of the recession, foreclosure, and subsequent home value declines, the Washington, DC region has been impacted by overall decline in government jobs, decreased federal contracting, and the unpredictability of government function. The rise of low-wage and lower-middle-class jobs and increase in the cost of commuting have changed the potential of traditional homeownership for many families. In addition, in spite of the economic slowdown, land prices continue to increase, putting new single-family homes out of reach of many new families.

Meanwhile, as Millennials (also called Generation Y) delay family formation, Generation Xers begin to have children, and Baby Boomers age into retirement, housing demand is shifting. Urban jurisdictions are changing to attract young affluent individuals and to retain young families as they have children and advance in their careers. More millennials are staying in the city, attracted by carfree lifestyles, walkable amenities, and neighborhoods that have become safer over the past decade. Generation X households, many of whom moved to Washington, DC, Arlington County, and Alexandria as they were beginning to change in the late 1990s and early 2000s have bought homes and are tending to stay in jurisdictions once deemed unacceptable to many families who had options to move. Meanwhile, Baby Boomers are retiring and remaining in their largely suburban communities.

At the same time, local jurisdictions and developers are working to attract the demand for walkable amenities, safety, sense of place, and schools. Policies such as free pre-Kindergarten, charter schools, renovated public spaces, and recreation centers have been a way that jurisdictions continue to work to attract upper-middle-class families. Developers are not only building high-end amenities within their buildings but also focusing on submarkets such as Silver Spring, Clarendon, and NoMa to attract young

residents to new areas with a sense of place, walkable bars and restaurants, and access to jobs. Similarly, Loudoun and Fairfax Counties have been building city centers with mixed-use, residential and commercial development to support a new type of demand. Building owners are also adapting their existing buildings to provide play rooms and senior centers to support the interest of families in all stages to stay in place.

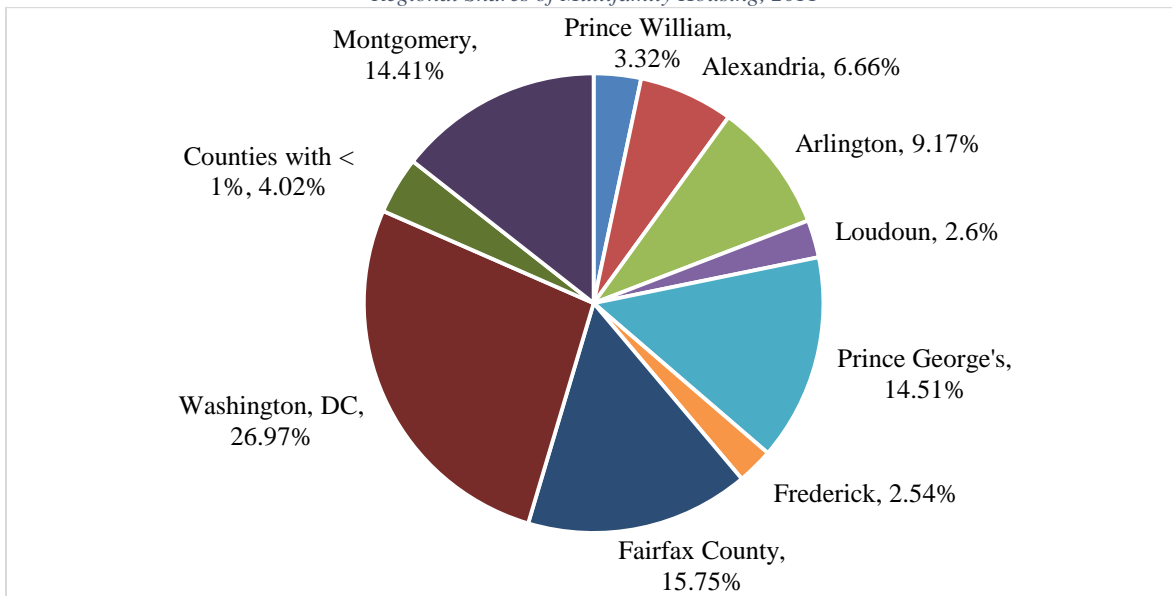
These efforts have been successful. Developers and local jurisdictions have reaped the rewards of this changing demand. However, this trend is only just beginning. Over the next decade, the market for middle-class jobs will shrink, meaning that new workers will have lower wages, and those remaining may not advance into jobs that will allow many of them to purchase homes. Further, the babyboomers will continue to retire and remain in the region after decades of suburban living, while millennials and genXers will continue family formation and child-rearing after more than a decade of core residency. The region also remains a highly desirable location for recent college graduates.

Supply of Multifamily in the Washington, DC Region

Multifamily housing in Washington, DC has largely been confined to the urban core of The District, Alexandria, Montgomery County, Prince George's County and Arlington County. However, as transportation corridors have expanded across the region, including growth along I-270, the Dulles Toll Road, Tysons Corner and I-95 South into Virginia, multifamily construction has followed. This is particularly the case for multifamily owner-occupied units. While most housing units across the region continue to be located in single-family communities and in tracts with less than 20 percent multifamily units, the number of high-density tracts has increased significantly over the past decade, thereby increasing the population living in multifamily housing across the region.

As illustrated in Figure 1, The District leads the region in multifamily housing units, supplying 27 percent of the region's multifamily housing. In fact, the core jurisdictions of The District, Alexandria, Montgomery County, Arlington County, Prince George's County, and Fairfax County account for 87.5 percent of the multifamily development, leaving just 12.5 percent of multifamily housing outside the center of the region. For this report, multifamily housing was defined as being located within buildings of two-or-more units. Townhouses or row houses are defined as single-family attached units. The maps in Appendix one illustrate the change in multifamily development by tract. Multifamily housing has been concentrated in The District, the City of Alexandria, Arlington County and Prince Georges County, as well as along the I-270, I-66, and I-95 corridors in Montgomery, Fairfax, and Loudoun counties.

Figure 1
Regional Shares of Multifamily Housing, 2011



Source: American Community Survey GMU Center for Regional Analysis

To better understand the character of the communities in which multifamily housing is located, the census tracts in the region were divided by the percentage of multifamily units located within the census tract. Table 1 illustrates the change in the housing type by concentration of multifamily units in the census tract. Between 2000 and 2011, the number of multifamily units increased by 2.8%, compared to an increase in single-family units of 17.1%. Within multifamily housing development, multifamily rental declined by 4.4%, compared to a 39.4% increase in multifamily homeownership in condominium and cooperative structures. This was particularly clear in the low-density tracts in which multifamily housing is often viewed as undesirable due to its reputation for poverty and unstable rental tenures. Multifamily rental housing particularly has declined or not grown at pace with the other types of housing across the region's jurisdictions.

Table 1
Change in Housing Unit Type by Multifamily Concentration, 2000-2011

Census Tracts % Multifamily	All Multifamily %	All Single- Family %	Multifamily owner- occupied %	Multifamily Rental %
0-20%	3.8	21.2	132.6	-26.1
20-40%	21.2	12.0	100.9	6.1
40-60%	6.4	23.4	18.1	3.9
60-80%	-9.5	-17.1	-3.9	-10.4
80-100%	1.3	-14.0	26.6	-4.1
All Tracts	2.8	17.1	39.4	-4.4

Source: American Community Survey, GMU Center for Regional Analysis

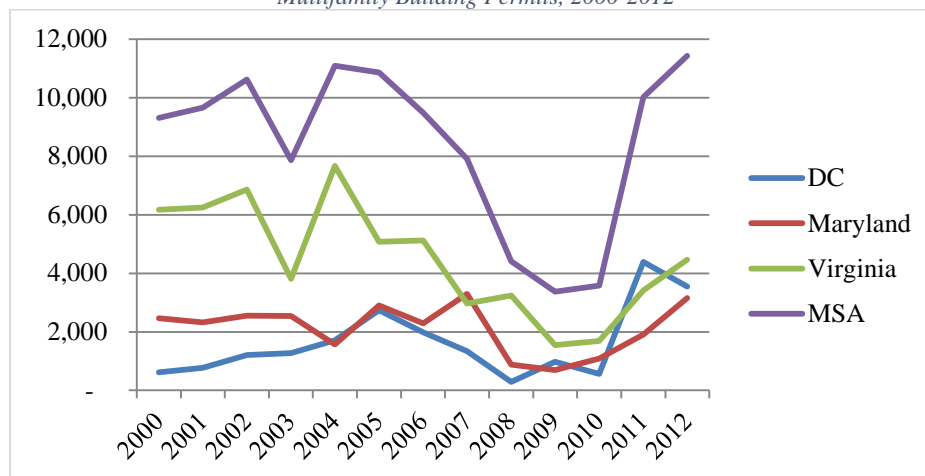
The decline in the amount of multifamily rental housing may reflect the increase in demand for homeownership during the middle part of the decade that depressed the rental housing market. However, this decrease resulted in an unmet demand for multifamily housing that resulted in low vacancy rates in

some markets and rising rents. Multifamily building permits have rebounded over the past three years across the region.

