

Background

Montgomery County, Maryland ("the County" or "MoCo") contracted with HR&A and LSA to assess the County's current and future housing needs. To do so, the team undertook the following workstream to develop an understanding of both historical and projected trends in the County.

> **Demographic Trends and Current Housing Needs**

Demographic Assumptions and Future Housing Needs





Background

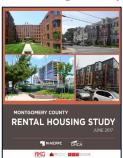
This study recognizes and builds upon several past and ongoing studies, with a goal of informing the housing portions of the Thrive Montgomery 2050 Plan.

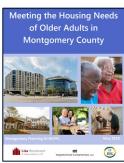
Past County Studies

Rental Housing Study

Older Adults

ADUS







Missing Middle

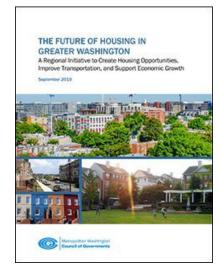
Demographic, Housing, **Economic Trends**





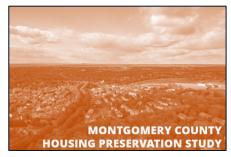
Past Regional Studies

MWCOG Regional Housing Needs



Ongoing County Efforts

Housing Affordability Preservation Study



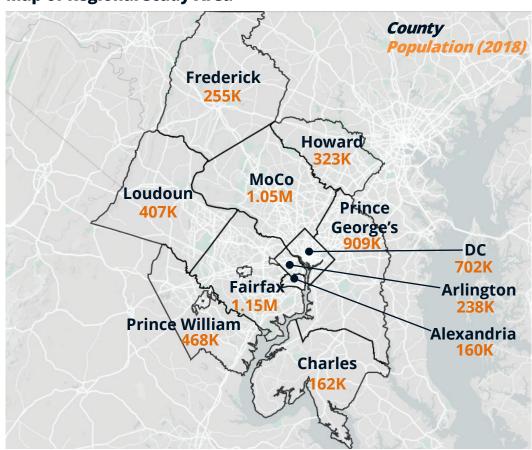
Thrive Montgomery 2050 General Plan



Geographic Study Area | Region

Throughout the document, the "region" refers to a peer set of counties in the metropolitan D.C. area, listed below. These are the same geographies used in the MWCOG's regional housing needs report, *The Future of Housing in Greater Washington*, with the addition of adjacent Howard County.

Map of Regional Study Area



List of counties, ranked by largest to smallest population:

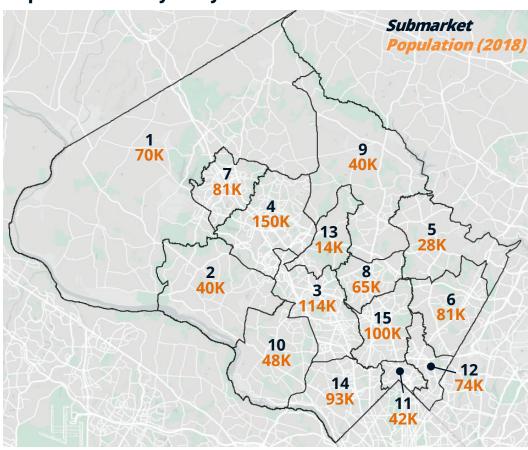
- Fairfax County
- Montgomery County (MoCo)
- Prince George's County
- District of Columbia (DC)
- Prince William County
- Loudoun County
- Howard County
- Frederick County
- Arlington County
- Charles County
- Alexandria city County

Source: U.S. Census Bureau, Population Division

Geographic Study Area | Submarkets

Some figures in the document refer to county submarkets, defined and provided by the Planning Department. These submarkets, and their relative sizes, are indicated below.

Map of Intra-County Study Area



List of submarkets

- **1** Bennett/Clarksburg/Damacus/Dickerson/ Lower Seneca/Poolesville/Goshen
- 2 Darnestown/Travilah
- **3** North Bethesda and Rockville
- **4** Gaithersburg City and Vicinity
- **5** Cloverly/Patuxent
- **6** Fairland/White Oak
- **7** Germantown
- **8** Aspen Hill
- **9** Olney
- **10** Potomac
- **11** Silver Spring
- 12 Takoma Park/Kemp Mill/4 Corners
- **13** Upper Rock Creek
- 14 Bethesda/Chevy Chase
- **15** Kensington/Wheaton

Source: U.S. Census Bureau, Population Division

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Approach and Key Findings

Our demographic analysis covers the following major indicators of housing need.



Overall Growth

- Steady growth in households, with low capture of regional growth
- Building permits indicate supply constraints despite growth
- Household growth concentrated near transit



Tenure

- Homeownership rate falling, driven by fewer young owners, low-income owners, and white owners
- Almost every submarket is adding renter households; few are adding owners



Income and Affordability

- "Barbell" growth in low- and high-income households
- Low-income households highly cost-burdened
- Supply gap exists for households earning up to 65% AMI; widening gaps driven by high demand



Household Size and Unit Type

- Household sizes are rising due to larger renter HHs, driving an increase in single-family rentals
- 1 in 7 renter households are overcrowded
- 1 in 3 owner households are over-housed

OVERALL GROWTH

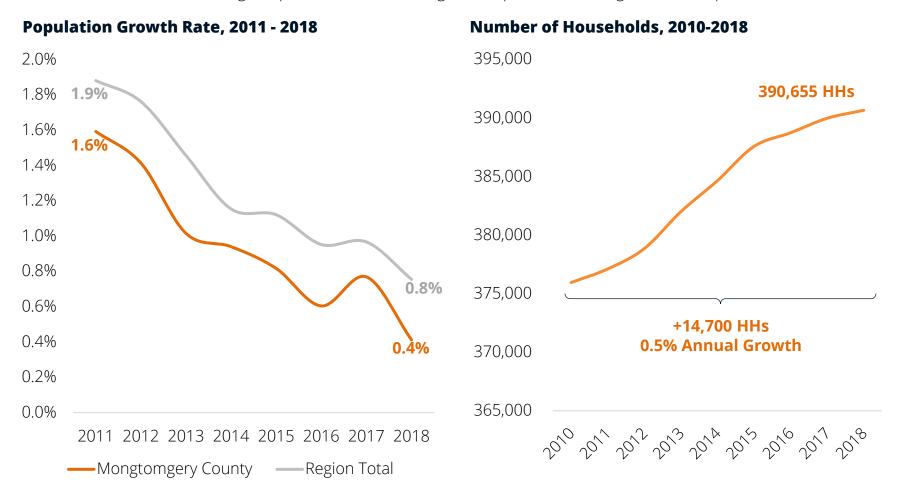
TENURE

INCOME

HOUSEHOLD SIZE

Positive but decelerating population and household growth

Population growth is decelerating. MoCo lags the regional growth rate, and the gap has recently widened. The growth in households is also decelerating but positive, with an average of 0.5 percent annual growth in the past decade.



Source: 2009-2018 ACS 1-Year Estimates, Montgomery County Population Division

Low capture of regional household growth

Since 2010, the region has added roughly 150,000 households. MoCo captured 5 percent of that growth, a share similar to that of Fairfax County, the only other county in the region with a population of over a million people.

Household Growth, 2010 - 2018

Ranked by largest to smallest percent change in households

	Percent Change in Households	Share of Regional Change in Households
Loudoun County	30%	19%
Arlington County	18%	10%
Frederick County	14%	7%
District of Columbia	14%	21%
Charles County	13%	4%
Alexandria City	11%	5%
Howard County	11%	7%
Prince William County	10%	8%
Prince George's County	5%	8%
Montgomery County	2%	5%
Fairfax County	2%	4%

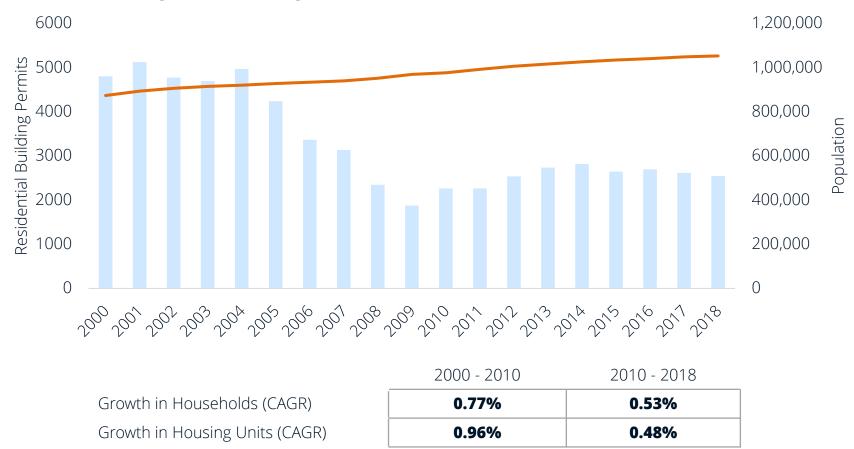
^{*}Share of Regional Change indicates each jurisdiction's capture of total regional growth. Percent change indicates growth rate within each *iurisdiction.*

Source: Montgomery County Population Division; 2010 and 2018 ACS 1-Year Estimates

Limited new construction creates supply constraints

While MoCo's population has steadily risen, the number of annual residential building permits has significantly declined since the Great Recession, a trend that creates supply constraints and pricing pressures within a growing jurisdiction.

