

Working Overtime: Long Commutes and Rent-burden in the Washington Metropolitan Region

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Executive Summary

As the traditional model of commutes changes from a suburb-to-downtown model to one where jobs of all types are dispersed to suburbs and small cities, the Washington, DC region has become more interconnected in terms of employment. Employment is not only becoming more geographically diverse, but a majority of new jobs are in low- and moderate-wage sectors such as healthcare and education. At the same time, workers are making longer commutes – either by choice or by necessity – in order to find the mix of housing, schools, and amenities affordable to them. These commutes have costs – both financial and social – such as vehicle maintenance, public transportation, parking, gas, and lost time. Workers commuting for low paying jobs pay disproportionately more of their incomes on vehicle maintenance and public transportation, which can represent 30% or more of their incomes in the Washington, DC region¹.

Commute-burdened workers, defined as those commuting greater than 60 minutes each way, reside in all jurisdictions in the Washington, DC region. Among all workers in the region, 16.5% are considered commute-burdened. The commute burden is greater in the region's outer suburbs, where 18% of workers have commutes in excess of 60 minutes, compared with just 6.4% in Arlington and Alexandria. Commute-burdened workers are most concentrated outside of Arlington, Alexandria and Northwest Washington, including parts of the District, and close-in suburban communities. The suburban jurisdictions of Virginia and Maryland are most disproportionately impacted by long commutes.

Rent-burdened households are defined as those paying 30% or more of their incomes towards housing costs. These communities are also geographically dispersed across the region. Suburban Maryland faces disproportionately high concentrations of rent-burdened households. African Americans are also more likely to live in rent- and commute-burdened tracts than any other ethnicity, while white and Asian residents are more likely to live in low rent-burdened communities.

Among the region's rent-burdened Census tracts, 55.2% were also commute-burdened. More than half of these dually-burdened tracts are located in suburban Maryland. The dually-burdened population is disproportionately African American, lives in older rental units, and is mostly situated in communities with high poverty and concentrations of housing choice vouchers. Households living in these tracts are also more likely to be employed in service and sales jobs than the region as a whole. This is particularly the case in the District where 52.9% of workers were employed in service and sales, compared to 37.6% of the region's total workforce. The colocation of Rent burden and Commute burden in communities where more than half the residents are employed in low- and moderate-wage jobs suggests a need to address affordable rental housing and improve the employment options across the region.

This research focused exclusively on renters, and does not include homeowners. To determine census tracts that had high rent and Commute burdens, the regional medians of both measures were derived and tracts that fell above the median level of each were examined. To determine the tracts that were both rent-

¹ *Heavy Load: The Combined Housing and Transportation Burdens of Working Families*. Center for Housing Policy, 2006.

and commute-burdened the Rent burden and Commute burden data were combined by the census tracts in which they were located.

This research examines rent- and commute-burdened census tracts in the Washington, DC region. Specifically, it examines the geographic distribution of tracts with an over-median percentage of commutes that are 60 minutes or longer and high Rent burdens. It also discusses the demographics of those tracts and the jobs for which the residents of those communities commute. Finally, this research discusses the implications for housing policies across the region.

Summary of Key Findings

Between 2008 and 2013, the Washington, DC region added about 60,000 low-income jobs, 20,000 middle-income jobs, and 45,000 high-income jobs². The low-income jobs are primarily in the service, retail, and health and education sectors that are located in all jurisdictions across the region. Meanwhile, Federal employment has declined to levels not seen since the 1980s. At the same time the rising cost of housing in the region has pressed more families to move farther from the employment to find housing that will fit their incomes. These dynamics have forced many workers to commute in excess of 60 minutes, but, for many families, even such a long commute does not translate to affordable housing.

Key Findings

- Although tracts with a high rate of household Rent burden are dispersed across the region, the Suburban Maryland and Washington, DC tracts are disproportionately rent-burdened. Comparatively, Suburban Virginia and Arlington/Alexandria are disproportionately represented in the low rent-burdened tracts.
- Low Commute burden is centered in NW Washington, DC, Arlington and Alexandria. Suburban Maryland and Virginia, as well as Northeast and Southeast Washington, DC are more likely to be rent-burdened.
- Rent-burdened households tend to live in older housing. More than 60% of units in rent-burdened communities were built before 1980, and only 12.8% were built since 2000, compared to 59% and 15% in tracts with low rent burdens.
- Census tracts with high Rent and Commute burdens are more likely in African American and Latino communities than in white or Asian communities.
- There is significant variation by jurisdiction of Rent- and Commute-burdened census tracts. The District's burdened tracts are overwhelmingly African American and poor and dominated by housing built before 1980. Meanwhile, suburban Virginia tracts with these tracts are largely white with a disproportionate share of Latinos.
- Residents of dually burdened tracts are disproportionately commuting for service, retail and construction occupations.

