MULTIFAMILY RENTAL HOUSING CONSTRUCTION INDICATORS

Information on the number, location, size and cost of multifamily residential development projects in metropolitan Washington

2018 Edition

Metropolitan Washington
Council of Governments

MULTIFAMILY RENTAL HOUSING CONSTRUCTION INDICATORS 2018
December 2019

ABOUT COG
The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from 24 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

CREDITS
Report Author: John Kent, COG Staff
Cover Photo: New views of H Street NE 8561 / Cropped from original, (Ted Eytan/Flickr)

ACCOMMODATIONS
Alternative formats of this document are available upon request. Visit www.mwcog.org/accommodations or call (202) 962-3300 or (202) 962-3213 (TDD).

TITLE VI NONDISCRIMINATION POLICY
The Metropolitan Washington Council of Governments (COG) fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. For more information, to file a Title VI related complaint, or to obtain information in another language, visit www.mwcog.org/nondiscrimination or call (202) 962-3300.

El Consejo de Gobiernos del Área Metropolitana de Washington (COG) cumple con el Título VI de la Ley sobre los Derechos Civiles de 1964 y otras leyes y reglamentos en todos sus programas y actividades. Para obtener más información, someter un pleito relacionado al Título VI, u obtener información en otro idioma, visite www.mwcog.org/nondiscrimination o llame al (202) 962-3300.

TABLE OF CONTENTS

FIGURES AND TABLES

EXECUTIVE SUMMARY

This report describes recent trends in the multi-family rental housing market within the 24 member jurisdictions of the Metropolitan Washington Council of Governments (COG). Residential property records from the CoStar subscription database (www.costar.com) for buildings completed through the end of 2018 were analyzed to document the number, size, and location of new apartment units, as well as describe changes in the market rents across the region.

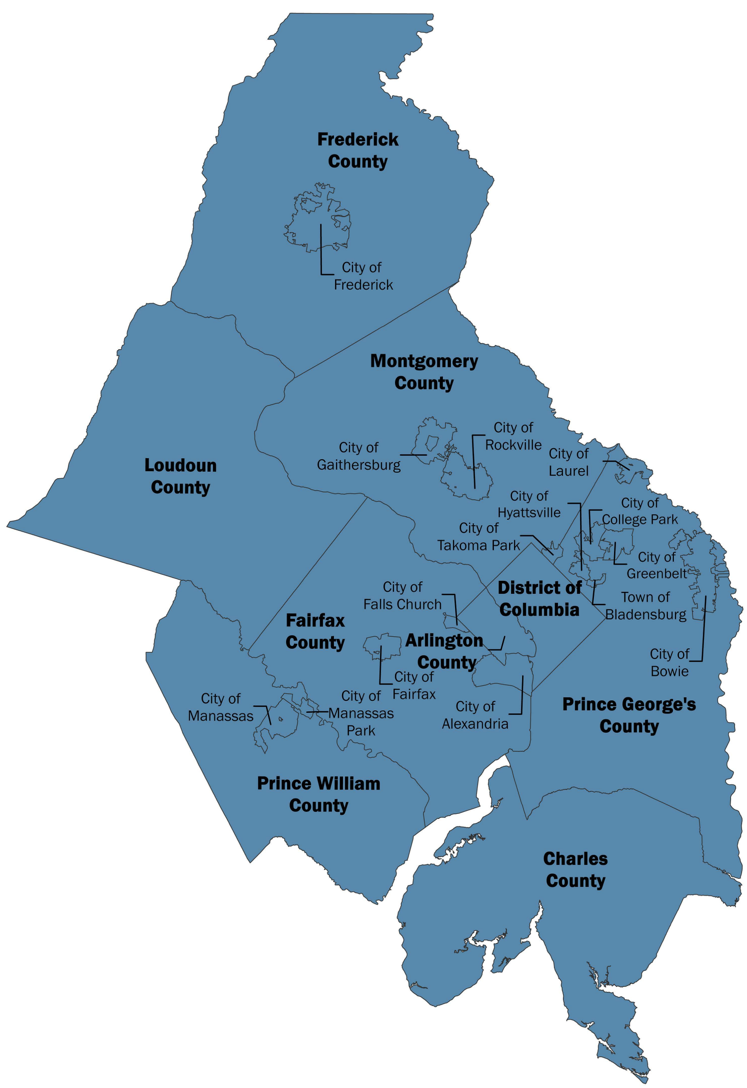
- New construction declined 30 percent from 2017 to 2018. In 2018, 82 new multifamily buildings were completed, with 9,971 total housing units added to the region.
- 2018 represents a year-over-year decline amidst a construction boom. Apartment construction in the region is occurring at the fastest pace since the 1960s, a decade which saw 15,434 units built per year. Since 2014, the region has added 656 apartment buildings and 67,531 new units, the most for any five-year period in the last 50 years.
- Rents in the COG region are high compared with the median income of renters. At the end of 2018, median rents in multifamily buildings were between 28 and 38 percent of median renter income, depending on the number of bedrooms in a unit.
- New construction is trending towards units with fewer bedrooms. In 2018, 63 percent of all new units were studios or one-bedroom units, the highest share in over 50 years.
- Development is also trending towards buildings located in or near Metrorail stations. Just over 52 percent of units built in 2018 were within a half-mile walk from a Metrorail station, while only 24 percent of units built before 2018 are in a Metrorail station walkshed.
- With four new apartment buildings and 965 new units in 2018, the Reston Town Center Activity Center was the fastest growing neighborhood in the region, accounting for ten percent of all regional apartment growth.
- Overall, 85 percent of new units were located within one of the region’s 141 Activity Centers or near one of the region’s high-capacity transit (HCT) Stations. This surpasses the 75 percent target the COG Board of Directors set earlier this year for new housing construction in the region.

INTRODUCTION

The annual Multifamily Rental Housing Construction Inventory focuses on rental apartment projects of five units or more that have been completed in metropolitan Washington. These include market rate, mixed-income, and affordable residences, including public housing. Corporate and senior housing are included, but this inventory does not include student housing, military housing, housing cooperatives, or condominium units. Included senior housing is limited to age-restricted communities, while assisted and other senior care facilities are excluded. Building styles include high-rise, mid-rise, low-rise, and garden-style apartments, but not single-family residences, attached housing projects of four units or fewer, or mobile home parks. Metropolitan Washington Council of Governments (COG) staff compiled this report by analyzing residential property records from the CoStar subscription database (www.costar.com).

In this report, the metropolitan Washington region refers to the areas surrounding the District of Columbia that are members of COG, as shown below in Figure 1 below.

Figure 1. COG represents 24 local governments in the multi-state metropolitan Washington region.



According to data from the 2017 American Housing Survey (AHS), the single-family detached house is the most common dwelling type in the Washington Metropolitan Statistical Area. The subject of this report, the multi-family rental apartment market, comprises the second largest sector of the housing market, representing approximately one-fifth of the region's housing, shown in dark green in Figure 2 to the right. However, apartments have represented a much larger share of recent construction.[1]

Multifamily rental housing construction in the metropolitan Washington region decreased by 30 percent in 2017. Last year, 82 new multifamily buildings were completed, with 9,971 total housing units, a decline of 4,217 units from 2017.

Figure 2. Household Types in Washington MSA in 2017

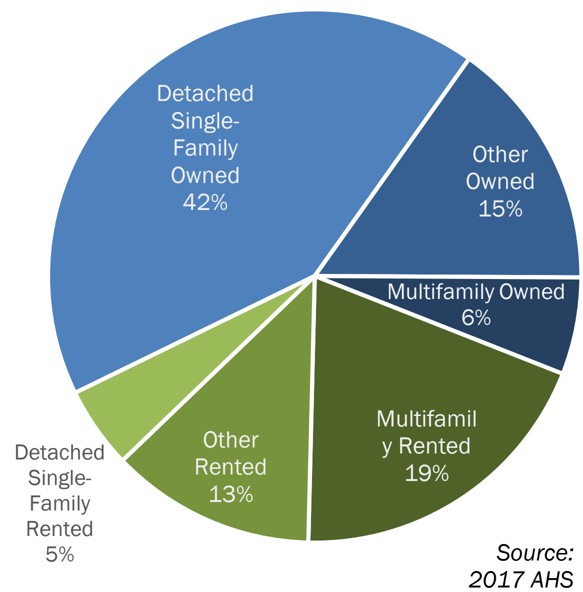
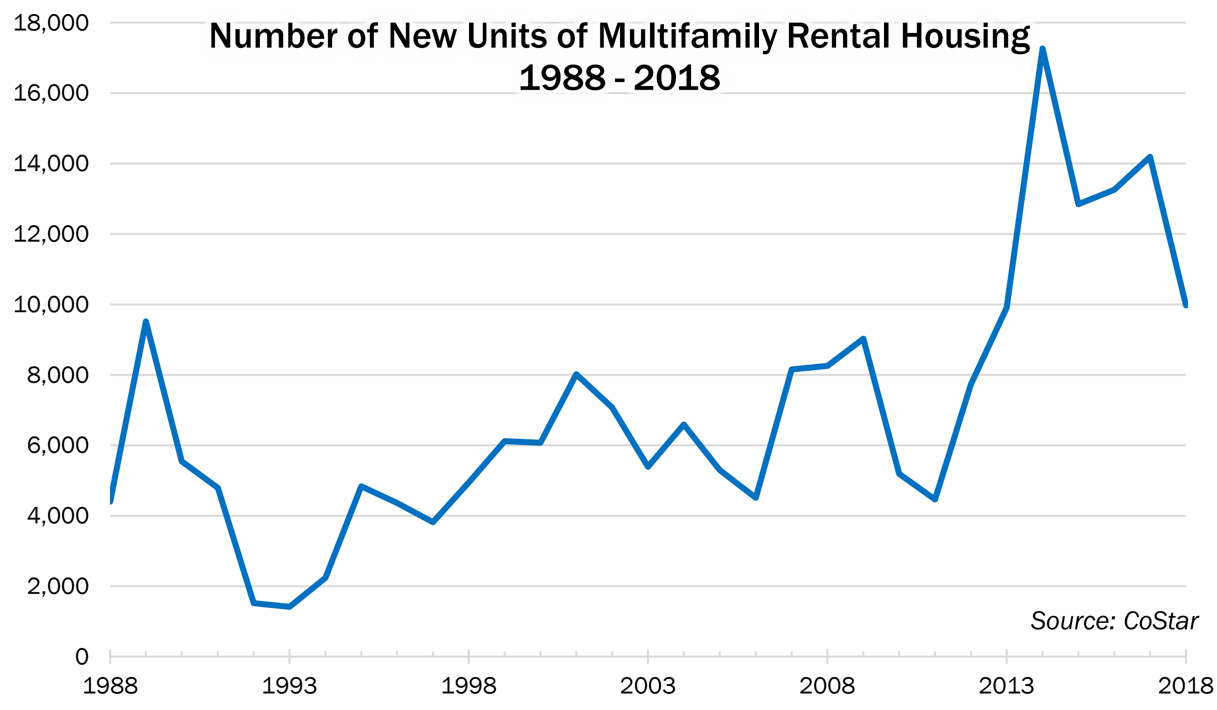


Figure 3



As shown in Figure 3 above, the rate of construction has fallen by 43 percent since 2014, the peak year of construction, when 17,269 units were built. The 2018 construction total was the fifth highest

[1] Exact data for recent construction is hard to come by as the data falls below the Census's minimum thresholds for privacy. The 2017 AHS data suggests that between 28 and 44 percent of housing units built between 2010 and 2015 in the Washington MSA were multifamily rental units. Permit data for approved housing construction from the U.S. Census shows that 52 percent of the units approved between 2012 and 2018 in the COG region were in multifamily buildings (permit data does not specify whether a building will be renter or owner-occupied).