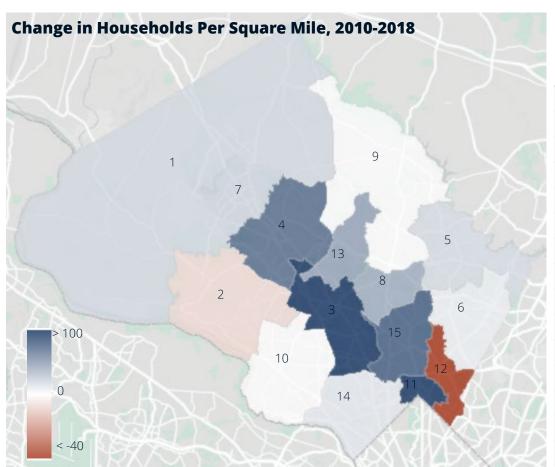
Residential Building Permits and Population, 2000 - 2018



Source: U.S. Census Building Permit Survey, Montgomery County, Population Division

Household growth highest along the metro line and I-270

Silver Spring and North Bethesda and Rockville saw the highest concentration of growth between 2010 and 2018. The Takoma Park submarket lost the most households on net.



	Group	Change in Total HHs, 2010-2018
1	Bennett	3641
2	Darnestown/Travilah	-277
3	N. Bethesda and Rockville	4957
4	Gaithersburg City	2079
5	Cloverly/Patuxent	474
6	Fairland/White Oak	183
7	Germantown	304
8	Aspen Hill	467
9	Olney	63
10	Potomac	-17
11	Silver Spring	3410
12	. Takoma Park	-375
13	Upper Rock Creek	575
14	- Bethesda/Chevy Chase	256
15	Kensington/Wheaton	1310

Source: 2010-2018 ACS 5-Year Estimates

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OVERALL GROWTH

TENURE

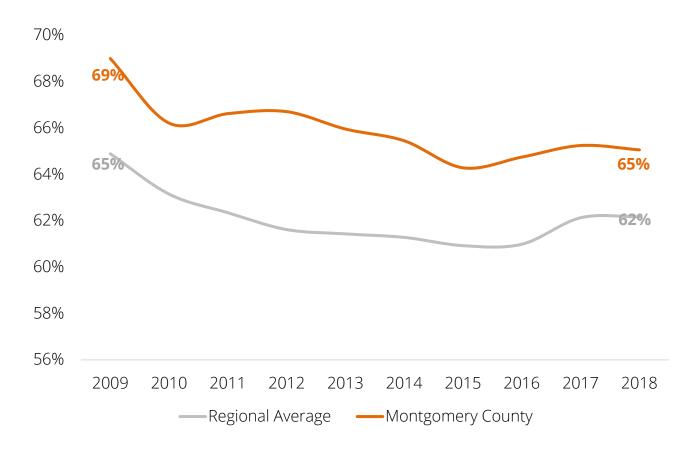
INCOME

HOUSEHOLD SIZE

Ownership rate high but in decline, following regional trend

Montgomery County has consistently had a higher homeownership rate than the rest of the region on average, and like in the rest of the region, this rate has been in decline.

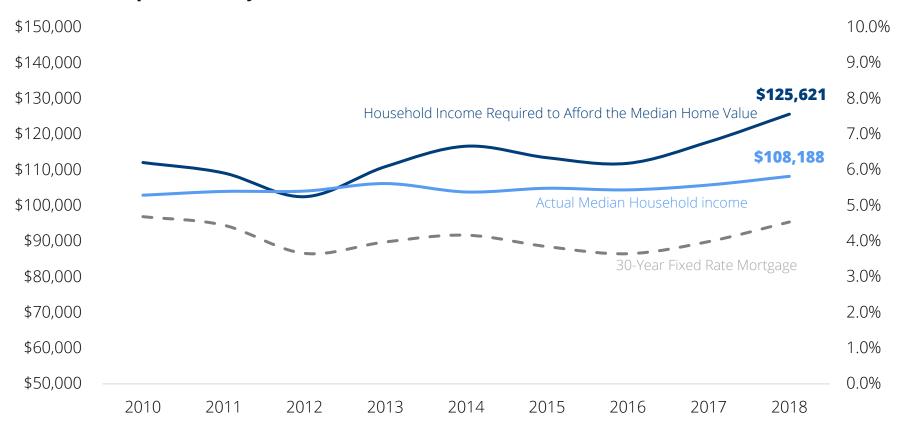
Homeownership Rate, 2010-2018



Owning unaffordable to median HH, driven by interest rates

Since 2012, the household income required to afford the median-priced home in Montgomery County has exceeded the actual median income, and this gap has steadily widened, partially driven by a period of rising interest rates. As the interest rate environment changes relative to income levels, this dynamic will shift.

Homeownership Affordability, 2010 - 2018



^{*2018} inflation-adjusted dollars Source: Zillow, Federal Reserve Economic Data HR&A Advisors, Inc.

Only \$150K+ segment adding owners on net, post-recession

In Montgomery County, \$150,000 is just under 120% of area median income for a household of four. Ownership for households earning below that has not recovered since the Great Recession.

Change in Number of Owner-Occupied Housing Units by Household Income

Less than \$25K \$25 to 50K \$50 to 75K \$75 to 100K \$100 to \$150K \$150K+

2000 - 2010	2010 - 2018
4,619	-725
10,331	-5,167
7,858	-6,574
2,632	-5,378
4,228	-6,528
-7,861	21,820

Decrease in younger owners; age "inflection point" on the rise

The number of younger homeowner households has decreased, and this trend of decline in homeownership has extended to affect 45- to 54-year-olds in the last decade. These trends are driven by falling headship rates for young households, and because those aging from the 35- to 44-year-old band into the 45- to 54-year-old band may be no closer to wanting or being able to own a home, whether due to lifestyle preferences or continued lack of economic opportunity to do so.

Change in Number of Owner-Occupied Housing Units by Age of Householder

Householder 15 to 24 Years Householder 25 to 34 Years Householder 35 to 44 Years Householder 45 to 54 Years Householder 55 to 64 Years Householder 65 to 74 Years Householder 75 and Over

2000 - 2010	2010 - 2018
-309	-303
-1,478	-5,476
-5,304	-9,998
6,965	-8,898
14,762	7,309
3,132	11,922
4,030	2,892

Asians driving ownership growth; growth in renting across all races

The decrease in owner households since 2010 has primarily been driven by a decrease in white (non-Hispanic or Latino) owner households, though there has been a slowdown in growth across all other races. Asian households led a growth in ownership both pre- and post-recession.

Renter households have increased across all races, with a significant increase for the same categories that saw the greatest slowdown in ownership growth (Hispanic, Black, and Other).