In Figure 2, the rise in the number of permits in the three-state region is shown. Over the past three years, the total number of permits annually increased from less than 4,000 in 2010 to almost 12,000 in 2012. Developers have ramped up production of Class A apartments, particularly in submarkets in The District and the core jurisdictions of the City of Alexandria, Arlington County and Montgomery County. Figures 3 and 4 illustrate the change in production of multifamily housing in the jurisdictions inside the beltway, as well as Loudoun, Prince William and Fairfax Counties.

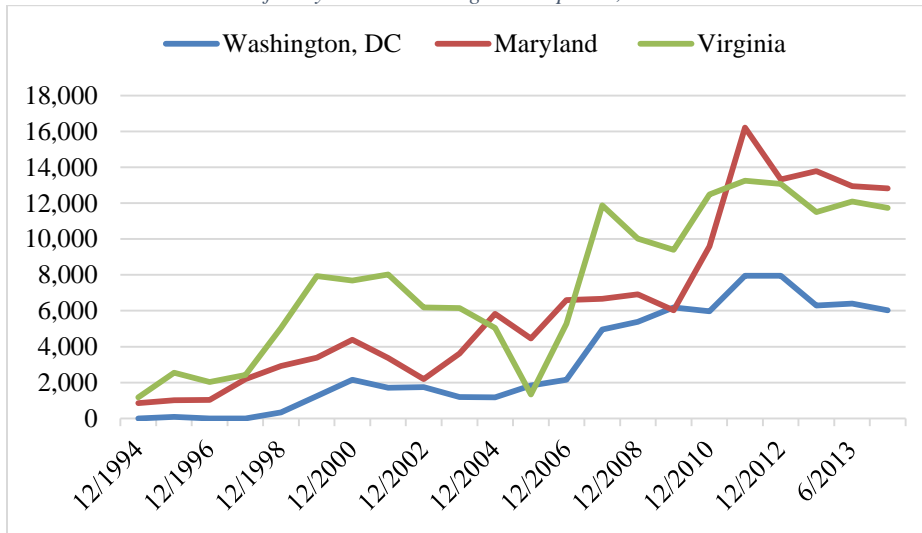
Although rental housing production has increased in all jurisdictions since the end of the recession, condominium production has not yet rebounded from the height of production in 2006. As has been widely researched, the condominium market declined precipitously over the past six years such that new condominium development has fallen to pre-market boom levels. Like a corresponding slow-down in the new construction single-family ownership market, the shift in demand may be partially attributable to the changing access to credit, employment instability, the recent bust in the condominium market, and a change in the perception of homeownership among multifamily residents. Figure 4 shows the flat condominium production over the past three years in DC, Maryland and Virginia.

Figure 2
Multifamily Building Permits, 2000-2012



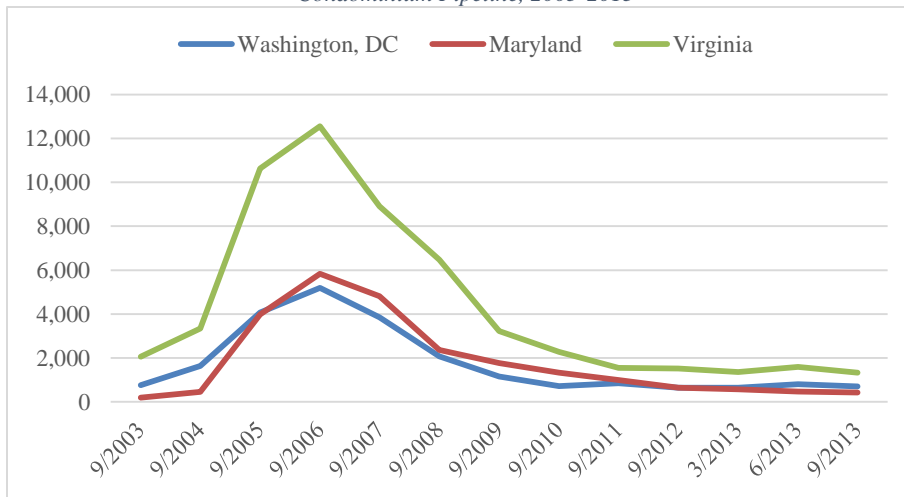
Source: US Census, GMU Center for Regional Analysis

Figure 3
Multifamily Rental Housing Unit Pipeline, 1994-2013



Source: Delta Associates, GMU Center for Regional Analysis

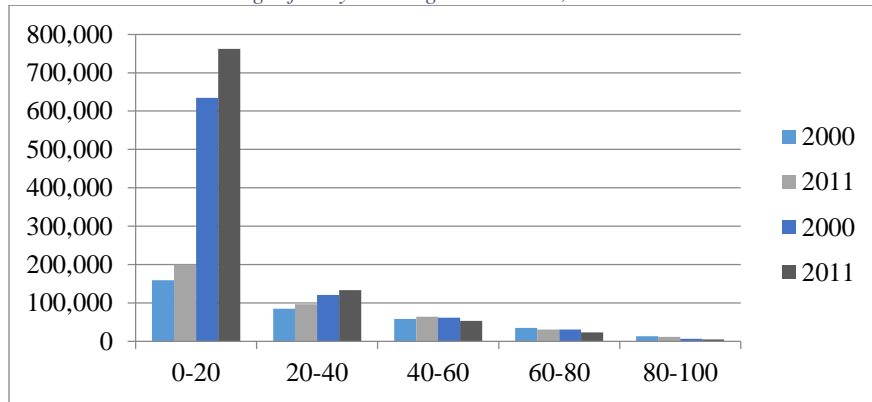
Figure 4
Condominium Pipeline, 2003-2013



Source: Delta Associates, GMU Center for Regional Analysis

An interesting trend in the region is that jurisdictions with low shares of multifamily housing experienced growth rates in the attached single-family stock that outpaced the single-family detached stock growth. Figure 5 illustrates the distribution of single-family housing by type for the multifamily concentration of the tracts in which they are located. Although the single-family stock declined in the higher multifamily density tracts, single-family attached housing stock grew in tracts with between zero and 60% multifamily housing units.

Figure 5
Single-family Housing Distribution, 2000-2011



Source: American Community Survey, GMU Center for Regional Analysis

The percentage change in the single-family housing supply is shown in Table 2 by tract density. While single-family units in the 0 to 20 percent multifamily concentration communities increased by 20.2 percent, attached units grew by 25.7 percent, compared to a 20.1 percent increase in detached units. Although attached single-family housing remains a small portion of the total stock, the growth of those units suggests a changing demand for more dense housing stock within the suburban context. However, attached single-family housing often requires rezoning or variance for development in suburban and exurban jurisdictions that may create a barrier to production.

Table 2
Change in Single-family Housing Supply by Tract Density, 2000-2011

Housing Type	0-20%	20%-40%	40%-60%	60%-80%	80%-100%	All Tracts
Attached %	25.7	14.5	9.5	-11.1	-9.4	15.3
Detached %	20.1	10.2	-13.2	-23.9	-22.9	14.4
Total Single-family %	21.2	12.0	-2.1	-17.1	-14.0	14.7

Source: American Community Survey, GMU Center for Regional Analysis

Most of the region's multifamily housing was constructed before the year 2000, with 61 percent built before 1980. Table 3 shows the age of multifamily housing by jurisdiction. The aging of the multifamily stock is most evident in the core. Prince George's and Arlington counties as well as the cities of Alexandria, Falls Church, Fairfax and The District have a particularly aging multifamily stock. This is likely due to the fact that multifamily has been a viable option for a larger number of families for decades, while suburban areas experienced minimal development of multifamily housing beyond the subsidized stock over the recent decades.

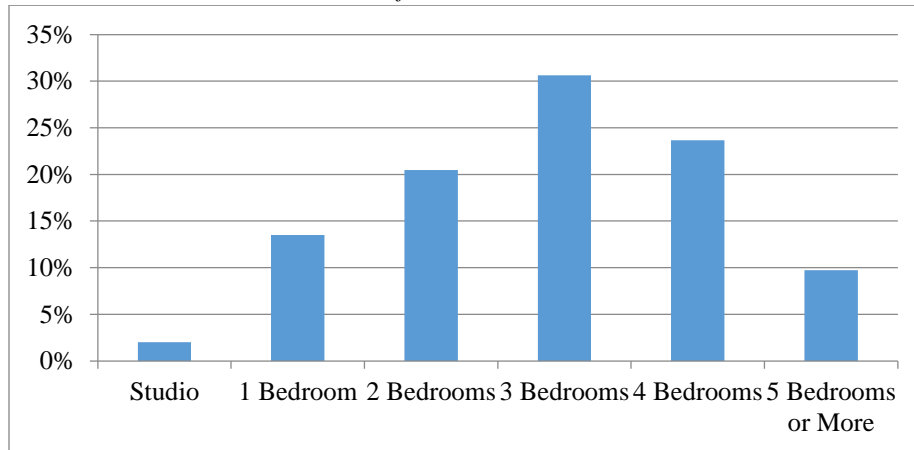
*Table 3
Percentage of multifamily stock by year built*