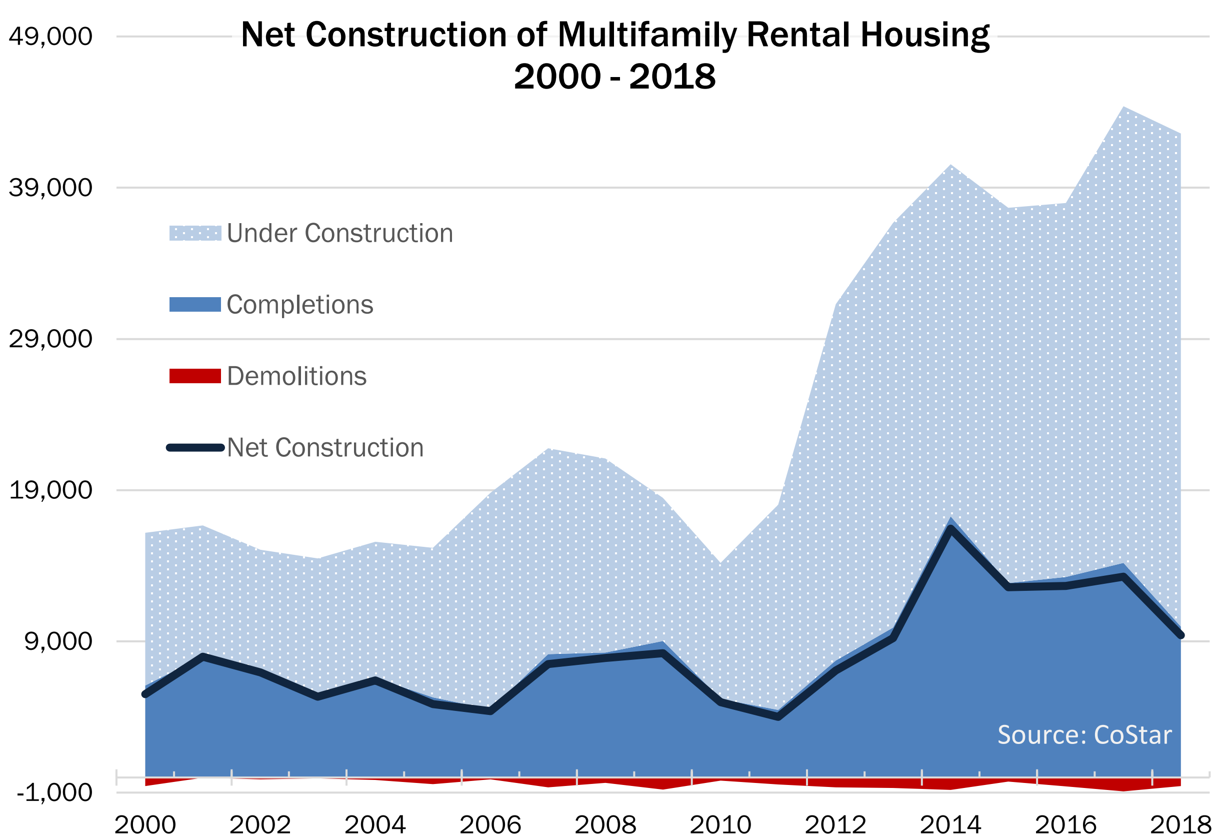
in the past 50 years. Since 2013, the region has added 67,531 new units, more than any five-year period since the 1960s. The number of units under construction continues to increase, shown in Figure 4 below, suggesting that high rates of construction are likely to continue for the next few years.

The recent flurry of construction has coincided with a slight increase in demolitions of multi-family housing. In 2018, 570 apartment units were demolished, representing just under six percent of the units built last year. The recent increase in construction has vastly outpaced demolitions; for each unit lost to demolition in 2018, 17 new units were built.

The COG region has added 94,623 new apartment units since 2010, the second most for any decade. Only the 1960s had more multifamily rental construction. With 154,340 units built between 1960 and 1969, just under 27 percent of all apartment existing units were built in that era.

The current decade has averaged about 573 units demolished per year; the first decade of this century averaged 332 units demolished per year. Just over 85 percent of the multifamily units demolished in the past three years have been in either the Alexandria, Arlington, or the District of Columbia and three-quarters of the lost units were in Activity Centers. All of the units demolished over the past three years were at least 40 years old.

Figure 4



The largest multifamily project completed in 2018 was the 508-unit Signature in Reston Town Center, Fairfax County, shown to the right. Altogether, the ten largest projects in 2018, shown in Figure 5 below, combined to make up 40 percent of the region's 9,971 new units of multifamily rental housing.

Signature Apartments in Reston (CoStar)

The Reston area added three of the region's six largest new projects, increasing the rental apartment stock in Reston by 1,354 units.

The average (mean) effective rent in the region for a one-bedroom apartment was $1,590 in 2018, an increase of less than one percent from the previous year when adjusting for inflation. The average for all unit sizes was $1,721 per month. Between 2005 and 2016, inflation adjusted rents in the region increased at an annual rate of 1.34 percent. During the past three years, inflation adjusted rents have stayed fairly flat.

Figure 5. Ten Largest Projects by Total Number of Units in 2018

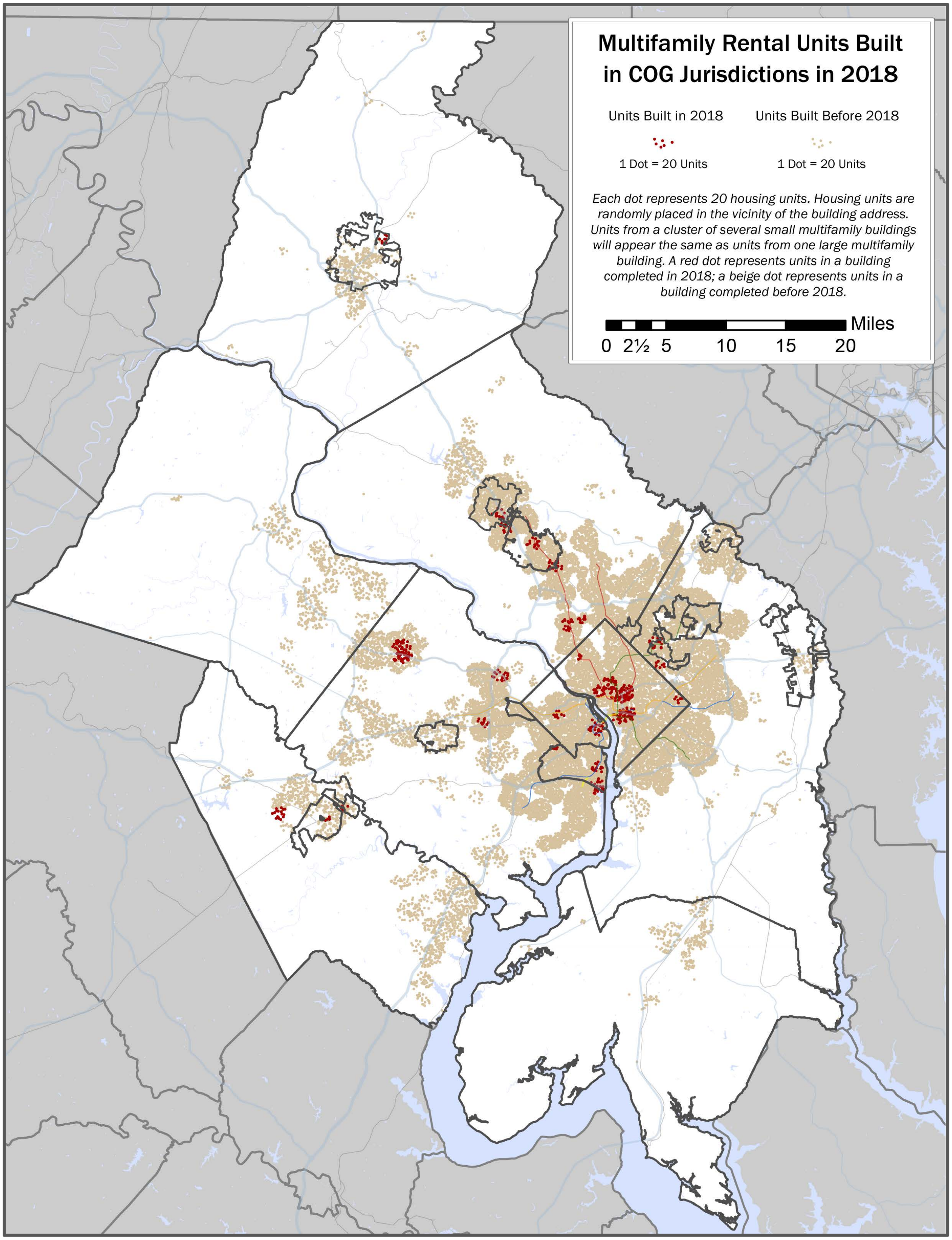
Project Name	Street Address	Jurisdiction	Buildings	Stories	Units	1BR Effective Rent[2]
Signature	11850 Freedom Dr, Reston, VA	Fairfax County	2	21	508	$1,897
Exo	1897 Oracle Way, Reston, VA	Fairfax County	2	16	457	$1,488
Altaire	400 Army Navy Dr, Arlington, VA	Arlington	2	20	451	$2,525
The Thornton	1199 S Washington St, Alexandria, VA	Alexandria	2	5	439	$1,890
Escher	1900 Chapman Ave, Rockville, MD	Rockville	14	6	389	$1,785
VY / Reston Heights	11830 Sunrise Valley Dr, Reston, VA	Fairfax County	1	5	385	$1,617
Camden Washingtonian	10201 Washington Blvd, Gaithersburg, MD	Gaithersburg	1	5	365	$1,588
The Edition	3401 E West Hwy, Hyattsville, MD	Hyattsville	1	4	351	$1,678
The Belgard	33 N St NE, Washington, DC	District of Columbia	1	13	346	$2,124
Abberly Avera Apartments	11601 Hokie Stone Loop, Manassas, VA	Prince William	13	1	336	$1,442

Source: CoStar

Figure 6 on the following page maps the location of projects completed in 2018. New construction of multifamily rental housing, shown in red, is primarily located in the region's core and near Metrorail stations. Existing units are shown in beige—just over 58 percent of all apartment units in the region are located inside the Beltway.