² Dani, Lokesh. *The Lower-Wage Recovery in the Higher-Wage Economy of the Washington DC Metropolitan Area*. George Mason University Center for Regional Analysis Working Paper 2013-07.

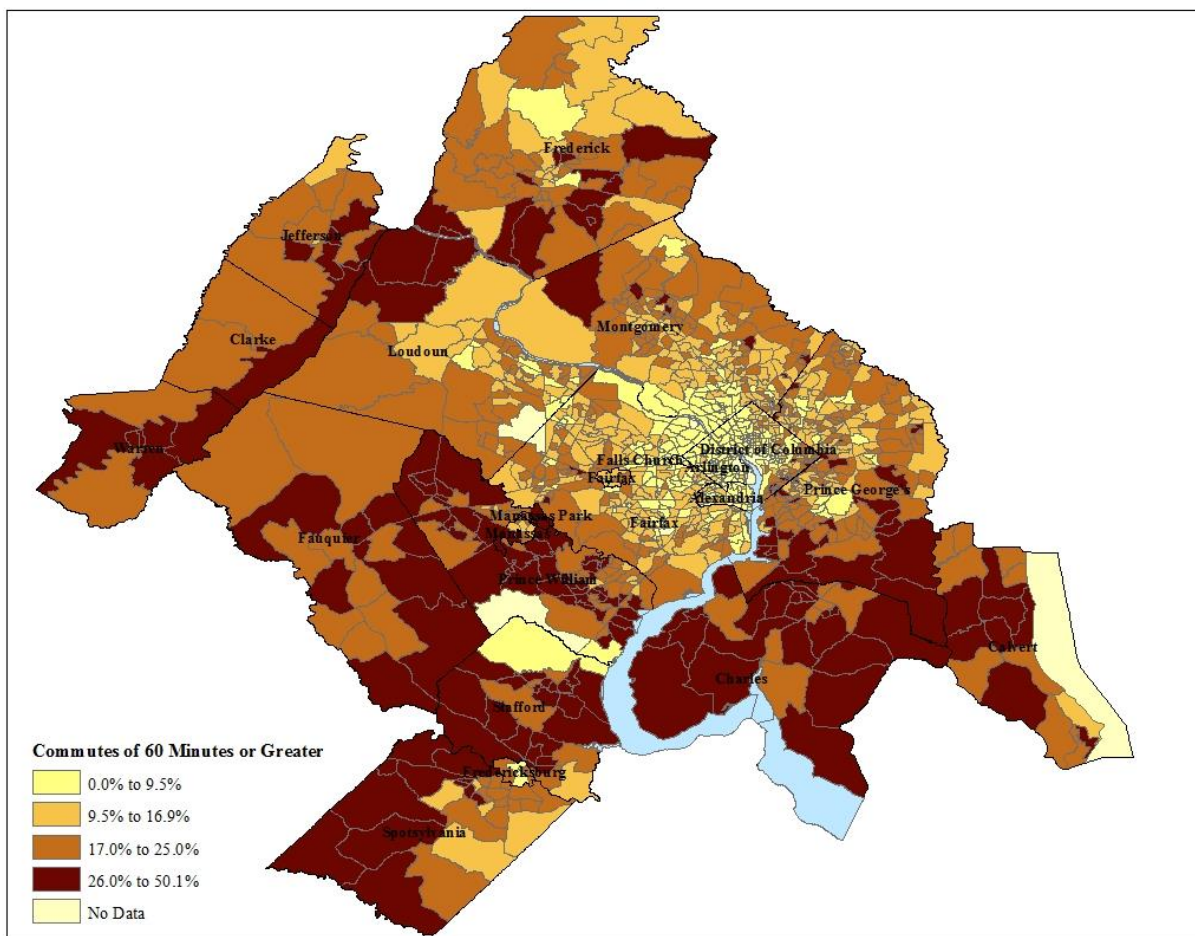
Rental Housing and Commuting in the Region

Housing prices in the urban core have increased in recent years, particularly along transit corridors, forcing many households to move farther away in order to rent or buy housing. This trend has led to increasing costs for commuting – both social and financial. Short commutes have become a luxury for many households in the region where the shortest commutes are concentrated in the highest income communities of Arlington, Alexandria, and NW Washington, DC. Longer commutes, meanwhile, exist in the middle-income Virginia and Maryland and in the low income census tracts of SE and NE Washington, and southern Prince George’s County, Maryland.

Rent burden, which is defined as paying more than 30% of the household income on rent, is concentrated in pockets across the region. Many households have made tradeoffs between housing costs and commutes as may be seen in the middle-income parts of the region where long commutes do not overlap with Rent burdens. In 55.2% of the tracts where residents are commuting long distances, a high concentration of households are also paying high percentages of their incomes on rent, leaving less income for food, utilities, healthcare, and other basic necessities.