Change in Number of Housing Units by Race by Tenure

White Alone, Not Hispanic or Latino White Alone, Hispanic or Latino Black or African American Asian Alone Other

2000 - 2010	2010 - 2018
-5,561	-11,801
6,247	1,361
5,959	229
10,835	6,823
4,327	836

Owner

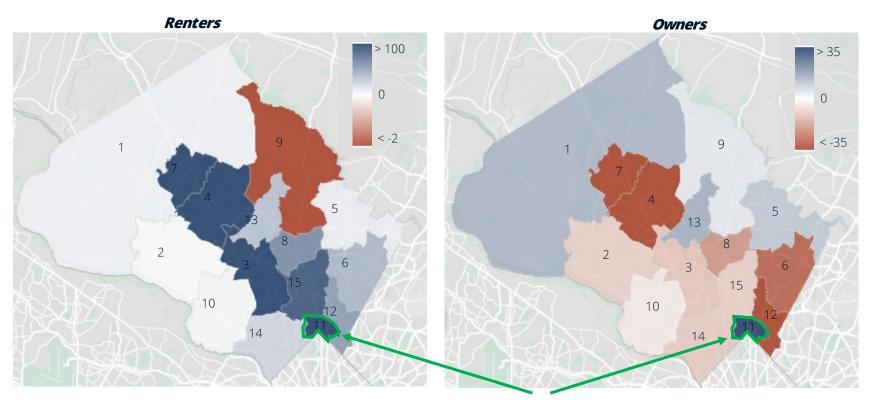
2000 - 2010	2010 - 2018
-3,207	1,510
1,389	4,443
5,727	5,535
1,480	2,264
1,416	5,850

Renter

Adding renters and losing homeowners nearly everywhere

Nearly all submarkets have seen an increase in the number of renters, but most—except for Silver Spring and the outer submarkets further from D.C.—have lost owners on net.

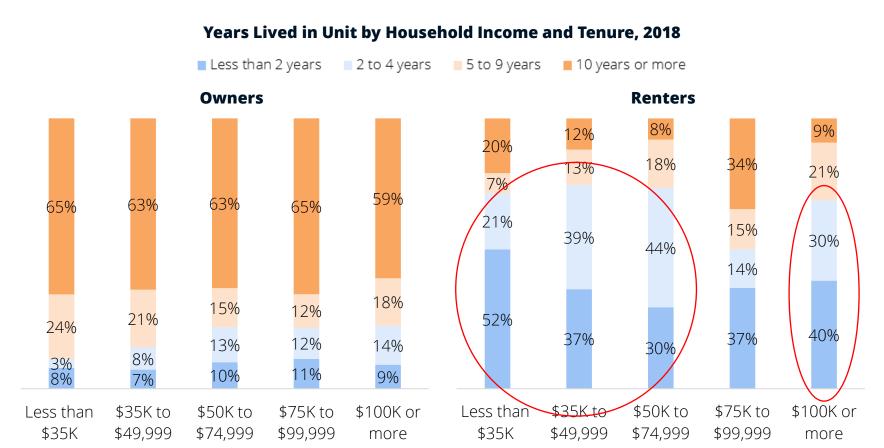
Change in Households Per Square Mile by Tenure, 2010 - 2018



Silver Spring is the only submarket to experience a net gain in both owners and renters

Renter households more mobile, especially if lower-income

This difference in mobility primarily reflects a higher turnover rate and housing instability for lower-income renters. This also reflects household growth between 2014 and 2018 in the lower- and higher-income renter segments.



OVERALL GROWTH

TENURE

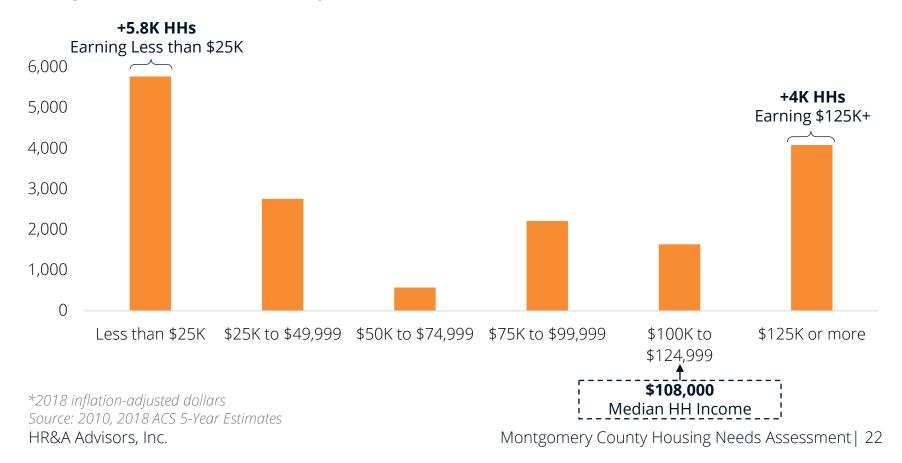
INCOME

HOUSEHOLD SIZE

"Barbell" growth in low- and high-income households

Since 2010, household growth in MoCo has been concentrated in households the lowest and highest end of the income distribution. These trends could be due to various factors, including existing households increasing their income or lower income households moving to the county. These trends imply that there is demand for housing across the income spectrum, with a particularly growing need for affordably priced housing.

Change in Number of Households by Income Bracket, 2010-2018



MoCo capturing an outsized share of low-income (<\$50K) HHs

MoCo's trend is a bit more pronounced than that of Fairfax, which is capturing 15 percent of new low-income households compared to its 14 percent existing share, while MoCo is capturing 20 percent of new low-income households compared to its existing 17 percent. Prince George's County is adding low-income households at a lower proportion to its existing share, and D.C. is actively losing low-income residents—likely displacing them into these adjacent counties.

Share of Low-Income Households in the Region, 2018

17%

Montgomery County

Rest of Region:	
District of Columbia	21%
Prince George's County	18%
Fairfax County	14%
Prince William County	6%
Loudoun County	4%
Howard County	4%
Arlington County	4%
Alexandria city County	4%
Frederick County	5%
Charles County	3%

Share of Net New Low-Income Households in the Region, 2010-2018

20%	
Montgomery County	
Rest of Region: District of Columbia	-8%
Prince George's County Fairfax County	14% 15%
Prince William County Loudoun County	14% 12%
Howard County Arlington County	8% 3%
Alexandria city County Frederick County Charles County	4% 10% 9%
Charles County	9%

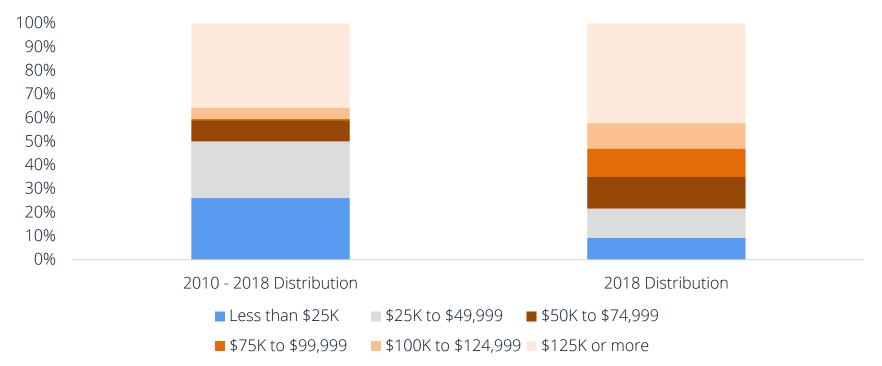
Lower Share **Greater Share**

*2018 inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

In past decade, 1 in 2 net new MoCo households earned <\$50K

Since 2010, about half of all new households earn less than \$50,000 annually. While in 2018, households earning less than \$50,000 comprised of just less than a third of total households in MoCo, this group has been growing the most rapidly over the past decade. This indicates that while high income households remain the largest group in MoCo, there is an increasing need for affordable housing to accompany the County's shifting demographics.

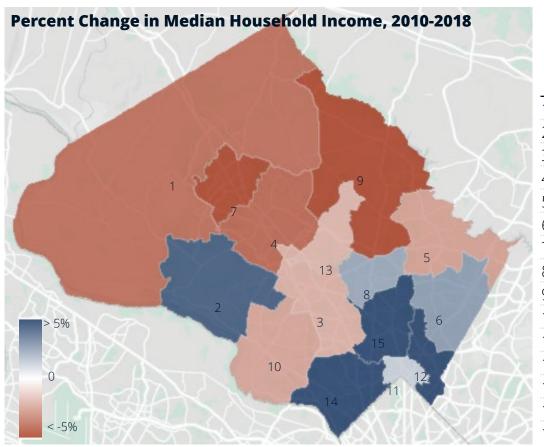
Net New Households, 2000 - 2018



^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

Income growth fastest in submarkets adjacent to D.C.