[2] Average (mean) effective rent for one-bedroom apartments in the property that were available to be rented at the end of 2018.

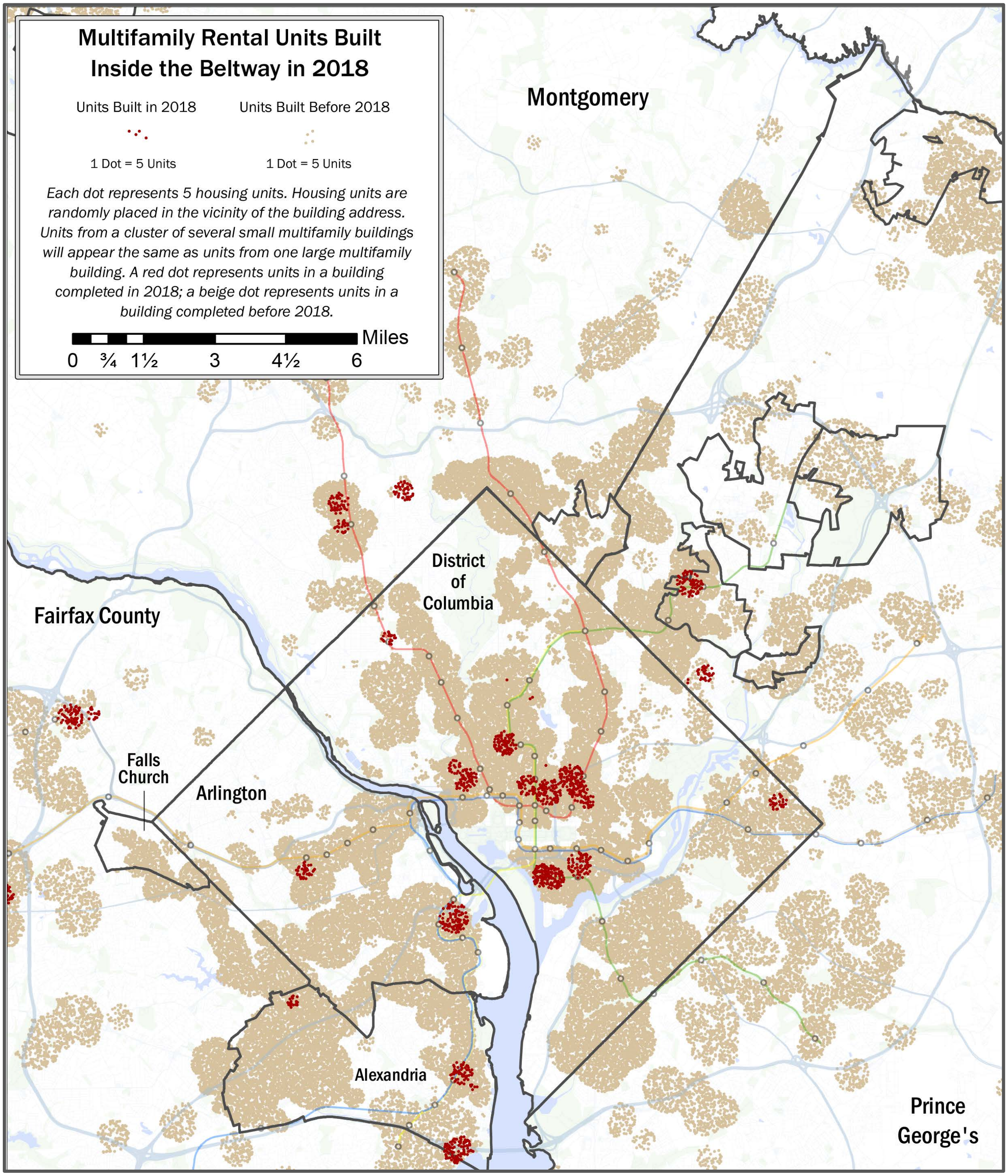
Figure 6



Source: CoStar

Figure 7 below shows construction within the Beltway. Apartments built in a neighborhood without a Metrorail station tend to be more dispersed than those built near a station. This is particularly apparent in Prince George's County, where over three-quarters of existing apartment units were built before its first Metrorail station opened in 1978.

Figure 7



Source: CoStar

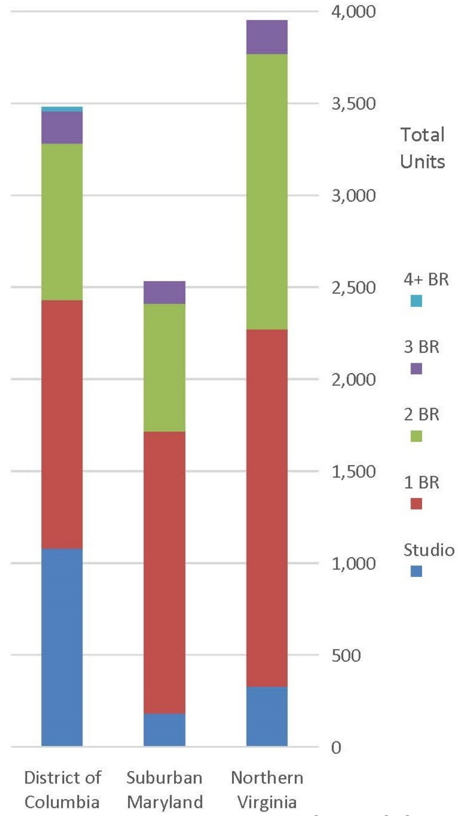
Multifamily Rental Housing Construction by State

The District of Columbia added 20 new apartment buildings and 3,488 units in 2018, primarily studio and one-bedroom apartments (Figure 8). The number of new units completed in the District declined by 40 percent from 2017 (Figure 9). The average (mean) effective rent for a one-bedroom apartment in the District of Columbia was $1,798 at the end of 2018.

In 2018, 29 new buildings and 2,531 new rental units were added to suburban Maryland jurisdictions (Figure 8). In suburban Maryland, the number of new apartment units declined by about 42 percent from 2017 (Figure 9). At the end of 2018, the Maryland jurisdiction average (mean) effective rent for a one-bedroom apartment was $1,354 per month.

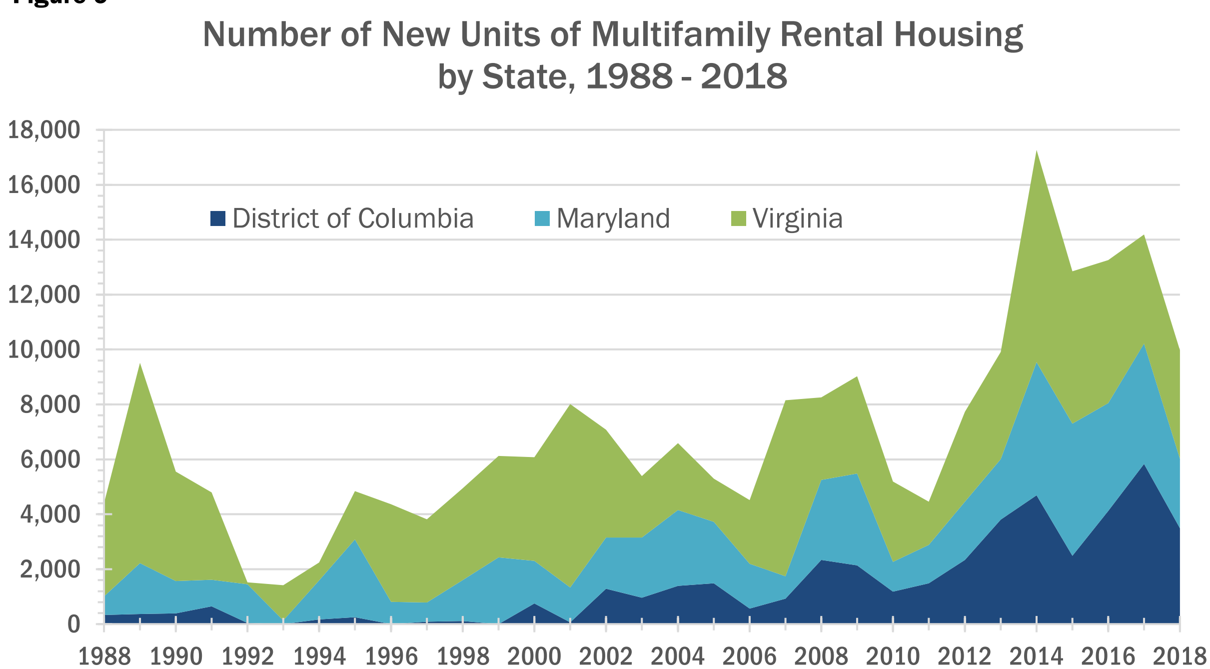
Northern Virginia jurisdictions added 33 new buildings and 3,852 new units in 2018, a decrease of less than one percent from 2017. Virginia jurisdictions have accounted for the largest share—39 percent—of all regional construction since 2014. The Northern Virginia average (mean) effective rent for a one-bedroom was $1,600 at the end of 2018.

Figure 8. 2018 Projects by Number of Units



Source: CoStar

Figure 9



Note: This stacked area chart shows cumulative values.