Jurisdiction	2000 or later	1980 to 1999	1960 to 1979	1940 to 1959	Before 1939
District of Columbia	9.7	8.3	27.7	30.0	24.3
Calvert	16.9	62.1	13.2	0.6	7.2
Charles	25.8	44.5	23.5	3.6	2.7
Frederick	21.7	40.1	20.7	6.1	11.6
Montgomery	16.3%	32.1	38.7	10.8	2.1
Prince George's	8.5	19.4	51.4	17.8	3.0
Arlington	17.4	24.7	28.9	25.8	3.1
Clarke	0.0	37.4	29.8	9.6	23.2
Fairfax	16.0	37.9	37.9	7.4	0.8
Fauquier	10.8	44.5	23.7	4.5	16.5
Loudoun	40.3	47.5	9.6	1.5	1.1
Prince William	24.3	44.9	25.5	4.1	1.1
Spotsylvania	19.1	56.8	20.3	3.5	0.4
Stafford	39.8	45.3	11.9	2.7	0.3
Warren	1.2	35.9	22.2	15.3	25.5
Alexandria city	11.4	22.1	45.5	17.9	3.1
Fairfax city	8.6	18.0	65.4	7.0	1.1
Falls Church city	19.7	12.0	55.7	11.9	0.76
Manassas city	11.4	51.1	26.3	6.8	4.5
Manassas Park city	78.1	7.4	7.7	4.3	2.6
Total	14.4	25.2	35.4	17.1	8.0

Source: American Community Survey, GMU Center for Regional Analysis

Figure 6 presents the types of housing that are available in the Washington, DC Region. A total of 74.5 percent of all housing units have between 2 and 4 bedrooms per unit, suggesting units that support families. Meanwhile only 15.5 percent of all units are studios or one bedrooms. Table four shows the significant disparity in the size of housing units among the region's jurisdictions. When homeownership and rental units are reported separately, it is clear that rental units are more likely to be smaller with 37.5 studio and one bedroom units, and 60.1 percent 2 to 4 bedroom units, compared to 3.99 percent and 82.4 percent of owner-occupied units.

Figure 6
Number of Bedrooms in all Units



Source: American Community Survey, GMU Center for Regional Analysis

Further, in the core, smaller units remain dominant while suburban jurisdictions have a higher share of their units with two or more bedrooms. This is largely due to the small number of multifamily buildings, relative to the entire stock. Although the number of families that choose to remain in the core jurisdictions may have increased, the low share of family-sized units suggests that these families may be living in single-family homes, rather than multifamily rentals or ownership units.

Table 4 shows the percentage of single-family rentals by jurisdiction. The suburbs are more likely to house their renters in single-family homes than core jurisdictions, consistent with the growth of younger, more affluent single or two person households in central jurisdictions. Regionally, the rental housing stock is similarly disparate, with the core jurisdictions dominated by studio and one bedroom rentals, while the suburban rentals have more bedrooms due to the large single-family rental stock.

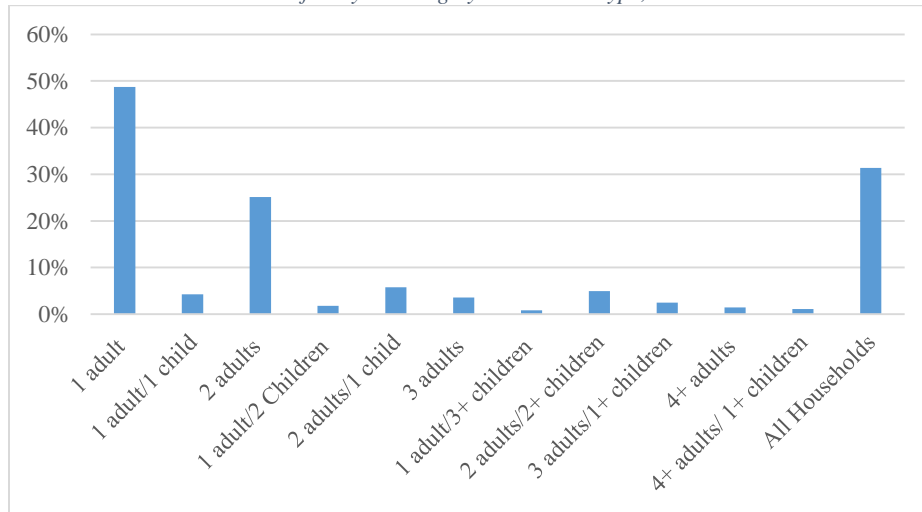
*Table 4
Number of Bedrooms in all Units by Jurisdiction, 2011*

Jurisdiction	0/1 Bedroom		2-4 Bedrooms		5 + Bedrooms		Percent Single-Family Rent
	Rent	Own	Rent	Own	Rent	Own	
District of Columbia	56.9	16.7	41.4	76.2	1.7	7.4	15.8
Calvert	21.4	0.9	77.6	84.9	1.0	14.3	52.5
Charles	18.9	0.6	79.1	87.9	2.0	11.5	55.9
Frederick	21.3	0.9	76.5	90.4	2.2	8.8	47.0
Montgomery	35.2	3.6	62.4	80.1	2.4	16.3	24.2
Prince George's	33.3	1.9	64.3	85.1	2.4	13.1	21.9
Arlington	53.0	13.1	45.7	78.3	1.3	8.7	14.4
Clarke	10.9	1.9	88.1	92.3	1.0	5.9	72.4
Fairfax	28.2	2.9	69.0	80.5	2.8	16.7	35.1
Fauquier	11.6	0.6	87.3	88.0	1.1	11.4	74.0
Loudoun	20.3	1.3	77.1	81.2	2.6	17.6	44.4
Prince William	18.5	0.8	75.5	85.0	6.0	14.2	50.2
Spotsylvania	12.6	0.4	84.9	89.3	2.5	10.3	68.9
Stafford	12.4	0.5	82.6	84.2	5.0	15.3	61.1
Warren	20.9	3.5	79.0	91.0	0.2	5.6	59.7
Alexandria City	49.1	14.3	50.2	81.6	0.7	4.2	16.5
Fairfax City	22.3	2.7	70.9	81.7	6.8	15.6	40.7
All Jurisdictions	37.5	4.0	60.1	82.4	2.3	13.6	30.1

Source: American Community Survey, GMU Center for Regional Analysis

Nearly three quarters (73.8%) of multifamily units in the Washington, DC region are occupied by one- or two-adult households. Figure 7 presents the household types living in multifamily housing in all jurisdictions in the region. Although suburban jurisdictions have larger units and larger households, the number of units that exist for these families is not sufficient enough to make an impact in a region where the multifamily housing is concentrated at the core of the region with one- and two-bedroom units. As suggested in the tables above, many multifamily residents living in suburban jurisdictions live in single-family units that are both more plentiful and have more bedrooms.

Figure 7
Multifamily Housing by Household Type, 2011



Source: American Community Survey, GMU Center for Regional Analysis

Rents and home values increased dramatically in all jurisdictions between 2000 and 2011. Table five shows the highest median rents in the region are in Fairfax City and Arlington and Loudoun Counties (\$1,653, \$1,604, and \$1,603, respectively) while home values were highest in Arlington County, Fairfax County, and Alexandria (\$575,600, \$493,100, and \$480,300, respectively). The District had the steepest increase in rents (41 percent), growing from \$807 per month in 2000 to a median rent of \$1,135 in 2011, followed by Arlington County (37 percent), Fairfax City (34 percent), and Loudoun County (29 percent). Home values increased the greatest in the District (116 percent), and Clarke County (96 percent), all jurisdictions which have experienced significant residential construction over the past decade.

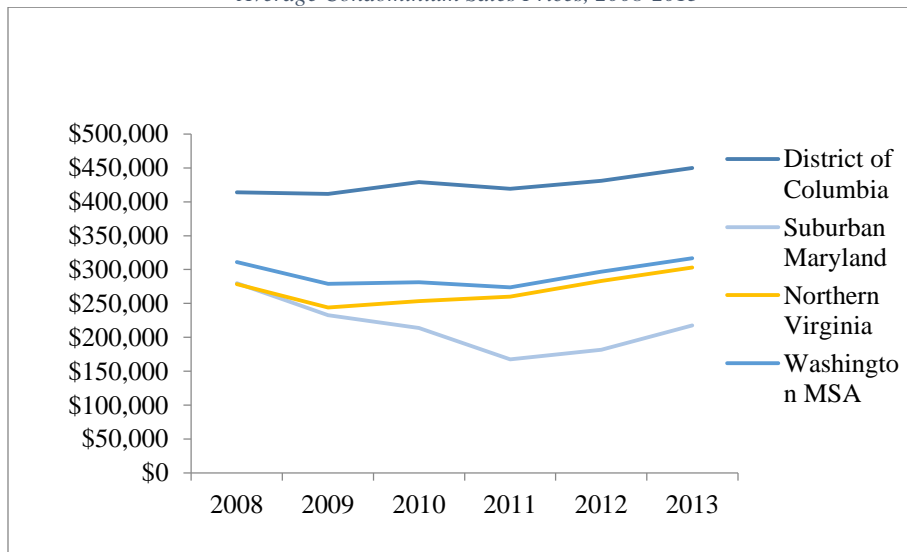
*Table 5
Value and Rent Costs of housing units by Jurisdiction, 2000 to 2011*

