PRICED OUT

Persistence of the Workforce Housing Gap in the Washington, D.C., Metro Area

Urban Land Institute
Terwilliger Center for Workforce Housing

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RCLCO
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About the Urban Land Institute

The Urban Land Institute is a 501(c)(3) nonprofit research and education organization supported by its members. Founded in 1936, the Institute now has more than 33,000 members worldwide representing the entire spectrum of land use and real estate development disciplines, working in private enterprise and public service. As the preeminent, multidisciplinary real estate forum, ULI facilitates the open exchange of ideas, information, and experience among local, national, and international industry leaders and policy makers dedicated to creating better places.

The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. Members regard ULI as a trusted idea place where leaders come to grow professionally and personally through sharing, mentoring, and problem solving. With pride, ULI members commit to the best in land use policy and practice.

About the ULI Terwilliger Center for Workforce Housing

The ULI Terwilliger Center for Workforce Housing was established by J. Ronald Terwilliger, chairman and CEO of Trammell Crow Residential, to expand housing opportunities for working families. The mission of the center is to serve as a catalyst in increasing the availability of workforce housing in high-cost communities by harnessing the power of the private sector.

The center supports the development of mixed-income communities close to employment centers and transportation hubs. Through a multifaceted approach, the center facilitates research, advocates for public policy change, publishes best practices, convenes housing experts, and works to eliminate regulatory barriers to the production of workforce housing.

About RCLCO (Robert Charles Lesser & Co.)

This report was prepared by RCLCO (Robert Charles Lesser & Co.) for the ULI Terwilliger Center for Workforce Housing. RCLCO is a full-service real estate advisory and land use economics firm with offices throughout the United States. Contributors to this report include Leonard Bogorad, Laura Cole, Michelle Loutoo Wilson, Lindsay Duerr, and Elisabeth Putney Mygatt.

REPORT DESIGN BY SW CREATIVES, LLC

Executive Summary

Despite recent shifts in the regional housing market, land values and home prices in the Washington, D.C., metropolitan area remain unattainable for a large portion of workforce households. While the metro area as a whole has experienced an increase in affordability over the past few years, this study finds that workforce households—those with incomes 60 to 100 percent of area median income (AMI)—are priced out of rental and for-sale housing proximate to major employment centers. In particular, there is an imbalance of 40,000 workforce households with three or more people proximate to six employment cores that make up almost 40 percent of total employment in the metro area. This problem will only be exacerbated in the future, as there is an estimated need for an additional 5,000 new for-sale homes regionally to meet workforce housing needs over the next 20 years.

The effects of the recent housing market shifts and the projected additional shortage of for-sale workforce housing is particularly relevant to this population, as 65 percent of workforce households are homeowners. In addition, prohibitively high land prices and construction costs do not support the development of multifamily rental properties for workforce households near employment centers, particularly those with three or more people. With limited rental and for-sale housing choices near job centers and transit-accessible areas, workforce households, who represent nearly a quarter of the metro area's total households, will likely seek housing opportunities in the periphery. A portion of workforce households will take advantage of opportunities in the eastern portion of the metro area and urban areas undergoing revitalization.

The Washington, D.C., metro area has proven to be resilient in the face of the economic downturn, and is likely to recover faster than most metropolitan areas as a result of increased federal spending. At time of print, the Washington, D.C., metro area had the lowest unemployment rate of the 15 largest job markets, and was nearing equilibrium on housing supply (six months). Housing permits remain extremely low, and projected changes in the overall housing market suggest that the current undersupply of workforce housing opportunities will persist in the future.


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Defining the Workforce

The U.S. Department of Housing and Urban Development (HUD) defines area median income (AMI) for each metropolitan area. This indicator often is used to determine relative housing affordability for different income ranges and household sizes. The Washington, D.C., metro area has one of the highest median incomes in the country, with an AMI that hovers just above $100,000 for a family of four.

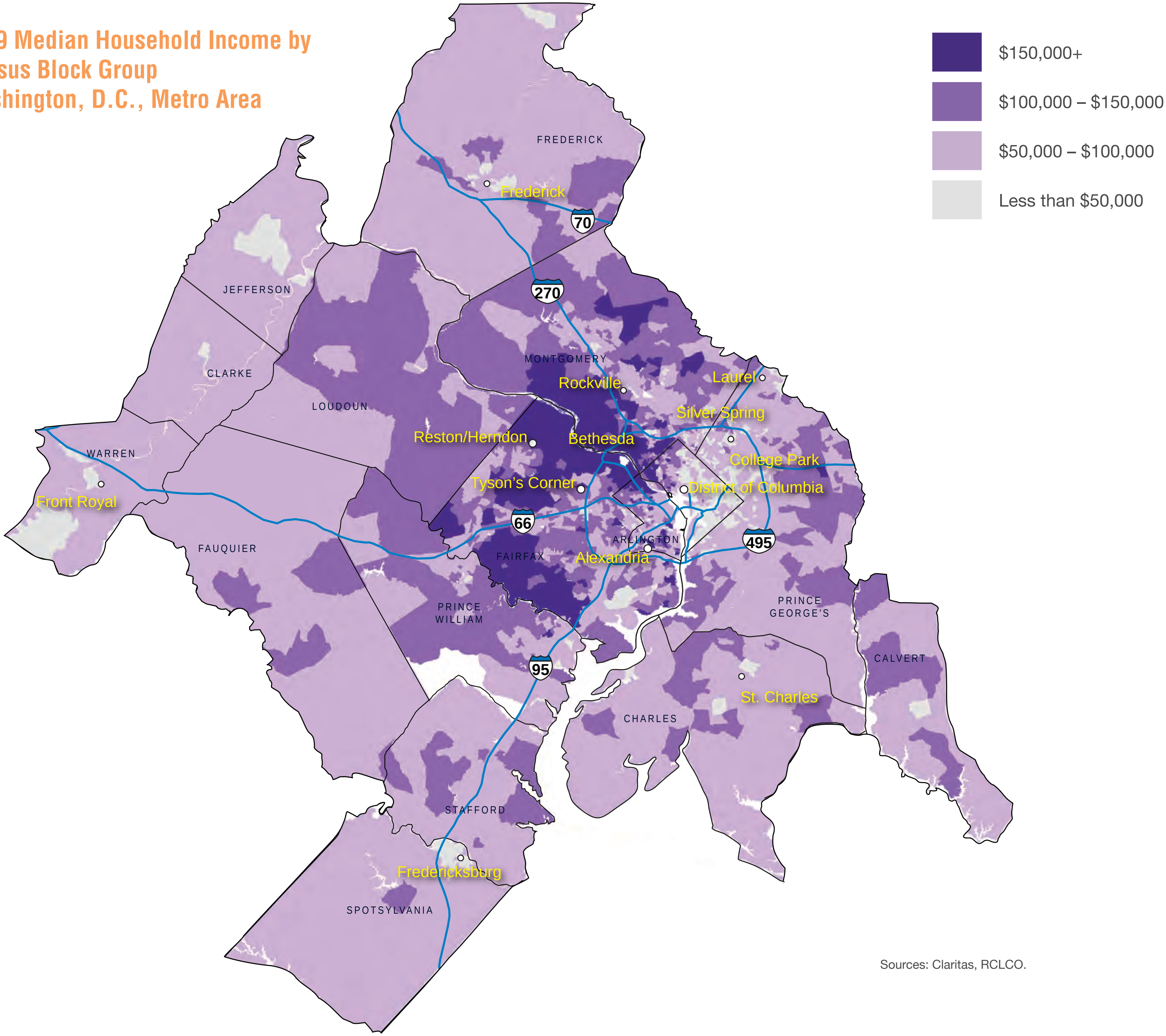
While the question of how to define workforce households remains heavily debated, for the purpose of this study we define workforce households as those with incomes between 60 and 100 percent of AMI adjusted for household size. Approximately 23 percent, or 467,000 of the Washington, D.C., metro area's 2 million households, fell in this income range in 2007, indicating that workforce housing is an issue relevant to a significant portion of the metro area's households. An additional 13 percent of the metro area's households earn between 100 and 120 percent of AMI, and while this report does not directly address the affordability needs of this group, the analysis also found a significant deficit of housing available to this group near employment centers.

Workforce Housing Income Ranges
60% to 100% of AMI
Washington, D.C., Metropolitan Area

	60% of AMI	100% of AMI
1-Person Household	$43,140	$71,900
2-Person Household	$49,320	$82,200
3-Person Household	$55,440	$92,400
4-Person Household	$61,620	$102,700
5-Person Household	$66,540	$110,900

Sources: HUD, RCLCO.