Figure 1 maps the commutes by census tract in the region. The median percentage of workers in the region commuting 60 minutes or longer was 17.5% in 2012. The smallest percentages of Commute burdens were located close to job centers such as downtown Washington, DC, Arlington, and Alexandria. Arlington had no tracts in which more than 17.5% of workers had commutes of an hour or more. Meanwhile, more than 90% of tracts in Charles MD, Stafford, VA, Spotsylvania, VA, Prince William, VA, and Jefferson, WV had high concentrations of Commute burden. The majority (70.1%) of commuters in the rent-burdened tracts commuted alone by car, compared to 65.9% of commuters in all tracts. However, in the commute-burdened tracts in Washington, DC and Prince George’s County, more than half of the commuters took public transportation.

Figure 1: Commutes Longer than 60 Minutes by Census Tract, 2012

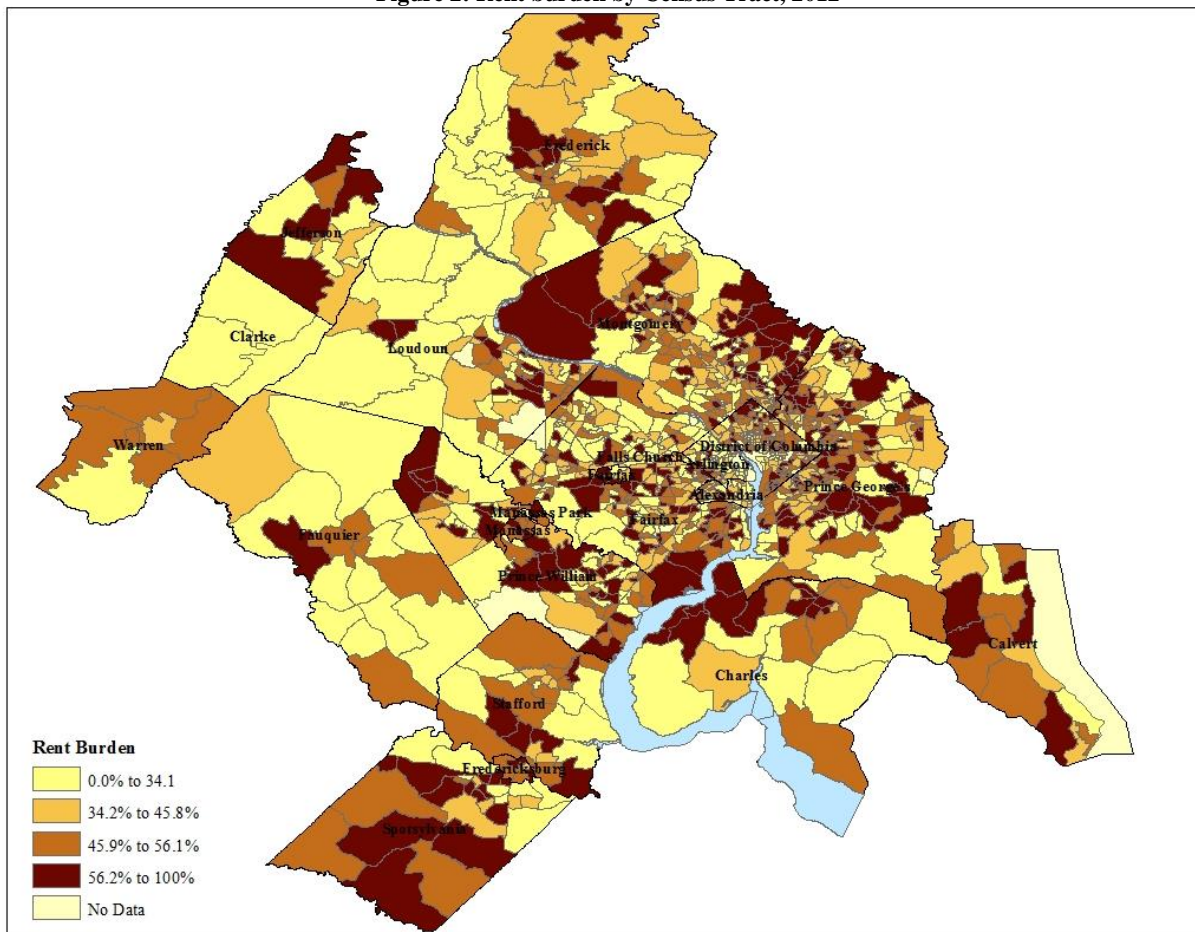


Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

Figure 2 maps the region's Rent burden. The median percentage of households in each tract paying more than 30% of their incomes for rent was 45.9%. Unlike the commute patterns, Rent burden is more geographically heterogeneous, with pockets in all jurisdictions. Maryland had the highest percentage of overall tracts with 55.7% of all tracts having high concentrations of rent-burdened households, compared to 43.2% in Virginia. Figure 3 illustrates the distribution of census tracts that have above median concentrations of Rent burden, Commute burden concentrations, low-rent burden, and both rent and Commute burdens. Arlington and Alexandria and Suburban Virginia are overrepresented among low-rent burden tracts³.