Median household incomes have grown most rapidly for the submarkets adjacent to D.C., whereas they have fallen in the submarkets where there has been an increase in low-income households but not high-income ones.

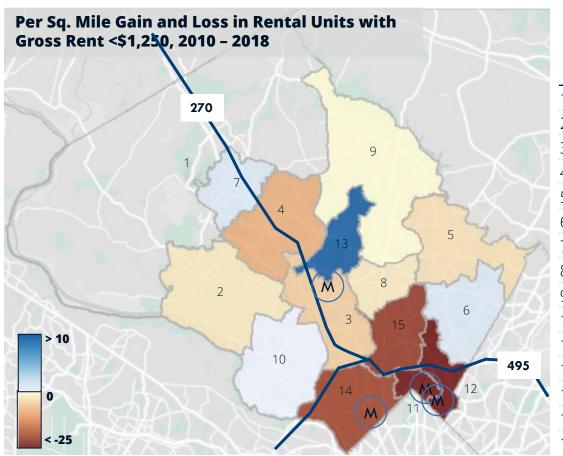


	Group	% Change in Median HH Income, 2010-2018
1	Bennett	-4%
2	Darnestown/Travilah	4%
3	N. Bethesda and Rockville	-2%
4	Gaithersburg City	-4%
5	Cloverly/Patuxent	-3%
6	Fairland/White Oak	3%
7	Germantown	-6%
8	Aspen Hill	2%
9	Olney	-6%
10) Potomac	-3%
11	Silver Spring	1%
12	. Takoma Park	7%
13	Upper Rock Creek	-2%
14	Bethesda/Chevy Chase	7%
15	Kensington/Wheaton	7%

^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

Growing incomes correlate to losses in affordable units

Submarkets with relatively affordable stock have also faced the most significant pricing pressure, leading to the loss of affordably priced units.

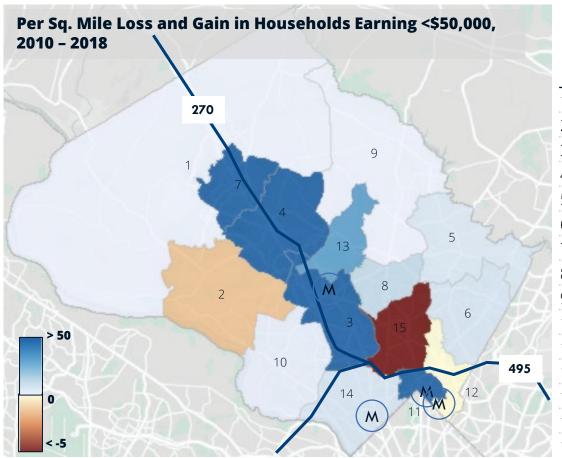


Group	0	Change in Rental Units <\$1250
1 Bennett		74
2 Darnestown/Tr	ravilah	-115
3 N. Bethesda ar	nd Rockville	-131
4 Gaithersburg (City	-246
5 Cloverly/Patux	ent	-108
6 Fairland/White	Oak	47
7 Germantown		26
8 Aspen Hill		-31
9 Olney		-34
10 Potomac		18
11 Silver Spring		-352
12 Takoma Park		-1,093
13 Upper Rock Cr	eek	156
14 Bethesda/Che	vy Chase	-411
15 Kensington/W	heaton	-341

^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

Growth in low-income households occurring along I-270

There is a gain in lower-income households along I-270 and near some metro stations. Overall, over the past decade, more submarkets have experienced a gain in lower-income households than a loss.

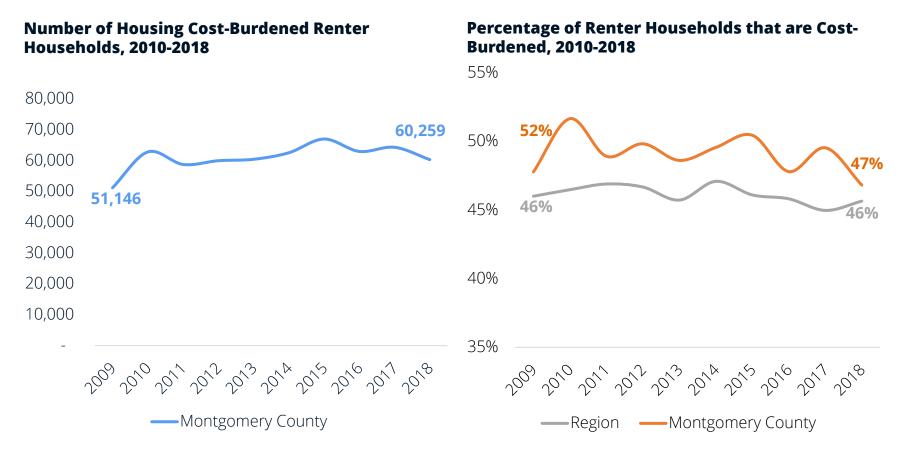


		Group	Change in HHs Earning <\$50K
	1	Bennett	792
	2	Darnestown/Travilah	-70
	3	N. Bethesda and Rockville	2,186
	4	Gaithersburg City	1,802
	5	Cloverly/Patuxent	230
	6	Fairland/White Oak	207
	7	Germantown	1,181
ĺ	8	Aspen Hill	166
	9	Olney	205
	10	Potomac	169
	11	Silver Spring	1,173
	12	. Takoma Park	-12
	13	Upper Rock Creek	400
	14	Bethesda/Chevy Chase	204
	15	Kensington/Wheaton	-122

^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

Cost-burdened households increasing, despite falling share

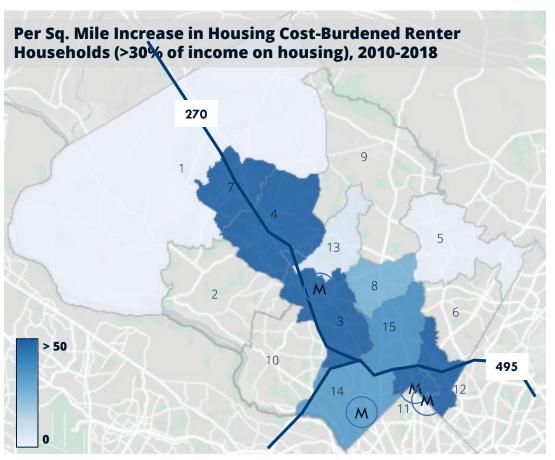
The barbell income growth helps to explain why even though the number of housing cost-burdened renters has increased, the percentage of renter households that are cost burdened has decreased over the same period.



^{*}Assumes a cost burden threshold of spending 30% of gross income on housing. Source: 2010-2018 ACS 1-Year Estimates

Cost burden is rising along transit routes

Aligned with the gain in lower-income households and the loss of affordable units along transit corridors, there was a gain in housing cost-burdened renters in these areas as well.

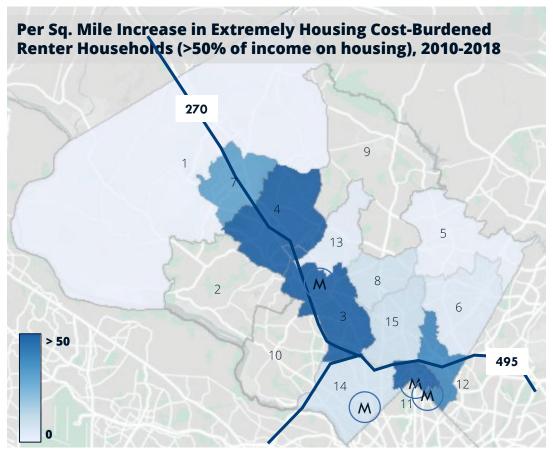


Group	+ HCB Renters
1 Bennett	251
2 Darnestown/Travilah	-86
3 N. Bethesda and Rockville	2,851
4 Gaithersburg City	2,204
5 Cloverly/Patuxent	57
6 Fairland/White Oak	-178
7 Germantown	1,150
8 Aspen Hill	294
9 Olney	-312
10 Potomac	-59
11 Silver Spring	1,596
12 Takoma Park	547
13 Upper Rock Creek	76
14 Bethesda/Chevy Chase	664
15 Kensington/Wheaton	610

^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates HR&A Advisors, Inc.