Source: CoStar

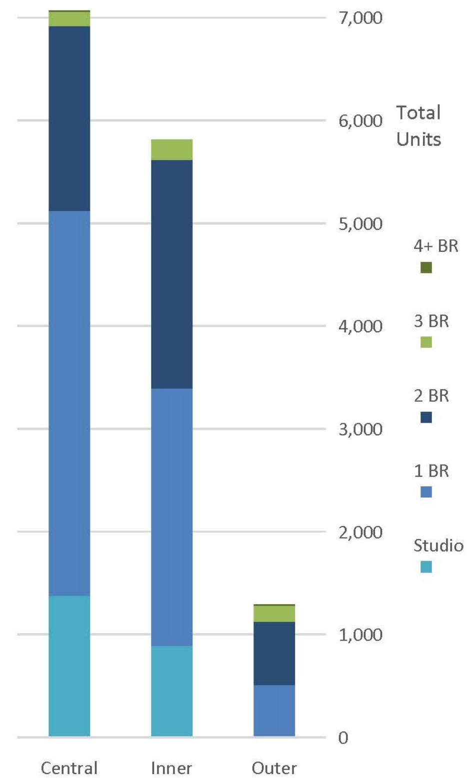
Multifamily Rental Construction by Regional "Ring"

COG groups jurisdictions into three "rings" for analysis purposes (see Appendix A). The Central Jurisdictions—D.C., Alexandria, and Arlington—added 28 new apartment buildings and 4,943 new units in 2018 (Figure 10). The total number of new rental units in Central Jurisdictions declined by 30 percent from 2017 (Figure 11). At the end of 2017, the average (mean) effective rent for one-bedroom apartments in Central Jurisdictions was $1,761.

In 2018, 37 new buildings and 4,299 new units were added to the Inner Suburban Jurisdictions of Fairfax, Montgomery, and Prince George's Counties, Falls Church, and City of Fairfax (Figure 10). The number of new units declined by 26 percent from 2017 (Figure 11). The average (mean) effective rent for one-bedrooms in Inner Jurisdictions was $1,425 per month at the end of 2018.

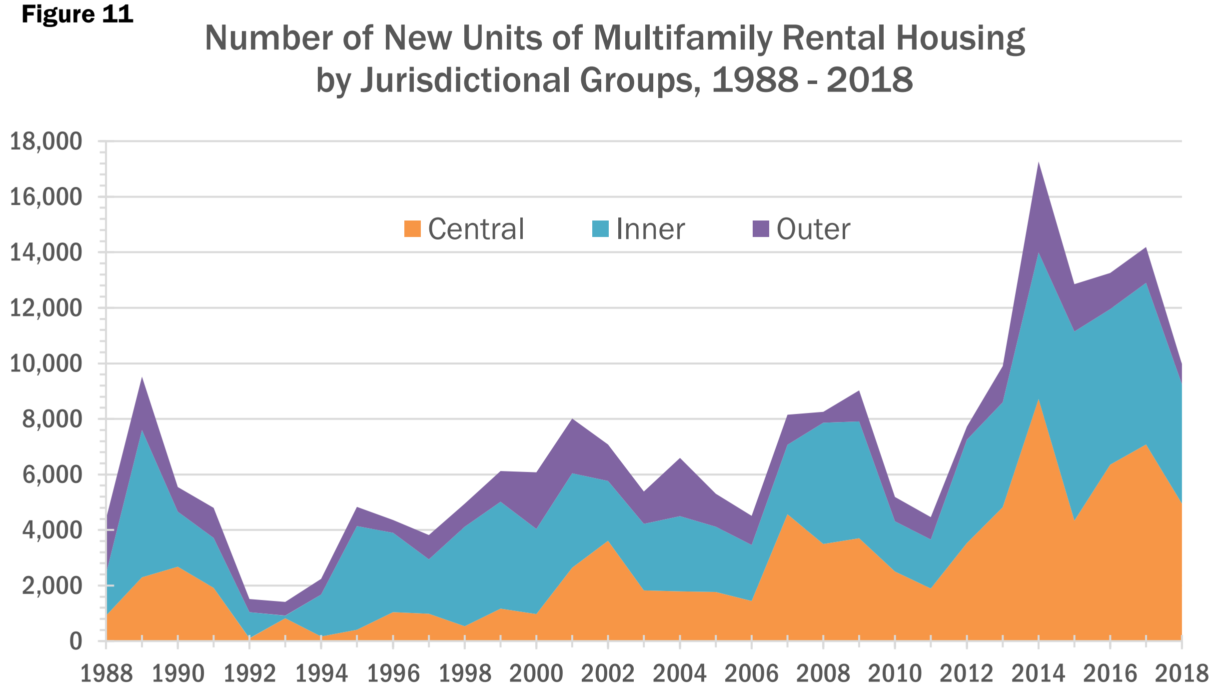
The Outer Jurisdictions of Charles, Frederick, Loudoun, and Prince William Counties, Manassas, and Manassas Park added 17 buildings and 729 new apartment units in 2018 (Figure 10). New construction declined by 44 percent from 2017 (Figure 11). At the end of 2018, the average (mean) effective rent for one-bedroom units in Outer Jurisdictions was $1,309 per month.

Figure 10. 2018 Projects by Number of Units



Source: CoStar

Figure 11



Note: This stacked area chart shows cumulative values.

Source: CoStar

Multifamily Rental Housing Construction by Jurisdiction

For the third consecutive year, the District of Columbia led the region in multifamily rental housing construction, accounting for 35 percent of the region's new apartment units in 2018. After the District, Prince George's County has the second most multifamily units in the region, with more than half of those units having been constructed during the 1960s. Among other COG jurisdictions, Bladensburg, Fairfax City, and Takoma Park have had no new multi-family rental construction for at least nine years.

Figure 12. Apartment Construction Totals for Each COG Member Jurisdiction

Jurisdiction	Built Prior to 2018			2018 Completions			Avg. Effective Rent in 1 BR Units at End of 2018
	Buildings	Units	Regional Share	Buildings	Units	Regional Share	
District of Columbia	**5,187**	**139,321**	**24.8%**	**20**	**3,488**	**35.0%**	**$1,798**
Suburban Maryland Jurisdictions							
Charles	426	5,933	1.1%	0	0	0.0%	$1,307
Frederick	645	10,460	1.9%	2	205	2.1%	$1,129
City of Frederick	*423*	*7,537*	*1.3%*	*2*	*205*	*2.1%*	*$1,124*
Rest of County	*222*	*2,923*	*0.5%*	*0*	*0*	*0.0%*	*$1,138*
Montgomery	3,849	94,504	16.9%	24	1,824	18.3%	$1,503
Gaithersburg	*447*	*9,465*	*1.7%*	*1*	*365*	*3.7%*	*$1,376*
Rockville	*271*	*9,420*	*1.7%*	*15*	*664*	*6.7%*	*$1,689*
Takoma Park	*152*	*2,671*	*0.5%*	*0*	*0*	*0.0%*	*$1,034*
Rest of County	*2,979*	*72,948*	*13.0%*	*8*	*795*	*8.0%*	*$1,509*
Prince George's	5,604	98,572	17.6%	3	502	5.0%	$1,231
Bladensburg	*122*	*2,570*	*0.5%*	*0*	*0*	*0.0%*	*$1,137*
Bowie	*81*	*1,840*	*0.3%*	*0*	*0*	*0.0%*	*$1,501*
College Park	*39*	*2,107*	*0.4%*	*0*	*0*	*0.0%*	*$1,573*
Greenbelt	*182*	*4,920*	*0.9%*	*0*	*0*	*0.0%*	*$1,324*
Hyattsville	*182*	*3,229*	*0.6%*	*1*	*351*	*3.5%*	*$1,264*
Laurel	*245*	*5,140*	*0.9%*	*0*	*0*	*0.0%*	*$1,398*
Rest of County	*4,753*	*78,766*	*14.0%*	*2*	*151*	*1.5%*	*$1,194*
Maryland subtotal	**10,524**	**209,469**	**37.3%**	**29**	**2,531**	**25.4%**	**$1,354**
Northern Virginia Jurisdictions							
Alexandria	1,281	35,842	6.4%	5	831	8.3%	$1,554
Arlington	1,326	52,834	9.4%	3	624	6.3%	$1,818
Fairfax	3,723	80,280	14.3%	10	1,973	19.8%	$1,557
Fairfax City	92	1,379	0.2%	0	0	0.0%	$1,540
Falls Church	47	2,281	0.4%	0	0	0.0%	$1,683
Loudoun	538	13,299	2.4%	0	0	0.0%	$1,465
Manassas City	138	2,370	0.4%	1	87	0.9%	$1,154
Manassas Park	49	1,259	0.2%	1	101	1.0%	$1,338
Prince William	1,328	22,510	4.0%	13	336	3.4%	$1,301
Virginia subtotal	**8,522**	**212,054**	**37.8%**	**33**	**3,952**	**39.6%**	**$1,600**
COG Region Total	**24,233**	**560,844**	**100.0%**	**82**	**9,971**	**100.0%**	**$1,560**

Source: CoStar

Activity Centers

Activity Centers are locations that will accommodate the majority of the region's future growth. They include existing urban centers, priority growth areas, traditional towns, and transit hubs. In 2013, the COG Board of Directors approved 141 Activity Centers for the region[3].

From 2017 to 2018, construction within Activity Centers declined by 50 percent. The Reston Town Center Activity Center in Fairfax County had the most construction in 2018, with 965 units from four apartment buildings. The average (mean) effective rent for one-bedroom apartments in Activity Centers was $1,700 at the end of 2018.

COG's *Region Forward Vision* set a target for at least half of new households to be located within Activity Centers. In 2018, 85 percent of new rental units were within an Activity Center; multifamily rental construction has surpassed the target for each of the past 14 years.

Metrorail Station Walksheds

In 2018, 22 of the Washington Metropolitan Area Transit Authority's 91 Metrorail stations had at least one apartment complex built within a half-mile walk from a station entrance, with a total of 5,225 new units from 38 buildings. Construction in station areas declined 41 percent from 2017. The share of total regional construction within a Metro station walkshed dropped from 63 percent in 2017 to 52 percent in 2018.

The Waterfront station walkshed had the most construction in 2018 with three buildings and 672 new apartment units. The average (mean) effective rent for one-bedroom apartments within a half-mile walk of a station was $1,975 at the end of 2018.