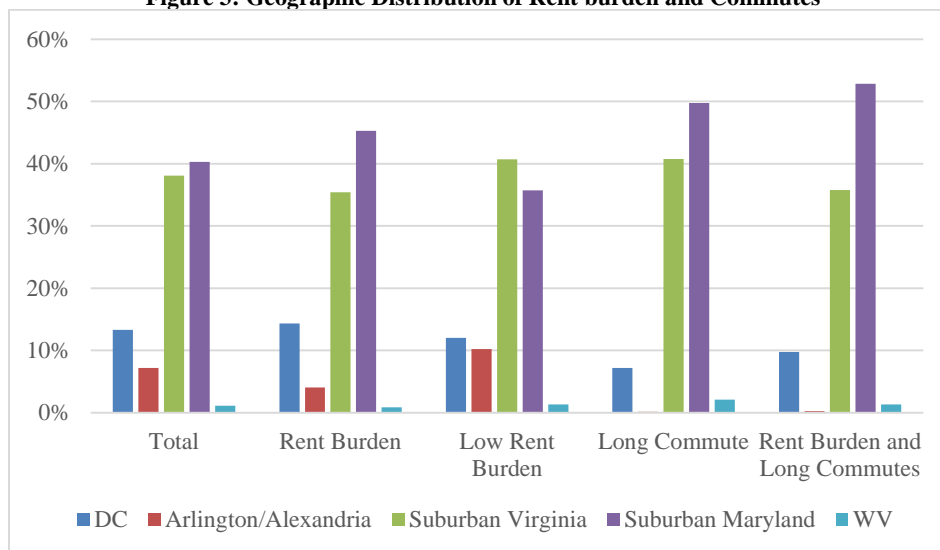
³ Arlington and Alexandria were separated from the remainder of the region's Virginia jurisdictions.

Figure 2: Rent burden by Census Tract, 2012



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

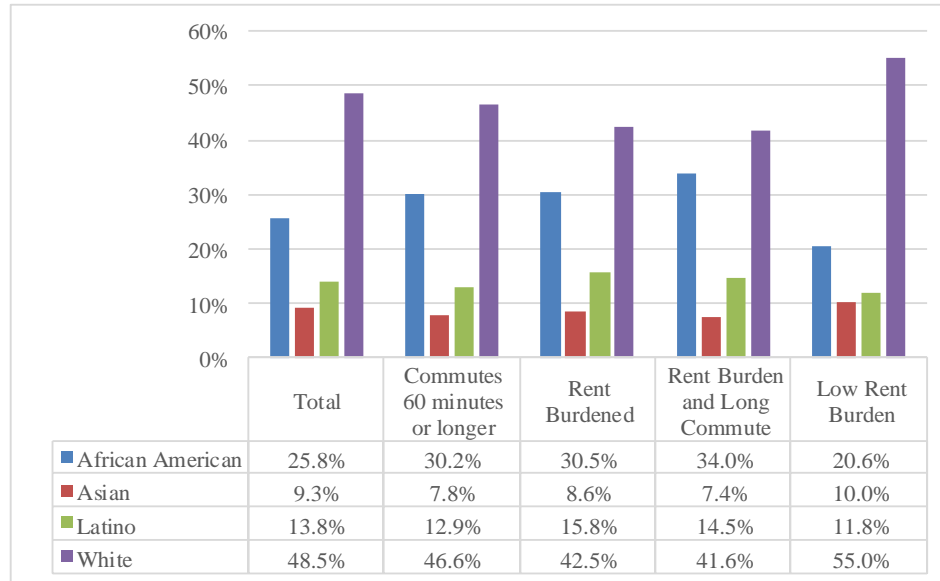
Figure 3: Geographic Distribution of Rent burden and Commutes



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

Figure 4 illustrates the demographic characteristics of the region’s census tracts by tract type. African Americans and Latinos disproportionately live in high-rent burden communities. Regionally, non-Hispanic whites represent 48.5% of the total population, followed by African Americans (25.8%) Latinos (13.8%), and Asians (9.3%). African Americans make up 30.2% of the population in commute-burdened tracts, 30.5% of rent-burdened tracts, and 34.0% in rent- and commute-burdened tracts. Conversely, Asians and white residents are less likely to live in rent- and commute-burdened tracts and overrepresented in tracts with low-rent burdens. White and Asian residents represented 55.0% and 10.0% of the populations in low rent-burdened tracts, respectively.