2009 Median Household Income by Census Block Group Washington, D.C., Metro Area



Sources: Claritas, RCLCO.

Workforce Household Profile

Assistant Professor at Georgetown University (Single-Income Household)

Vital Statistics:

- Household Type: Single Parent, Two Children
- Profession: Assistant Professor
- 2009 Annual Household Income: $74,000
- 2009 Affordable Home Price Range: $250,000–$280,000
- Required Downpayment: $25,000–$28,000
- Percent of AMI for Three-Person Household: 81%

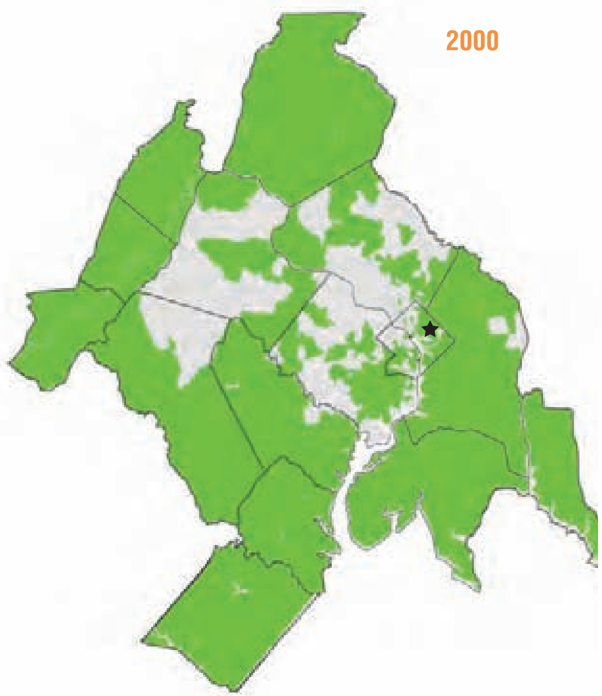
This university professor can afford to purchase a home priced between $250,000 and $280,000. Home values have appreciated considerably from 2000 to 2009, severely limiting this professor's housing choices within close proximity of his workplace, as indicated by the black star on the maps below.

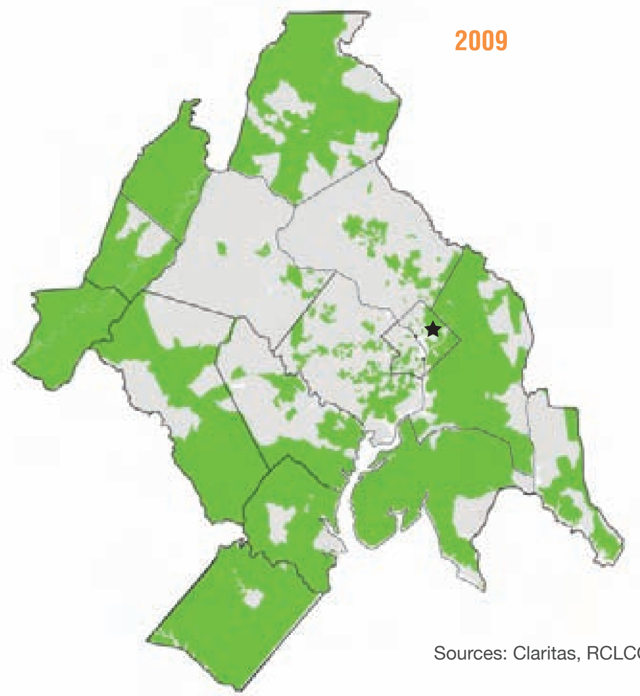
Locations with Affordable Median Home Values for Profiled Family 2000 and 2009

Affordable

Priced Out

★ Place of Employment





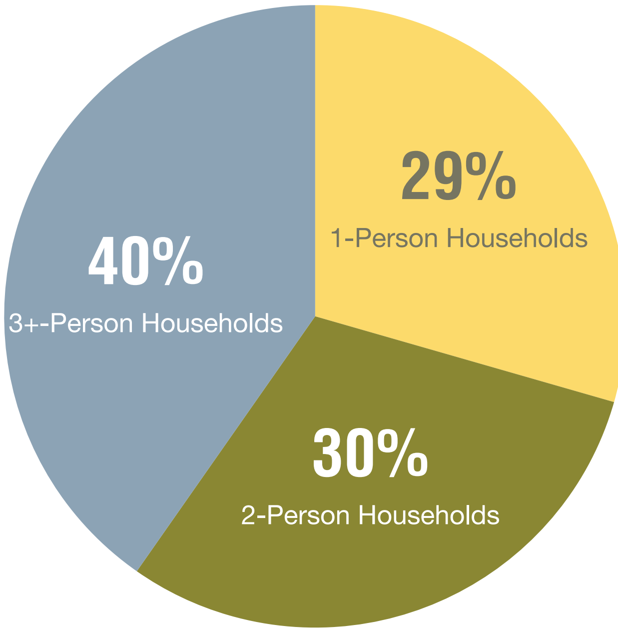
Sources: Claritas, RCLCO.

Metro Area Household Composition

A deeper analysis of the characteristics of workforce households in Washington, D.C., reveals more about this group's specific housing needs. An average of 40 percent of the metro area's workforce households are made up of three or more people. This finding is significant, because larger households require homes with more bedrooms, which typically are more expensive, often limiting their housing options to fringe locations.

Although recent demographic trends point toward an increasing number of smaller households as echo boomers enter their 20s and baby boomers age, this trend likely will only slightly alter the overall distribution of household sizes. Though average household size is trending downward, larger households will continue to make up a notable portion of future growth. Households of this size are conventionally thought of as a traditional couple with one or more children, yet many of these households are a single parent with two or more children, multigenerational households such as a couple with an older parent or parents, or groups of roommates and others sharing a home for preference or cost reasons.

Household Composition in the Washington, D.C., Metro Area



Sources: RCLCO, U.S. Census 2007 PUMA data.

		Less than 60% AMI	60%–80% of AMI	80%–100% of AMI	100%–120% of AMI	More than 120% of AMI	TOTAL
WASHINGTON, D.C., METRO AREA	Estimated Number of Households	588,427	243,487	223,196	202,906	771,042	2,029,059
	Distribution of Households	29%	12%	11%	10%	38%	100%

Source: RCLCO, Claritas, U.S. Census 2007 PUMA Data

23% **or 466,683** of the households in the Washington, D.C., metro area are in the 60 to 100 percent AMI income range.

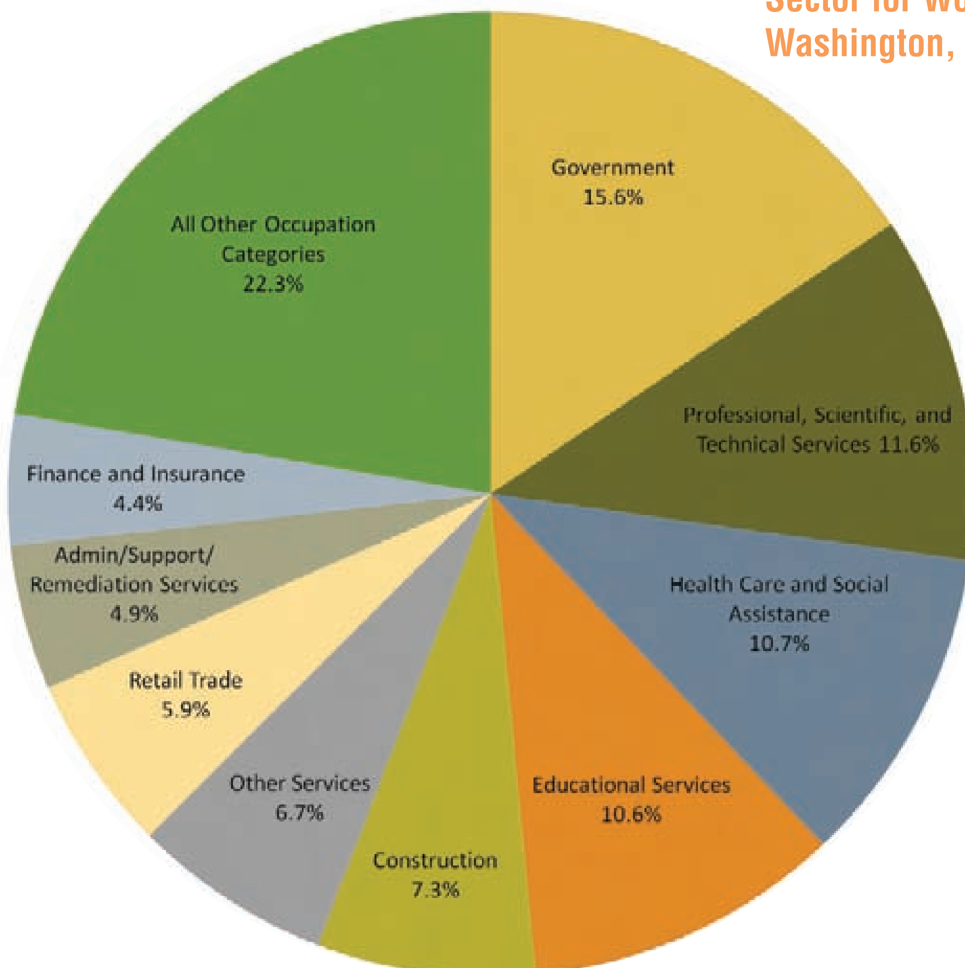
Employment Distribution

The Washington, D.C., metro area—like most major metro areas—contains a number of employment cores that have emerged as major job centers over the past several decades. These include downtown D.C., Reston/Herndon, Alexandria (along with nearby Crystal City and Pentagon City), and Tysons Corner in Virginia, and Bethesda and Rockville in Maryland.