Jurisdiction	Median value, 2000	Median Rent, 2000	Median Value 2011	Median Rent 2011	Change in Value %	Change in rent %
District of Columbia	\$205,345	\$807	\$442,600	\$1,135	115.5	40.6
Calvert	\$221,020	\$1,093	\$384,500	\$1,321	74.0	20.9
Charles	\$199,858	\$1,120	\$341,200	\$1,370	70.7	22.3
Frederick	\$209,263	\$939	\$335,600	\$1,184	60.4	26.1
Montgomery	\$289,729	\$1,193	\$469,900	\$1,473	62.2	23.5
Prince George's	\$190,192	\$962	\$312,800	\$1,180	64.5	22.7
Arlington	\$342,764	\$1,171	\$575,600	\$1,604	67.9	37.0
Clarke	\$182,224	\$816	\$356,700	\$1,038	95.8	27.2
Fairfax	\$304,751	\$1,303	\$493,100	\$1,572	61.8	20.6
Fauquier	\$212,529	\$920	\$376,100	\$1,148	77.0	24.8
Loudoun	\$261,906	\$1,246	\$472,000	\$1,603	80.2	28.7
Prince William	\$195,417	\$1,126	\$353,300	\$1,402	80.8	24.5
Spotsylvania	\$167,855	\$1,051	\$286,800	\$1,213	70.9	15.4
Stafford	\$204,300	\$1,099	\$334,800	\$1,329	63.9	20.9
Warren	\$142,121	\$693	\$244,000	\$884	71.7	27.6
Alexandria city	\$330,224	\$1,124	\$480,300	\$1,395	45.5	24.1
Fairfax city	\$250,933	\$1,234	\$472,600	\$1,653	88.3	34.0

Source: US Census, GMU Center for Regional Analysis. All 2000 data have been adjusted to 2011 dollars

After a post-recession decline in the price of multifamily homeownership units, sales prices are on the rise in all jurisdictions, with the regional average sale price of condominiums rising to \$316,000 by the end of 2013. There was regional variation in average sales prices with suburban Maryland averaging just \$217,000 while The District condominiums averaged almost \$450,000 last year and the average Northern Virginia condominium sales price was \$303,000.

Figure 8
Average Condominium Sales Prices, 2008-2013



Source: Metropolitan Regional Information Systems (MRIS), GMU Center for Regional Analysis

Multifamily Housing Supply: Key Findings

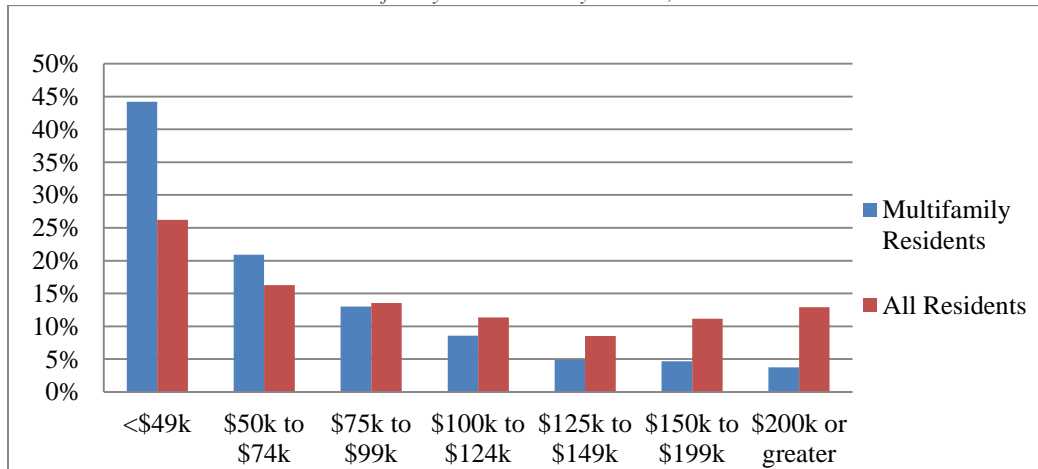
- The supply of multifamily housing increased by 2.8% between 2000 and 2011, led by a 36.4% growth in multifamily home ownership.
- Since 2011, the production of multifamily housing has increased, particularly in the rental housing sector. Multifamily building permits increased from a low in 2009 of 3,375 to a high of 11,424 in 2012 permits, outpacing single-family housing permits.
- Median rents and home values increased between 2000 and 2011. The District led the region in terms of both rent and home value increases during this period. The highest rents in the region were in the City of Fairfax (\$1,653) and Arlington County (\$1,604). Arlington County (\$575,600) and Alexandria (\$480,300) had the highest median home values.
- Rental housing markets in jurisdictions with low rates of single-family rental are dominated by small units (studio and one-bedroom units). These jurisdictions also lead the region in the percentage of one- and two-adult households living in multifamily housing. Meanwhile, renters in suburban communities are likely to live in single-family housing, rather than multifamily housing.
- The amount of attached single family housing grew in suburban jurisdictions, outpacing the growth in detached single family housing.

Demand for Multifamily Housing

The demand for multifamily housing in the Washington, DC region is changing. From demographic shifts by age and family formation to income and job changes, more multifamily housing will be required to meet a wider variety of needs.

Residents living in multifamily households are more likely to have incomes of less than half of the region's area median income (AMI)¹ as shown in Figure 9. Further, they are most likely to be one- or two- adult households with non-Hispanic White householders. Low- and moderate-income households currently heavily rely on multifamily units for housing. They are disproportionately represented among the multifamily housing residents, occupying almost half of the multifamily units across the region, compared to just over twenty percent of the housing stock overall. Given the incomes of the residents, compared to the cost of housing, it is likely that many of these households receive either a place-based subsidy or a housing choice voucher. Meanwhile, those households earning greater than \$100,000 annually are underrepresented in the multifamily housing stock, suggesting that single-family housing options are greatest for those earning higher salaries.

*Figure 9
Multifamily Households by Income, 2010*



Source: American Housing Survey, GMU Center for Regional Analysis

The character of the region's multifamily residents varies. Table 6 presents the income by county of residents living in multifamily housing in the region's jurisdictions for which these data are available. Region wide, more than three quarters of multifamily residents earn less than \$100,000 annually. Although regionally, the majority of multifamily residents earn less than \$100,000, jurisdictions in the urban core, including The District, Alexandria, Arlington County and Montgomery County had significantly more income diversity in multifamily households compared to the less developed suburban jurisdictions where there are more single-family options for high-income households. In The District, for example, 49.6 percent of multifamily residents earn less than \$49,000 per year, compared to 33.5 percent in Alexandria and 53.4 percent in Prince George's County. By contrast, 5.8 percent of multifamily residents in the District, 3.4 percent in Alexandria, and 0.6 in Prince George's earned more than \$200,000 annually. The income diversity in the core jurisdictions suggests that multifamily housing is viewed as more than just an affordable option. Instead, for many households, the decision to live in a multifamily

¹The Area Median Income (AMI) for the Washington Metropolitan Statistical Area is \$107, 500
George Mason University Center for Regional Analysis

unit may represent a desire to live in denser communities, have fewer maintenance responsibilities, or may offer greater flexibility.

*Table 6
Income of Multifamily Residents, 2010*

Jurisdiction	<\$49k	\$50k to \$74k	\$75k to \$99k	\$100k to \$124k	\$125k to \$149k	\$150k to \$199k	\$200k or greater
Washington, DC	49.6	16.1	10.8	8.0	4.8	4.9	5.8
Charles	61.8	13.3	12.5	5.8	0.6	1.6	4.4
Calvert	48.0	22.8	11.5	9.1	2.8	4.4	1.5
Frederick	53.0	20.8	11.0	5.2	6.1	1.9	2.1
Montgomery	43.8	22.9	12.7	7.7	4.3	5.2	3.5
Prince George's	53.4	24.7	11.3	6.1	2.3	1.6	0.6
Arlington	26.7	19.6	16.5	13.0	8.2	9.1	6.9
Fairfax	34.8	21.6	16.6	11.8	6.1	5.1	3.9
Prince William	51.9	19.8	14.8	6.2	3.5	2.6	0.8
Loudoun	43.2	24.6	11.4	5.8	7.4	5.1	2.4
Stafford	54.4	20.9	12.7	6.6	2.6	2.0	0.7
Alexandria City	33.5	25.8	14.4	10.6	6.7	5.7	3.4
All Multifamily	44.2	20.9	13.0	8.6	4.9	4.7	3.7

Source: American Housing Survey, GMU Center for Regional Analysis

The racial and ethnic composition of multifamily residents is shown on Table 7. Residents of multifamily housing are a diverse representation of the population. Non-Hispanic Whites represent 39 percent of multifamily residents in the region, followed by African Americans (30.4 percent) and Latinos (10.6 percent). Within the jurisdictions, there is significant variation based on the concentration of minorities and the size of the existing multifamily housing stock.