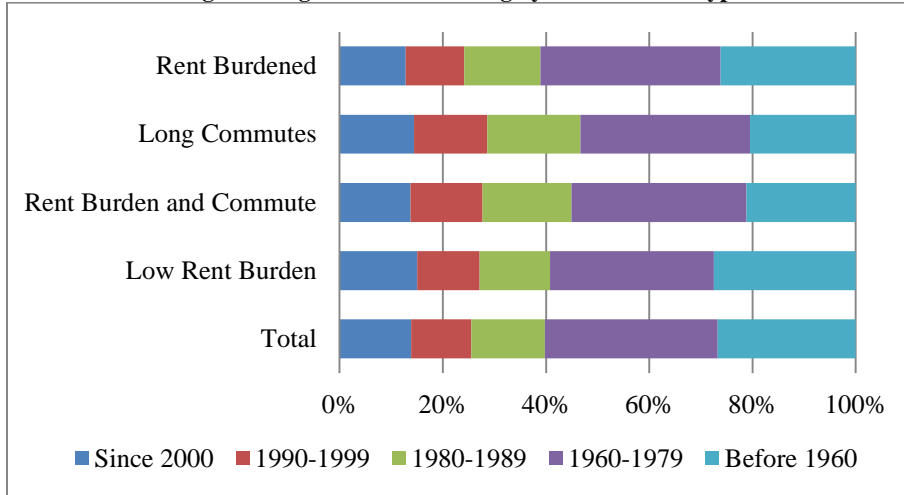
Figure 4: Demographic Characteristics of Census Tracts by Type, 2012



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

The age of the rental housing stock varies across census tracts by geography and tract type. Figure 5 illustrates the age of rental units across census tracts. Rent-burdened tracts tend to have concentrations of older rental units than tracts more generally. Only 24.2% of rental units in rent-burdened tracts were built since 1990, compared to 27.1% of units in low-burdened tracts and 25.5% of all tracts. However, the data mask the geographic variation across the region. In the District, for example, only 11.3% of all rental units have been constructed since 1990, compared to 36.9% in suburban Virginia. This translates to small changes in jurisdictions like Maryland, where rental housing in burdened communities represents less than a percentage point difference in terms of age. However, in Arlington and Alexandria, 74.4% of rental housing units in rent-burdened tracts were built before 1980, compared to just 64.0% in all tracts. Likewise, in those jurisdictions, 25.0% of rentals in all tracts have been built since 1990, while only 14.4% of units in rent-burdened tracts have been constructed in the past 30 years.

Figure 5: Age of Rental Housing by Census Tract Type

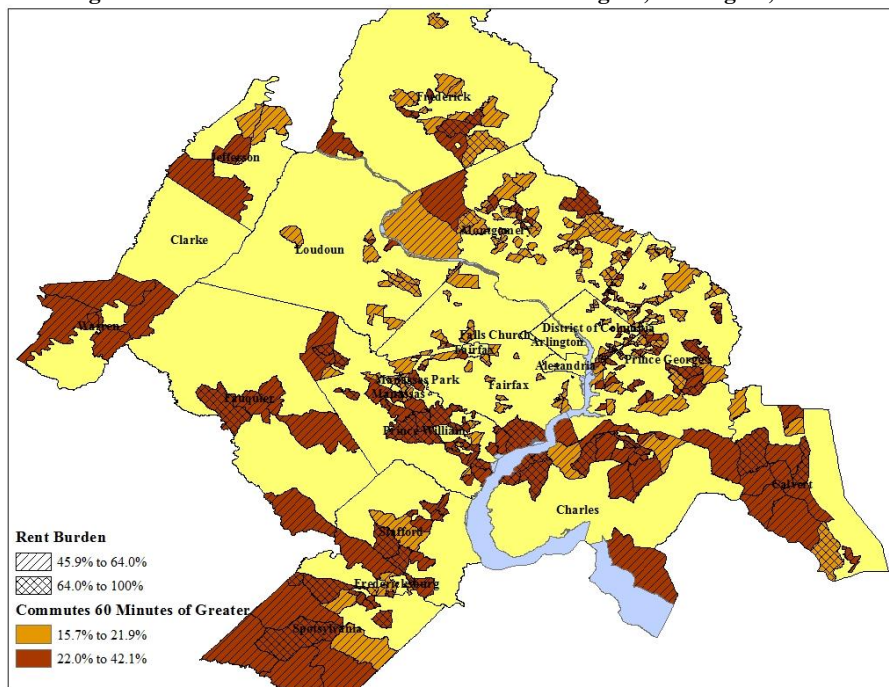


Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

A Portrait of Rent- and Commute-Burdened Households

When Rent burden concentrations were mapped against Commute burden, there was an overlap of 55.2% of the tracts. Figure 6 shows the geographic distribution of these tracts. The orange tracts represent the concentrations of long commutes, while the hatches illustrated the rent-burdened tracts. These tracts were scattered across the region. Suburban Maryland contributed 52.8% of burdened tracts, followed by Suburban Virginia (35.8%) and the District (9.8%). Only one tract in Alexandria and no tracts in Arlington fit this category.