Extreme cost burden follows greatest growth in low-income HHs

The gain in extremely housing cost-burdened renters follows a similar pattern. The increase in extreme cost burden aligns with those submarkets with the greatest increases in low-income households (e.g. N. Bethesda and Rockville, Gaithersburg, and Germantown) or the greatest declines in affordable units (e.g. Silver Spring, Takoma Park).



Group	+ Extremely HCB Renters		
1 Bennett	230		
2 Darnestown/Travilah	-75		
3 N. Bethesda and Rockville	1,871		
4 Gaithersburg City	1,901		
5 Cloverly/Patuxent	62		
6 Fairland/White Oak	114		
7 Germantown	454		
8 Aspen Hill	100		
9 Olney	-16		
10 Potomac	-136		
11 Silver Spring	573		
12 Takoma Park	359		
13 Upper Rock Creek	53		
14 Bethesda/Chevy Chase	167		
15 Kensington/Wheaton	171		

^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 5-Year Estimates

Measuring the balance between demand and supply by AMI level

We measured the rental housing supply gap for different AMI levels. These gaps are provided for a cumulative income group (e.g. for households earning "up to 30% AMI" or "up to 80% AMI"), as households can demand and compete for units renting for below what they can technically "afford" (as defined by a 30% share-of-income threshold).

Demand: # of households in an income segment, defined by household income and household size

Supply: # of housing units affordable to these households (where gross rent is at most 30% of income), accounting for unit rent and unit size

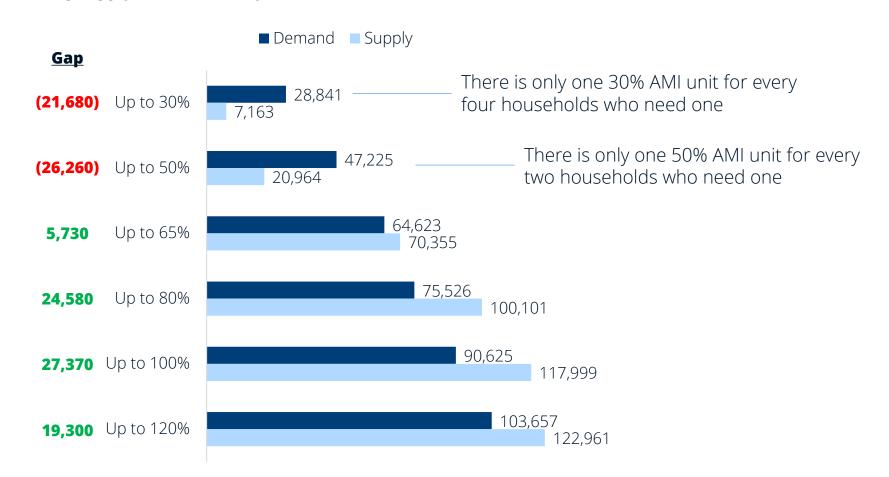
Housing gap: supply – demand

To measure the size of the gap and cost burden, we used nominal gross rent values and household income values, comparing 2018 and 2014 1-year PUMS data.

To define AMI levels, we used 2018 AMI thresholds (to match 2018 PUMS data). For the 2014 gap analysis, these thresholds were adjusted down by the rate of inflation between 2014 and 2018.

In 2014, the county faced a gap of about 26,260 units for households earning up to 50% of AMI.

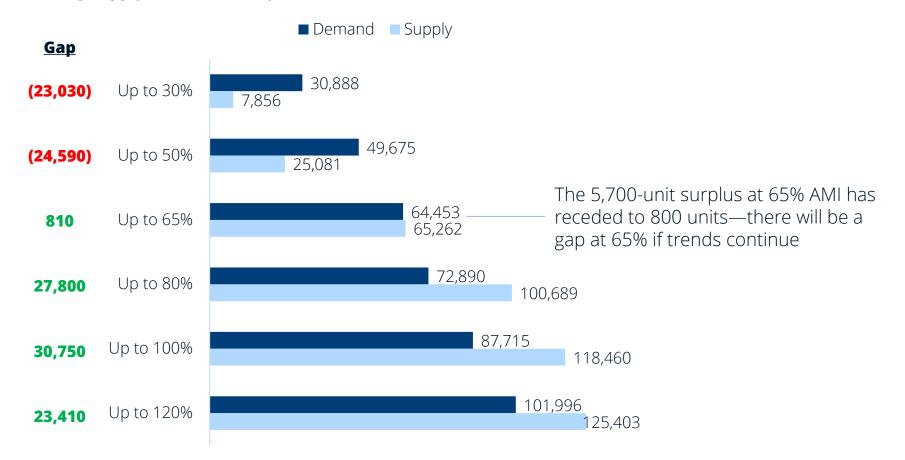
Housing Supply and Demand by AMI Band (Cumulative), 2014



Source: 2014, 2018 PUMS 1-Year Estimates HR&A Advisors, Inc.

Between 2014 and 2018, the gap worsened for households earning up to 65% AMI, while improving for households earning above that.

Housing Supply and Demand by AMI Band (Cumulative), 2018



Overall, trends are worsening for households below 65% AMI

"Low-income households" are not an insignificant share of MoCo's residents. Those earning up to 30% of AMI make up roughly a quarter of all renter households, and those earning up to 65% of AMI represent half of all renter households.

Overall Housing Gap Trends, 2014-2018

Cumulative AMI Band	Share of Total Renter HHs Represented by AMI Band	<u>2014 Gap</u>	<u>2018 Gap</u>	Shift in Gap	Nature of Shift
Up to 30% AMI	24%	(21,680)	(23,030)	(1,350)	Deepened gap
Up to 50% AMI	39%	(26,260)	(24,590)	1,670	Lessened gap
Up to 65% AMI	50%	5,730	810	(4,920)	Reduced surplus
Up to 80% AMI	57%	24,580	27,800	3,220	Increased surplus
Up to 100% AMI	68%	27,370	30,750	3,380	Increased surplus
Up to 120% AMI	79%	19,300	23,410	4,110	Increased surplus

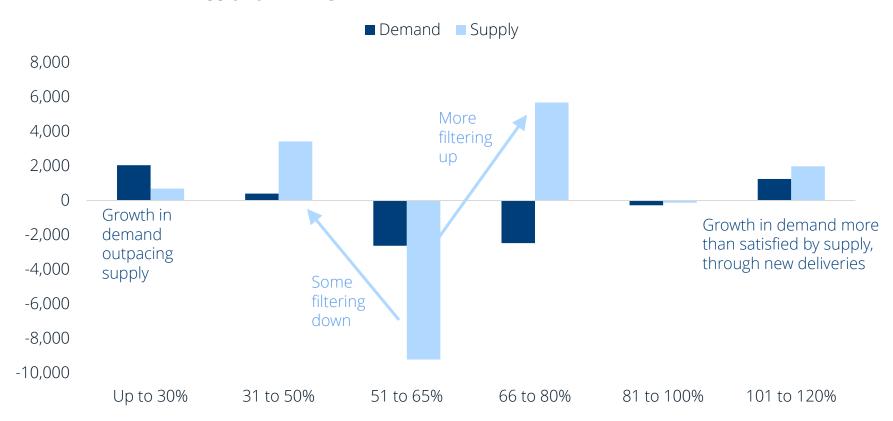
Source: 2014, 2018 PUMS 1-Year Estimates

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The underlying supply and demand trends differ by AMI segment

At below 30% of AMI, growth in rental housing demand has visibly outpaced supply, leading to a worsened gap. For the 30% to 80% AMI levels, shifts in supply appear to be primarily driven by "filtering" (shifts in price for existing units) and through the delivery of moderately priced dwelling units. At the highest income levels, growth in supply has exceeded growth in demand, likely through the ample new delivery of higher-priced rental units.