Nearly every profession includes employees who fall into the workforce housing income range. The top categories of regional employment in the workforce housing income range, as shown in the accompanying pie chart, include public administration; construction; professional, scientific, and technical services; health care; and education. Many of these professions are in significant growth industries within the metropolitan area and reflect the area's overall distribution of employment by sector. As these industries continue to be engines of growth in the future, their employees will need to be accommodated with appropriate workforce housing options.

According to the Greater Washington Initiative, "two-thirds of all new jobs [in Greater Washington] are anticipated in service sectors such as engineering, computer and data processing, business services, and medical research."

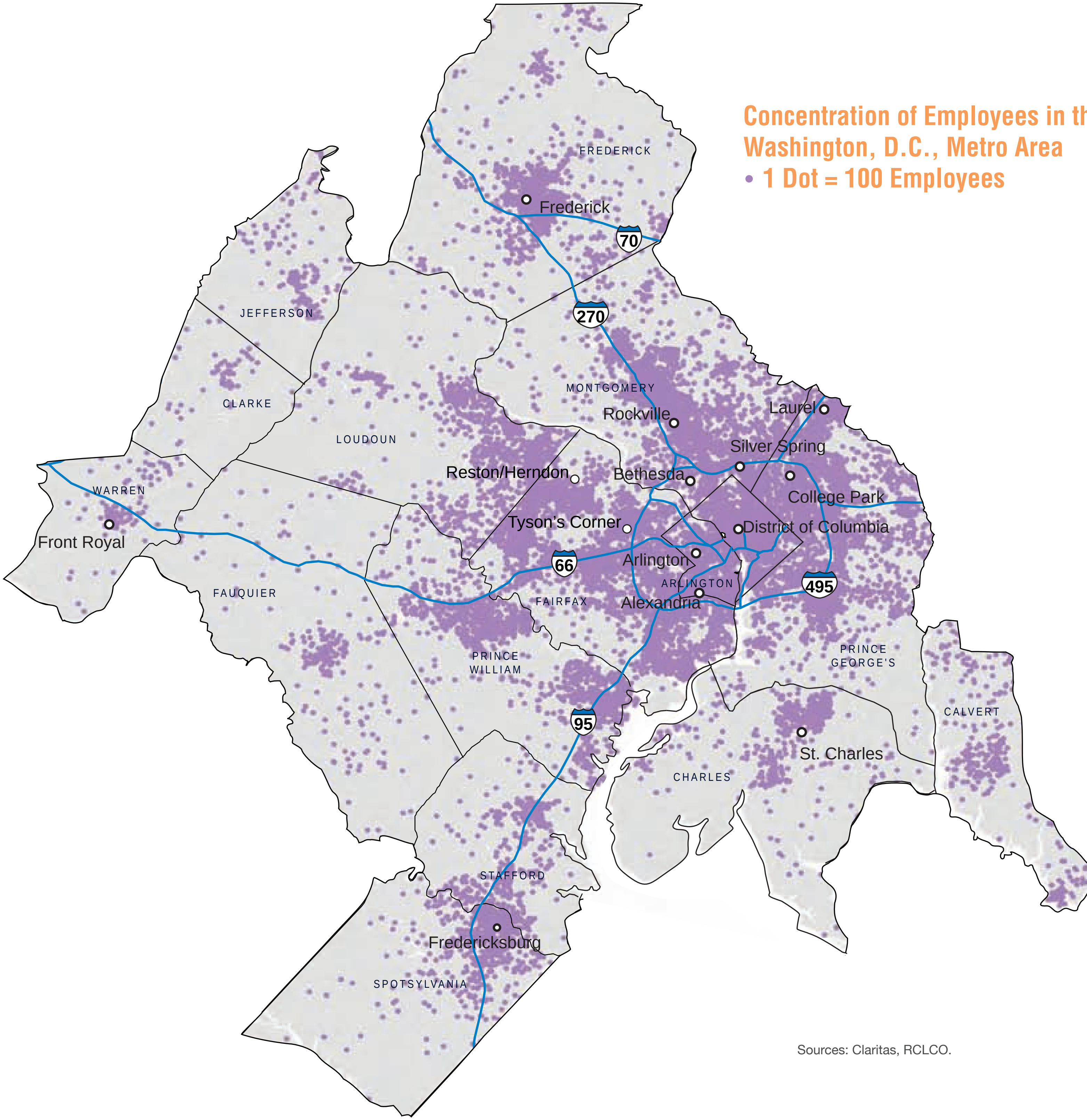
Distribution of Employment by Sector for Workforce Households Washington, D.C., Metro Area



Sources: U.S. Census 2007 PUMA data, RCLCO.

Concentration of Employees in the Washington, D.C., Metro Area

• 1 Dot = 100 Employees



Sources: Claritas, RCLCO.

Workforce Household Profile

Virginia State Employee & Nonprofit Employee in Arlington County (Dual-Income Household)

Vital Statistics:

- Household Type: Married Couple, No Children
- Professions: Public Administration (State Employee) and Nonprofit Organization Employee
- 2009 Annual Household Income: $78,000
- 2009 Affordable Home Price Range: $270,000–$310,000
- Required Downpayment: $27,000–$31,000
- Percent of AMI for Two-Person Household: 99%

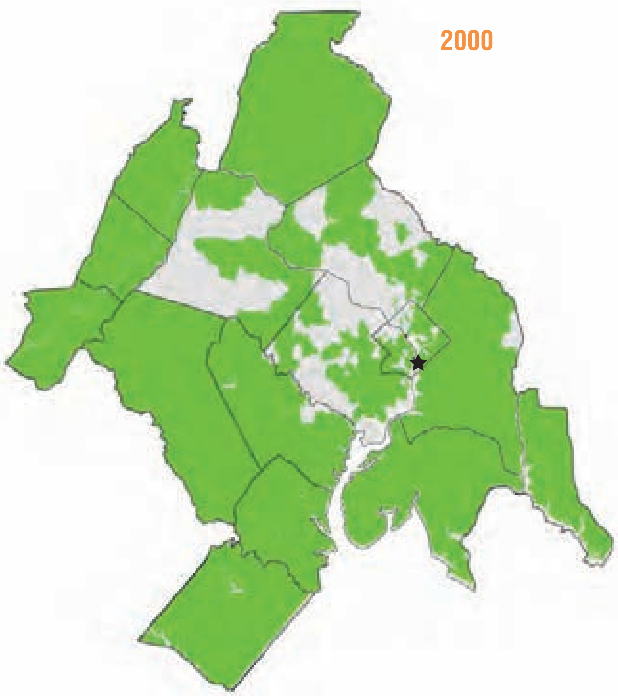
This two-income couple can afford to purchase a home priced between $270,000 and $310,000. The housing value appreciation between 2000 and 2009 severely limits this household's choices within the metro area, and particularly within a 20-minute no-traffic drive from their place of employment, as indicated by the black star on each map.