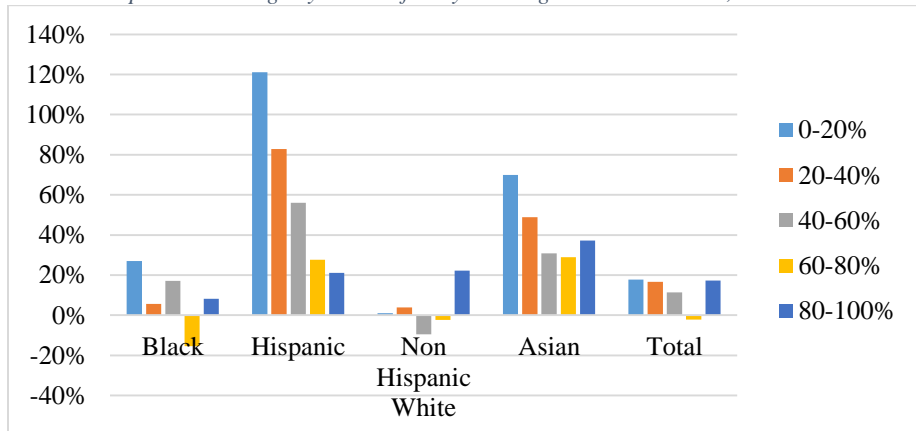
*Table 7
2011 Multifamily Householder Race*

Jurisdiction	White Not Hispanic	Black	Latino
District of Columbia	35.0	38.1	7.7
Calvert	72.5	17.4	2.1
Charles	30.0	50.4	3.0
Frederick	64.5	13.2	6.5
Montgomery	43.8	23.9	12.5
Prince George's	9.0	66.3	10.6
Arlington	54.5	8.9	9.9
Clarke	54.1	13.4	4.5
Fairfax	45.8	13.9	13.7
Fauquier	58.5	9.9	8.3
Loudoun	53.8	11.5	10.9
Prince William	36.6	28.9	15.4
Spotsylvania	69.8	20.4	3.5
Stafford	51.6	23.7	5.4
Warren	70.0	8.3	6.3
Alexandria	46.4	20.4	11.4
Fairfax	58.1	4.7	13.5
All Jurisdictions	38.5	30.4	10.6

Source: American Housing Survey, GMU Center for Regional Analysis

The communities in which these residents live have changed over the past decade. As shown in Figure 10, the population of low-density neighborhoods (measured by the concentration of multifamily housing in the census tract) continues to grow as more areas that were formerly farm land or other undeveloped properties have been subdivided and developed for single-family homes. However, high-density tracts kept pace. The lowest density neighborhoods grew by just over twenty percent, while 20 to 40 percent multifamily tracts grew by approximately 18%, followed by 80 to 100 percent tracts, which grew at just under 15% between 2000 and 2011. The population growth in suburban jurisdictions was most pronounced in Latino and Asian populations that experienced the greatest overall growth in low-density communities, suggesting a growing diversity in suburban jurisdictions. Further, the White population grew dramatically in the highest density tracts.

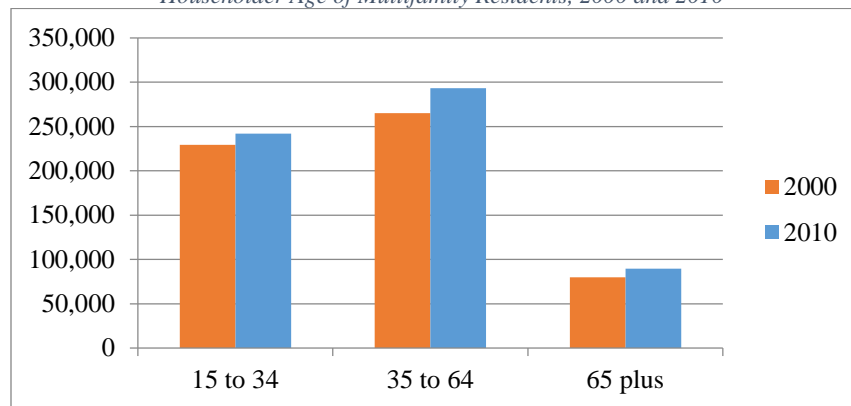
Figure 10
Population Change by % Multifamily Housing Units in the Tract, 2000-2011



Source: American Community Survey, GMU Center for Regional Analysis

The age distribution of multifamily residents suggests a high concentration of residents between the ages of 35 and 64, compared to the younger demographic, consistent with the neighborhoods in which multifamily housing is concentrated. Figure 11 shows the change in the householder age for those living in multifamily housing in 2000 and 2010. While all age groups living in multifamily housing experienced increases between 2000 and 2010, growth was slower in younger households. The number of multifamily householders between the ages of 15 and 34 grew by 5.6% while householders between 35 and 64 and over 65 increased by 10.5% and 12.3%, respectively. In some jurisdictions, these increases were exaggerated. In the City of Fairfax and Loudoun County, seniors living in multifamily housing increased by 85.6% and 78.0 percent, respectively, compared to overall multifamily rates of change of -4% and 65%, respectively. This is likely due to the growth in multifamily production in the newly developed town center areas and the growth in senior and assisted living facilities. Long-term residents who have owned homes and wish to remain in their communities are able to downsize to smaller units with improved access to shopping and dining.

Figure 11
Householder Age of Multifamily Residents, 2000 and 2010

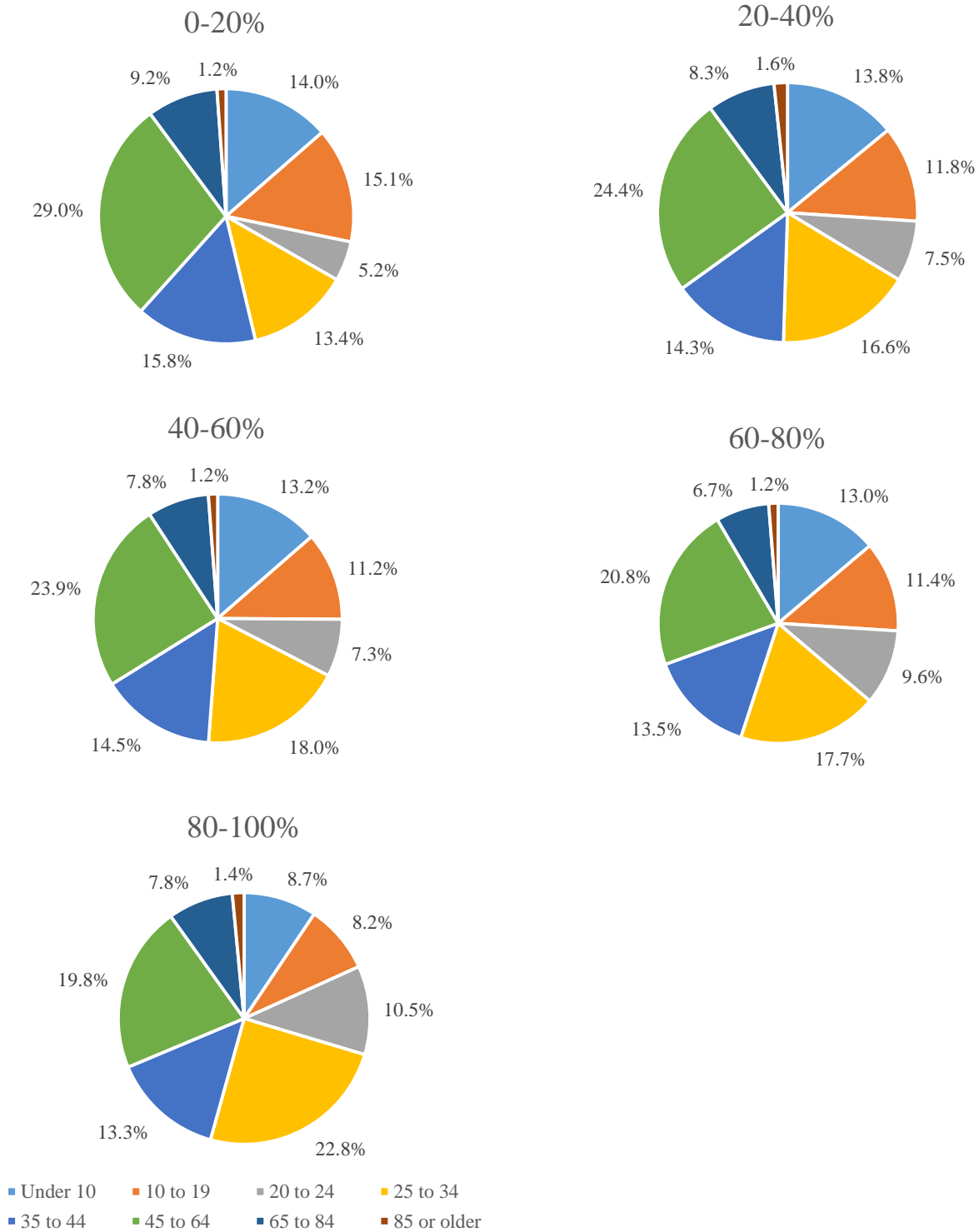


Source: American Housing Survey, GMU Center for Regional Analysis

The neighborhoods in which multifamily housing is being built reflect these changes. In Figure 12 census tracts are broken out by the shares of multifamily housing in them and the age distribution of the residents in those tracts is presented. In the neighborhoods with the lowest density of multifamily housing, those residents under 20 years old and between 45 and 64 represented 58.0 percent of the population. Although