The Modern on M Apartments near the Southwest Waterfront Metro Station in DC (CoStar)

High-Capacity Transit Station Walksheds

Earlier this year, the COG Board set housing goals that included a target of constructing 75 percent of new housing in Activity Centers or near one of the region's high-capacity transit (HCT) stations. Currently, there are 199 HCT stations in the COG region—including Metrorail, MARC, and VRE commuter rail, bus rapid transit, and streetcar stations.[4]

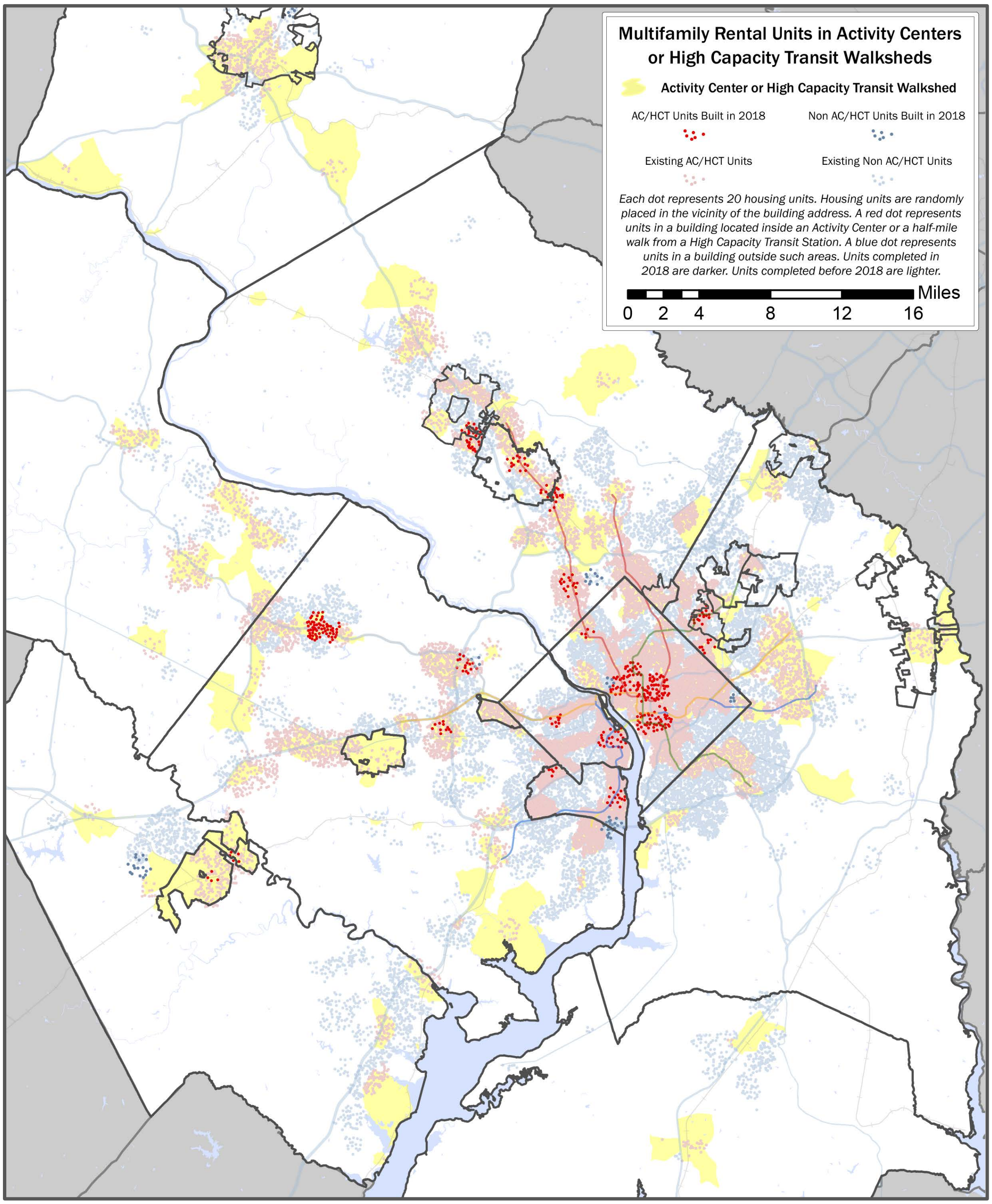
---

[3] See Appendix B for a map of Activity Centers and Appendix C for Activity Center construction totals.

[4] See Appendix D for Metrorail station area construction totals and an explanation of how the walkshed geography was calculated.

In 2018, 85 percent of new apartment units were located in an Activity Center or a half-mile walk from a high-capacity transit station, mapped in Figure 13 below. Multifamily rental housing construction has met or exceeded the 75 percent housing target in each of the past six years.

Figure 13



Source: CoStar, COG

Construction by Number of Bedrooms in a Unit

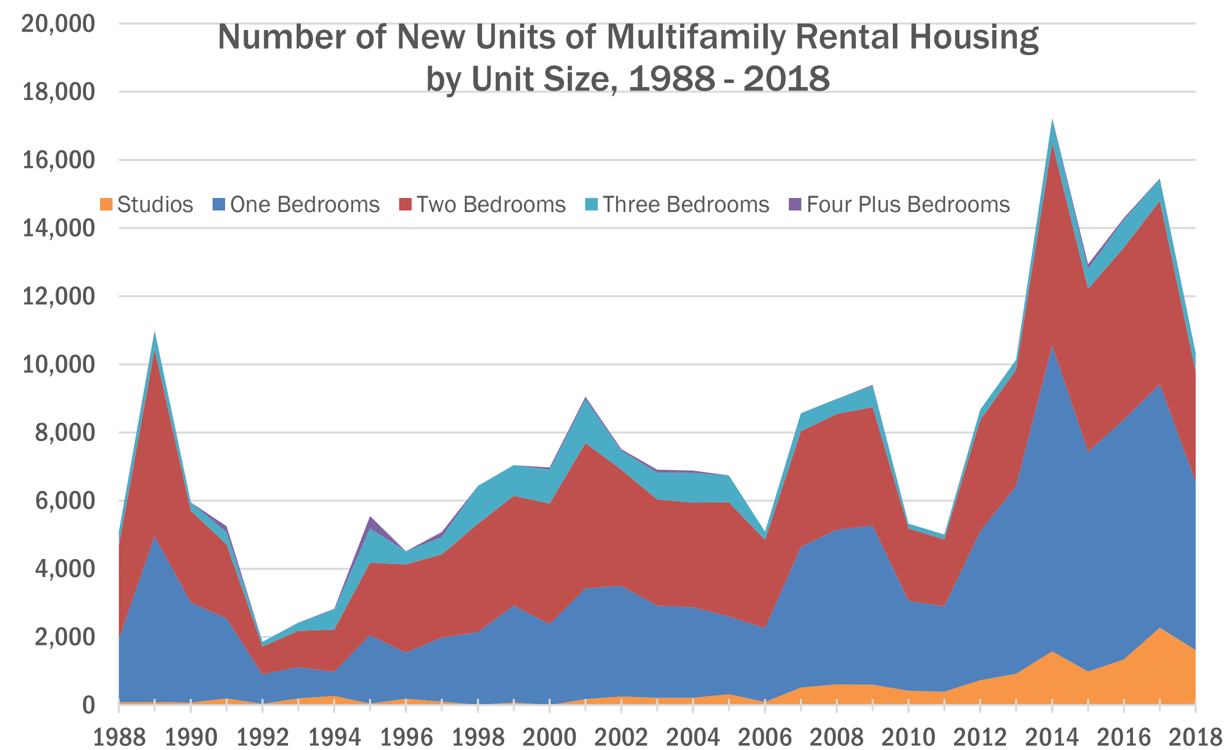
Most apartment units in the region have either one or two-bedrooms, and those two apartment styles continued to dominate in 2018. Over the past ten years, however, developers have shifted towards smaller units. The square footage of an average one-bedroom apartment peaked in the mid-2000s and has declined by about eight percent since the recession. However, a typical new apartment is still larger than those built before the 1990s. The downsizing trend has been more pronounced in terms of the total number of rooms in the apartment. Historically, just under half of all apartments had more than one-bedroom; in 2018, only 36 percent of new apartments did.

Figure 14. Existing Multifamily Rental Units Completed by Apartment Type and Year Built

Apartment Type	Prior to 2018		2018	
	Units	Share	Units	Share
Studio	45,687	8.1%	1,588	15.9%
One-Bedroom	242,539	43.2%	4,831	48.5%
Two-Bedrooms	224,589	40.0%	3,050	30.6%
Three-Bedrooms	45,231	8.1%	477	4.8%
Four-Plus Bedrooms	2,798	0.5%	25	0.3%

Source: CoStar

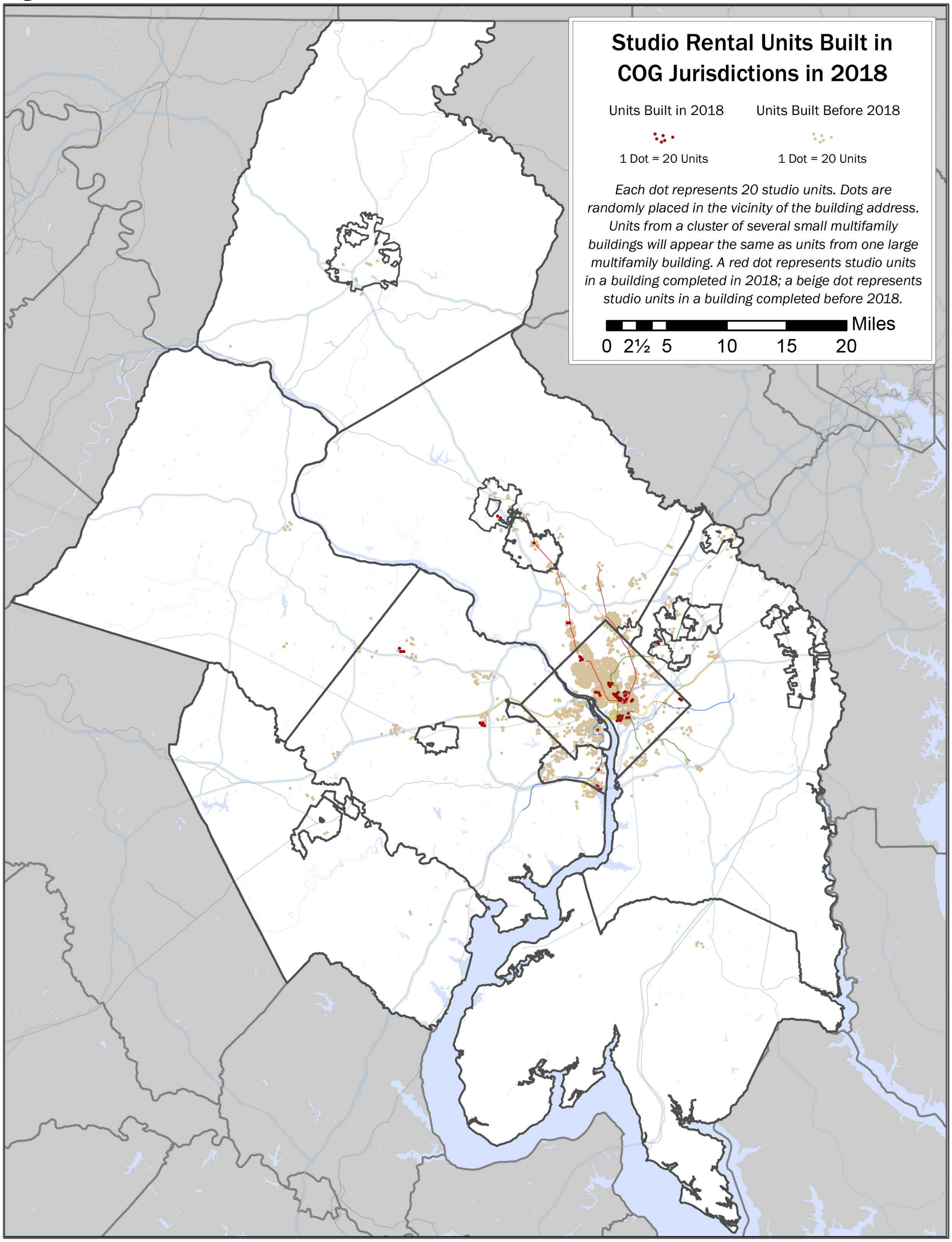
Figure 15



Note: This stacked area chart shows cumulative values.