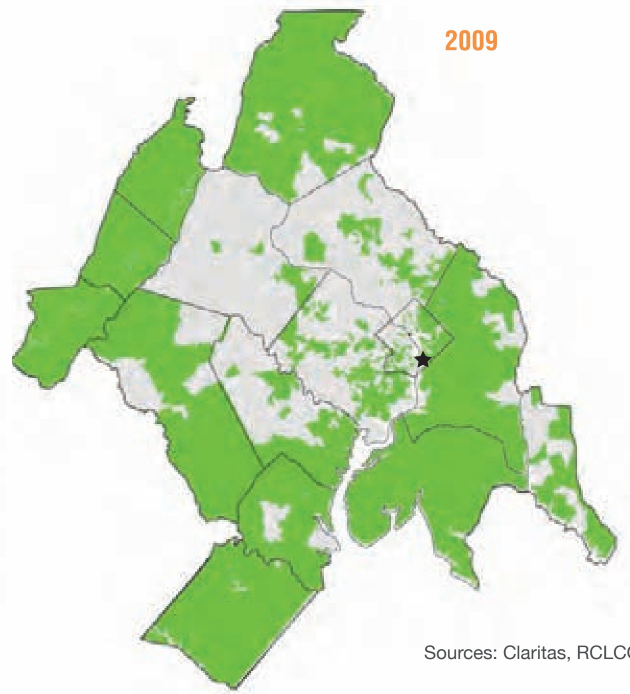
Locations with Affordable Median Home Values for Profiled Couple 2000 and 2009

Affordable

Priced Out

★ Place of Employment





Sources: Claritas, RCLCO.

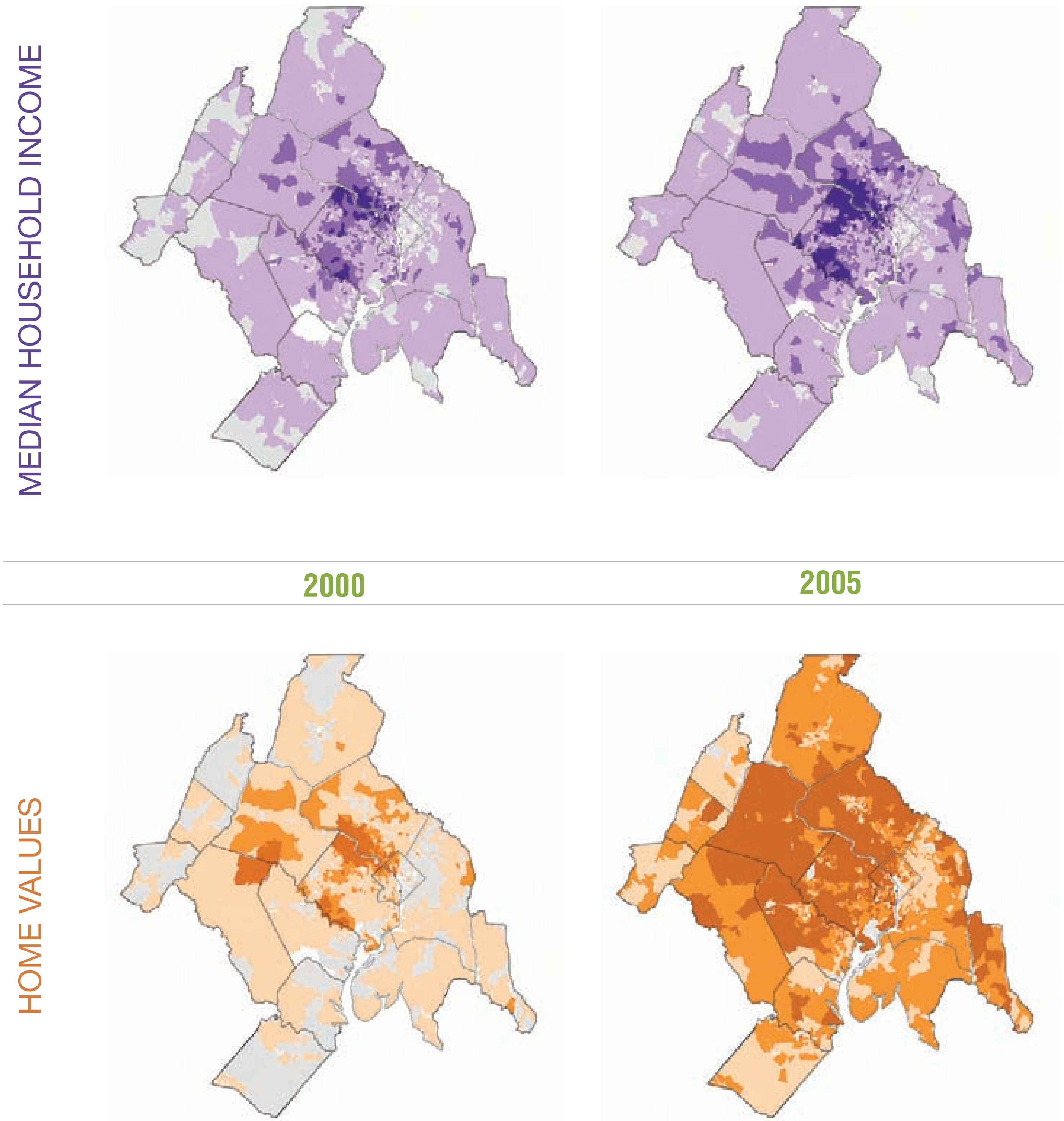
Workforce Households Pushed to the Periphery

In addition to having a number of the Washington, D.C., metro area's larger employment cores, the close-in jurisdictions have experienced the most dramatic growth in incomes and housing value. As seen in the series of maps on pages 14 and 15, household income and housing values have grown in the metro area since 2000 and are projected to continue to increase through 2014. This growth has occurred primarily around the metro area's major employment cores, specifically in the District of Columbia and close-in Maryland and Virginia jurisdictions.

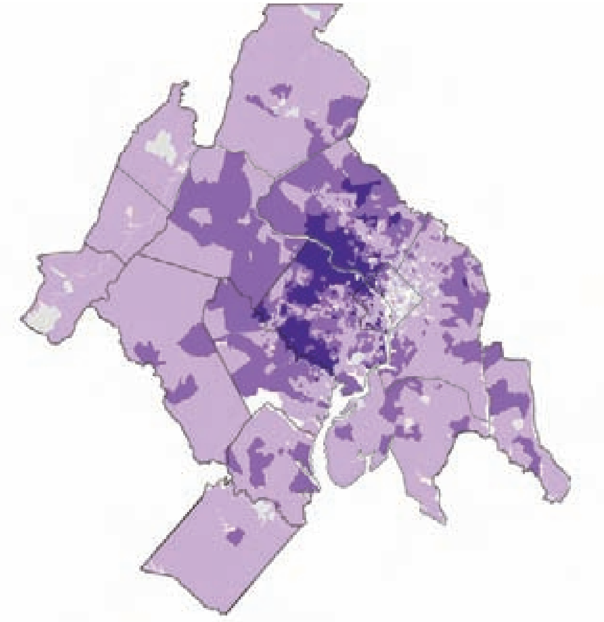
As a result of the current housing downturn, average home prices have experienced greater declines in the metro area's outer suburbs than in Washington, D.C., and other close-in jurisdictions. These trends indicate that although the market downturn has improved affordability on the periphery of the metro area, the central core still has high home prices.

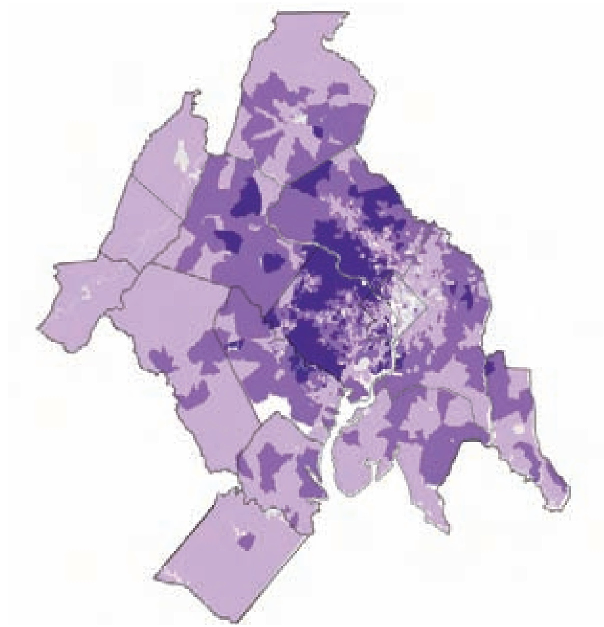
Another factor that has driven housing value appreciation in central locations is the presence of transit options and the scale of transit-oriented development (TOD) that has been completed in recent years. Relatively high land values around TOD projects—and particularly near Metrorail stations—push home prices and values upward, commanding a premium for living in a convenient location. While public transit systems provide a powerful strategic opportunity to reduce sprawl and increase accessibility throughout the metro area, creating a true mix of incomes and establishing a jobs/housing balance around these cores continues to be a challenge.