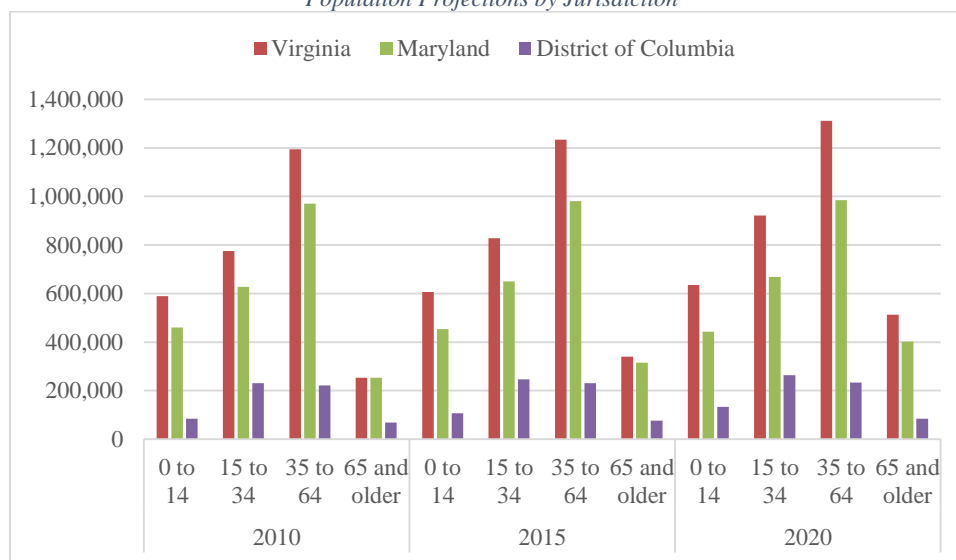
the higher density communities were dominated by residents over the age of 20 as they increased in density, the share of population by the age of the adults did not vary widely across the densities.

Figure 12
Age by Multifamily Housing Concentration



While the region continues to attract new workers who typically fall into the 15 to 34 year old cohort, many families also remain in the region to raise children, move through their careers and raise children. In Figure 13, the projection of population by state in the region is presented. The population of seniors will increase by an average of 27.0 percent between 2010 and 2015 and another 36.8% on average between 2015 and 2020. While core jurisdictions will see small increases in the population of seniors, this may be offset by increases in the population of residents under 15 years old. In the District, for example the increase in the child population (27.1 percent) will far exceed the comparatively modest regional growth of 3.2 percent. This growth expectation presents problems given both the continuing rise in home values and rents, as well as the prevalence of studio and one bedroom units.

Figure 13
Population Projections by Jurisdiction



Source: US Census, Metropolitan Washington Council of Governments, GMU Center for Regional Analysis

Table 8
Projected Regional Population Growth by Age Cohort: Percent

Years	Age Range	Virginia	Maryland	District of Columbia	Core Jurisdictions	Suburban Jurisdictions	Total
2010 to 2015	0 to 14	2.8	-1.6	27.1	6.0	1.0	3.2
	15 to 34	6.9	3.6	7.0	2.6	9.1	5.5
	35 to 64	3.3	1.0	4.3	2.3	3.1	2.7
	65 and older	34.1	24.4	10.2	19.4	36.2	27.0
	Total	8.0	4.0	9.8	5.3	7.8	6.5
2015 to 2020	0 to 14	4.7	-2.3	25.1	5.9	2.8	4.3
	15 to 34	11.2	2.7	7.2	2.3	13.1	7.3
	35 to 64	6.4	0.4	1.2	0.9	6.2	3.7
	65 and older	50.9	27.9	10.2	22.3	52.0	36.8
	Total	7.1	4.1	8.3	4.9	7.2	6.0

Even though the region is anticipated to have almost 19,000 multifamily rental units come on line in 2014 (shown on Table 9), there will still not be sufficient units to accommodate the approximately 66,000 households that will need multifamily units by 2015. These households will likely live in roommate situations, live in single-family rental housing, or stay with parents or other family members.

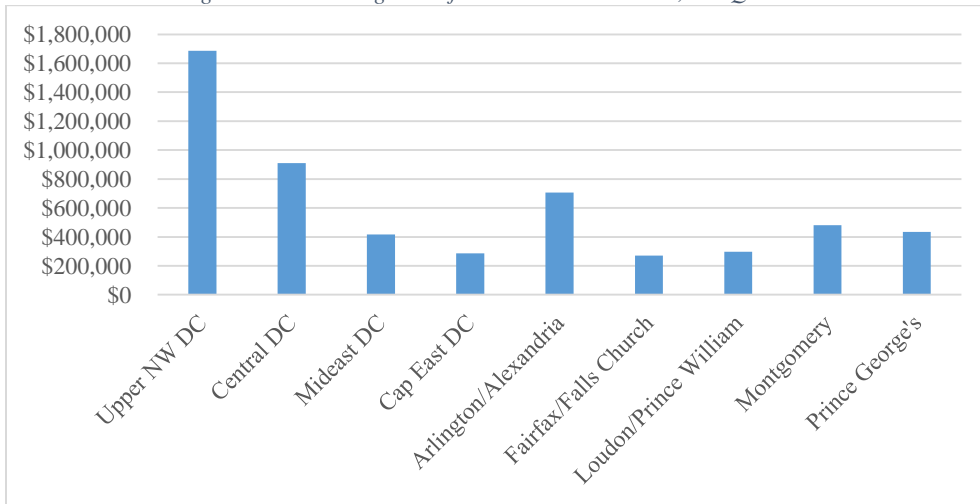
Table 9
Multifamily Rental Pipeline

Market	Rental Units	For Sale Units
District of Columbia	6,103	757
Upper Northwest	263	52
Central	956	590
Capitol Hill/ Riverfront / Hill East	2,985	4
Northeast/MidEast	662	111
Maryland	10,067	194
Frederick County	160	0
Montgomery County	6,099	179
Prince George's County	3,808	15
Virginia	11,736	2,059
Arlington/Alexandria	3,334	638
Fairfax/Falls Church	6,778	1,014
Loudoun/Prince William	1,624	407
Total	18,906	3,010

Source: Delta Associates, GMU Center for Regional Analysis

Moreover, the rising costs of both rents and condominium purchase prices in many markets will make these new units inaccessible to the growing low- and moderate-income members of the region's workforce. A Center for Regional Analysis report, *Housing the Region's Future Workforce*, suggests that almost half of new rental units will need to rent for less than \$1,250 per month, while 16 percent of new for-sale homes will need to be priced less than \$200,000. Although smaller multifamily units could address some of this demand, currently new condominiums on the market average more than \$400,000 in most markets, with some central markets, such as The District and Arlington and Alexandria averaging more than \$600,000. Figure 14 shows the asking price for new condominiums in the third quarter of 2013.

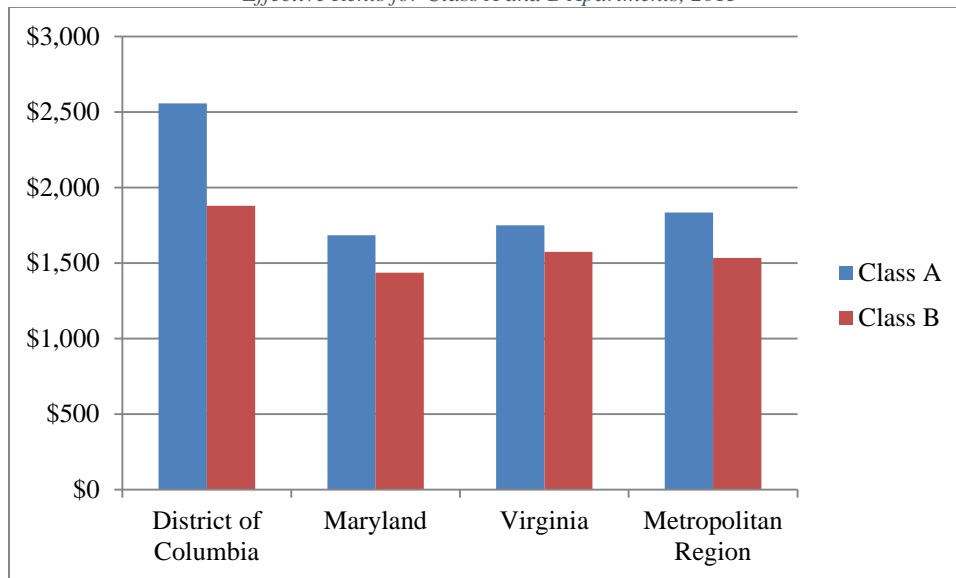
Figure 14
Average Contract Asking Price for New Condominiums, 3rd Quarter 2013



Source: Delta Associates, GMU Center for Regional Analysis

Rents for new units are similarly out of reach. Figure 15 presents the average rents for Class A and Class B apartments. On average, Class A apartments in the region rented for \$1,834 and Class B Apartments rented for \$1,535. The prices were highest in The District (\$2,556 for Class A and \$1,880 for Class B). While this represented a slight drop in rents due to the unusually high production of multifamily housing, the decline in building permits for 2013 should reduce vacancy rates by 2015, leading to an increase in rents.