Shift in Demand and Supply by AMI Segment (non-cumulative), 2014 - 2018



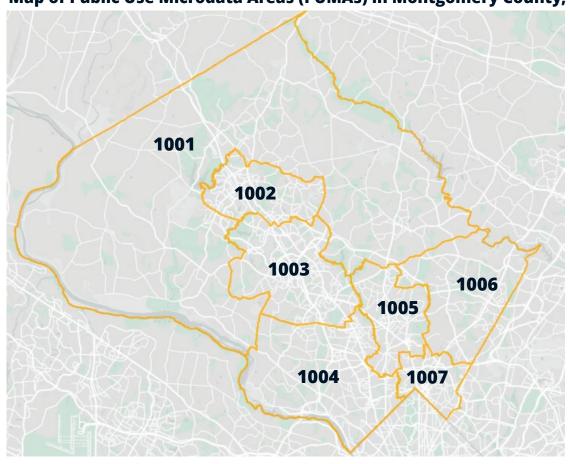
Source: 2014, 2018 PUMS 1-Year Estimates

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Geographic Study Area | PUMA

The housing gap analysis makes use of Public Use Microdata Areas, as defined by the 2010 Census. These geographies provide less detail than the county-designated submarkets used above, but they are the smallest resolution at which detailed Public Use Microdata Survey (PUMS) data is identifiable.

Map of Public Use Microdata Areas (PUMAs) in Montgomery County, MD



Olney, Damascus, Clarksburg &

1001 Darnestown

1002 Germantown & Montgomery Village Rockville, Gaithersburg Cities & North

1003 Potomac

1004 Bethesda, Potomac & North Bethesda

1005 Wheaton, Aspen Hill & Glenmont Fairland, Calverton, White Oak &

1006 Burtonsville

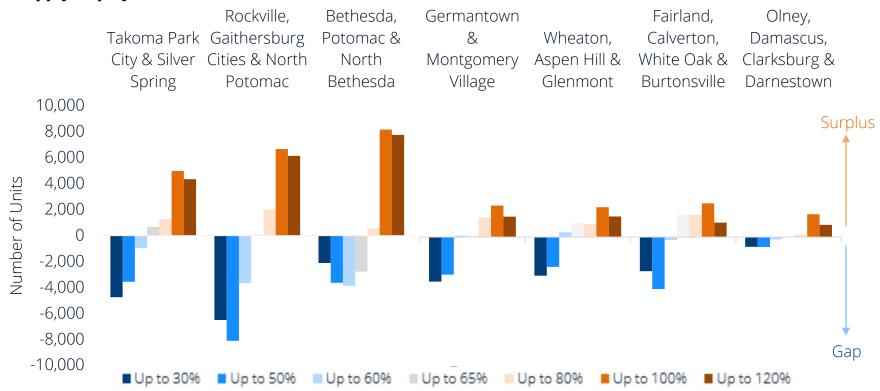
1007 Takoma Park City & Silver Spring

Source: U.S. Census Bureau HR&A Advisors, Inc.

Low-rent, high-growth submarkets have the steepest gaps

A housing gap exists for households earning up to 50% of AMI in all PUMAs. These gaps are steepest in the Takoma Park/Silver Spring and Rockville/Gaithersburg PUMAs, partly because these submarkets have greater demand from low-income households. The Bethesda PUMA's supply gap extends the furthest, affecting households earning up to 65% of AMI, due to the higher overall rent levels. Note that these charts do not indicate high vacancies in high-rent units. They indicate that higher-income renter households have many more options to find affordably priced rental units priced within 30 percent of their household income, whereas lower-income households in each PUMA are much more likely to be cost-burdened, or paying over 30 percent of income on housing, due to limited affordable options.

Supply Gap by PUMA, 2018



Source: 2014, 2018 PUMS 1-Year Estimates

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OVERALL GROWTH

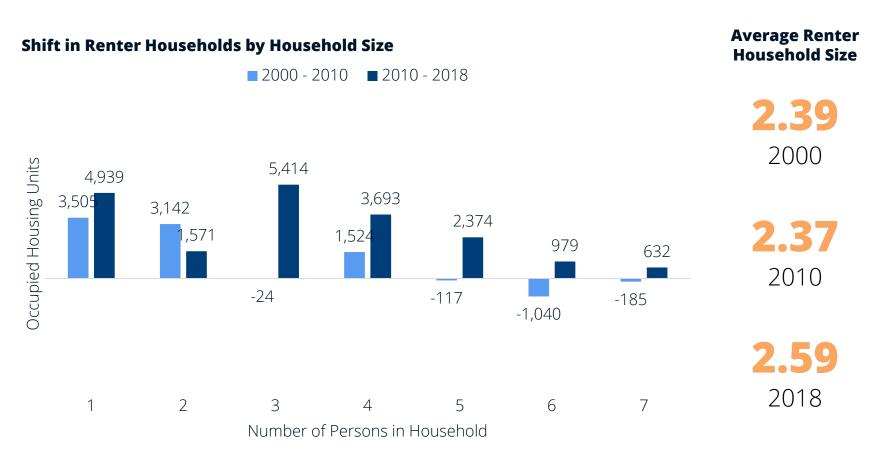
TENURE

INCOME

HOUSEHOLD SIZE

Post-recession, MoCo is adding more renters, of larger HH sizes

In the past decade, a quarter (25 percent) of net new renter households were 1-person households (singles), nearly half (50 percent) of net new renter households were 3- and 4-person households, and a fifth (20 percent) of net new renter households had 5 or more persons. Overall, the increase in larger renter households has accelerated in the past decade relative to 2000 to 2010.

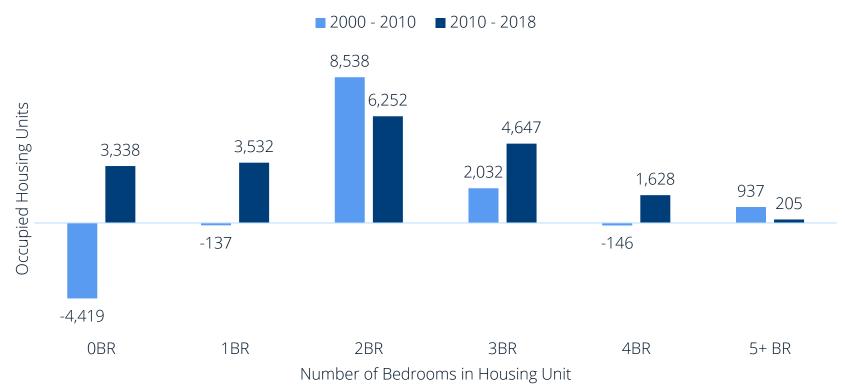


Source: 2000 Decennial Census (on 2010 Geographies); 2010, 2018 ACS 5-Year Estimates

Post-recession, MoCo is adding more, larger rental housing

To accommodate larger households, there has been a significant increase in the number of 2- and 3-bedroom rental units, both pre- and post-recession.

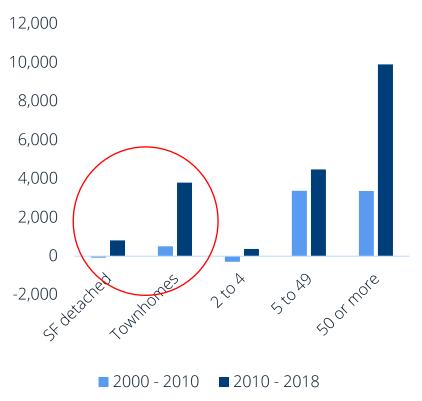
Shift in Renter-Occupied Housing Units by # Bedrooms



Larger units driven by single-family conversions to rental

This increase in larger rental supply is most likely explained by a rapid increase in single-family conversions to rental occupancy post-recession, as most new multifamily deliveries added 1- and 2-bedroom units, whereas a conversion of townhomes to rental product helped meet rapid demand for larger 2- and 3-bedroom units.

Shift in Renter-Occupied Units by Units in Structure, 2000-2018



Cumulative New Units Delivered in Multifamily Buildings by Unit Size, 2000-2018 (Indexed to 2000)



Source: CoStar HR&A Advisors, Inc.

1 in 7 renter households are overcrowded

15,600 renter households, or 14 percent of renter households, are in "overcrowded" housing arrangements, as indicated by the living situations highlighted in red (where there are at least two more people than there are bedrooms). In contrast, only 5 percent of owners are overcrowded by the same definition.