Source: CoStar

Figure 16

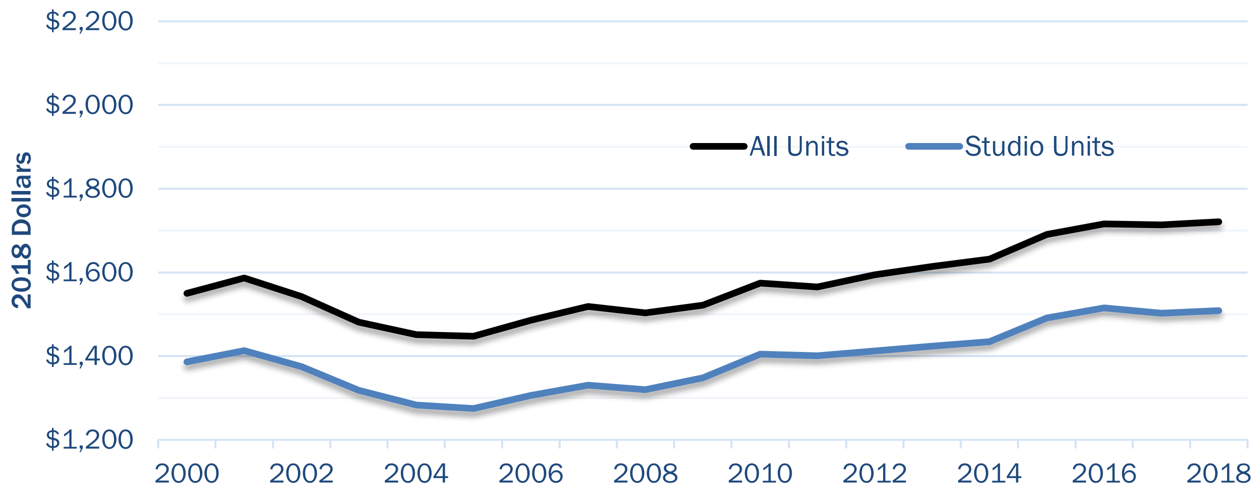


Source: CoStar

Studio Apartments

Construction of studio apartments declined by 16 percent from 2017 to 2018. However, the 1,588 studio units built in 2018 were the second largest annual total for new studio apartments built in the past 50 years and accounted for 16 percent of all new units. Most of the added studio apartments were in the District of Columbia, where 31 percent of all new units were studios. The average (mean) effective rent for new studio apartments built in 2018 was $1,840 per month and new studio units had an average of 522 square feet in area.

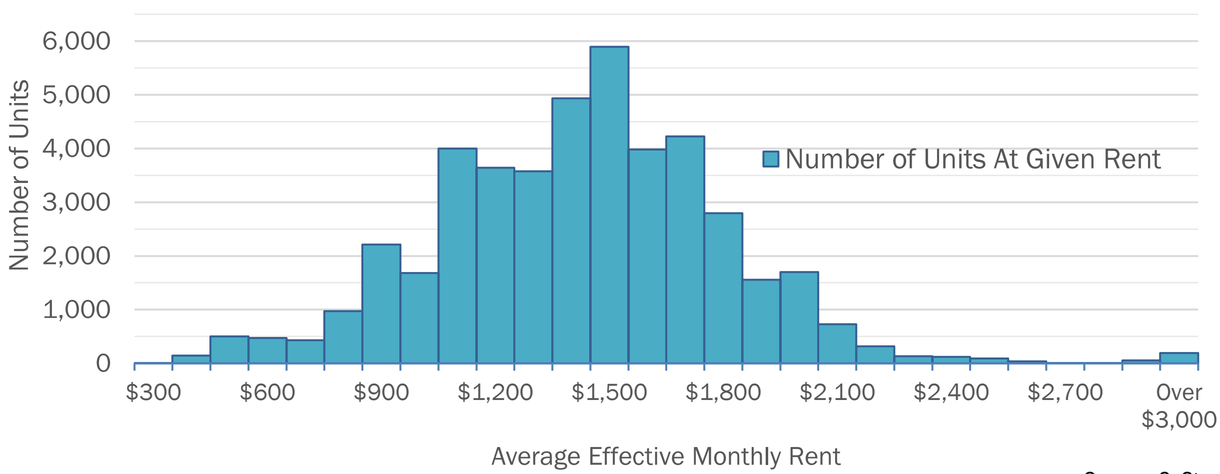
Figure 17. Inflation-Adjusted Average Effective Rent for Studio Apartments, 2000 - 2018



Source: Bureau of Labor Statistics (CPI, all items less food and energy in U.S. city average, all urban consumers), CoStar, COG

According to data from the American Housing Survey (AHS), the 2018 median household income for renters of studio units in the Washington Metropolitan Statistical Area was a little over $47,000 per year. The median effective rent for all studio units in the region was $1,418 at the end of 2018. The median effective rent in COG jurisdictions is roughly 38 percent of the median income of a studio renter, suggesting that typical studio renters are cost-burdened in the COG region[5].

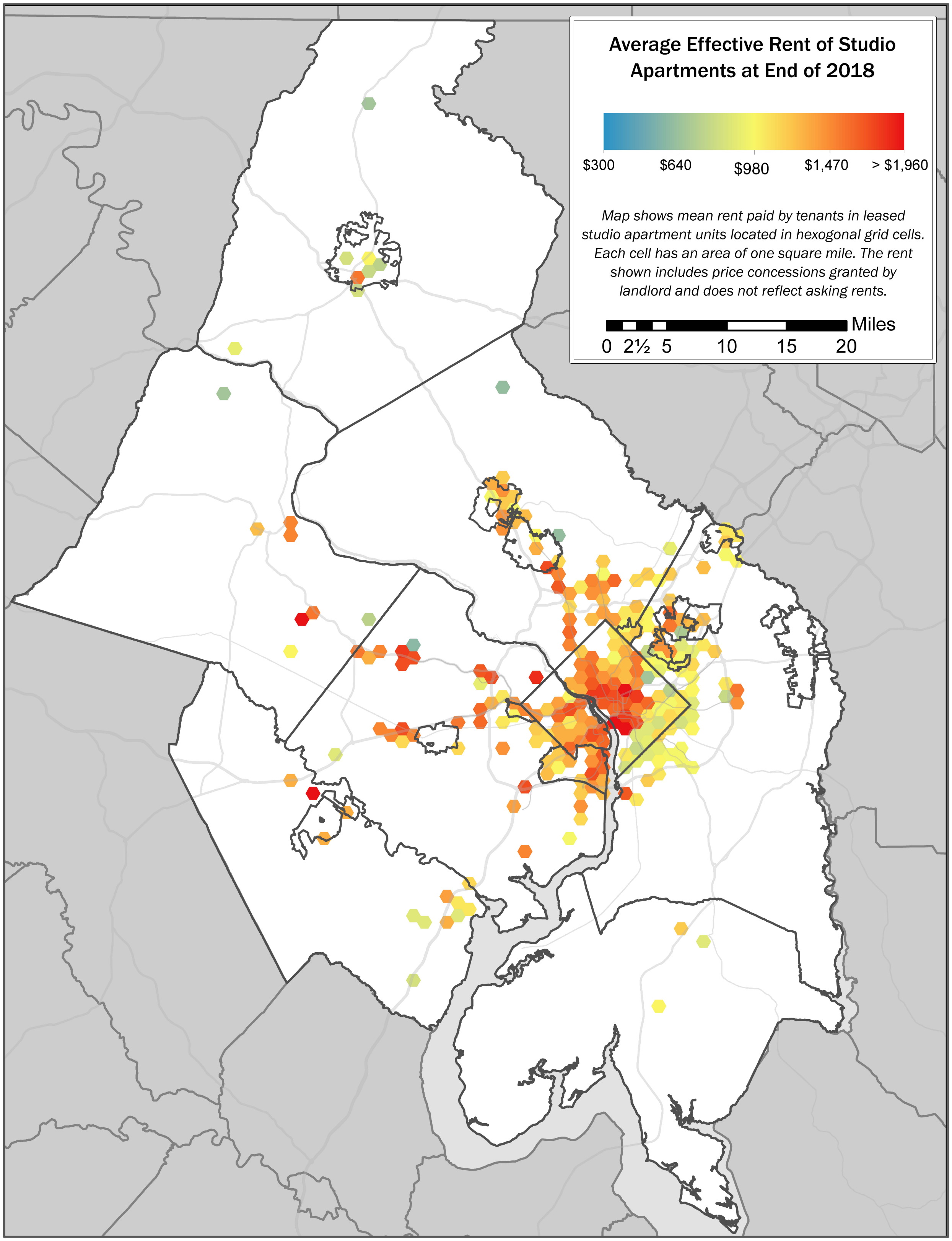
Figure 18. Effective Rents for Studio Apartments at End of 2018