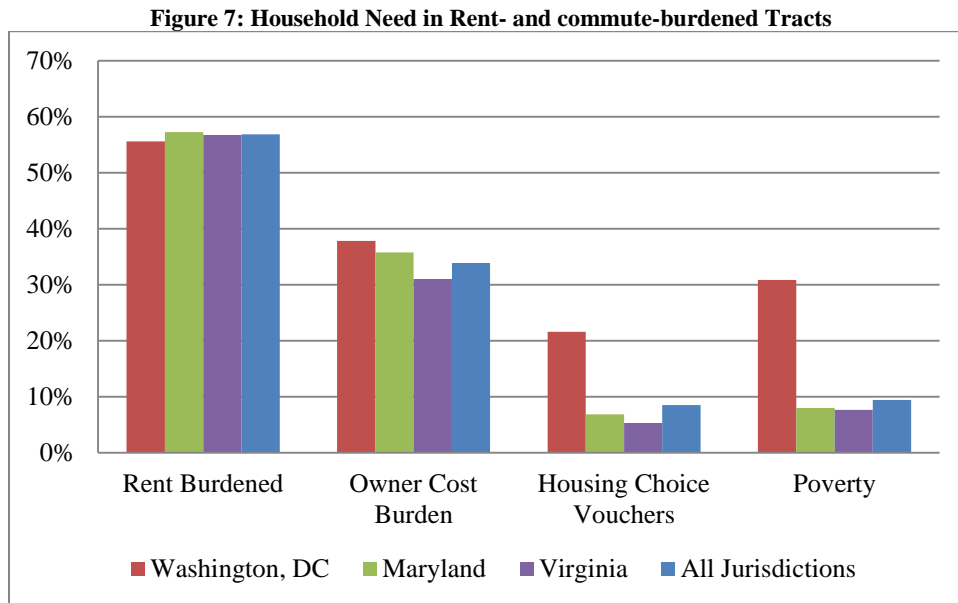
Figure 6: Rent and Commute burden in the Washington, DC Region, 2012



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

Rent burden and commutes longer than 60 minutes were compared against several categories. For instance, this research found that 58.8% of commute-burdened and 58.0% of rent-burdened tracts also had concentrations of Housing Choice Voucher (HCV) use that were above the median for the region (3.3%). Similarly, both indicators also had abnormally high rates of poverty with 61.0% of all rent-burdened and 58.4% of all commute-burdened tracts having poverty rates above the regional median (5.4%). Figure 7 shows housing need characteristics by jurisdiction in dually burdened census tracts. In the District, poverty and HCV concentrations were particularly marked. Rent- and commute-burdened tracts in the District had a 30.9% poverty rate, and 21.6% of all rental housing was inhabited by HCV users. Because the HCV requires tenants to only pay 30% of their incomes for rent, these households are not included in

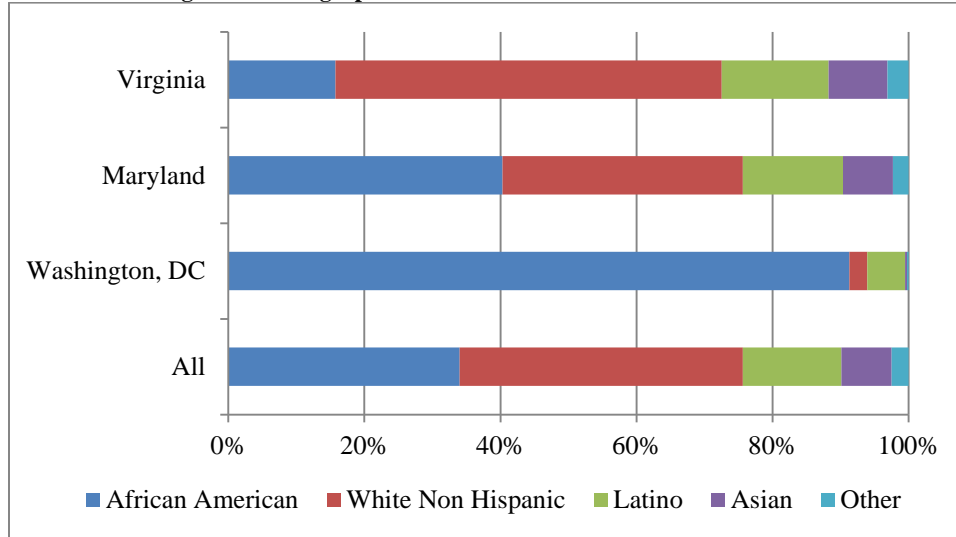
the number of rent-burdened households. Conversely, Virginia had the lowest rates of both poverty and voucher usage in their burdened tracts with 7.6% and 5.3%, respectively.