Rapid growth in housing values outpaced income growth between 2000 and 2005, limiting affordability and workforce housing options throughout the metro area. Recent housing market fluctuations have helped restore this balance on the periphery of the metro area, although a jobs/housing imbalance persists near major employment cores.



Steady Growth in Household Income Does Not Keep Pace with Rapid Housing Value Appreciation in the Washington, D.C., Metro Area





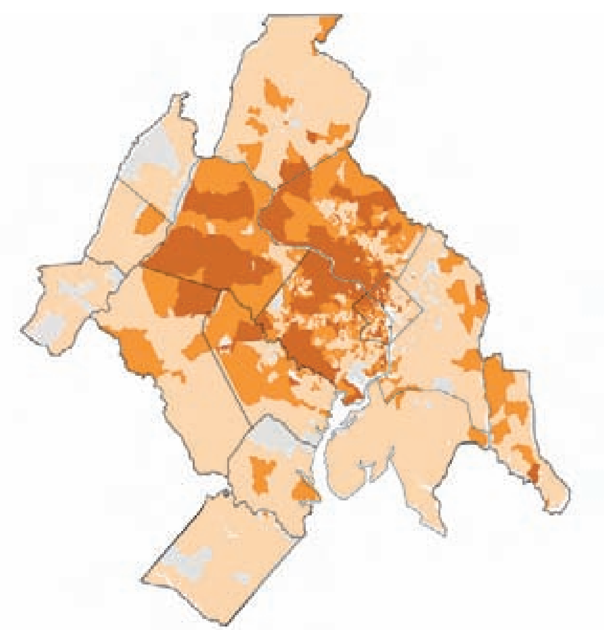
Less than $50,000

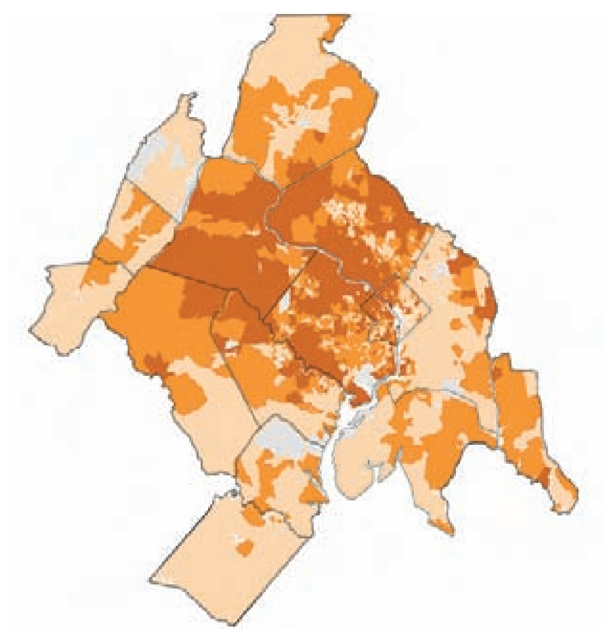
$50,000 – $100,000

$100,000 – $150,000

$150,000+

2009 **2014**





Less than $150,000

$150,000 – $300,000

$300,000 – $450,000

$450,000+

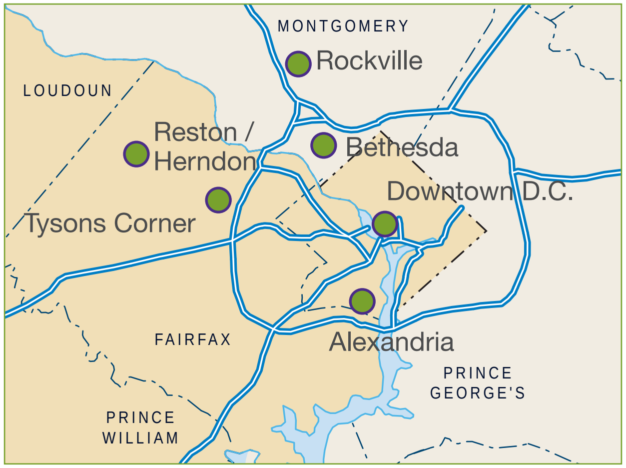
Regional Supply Conditions

While the metro area has a relative balance in total supply of homes priced affordably for households with incomes 60 to 100 percent of AMI, there is a shortage or imbalance of housing supply affordable to this income group. In particular, this analysis indicates that there is a shortage of 40,000 housing units affordable to workforce households with three or more people near the six major employment cores. Homes that are affordable to this population are geographically concentrated at the periphery of the metro area, highlighting the relative imbalance around major, close-in employment cores. Within the resale market, almost half of the metro area's homes are priced over $400,000, which is well outside the affordable home price range for most households with incomes 60 to 100 percent of AMI.

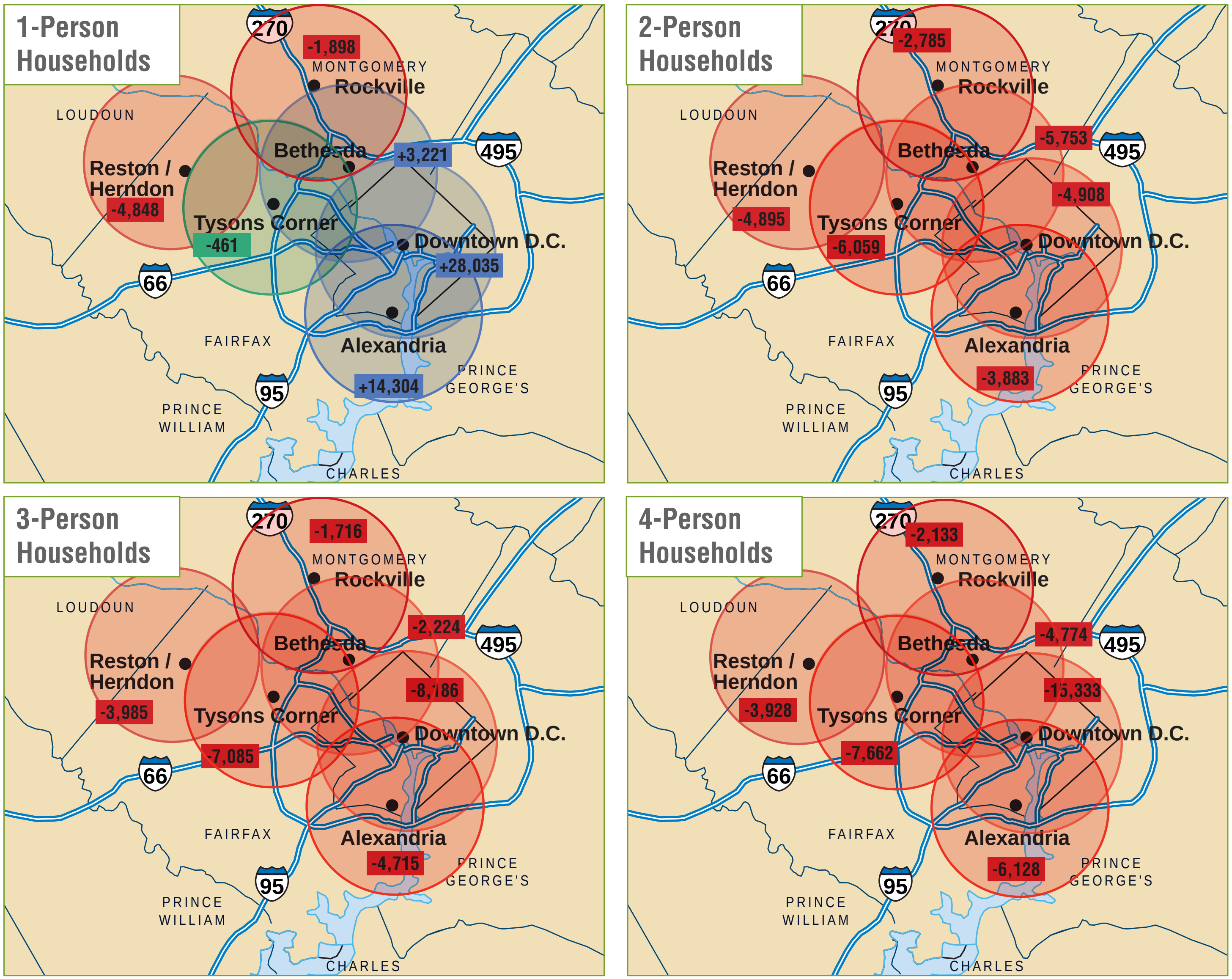
In order to measure the relative balance or imbalance of supply and demand of housing opportunities for workforce households, this study focuses on key close-in employment cores that have experienced both employment growth and rapid housing appreciation in recent years. With a healthy jobs/housing balance, the distribution of jobs and housing close to these major employment cores would resemble that of the metro area overall. This study looked at the distribution of workforce households within a 20-minute no-traffic drive time, as an approximation for a 30- to 45-minute in-traffic commuting distance from each core, as indicated by the circles on the series of maps on page 17. The employment cores included in this study account for over a third of the metro area's total employment, and include downtown Washington, D.C.; Bethesda, Maryland; Rockville, Maryland; Tysons Corner, Virginia; Reston/Herndon, Virginia; and Alexandria, Virginia. The red circles indicate a gap in housing opportunities while the blue circles indicate a relative oversupply, and the green circles indicate a balance similar to the metro area as a whole.