Source: CoStar

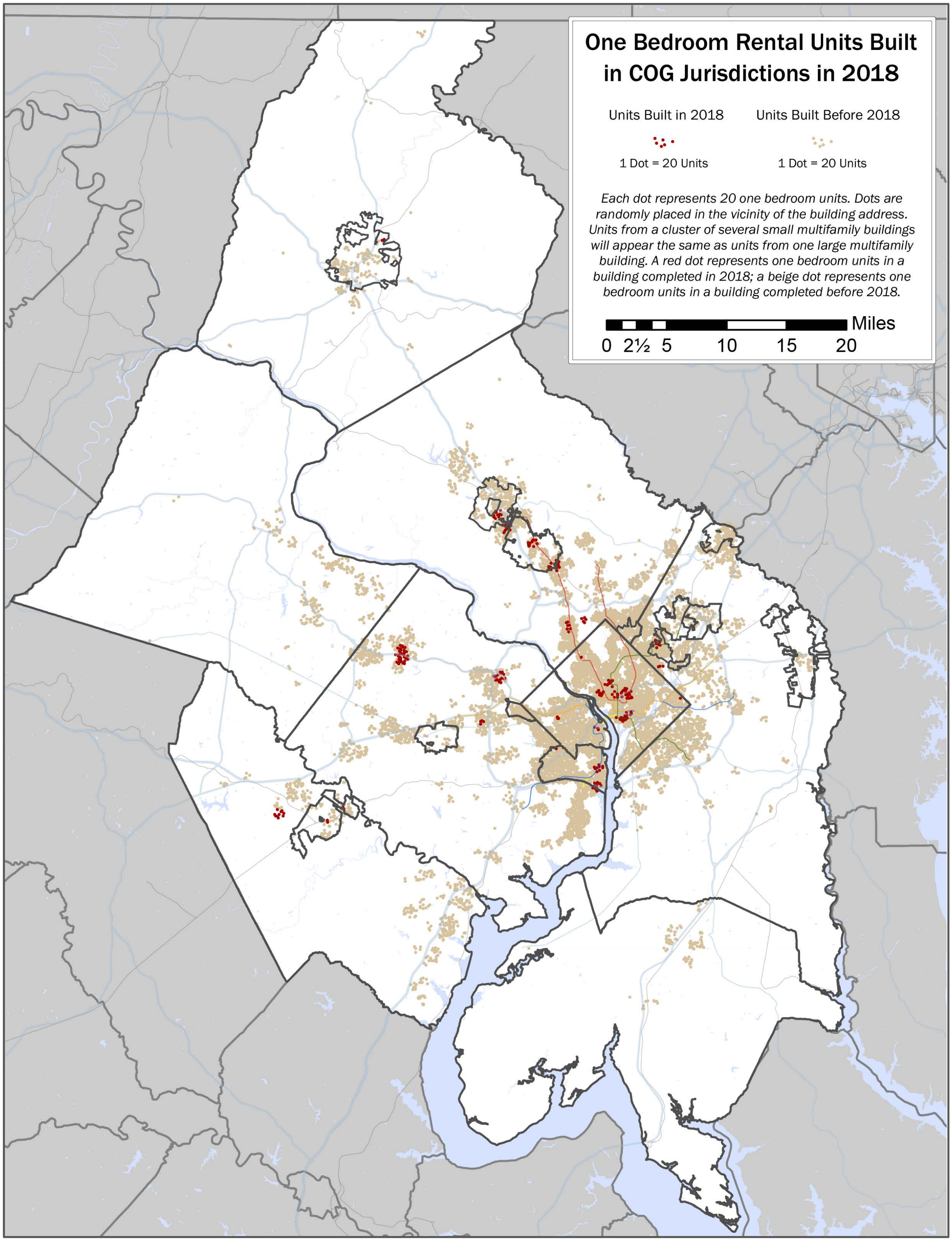
[5] See Appendix G for cost-burdened threshold calculation methodology.

Figure 19



Source: CoStar

Figure 20

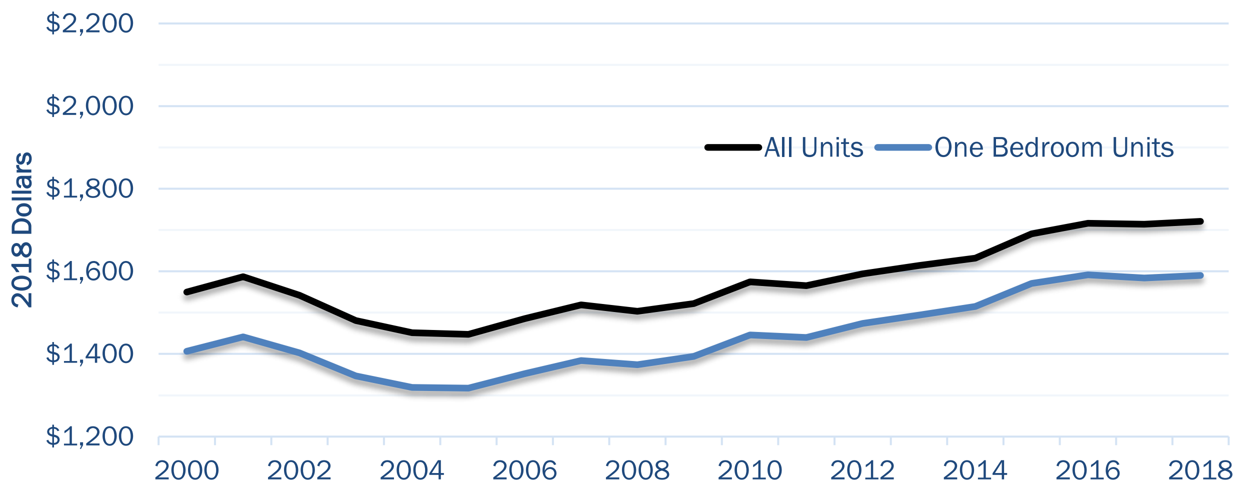


Source: CoStar

One-Bedroom Apartments

Construction of one-bedroom units declined by 29 percent from 2017 to 2018. One-bedroom apartments remained the most common apartment type built with new 4,831 units—48 percent of total construction. The average (mean) effective rent for one-bedroom apartment units built in 2018 was $2,008 per month and the average area for new one-bedrooms was 744 square feet.

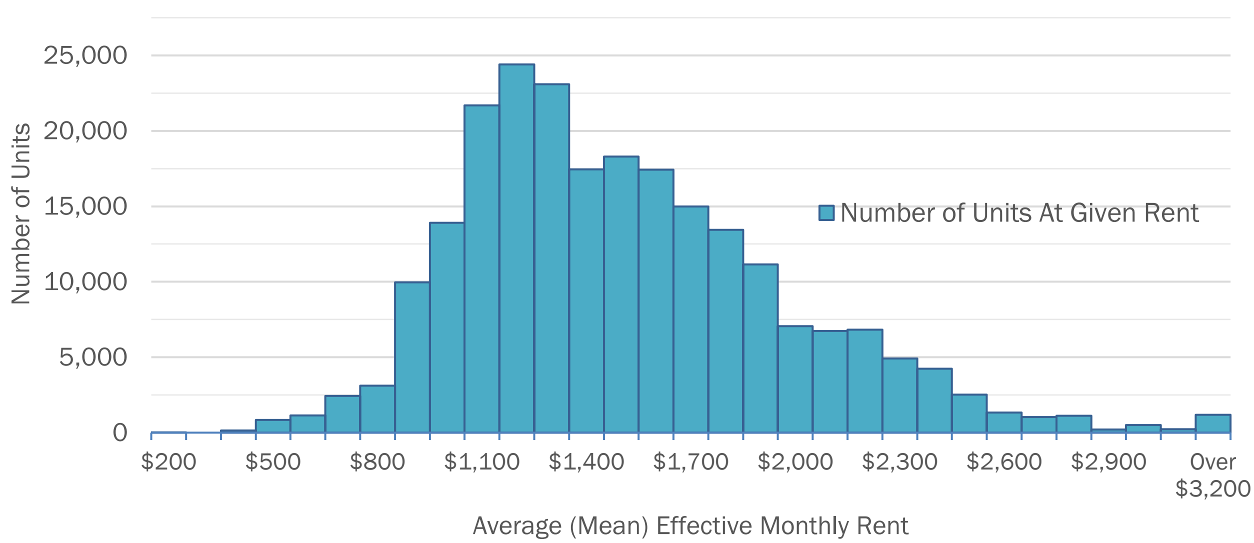
Figure 21. Inflation-Adjusted Average Effective Rent for One-Bedroom Apartments, 2000 - 2018



Source: Bureau of Labor Statistics (CPI, all items less food and energy in U.S. city average, all urban consumers), CoStar, COG

According the data from the American Housing Survey (AHS), the median household income in 2018 for renters of one-bedroom units in the Washington Metropolitan Statistical Area was just under $52,500 per year. The median effective rent for all one-bedroom apartments in the region was $1,487 at the end of 2018. The median effective rent in COG jurisdictions is approximately 34 percent of the median income of a one-bedroom apartment renter[6].

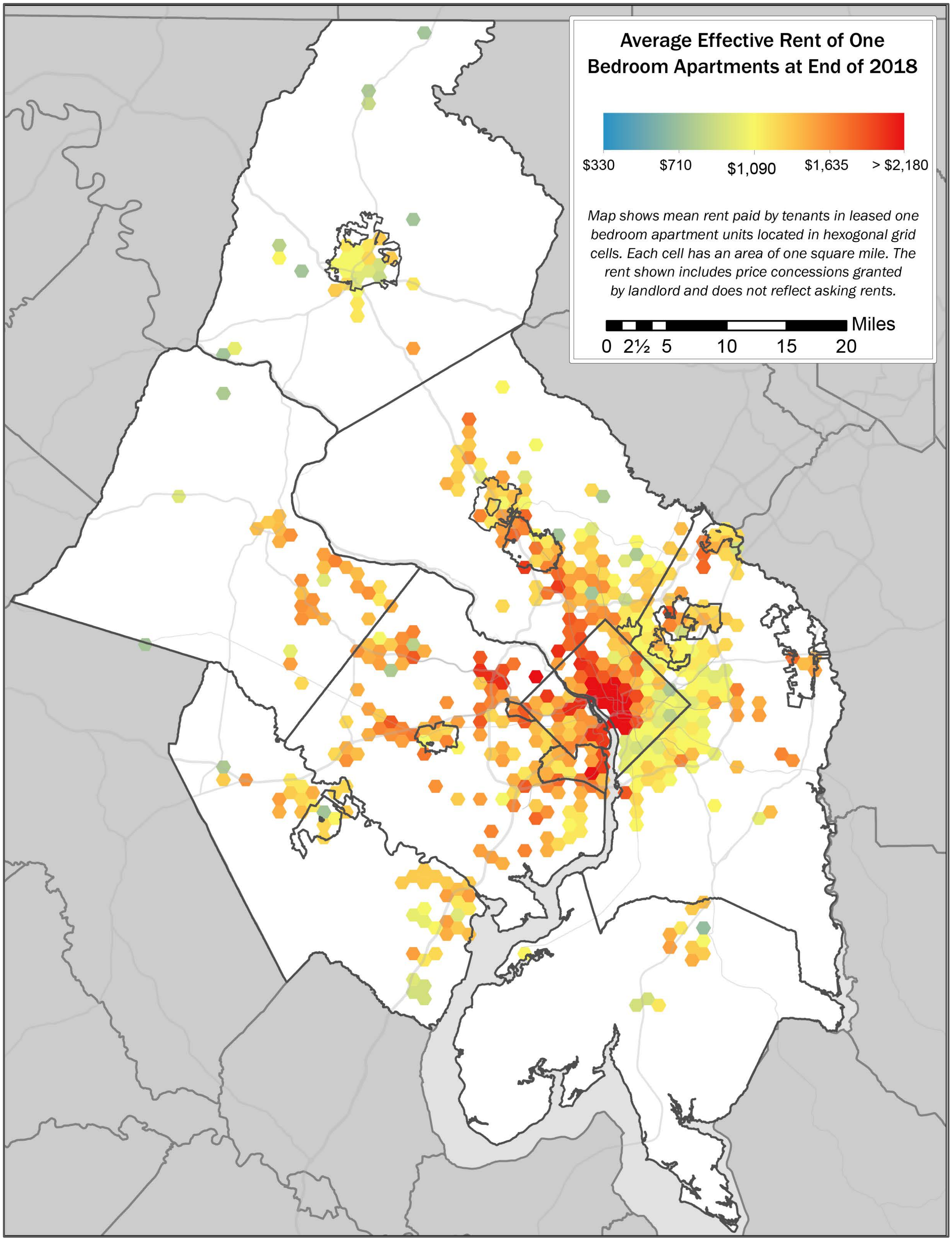
Figure 22. Effective Rents for One-Bedroom Apartments at End of 2018