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

African Americans disproportionately live in rent- and commute-burdened tracts, representing 34.0% in all tracts, 91.3% in the District, 40.3% in Maryland, and 15.8% in Virginia. Figure 8 shows the demographic breakdown of burdened tracts. This is particularly striking when compared against the same jurisdictional populations as a whole from Figure 4. In the District, African Americans represent just 51.1%, 35.3% in Maryland, and 11.9% in Virginia. Latinos are overrepresented in Virginia only, with 14.8% of the total population, compared to 15.7% in the burdened tracts.

Figure 8: Demographics of Rent- and commute-burdened Tracts

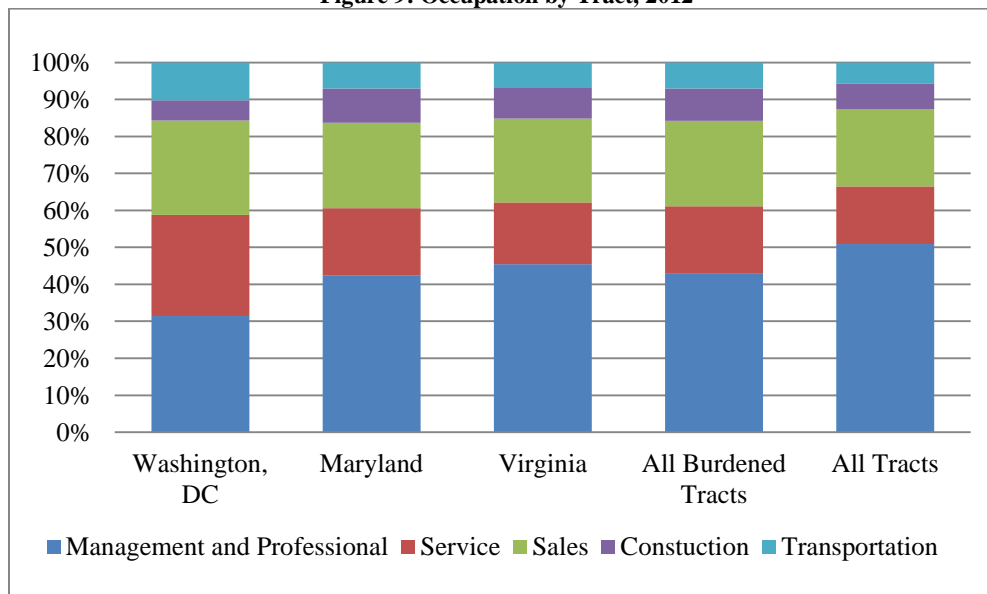


Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

Residents living in rent- and commute-burdened tracts commuted to lower paying jobs than residents in tracts across the region. Figure 9 shows the distribution of occupations in the region by jurisdiction. Across the region, 50.9% of workers were employed in management of professional occupations, (median wage of \$60.69 per hour); 15.6% in service (\$11.41 per hour), 21.0% in sales (\$19.65 per hour), 6.9% in construction (\$22.40 per hour), and 5.6% in transportation (\$17.86 per hour)⁴. In all rent-burdened tracts, the percentage of workers traveling for managerial and professional occupations fell to 43.0%, while in the District only 31.4% of workers were in those jobs. Conversely, more than half of the workers who lived in DC (52.9%) commuted to a service or sales job, compared to 41.4% in Maryland, and 39.3% in Virginia.

⁴ US Bureau of Labor Statistics, May 2013 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Washington-Arlington-Alexandria, DC-VA-MD-WV