Number of Renter Households by Housing Unit Size and Household Size

Number of People in Household Overcrowded Right-sized 2 3 4 0-1 32,200 11,000 2,300 400 400 2 11,300 17,500 9,900 7,500 3,500 Number of 3 1,300 3,800 5,200 6,000 1,500 **Bedrooms** 300 900 1,400 1,100 1,100 4 5+ 200 0 500 500 300

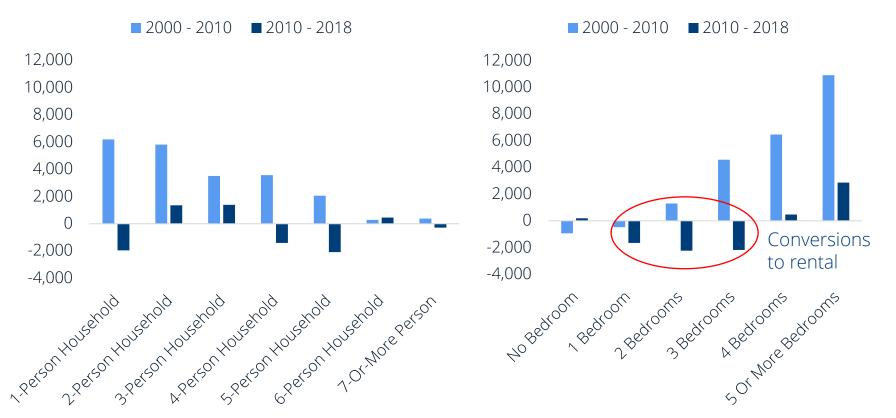


Pre-recession, MoCo overdelivered large owner-occupied housing

Pre-recession, the growth in owner households was primarily in 1- and 2-person households, whereas most deliveries were of 4- and 5-bedroom housing units. Post-recession, MoCo is adding fewer owner households on net, and only 2and 3-person owner households have continued to increase. Meanwhile, 1- to 3-bedroom owner-occupied housing units have faced rental conversions.

Shift in Owner Households by Household Size

Shift in Owner-Occupied Housing Units by # Bedrooms



Source: 2000 Decennial Census (on 2010 Geographies); 2010, 2018 ACS 5-Year Estimates

1 in 3 owner households are over-housed

80,000 owner households, or 32 percent of owner households, are over-housed (as defined by the housing situations outlined in red, where there are at least 2 more bedrooms than there are people), compared to only 3 percent of renter households by the same measure.

Number of **Owner** Households by Housing Unit Size and Household Size

Number of People in Household Right-sized Overcrowded 2 3 0-1 5,800 800 400 100 200 2 11,300 9,800 3,000 1,000 1,700 Number of 16,500 28,000 16,400 10,100 3 12,200 **Bedrooms** 9,200 31,000 16,900 4 17,400 11,700 11,400 5+ 3,400 12,800 7,100 9,900



"Over-housing" driven by low density, aging, and/or wealth

The Olney and Germantown PUMAs have the highest number of "over-housed" owners, due to the lower-density nature of these areas and due to rapid aging (the share of over-housed households over 65 has increased the most rapidly in these PUMAs). The Rockville/Gaithersburg PUMA showed the greatest increase in over-housed owner households, also driven by an increase in the number of over-housed households (10 percentage point increase in share). Bethesda is notable for having a high number of over-housed owner households despite having only a very small increase in the share of such units occupied by older households.

Characteristics of Over-Housed Owner Households by PUMA, 2014 and 2018

	# of HHs			% with 65+	
	2014	2018	2014 - 2018	2014	2018
Olney, Damascus, Clarksburg & Darnestown	18,603	18,288	-315	35%	52%
Germantown & Montgomery Village	14,491	14,763	273	27%	41%
Rockville, Gaithersburg Cities & North Potomac	13,326	14,700	1,374	38%	48%
Bethesda, Potomac & North Bethesda	10,883	10,722	-160	56%	58%
Wheaton, Aspen Hill & Glenmont	8,156	8,874	718	51%	54%
Fairland, Calverton, White Oak & Burtonsville	8,712	6,534	-2,178	46%	59%
Takoma Park City & Silver Spring	5,830	6,120	289	42%	50%



Approach

The housing need forecasts produced for Montgomery County account for both demographic trends and future economic growth in Montgomery County and the greater Washington DC region. This methodology more directly takes into account shifts in the structure of the economy as well as commuting patterns throughout the region.

Several inputs drive these housing forecasts:

- Forecasts of job growth by sector for Montgomery County and the rest of the Washington DC region, plus Howard County, Maryland are derived from projections by industry sector from Woods & Poole and the Bureau of Labor Statistics. These forecasts have been adjusted to take into account the expected 2020 economic recession.
- Age distribution of new workers.
- Distribution of wages of jobs by industry sector, assuming a minimum wage of \$15.
- Household types, including the number of adults and children and the number of workers per households.
- Assumptions about tenure (i.e. owner/renter) and housing type (i.e. single-family/multifamily) by household income and household type.

MoCo to add over 60,000 new households by 2040

Between 2020 and 2040, MoCo is expected to need to add 63,031 new households, both working and non-working households, specifically new residents who are seniors or persons with disabilities. These forecasts expect that the County will add 3,274 additional households over the 20-year period compared to the Metropolitan Washington Council of Governments (MWCOG) Round 9.1a forecasts. Given the average annual production of 2,577 new units* from 2015-2019, MoCo is likely producing less housing than what is suggested by the employment-driven housing demand forecasts.

Household Forecasts, 2020-2040

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
LSA Household Forecasts	14,317	17,979	16,350	14,386	63,031
MWCOG Rd. 9.1a	14,495	16,666	15,803	12,793	59,757
Diff (MWCOG – LSA)	241	-1,313	-547	-1,593	-3,274

These forecasts suggest an annual production of net new housing units as follows:

Net New Housing Needed Annually*

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040
Annual New Units	2,863	3,596	3,270	2,877

Source: LSA, Woods & Poole, U.S. Census Bureau, U.S. Bureau of Labor Statistics, MWCOG, dataMontgomery – Residential Building Permits

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^{*}This figure is based on permits for construction of new housing units (single-family and multifamily) and does not consider units lost through demolition.

Housing Type and Tenure

Household composition and household income are the key determinants of the tenure (i.e. renter/ owner) and type (i.e. single-family/multifamily) among new households living in Montgomery County. Assumptions were made about the distribution of housing types across incomes and household types. Details are available in the Appendix. One key assumption is that the need for single-family ownership for new households will be significantly lower than the current share of housing in the County that is single-family owner-occupied. New single-family homeowners largely will occupy existing homes vacated by current residents who either move out of the County, move into a different home in the County, or pass away.

Over the 2020 to 2040 period, these forecasts suggest that Montgomery County will need to add the following types of housing units to accommodate the forecasted households:

Housing Forecasts by Type and Tenure, 2020-2040 (%)

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
Single-Family Owner	13.9%	13.4%	13.5%	13.2%	13.5%
Multifamily Owner	27.5%	27.4%	27.4%	27.2%	27.4%
Single-Family Renter	4.4%	4.4%	4.4%	4.5%	4.4%
Multifamily Renter	54.2%	54.9%	54.8%	55.2%	54.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

More than half of the new housing needed to accommodate new households over the 2020 to 2040 period is projected to be multifamily rental housing (including both apartment and townhome/duplex/triplex/quadplex rentals). More than one quarter (27.4%) of new households are forecasted to need multifamily owner housing (including multifamily condominiums, as well as townhomes, duplexes, triplexes and quadplexes.)

Source: LSA, U.S. Census Bureau

^{*}Multifamily includes townhomes, duplexes, apartments and condominiums.

MoCo is expected to gain low- and high-income households

Based on the wages of new jobs and the number of workers per household, along with the incomes of non-working households, it is expected that the greatest shares of new households in MoCo over the 2020 to 2040 period will have incomes between \$25,000 and \$49,999 (26.6%) and \$125,000 and over (23.9%). An estimated 7.0% of new households over the 2020 to 2040 period will have incomes below \$25,000. This includes single-worker households earning below \$25,000, as well as seniors and persons with disabilities living in sixed incomes, such as Social Security or SSI.