This analysis revealed that there is a gap in housing opportunities for one-person workforce households near the Reston/Herndon and Rockville employment cores, while the downtown D.C., Bethesda, Tysons Corner, and Alexandria cores all have a balance or oversupply of housing. **An analysis of two-, three-, and four-person workforce households indicates a shortage in housing opportunities in all six employment cores for each of these household sizes.** This undersupply forces households in this income and size range to seek housing on the periphery of the metro area or in other locations that require much longer commutes, and limits the ability of jurisdictions to attract a diverse, mixed-income population. Overall, this analysis indicates a shortage of approximately 40,000 housing units affordable to workforce households with three or more people.

Representative Employment Cores Washington, DC Metro Area



Over- and Undersupply of Workforce Households
60 to 100 Percent AMI, Washington, D.C., Metro Area



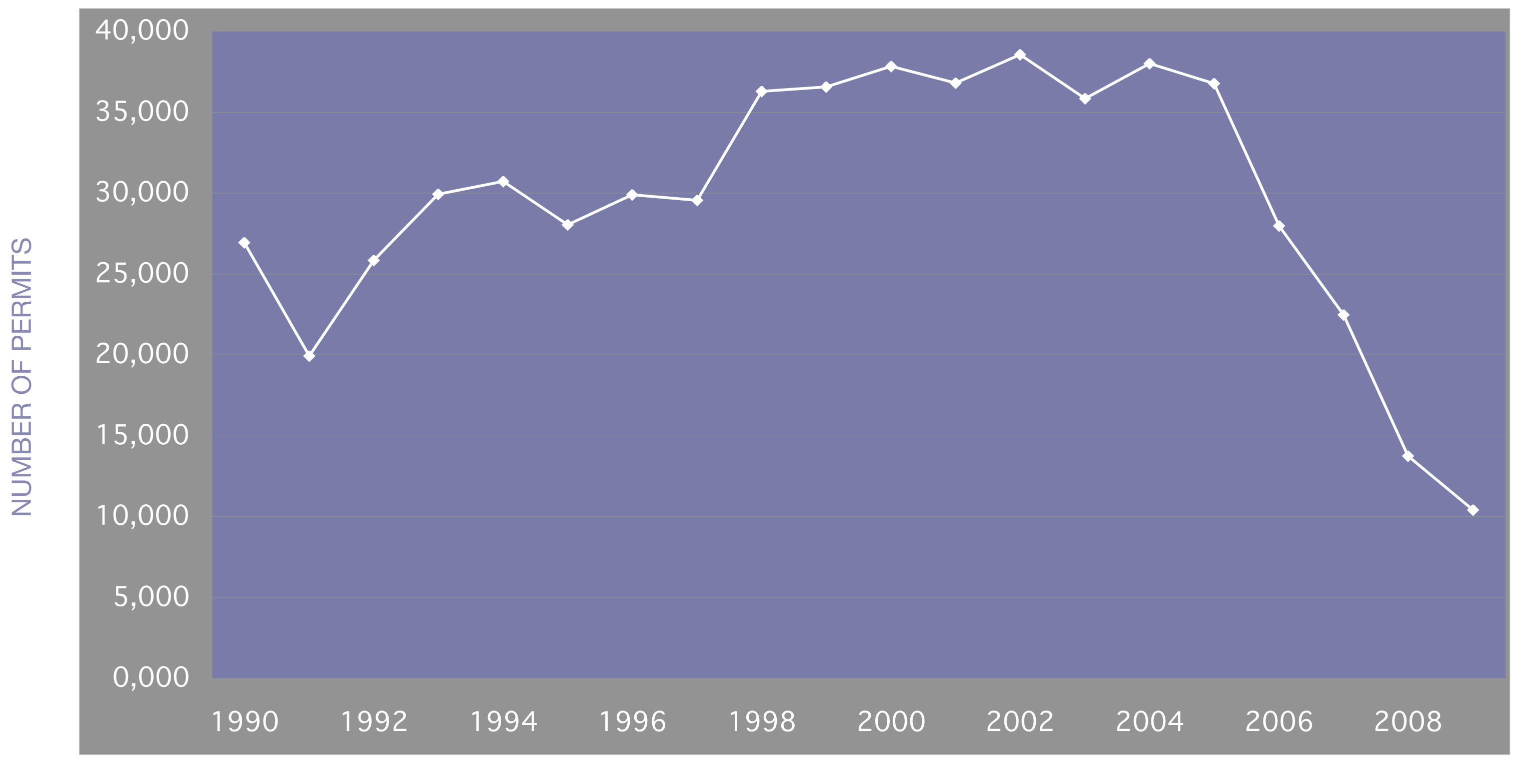
- Undersupplied by 1,000 Units or More
- Adequately Supplied
- Oversupplied by 1,000 Units or More

These maps illustrate the relative imbalance of housing types offered in key employment cores compared to the metro area.

Future Supply Constraints

Projected changes in the overall housing market suggest that the current undersupply of workforce housing opportunities will continue, particularly within close proximity of major employment cores. Annual permitting trends from 1990 to 2009 show a steep decline in the total number of permits pulled over the last four years. As household growth continues across the metro area, a decline in the development of new homes will push home prices up, exacerbating the jobs/housing imbalance.

This analysis projects a shortage of new for-sale housing units affordable to workforce households every year from 2010 to 2030, creating a cumulative additional shortage of 5,000 for-sale workforce housing units in the metro area. Even if home prices were to fall by 10 percent from the 2005–2007 average and remain at that level in today's dollars—an unlikely scenario, given market fundamentals in this area—demand will continue to outpace supply throughout this projection period. The annual gap in the number of new workforce households and the new supply of homes affordable to this group is estimated to be about 200 to 300 units per year. **Over time, the cumulative impact will be much more severe, totaling about 5,000 units of unmet demand in the metro area by 2030, in addition to the existing unmet supply.**



Dramatic Decline in Annual Permits

Sources: SOCDS, RCLCO.

By 2030, there will be an additional shortage of **5,000 workforce housing units** in the metro area.

New Rental Development: Product Type Limitations

The demonstrated undersupply of new for-sale housing for workforce households means that, in addition to striving to provide more for-sale options for these households, new rental opportunities must play a big part in meeting this unmet demand. Rental developments need to offer housing with more bedrooms for all income categories, especially in locations proximate to central employment cores, in order to satisfy this unmet demand. However, building new rental products for this price range is challenging if not cost prohibitive, particularly for households with three or more persons. Based on the cost of land and construction, and resulting typical rental rates, future rental stock will likely leave larger households earning 60 to 100 percent of AMI with few housing options. The rents commanded by garden apartments typically do not justify the land cost in central locations near employment cores and transit centers, so households that can only afford this less expensive product type will be forced to locate father away from these centers. Creatively exploring different types of unit mixes, floor plan designs, financing techniques, forms of public intervention, and other innovative development strategies will be necessary to mitigate these circumstances and provide adequate rental housing options for workforce households.

Development-Supportable Rents for Workforce Households in the Washington, D.C., Metro Area

High-Rise Rental Development		Supportable Rent per Square Foot for Workforce Households				
Persons per Household	Unit Type	60%	70%	80%	90%	100%
1	Studio	PRICED OUT				$3.00
2	1B					
3	2B					
4	3B					
5	3B					
6	4B					

High-rise development dictated by land prices near employment centers and Metro.

Mid-Rise Rental Development		Supportable Rent per Square Foot for Workforce Households				
Persons per Household	Unit Type	60%	70%	80%	90%	100%
1	Studio	PRICED OUT			$2.70	$3.00
2	1B				$2.46	$2.74
3	2B					$2.43
4	3B					
5	3B					
6	4B					

Mid-rise development located in an urban area just outside of employment center.