Figure 15
Effective Rents for Class A and B Apartments, 2013



Source: Delta Associates, GMU Center for Regional Analysis

Multifamily Housing Demand: Key Findings

- Residents of multifamily housing are concentrated in the low- to middle- income brackets with 44.2% earning less than \$50,000 per year and 78.1% earning less than \$100,000 per year.
- Multifamily residents are less likely to be Non-Hispanic White than the population generally. A notable exception to this is in The District where African Americans made up about half of the population, but only 38.1% of the multifamily householders. Multifamily householders between the ages of 45 and 64 made up the largest share of the multifamily population. However, the number of multifamily householders over 65 grew the fastest with an increase of 12.3% between 2000 and 2010.
- The communities in which multifamily housing is located have changed since 2000. Latino population grew by 133.5% in communities with the smallest percentages of multifamily housing compared to the 23.3% growth rate for all ethnicities, 11.3 for Non-Hispanic White and 34.6% for African Americans.
- The demand for multifamily housing will continue to rise, with approximately 66,000 households in need of units. These households will be likely to earn less than \$100,000 annually and be younger than 35 years old.
- New multifamily permits peaked in 2012, meaning that new multifamily development will slow after the 19,000 units scheduled to deliver in 2014 are completed and absorbed by the market.

Conclusions and Implications

Although much of the recent multifamily housing development in the Washington region has focused on one- and two-adult households under 35 years old that have dominated the submarkets in The District, Arlington County, and Alexandria, multifamily housing will need to change in order to meet the demands of an increasingly diverse market. Multifamily housing, whether rental or owner-occupied, is no longer the housing of last resort. Increasingly, residents choose these options to be closer to jobs, shopping, restaurants, and parks; to reduce maintenance responsibilities inherent in single-family homeownership; or to allow for greater flexibility and mobility in employment. Further, for many households traditional ownership may not be accessible due to wage levels, salary instability, or lack of affordable financing.

Seniors, Families and College Graduates will demand different types of housing

Multifamily housing will need to diversify in order to meet the growing demand from seniors, families with young children, and residents outside the urban core jurisdictions. Not only will the housing need to reflect these needs in terms of size, building amenities, and costs, but the neighborhoods will necessarily be different to reflect the needs of these growing populations in the region. Attached single-family and multifamily housing units in the suburban communities, where many aging families already live, will provide attractive and pedestrian-friendly options for seniors to downsize without leaving their current communities.

For example, at One Loudoun in Ashburn, VA, townhouse and dense single-family development is providing access to shopping and urban-style amenities for a growing number of residents. Meanwhile, developers in Crystal City have responded to a growing demand for play rooms and children’s amenities in their buildings that meet the needs of a changing demographic. In the District, infill adaptive reuse developments in neighborhoods like Capitol Hill and Columbia Heights have allowed small condominium buildings to flourish. These developments provide access to quality schools and parks as well as shopping, restaurants, and downtown jobs.

New Multifamily Housing will need to meet the needs of a range of incomes

While newly developed multifamily units have mainly met the needs of individuals and households with above-average incomes, the rising rents and asking prices for these units put them out of reach of many recent college graduates and younger families. As renter incomes decline, and rents and home values increase, fewer housing options are available to middle-income and low-income households. Moreover, the growing number of college graduates moving to and working in the region will need affordable housing options such as smaller units and shared apartments. There will also be a growing need to preserve the existing stock of low- and moderate-income housing, especially Class B apartments to provide housing for the growing number of service and health industry workers in the region.

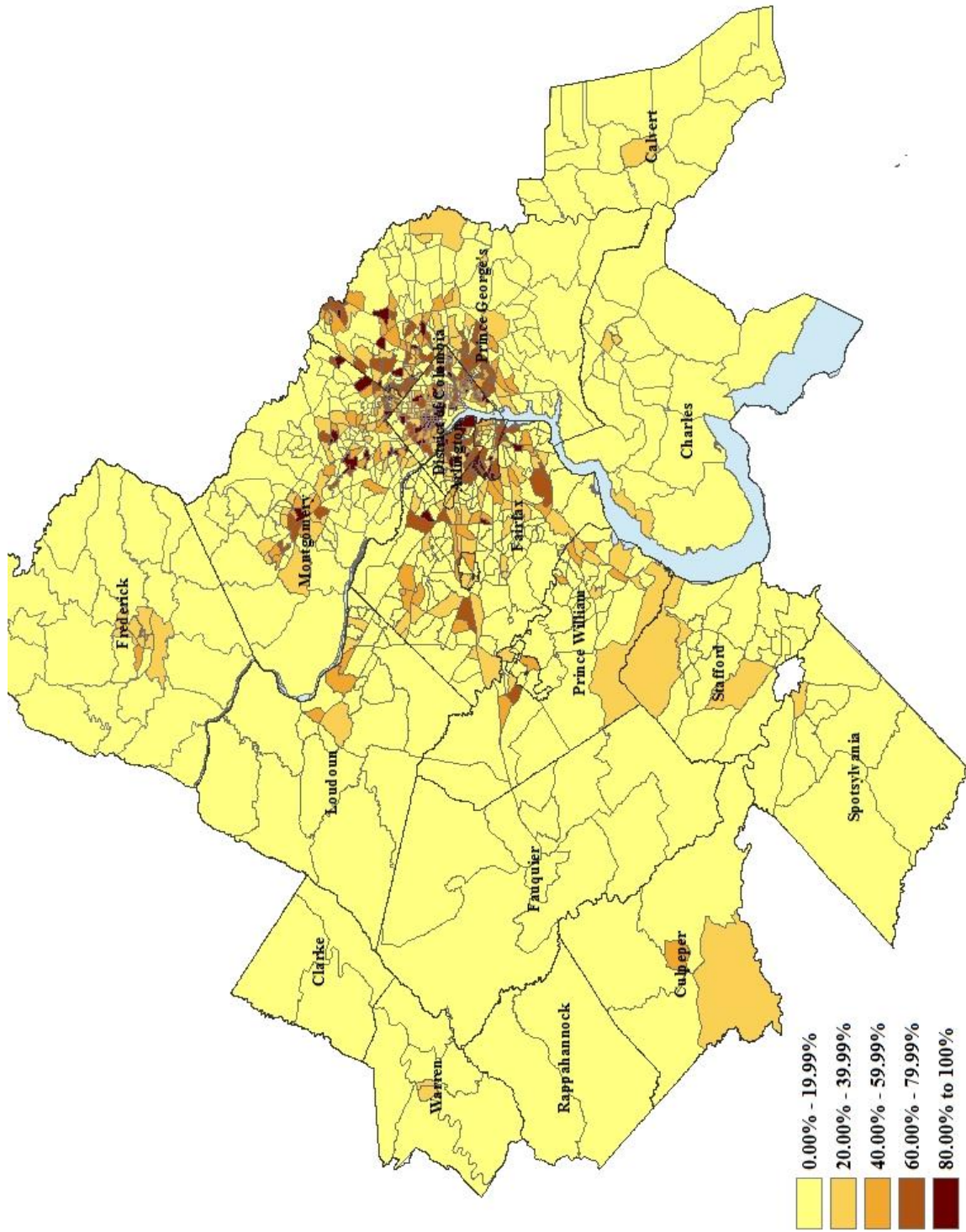
Arlington County has developed a plan to preserve affordable multifamily housing units as it redevelops the Columbia Pike Corridor to include housing, transportation and other neighborhood amenities. Meanwhile, the District and housing developers worked to preserve housing units in its 2008 redevelopment of Columbia Heights. As a result, more than 2,300 multifamily housing units were created or preserved at various affordable rents in addition to the market-rate retail and housing development.

Local jurisdictions should remove barriers to construction and support the changing demand for housing

Multifamily housing has traditionally been considered to be incompatible with detached single-family neighborhood development due to its perceived effects on property values, demands on municipal services, and potential for attracting poor residents. However, as this research suggests, the residents of and demand for multifamily housing is diverse – from seniors hoping to remain in their communities as they age to young families, wanting to have more walkable access to parks and amenities. As the *Housing the Region’s Future Workforce* report argued in 2013, “A lack of sufficient housing within the Washington DC area and located in proximity to the region’s employment centers and to transit will lead to increased traffic and transit congestion, and will result in longer commutes, lower worker productivity, and declining quality of life for all residents of the region.”