Figure 9: Occupation by Tract, 2012

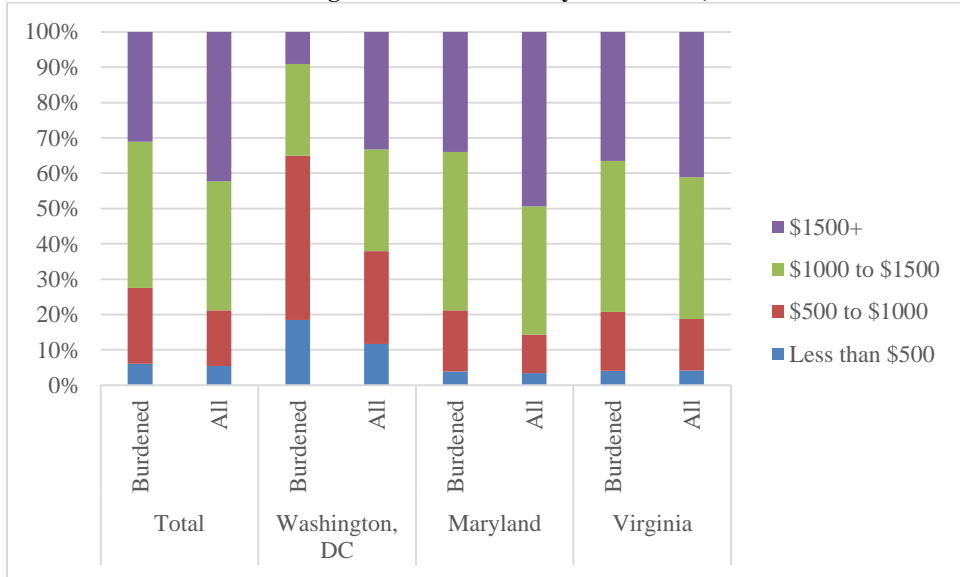


Source: American Community Survey, 2012; George Mason University Center for Regional Analysis

In spite of paying a larger portion of household income on housing costs, rent- and commute-burdened households pay lower rents than other renters in their jurisdictions. Figure 10 shows the rent paid by percentage of households by jurisdictions. Across the region, 31.1% of rent- and commute-burdened households paid \$1,500 per month or greater, compared to 42.4% of all metropolitan region households. Only 13.2% of burdened tracts in the region had median rents of \$2,000 per month or greater compared to 20.5% of all tracts. Of the burdened tracts with rents of \$2,000 or greater, none of them were located in the District, and 77.8% of burdened tracts in the District had a median rent of less than \$1,000.

In Virginia, the difference between the rents paid in burdened tracts and Virginia tracts overall was marginal. However, in the District, 33.3% of all households paid greater than \$1,500 per month, compared to only 9.1% of households in burdened tracts. These figures suggest that perhaps residents are not making trade-offs between high quality, expensive housing and long commutes. Many of these residents have chosen housing based on necessity.

Figure 10: Gross Rents by Jurisdiction, 2012



Source: American Community Survey, 2012; George Mason University Center for Regional Analysis
 *Burdened tracts are defined as having both above median rent burden and commute burden.

Conclusion and Implications

This analysis focused on the overlay of rent and Commute burden for this research to better understand the characteristics and communities of residents who live far from their jobs while still paying a premium for housing. This research suggests that in many cases, these commuters are not paying high rents in order to access good neighborhoods or schools and are in many cases living in neighborhoods with high poverty and low connectivity, while working in jobs that do not pay well. As a result of the combination of low incomes and long commutes, the costs of commuting take up a significant proportion of household incomes and leave them more heavily burdened than their higher income counterparts.

Commute-burdened workers live in all jurisdictions

Rather than being a the direct result of households moving away from urban cores, households commuting for greater than 60 minutes live in the District and close-in suburbs, as well as suburban and exurban communities. With the exception of District and Prince George's County residents, the majority of these commuters drove alone. This suggests a dispersed commuting pattern. With the growth of places like Tyson's Corner, the I-270 corridor and the Rosslyn-Ballston corridor and the increased demand for community-level services like healthcare, education, and retail, employment will continue to be dispersed through the region.

Minorities in the region are disproportionately burdened

Although the District offers an extreme example, African Americans have higher rent and commute burdens in all parts of the region. Given the greater likelihood of housing discrimination and abuses (including the areas of leasing, lending, and code violations), this raises questions about what housing may be available to them in the market. This is especially troubling given the colocation of older housing units, Rent burden and minority households.

Affordable housing should be dispersed

As the region changes toward a model of increasingly dispersed, low-wage jobs, the provision of affordable housing should become a regional priority to accommodate the growth in service sector jobs and to prevent this mix of Rent burdens and commutes. The provision and enabling of affordable housing development will not only allow existing residents to reduce their commute costs by living closer to work, but will also enable easier connections between workers and new jobs. For many of these new workers, the affordability of housing accessible to their jobs may be an important factor in the decision to relocate to the Washington, DC region.

Economic development activities should focus on rent-burdened communities

Many of the places where workers are doubly burdened are also areas where job growth has not been robust. This has exacerbated the housing and jobs mismatch that has fueled the commute burdens of workers in these communities. Economic development in conjunction with improvements to existing affordable housing stock should be the focus of areas such as Prince George's County and southeast Washington, DC. The goals should be to attract a range of jobs to support the diverse skills of those residents. The growth in high-wage jobs can then fuel the demand for low-wage work to reduce the commute burden that workers face.