"Donut"-Style Rental Development		Supportable Rent per Square Foot for Workforce Households				
Persons per Household	Unit Type	60%	70%	80%	90%	100%
1	Studio	$1.80	$2.10	$2.40	$2.70	$3.00
2	1B	PRICED OUT	$1.92	$2.19	$2.46	$2.74
3	2B			$1.95	$2.19	$2.43
4	3B				$1.85	$2.05
5	3B					$1.85
6	4B					

"Donut" development located outside of urban centers, not proximate to transportation centers.

Garden-Style Rental Development		Supportable Rent per Square Foot for Workforce Households				
Persons per Household	Unit Type	60%	70%	80%	90%	100%
1	Studio	$1.80	$2.10	$2.40	$2.70	$3.00
2	1B	$1.64	$1.92	$2.19	$2.46	$2.74
3	2B	$1.46	$1.70	$1.95	$2.19	$2.43
4	3B	PRICED OUT	$1.44	$1.64	$1.85	$2.05
5	3B			$1.48	$1.66	$1.85
6	4B					$1.49

Garden development located on the periphery.

Workforce Household Profile

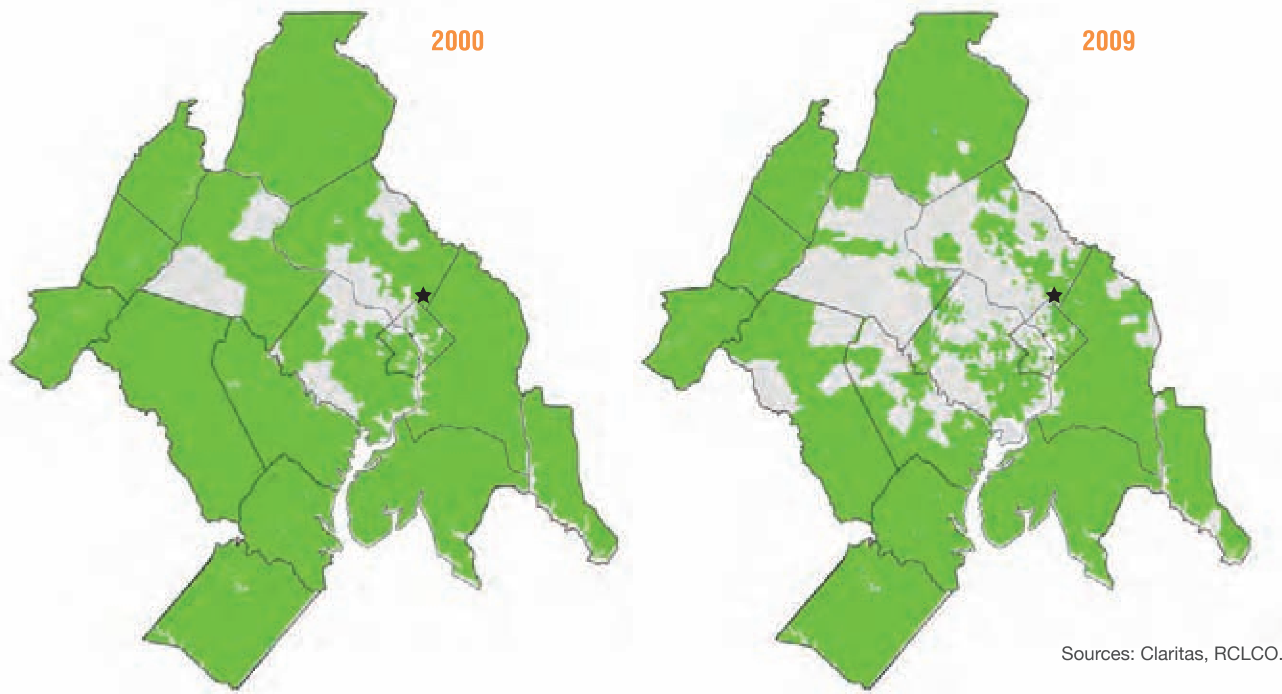
NIH Employee and Daycare Worker in Montgomery County (Dual-Income Household)

Vital Statistics:

- Household Type: Married Couple, Three Children
- Professions: NIH Researcher and Daycare Worker
- 2009 Annual Household Income: $94,000
- 2009 Affordable Home Price Range: $310,000–$360,000
- Required Downpayment: $31,000–$36,000
- Percent of AMI for Five-Person Household: 84%

The for-sale housing options affordable to a five-person family in this income range are quite limited within a 20-minute no-traffic drive of NIH (indicated by the black star on the maps below). Many of the homes that are affordable within this price range and proximity may not have enough bedrooms for a family of this size.

Locations with Affordable Median Home Values for Profiled Family 2000 and 2009



Affordable

Priced Out

★ Place of Employment

Sources: Claritas, RCLCO.

Other Considerations

In addition to these supply conditions, several other important factors are affecting the market's current and future ability to meet workforce housing demand. Notably, the tightening of lending standards, foreclosures in today's market, and rising interest rates are having and/or will have a significant impact on housing affordability.

Lending Standards

Banks have tightened lending standards considerably over the past year, making it more difficult for potential borrowers to obtain mortgages than in the recent past. According to several local mortgage brokers, lenders now require a higher credit score than they did in the past; often, borrowers must have a 700 FICO minimum to qualify for a loan. Borrowers must also have more cash on hand to qualify for conventional mortgages than they would have needed a year ago, and obtaining a second mortgage to avoid a 20 percent downpayment or private mortgage insurance (PMI) is much more difficult, if not impossible. Federal Housing Administration (FHA) and Department of Veterans Affairs (VA) loans only require a 3.5 percent downpayment and are an important source of loans for workforce households. However, these loans require the borrower to accept points and PMI still applies, making FHA and VA loans somewhat more expensive than other mortgages, even though they require lower downpayments.

Foreclosures

The recent increase in foreclosures in the market has temporarily skewed home sale prices downward. In the past 12 months alone there have been over 9,300 foreclosed home sales in the metro area. These foreclosures will not continue in perpetuity, however. A May 2009 Harvard Joint Center for Housing Studies report, "Forced Sales and House Prices," by Parag Pathak, indicates that a forced or foreclosed home typically sells for 28 percent less than if it is sold under unforced circumstances. As the market works through the current overabundance of foreclosures, sales prices will rebound to a certain extent, and the underlying affordability issues of the past few years will return.

Interest Rates

Although interest rates are at historical lows, these rates are likely to increase in the future, which will increase the expense of obtaining and holding a mortgage. Leading industry publications suggest that low interest rates increase the affordability of loans but are historically uncommon. According to a *Wall Street Journal* article by Nick Timiraos and Ruth Simon on June 11, 2009, "Higher mortgage rates are a blow to borrowers who were looking to refinance and reduce their monthly mortgage payments." As interest rates fluctuate in the future, monthly payments will become more expensive, constraining workforce households' ability to afford for-sale housing options.

Conclusions

Nearly a quarter of households in the metro area have incomes between 60 and 100 percent of AMI. Despite the recent housing market downturn, the high cost of housing near major employment cores and in transit-rich locations remains prohibitive for workforce households—particularly those with three or more people. The resulting jobs/housing imbalance has created or exacerbated a number of undesirable conditions.

Addressing the housing needs of workforce households near major employment cores and in transit-accessible locations will help to create a jobs/housing balance, and is aligned with the goals and visions of many local jurisdictions. These goals include:

- Reduce congestion and traffic;
- Reduce the amount of public spending on car-oriented infrastructure, improvements, and repairs;
- Create true mixed-income communities and provide housing opportunities for local employees; and
- Reduce overall environmental degradation.

This analysis also presents several implications for maximizing private development opportunities while addressing the workforce housing gap. There is a large and growing pool of unmet housing demand for units with two, three, or more bedrooms affordable to households with incomes 60 to 100 percent of AMI and located near close-in employment cores. While the market is relatively well supplied with units that meet the needs of one- and some two-person workforce households within these geographic areas, very few new for-sale or rental units are being built to address the needs of larger households. The construction costs to build these types of units for workforce households are prohibitive, and limit developers' ability to meet this need.

Efficiently designed units can accommodate larger households without pushing prices as high as those of typical, less efficiently designed units in the marketplace. Offering a more diverse mix of unit types and price points to creatively accommodate workforce households within traditional development projects will allow developers to target this pool of demand. The bottom line is that in today's smaller, softer housing market, workforce households with three or more people offer a deep, relatively untapped market segment in close-in locations.