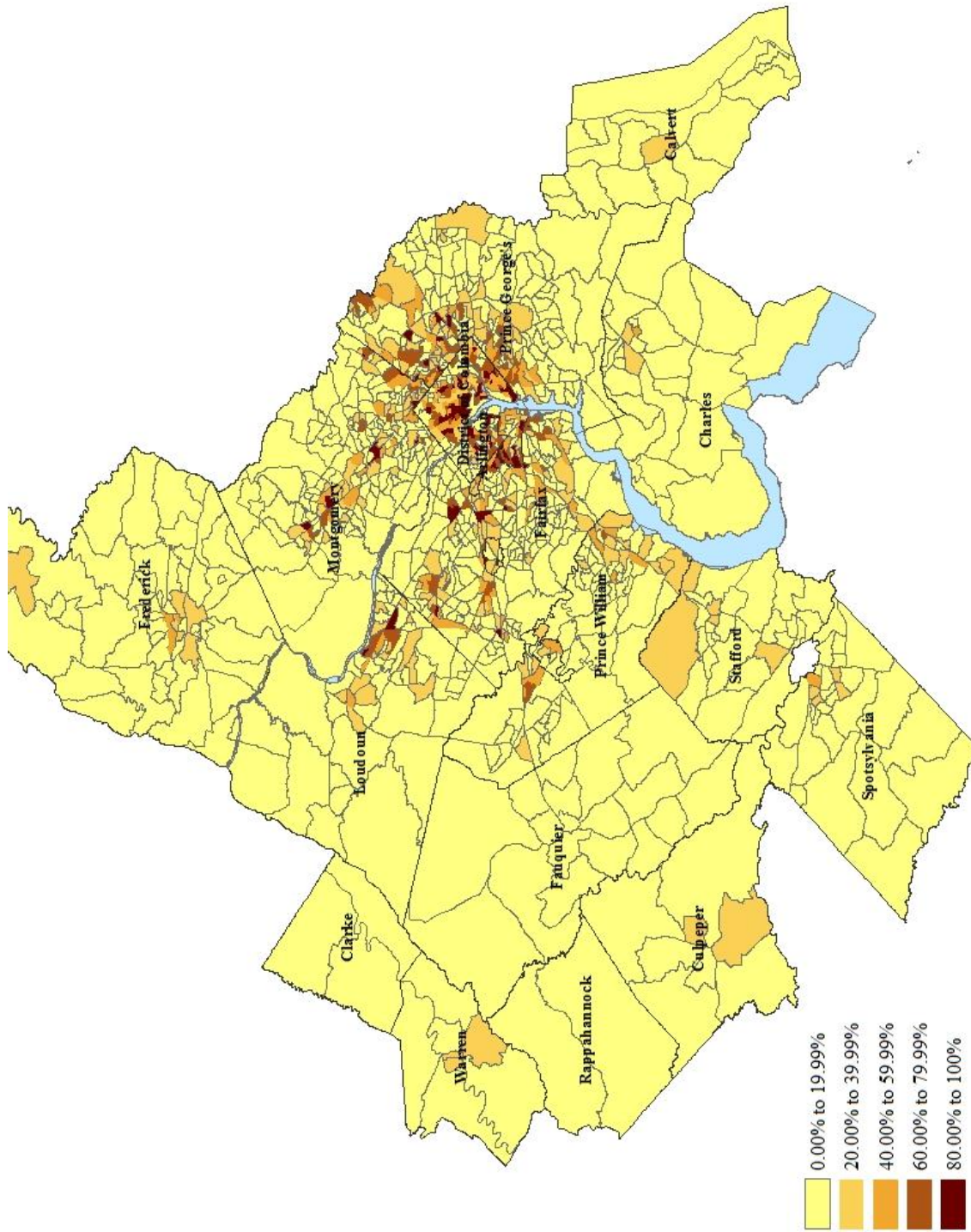
Appendix 1: Maps

Figure 1 Washington, DC Regional Multifamily Housing Stock, 2000



Source: American Communities Survey, GMU Center for Regional Analysis

Figure 2: Washington, DC Regional Multifamily Housing Stock, 2011



Source: American Communities Survey, GMU Center for Regional Analysis

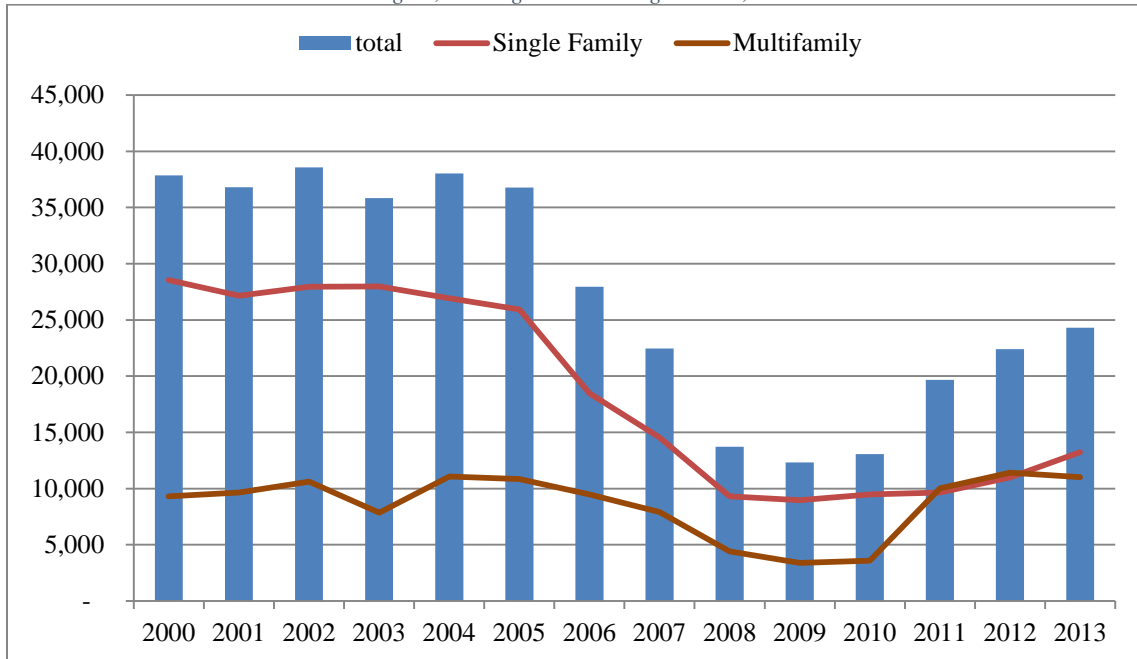
Appendix 2: Tables and Charts

1: Residential Housing Units by Jurisdiction

	Total Units	All Multifamily	Multifamily Ownership	Multifamily Rental
Arlington	92,436	54,538	12,287	42,251
Clark	5,564	366	9	357
Culpeper	15,750	1,753	13	1,740
Fairfax County	399,962	101,750	26,647	75,103
Fauquier	22,888	1,389	115	1,274
Loudon	99,761	15,432	3,874	11,558
Prince William	127,170	19,400	3,061	16,339
Spotsylvania	41,282	2,897	71	2,826
Stafford	188,568	18,359	2,059	16,300
Warren	14,203	1,531	61	1,470
Alexandria	64,217	38,888	9,379	29,509
Fairfax City	8,470	2,065	529	1,536
Falls Church	4,807	1,868	431	1,437
Manassas	11,872	2,900	398	2,502
Manassas Park	4,238	776	240	536
Calvert	93,907	10,139	1,062	10,139
Charles	50,305	4,430	368	4,430
Frederick	85,048	10,846	2,520	10,846
Montgomery	355,434	84,109	29,244	84,109
Prince George's	302,091	84,725	9,849	84,725
Washington, DC	260,136	157,434	32,391	125,283

Source: American Community Survey, GMU Center for Regional Analysis

2: Washington, DC Regional Building Permits, 2000-2013



Source: American Community Survey, GMU Center for Regional Analysis

3: Change in Housing Type by Age, 2000-2011

	Total		15 to 34 Years Old		35 to 64 Years Old		65 and older	
	Single-Family	Multi-family	Single-Family	Multi-family	Single-Family	Multi-family	Single-Family	Multi-family
Arlington	15.5	-0.5	-8.4	21.1	10.2	-2.9	-2.7	-6.1
Clarke	12.4	10.8	-11.5	96.8	19.2	2.4	4.5	-11.3
Culpeper	34.3	21.1	41.8	-24.1	38.6	21.8	18.7	41.4
Fairfax	10.3	5.4	-1.6	5.6	7.2	11.7	23.3	24.3
Fauquier	16.7	0.1	-18.1	-7.1	17.5	-4.4	28.6	16.5
Loudoun	61.9	48.7	20.3	52.7	71.6	74.1	48.9	78.0
Prince William	37.7	17.7	24.3	1.2	33.4	41.3	95.3	16.3
Spotsylvania	27.3	48.1	7.4	133.0	36.7	39.7	48.1	-2.2
Stafford	29.5	48.2	20.2	40.6	33.8	71.2	51.4	57.8
Warren	18.2	14.1	9.6	-2.9	20.6	25.7	14.4	71.5
Alexandria	17.7	-6.8	-7.1	-3.7	17.0	0.0	3.7	5.3
Fairfax City	10.8	-4.3	27.6	-1.6	8.7	-21.7	5.9	84.6
Falls Church City	11.2	-3.8	-28.3	-11.0	21.5	0.2	-13.7	22.1
Manassas	-2.4	4.9	-21.9	-16.8	3.2	22.8	-2.3	33.2
Manassas Park	16.9	75.0	-5.4	199.0	17.2	848.6	13.7	120.0
Calvert	18.8	20.9	-16.7	19.7	25.7	71.1	26.3	51.8
Charles	24.2	3.8	-9.7	47.7	23.9	23.5	37.9	6.4
Frederick	20.7	14.3	-4.4	7.3	21.9	39.6	26.6	27.7
Montgomery	9.8	6.7	-15.1	11.3	8.9	12.3	13.6	23.1
Prince George's	9.5	-1.4	-0.7	-13.7	8.0	8.8	18.5	10.0
Washington, DC	10.5	-1.1	5.8	7.9	4.0	7.1	-9.1	-4.2
Total Region	16.3	4.3	0.1	5.6	15.6	10.5	18.3	12.3

Source: American Community Survey, GMU Center for Regional Analysis