Household Forecasts by Household Income, 2020-2040

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
Less than \$25,000	986	1,244	1,127	1,043	4,399
\$25,000 to \$49,999	3,671	4,820	4,372	3,876	16,739
\$50,000 to \$74,999	2,319	2,968	2,676	2,360	10,324
\$75,000 to \$99,999	2,492	3,099	2,818	2,529	10,939
\$100,000 to \$124,999	1,368	1,601	1,419	1,201	5,588
\$125,000 and higher	3,481	4,247	3,936	3,378	15,042
Total	14,317	17,979	16,350	14,386	63,031

Household Forecasts by Household Income, 2020-2040 (%)

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
Less than \$25,000	6.9%	6.9%	6.9%	7.2%	7.0%
\$25,000 to \$49,999	25.6%	26.8%	26.7%	26.9%	26.6%
\$50,000 to \$74,999	16.2%	16.5%	16.4%	16.4%	16.4%
\$75,000 to \$99,999	17.4%	17.2%	17.2%	17.6%	17.4%
\$100,000 to \$124,999	9.6%	8.9%	8.7%	8.3%	8.9%
\$125,000 and higher	24.3%	23.6%	24.1%	23.5%	23.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: LSA, Woods & Poole, U.S. Census Bureau, U.S. Bureau of Labor Statistics

A third of households will have incomes at or above 100% AMI

Estimates of new households by income as a percentage of area median income (AMI) were also forecasted for the 2020 to 2040 period by comparing the forecasted household incomes and household sizes to the FY2019 HUD Income Limits. Based on these forecasts, more than a third (33.7%) of new households in Montgomery County over the 2020 to 2040 period will have incomes of 100% of the area median income or above. It is expected that 9.3% of new households will be extremely low-income households, with incomes below 30% of AMI, and another 16.6% of households will have incomes between 30 and 50% of AMI.

Household Forecasts by Household Income as a Percent of AMI, 2020-2040

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
<30% AMI	1,323	1,675	1,524	1,364	5,887
30-50% AMI	2,336	3,018	2,737	2,379	10,470
50-65% AMI	2,165	2,796	2,512	2,164	9,638
65-80% AMI	1,413	1,767	1,630	1,442	6,252
80-100% AMI	2,168	2,747	2,483	2,144	9,541
100%+ AMI	4,911	5,976	5,463	4,893	21,243
Total	14,317	17,979	16,350	14,386	63,031

Household Forecasts by Household Income, 2020-2040 (%)

	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2020 to 2040
<30% AMI	9.2%	9.3%	9.3%	9.5%	9.3%
30-50% AMI	16.3%	16.8%	16.7%	16.5%	16.6%
50-65% AMI	15.1%	15.6%	15.4%	15.0%	15.3%
65-80% AMI	9.9%	9.8%	10.0%	10.0%	9.9%
80-100% AMI	15.1%	15.3%	15.2%	14.9%	15.1%
100%+ AMI	34.3%	33.2%	33.4%	34.0%	33.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Comparison of Income Assumptions

Direct comparisons between the current household forecasts and the Urban Institute forecasts are not possible because of the way in which the income categories were defined. The below provides a very rough comparison to demonstrate that the current forecasts suggest much higher growth in higher income households in the County than do the Urban Institute forecasts.

Comparison of Current Forecasts and Urban Institute Forecasts (*Approximate* shares in each income category)

	Current Forecasts	Urban Institute
Lowest (<30% AMI)	9%	24%
Low (30-50% AMI)	17%	21%
Low-Middle (50-65% AMI)	15%	15%
Middle-High (65% - 100% AMI)	25%	21%
High (100% AMI+)	34%	20%
Total	100%	100%



Data note: Census income data presents year-to-year volatility

When looking at 1-year ACS surveys, the year-to-year volatility in the number of households being added by income bracket indicates a high amount of volatility, with the steepest differences and trend reversals seen in the lower-income population. The County should look to 2020 Census data for a reestablished benchmark in the number of households by income level.

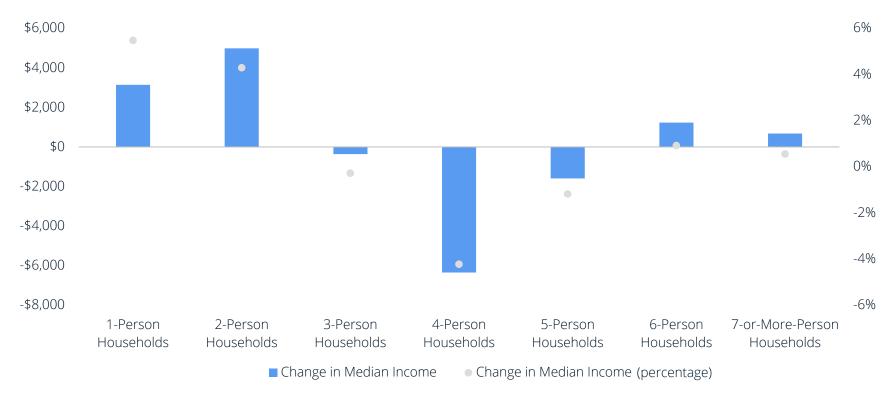
Cumulative Net Change in Number of Households by Income Bracket (indexed to 2009), ACS 1-year



Median household incomes rising for smaller households

Between 2010 and 2018, median household incomes grew by 4 to 5 percent for 1- and 2-person households, while they fell or were stagnant for larger households.

Change in Median Income by Household Size, 2010 - 2018

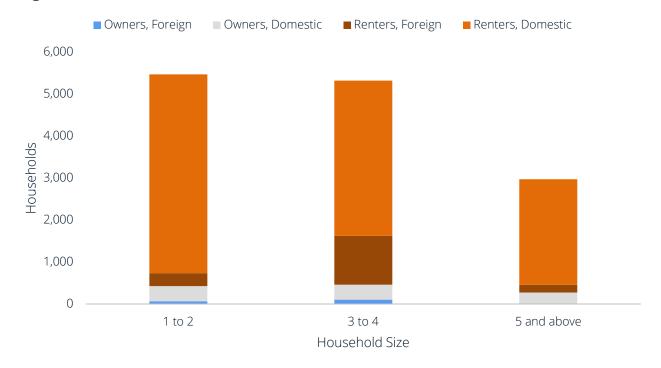


^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 1-Year Estimates

Low-income households with turnover likely family-sized (3+), renters

Focusing on just the low-income households changing housing units in a single recent year (2018), households with more than 3 persons made up about 60 percent. These low-income households entering new housing units are overwhelmingly renters (in orange). Nearly a quarter of low-income renter 3-4 person households turning over (or roughly 1,200 households) came from outside of the U.S. or Puerto Rico.

Households Earning <\$50,000 Who Moved Within Past Year, 2018, By Tenure, Origin, and Household Size



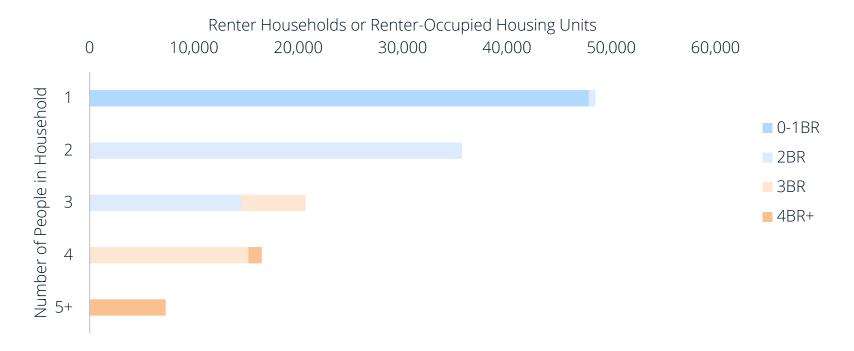
^{*2018} inflation-adjusted dollars Source: 2010, 2018 ACS 1-Year Estimates HR&A Advisors, Inc.

Renter Household Size vs. Housing Unit Size

The figure below presents a hypothetical situation in which households filled up housing units sequentially, with the smallest households occupying the smallest housing unit types, and so on. This hypothetical situation suggests that there are currently technically enough family-sized rental units in Montgomery County.

However, per the prior analysis on overcrowding, the reality is that the affordability, location, and building structures of housing units—as well as the income and spending power of household types—leads to an outcome in which small renter households may occupy both small and large units, and some larger, lower-income renter households are pushed into overcrowded accommodations.

Hypothetical Matching Between Household Sizes and Housing Unit Sizes (By Bedroom Count)



Source: 2018 PUMS 1-Year Estimates HR&A Advisors, Inc.