Creating viable housing options for these households will give a considerable pool of residents and employees the opportunity to live closer to their workplaces and other important services. Creating these housing opportunities can reduce the overall carbon footprint of the metro area, reduce congestion, allow easier access to transit, and improve the competitiveness of the Washington, D.C., metro area as an attractive place in which to work and live. It will also make the metro area's employment cores more competitively positioned for future growth.


bedroom 2
11 x 14
nook
kitchen
dining
10 x 10
bath 2
linen
bedroom 3
10 x 11

APPENDIX

Methodology

Affordable Home Price

RCLCO used a 3.5 income–to–home price multiplier to determine the affordable home price for each income bracket and household size. This multiplier was determined using the following assumptions: a 10 percent downpayment, a 5.5 percent interest rate, a 30-year fixed mortgage, PMI of 0.5 percent of the mortgage amount, and an estimated 1 percent of assessed value in annual property taxes.

Metro Area Conditions & Balance/Imbalance

RCLCO selected six close-in employment cores to analyze the relative balance of housing opportunities for households of each size within the 60-to-100 and 100-to-120 percent of AMI income brackets. Using Claritas mapping software, we mapped these six employment cores and generated a 20-minute no-traffic drive-time radius around each ("residential feeder area") as an approximation for a 30- to 45-minute in-traffic commuting distance. RCLCO used the U.S. Census Bureau's most recent (2007) American Community Survey (ACS) Public Use Microdata Areas (PUMA) to derive the characteristics and data for the approximate area of the residential feeder area for each employment core included in this analysis.

In order to determine the relative balance or imbalance of workforce households in the metro area, we considered both household size and income range. Using PUMA data, RCLCO identified the metro area distribution of household sizes with incomes 60 to 100 percent of AMI, as well as across those with incomes 100 to 120 percent of AMI. This metro area distribution was used as the baseline for determining the relative balance or imbalance of housing opportunities in the residential feeder areas for each of the six employment cores for each household size.

RCLCO then compared the household size and income distribution of each employment core residential feeder area to that of the metro area to estimate the distribution of households that would exist if each major employment core residential feeder area were in relative balance (plus or minus 1,000 households). These PUMA-based household distributions were applied to Claritas household data for the 20-minute drive-time area from each employment core to derive the relative over- or undersupply of workforce households for each household size, as seen in the maps on pages 16–17.

Future Supply Constraints

RCLCO used the Metropolitan Washington Council of Governments (MWCOG) Cooperative Forecasts, Round 7.1, to determine metro area household growth from 2010 to 2030. We used PUMA data to determine the percentage of total households with incomes between 60 and 100 percent of AMI that are homeowners. RCLCO applied this percentage to the overall household growth figures to determine the projected average annual household growth for workforce households that seek for-sale housing options.

RCLCO estimated the overall volume of new home sales using anticipated new household growth data from MWCOG and future permit projections from Moody's Economy.com. Moody's Economy.

com data were used to calculate the proportion of for-sale residential permits likely to be issued and RCLCO applied this factor to MWCOG household growth forecasts in order to determine the annual projected for-sale housing supply. For the purposes of this analysis, we assume that future permitting, or supply, will more or less correlate with future household growth or demand for housing.

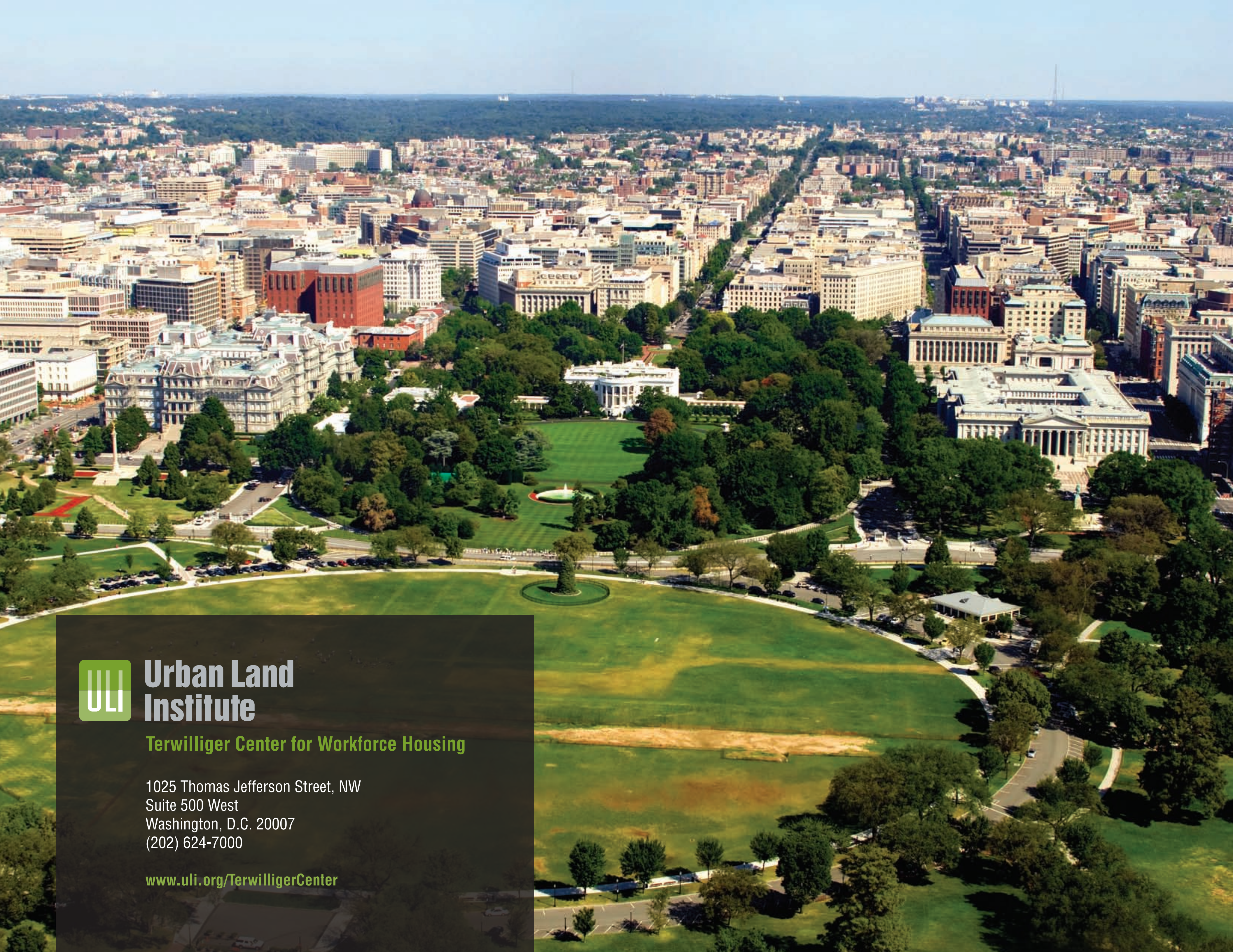
RCLCO identified the distribution of new home sales by price point for the Washington, D.C., metro area for homes built in 2005 to 2007 using PUMA data. We applied this distribution to the projected future for-sale residential permits to determine the number of homes projected to be built each year, priced affordably for households with incomes 60 to 100 percent of AMI. We compared the future new home sales projections to the projected average annual new household growth to determine the shortage in housing supply. Though we believe that the 2005–2007 distribution of new home prices is a good approximation for a long-term distribution, we also tested what would happen if prices were reduced by 10 percent from the 2005–2007 distribution. The results still indicate an undersupply of new for-sale homes for households with incomes 60 to 100 percent of AMI.

RCLCO did not factor in any home renovations that will take some homes out of the range of affordability for workforce households. This will only increase the need for more new homes to replace those no longer affordable to this group. This analysis also does not take into account any housing units that have become obsolete or vacant, reducing the overall supply of units and potentially reducing the number of units available to workforce households.

Data Sources

RCLCO relied on Claritas and Census PUMA data from 2007; many of the key pieces of data are likely to be relatively consistent between 2007 and 2009. For example, the percentage of one-person households with incomes between 60 and 100 percent of AMI is a relatively static figure that can change over decades, but is not likely to change in a year or two. Most of the demographic data found in this report are consistent with this statement.

In addition, we have used 2007 housing market data throughout this report. The current housing market is in a state of uncertainty, and using 2009 home sales data would offer skewed results at best, because of the number of foreclosures in today's market, as well as the overall hesitancy to buy and other atypical short-term conditions. These conditions are temporary and are not indicative of long-term trends. Thus, using data from 2007 is a logical and reliable method to determine a sustainable and reasonable new home sales distribution.



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