Source: CoStar

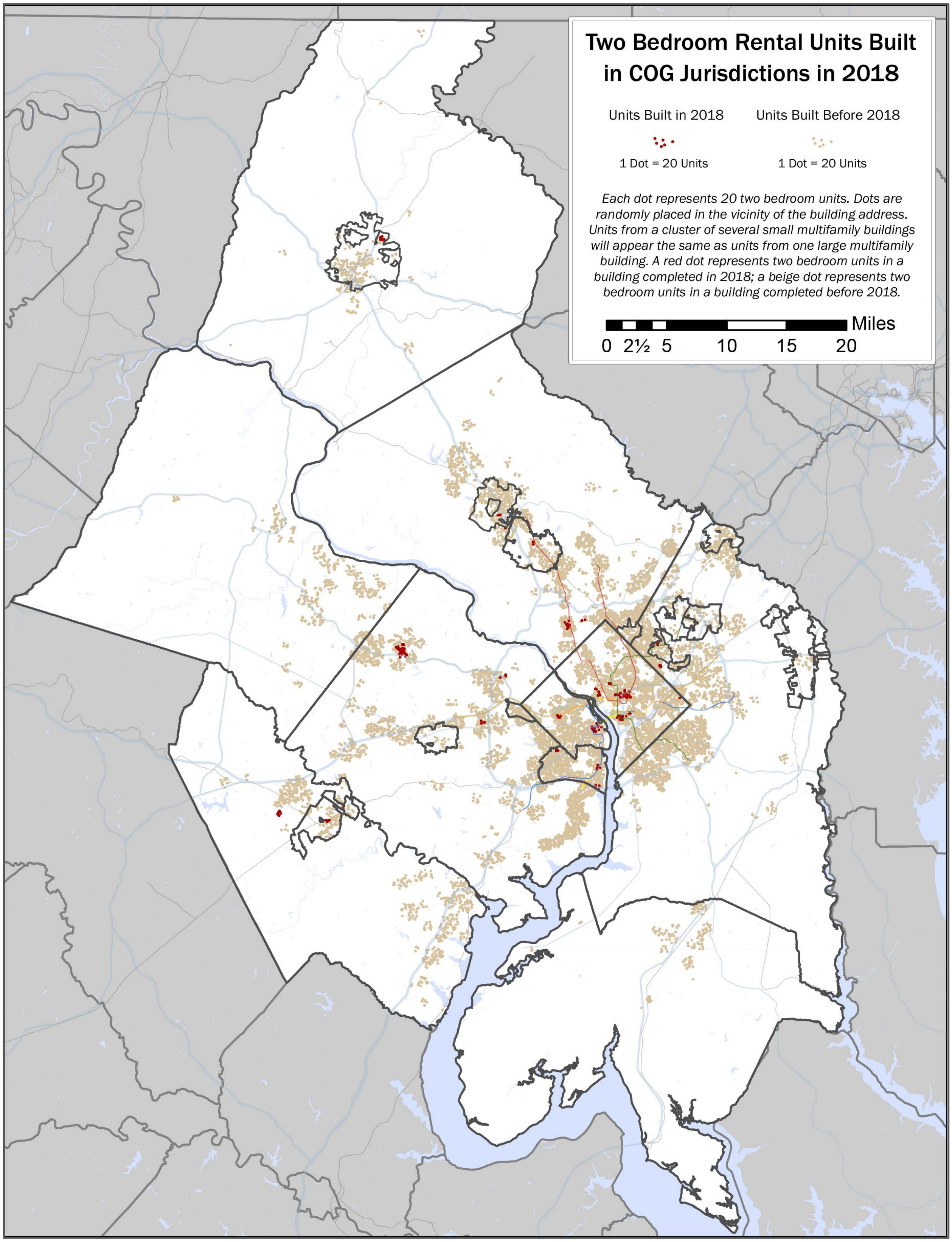
[6] See Appendix G for cost-burdened threshold calculation methodology.

Figure 23



Source: CoStar

Figure 24

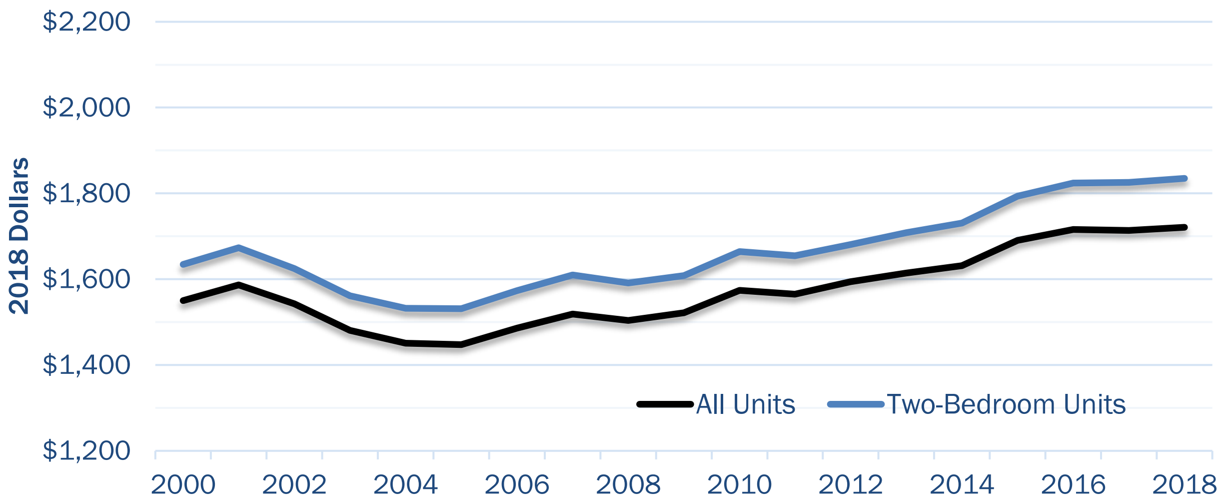


Source: CoStar

Two-Bedroom Apartments

Construction of two-bedroom apartment units declined by 34 percent from 2017 to 2018. Two-bedroom units represented a little less than a third of all multifamily rental construction, with 3,050 units built. The average (mean) effective rent for a two-bedroom unit built in 2018 was $2,949 and the average area was 1,126 square feet.

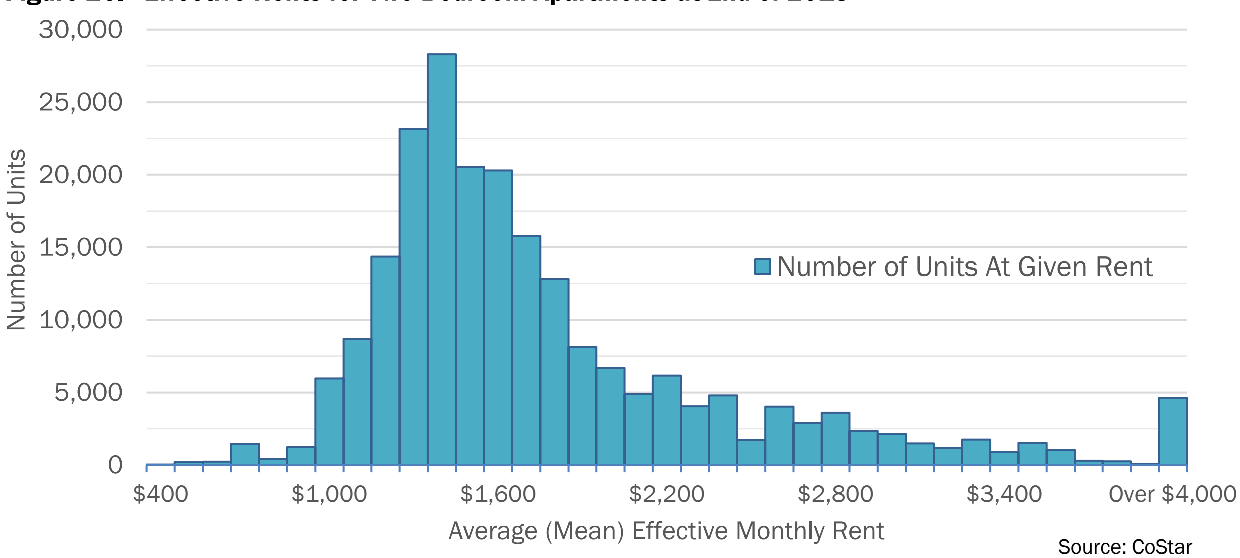
Figure 25. Inflation-Adjusted Average Effective Rent for Two-Bedroom Apartments, 2000 - 2018



Source: Bureau of Labor Statistics (CPI, all items less food and energy in U.S. city average, all urban consumers), CoStar, COG

According the data from the American Housing Survey (AHS), the median household income in 2018 for renters of two-bedroom units in the Washington Metropolitan Statistical Area was just under $67,000 per year. The median effective rent for two-bedroom apartments in the region was $1,616 at the end of 2018. The median effective rent in COG jurisdictions is around 29 percent of the median income of a two-bedroom apartment renter[7].

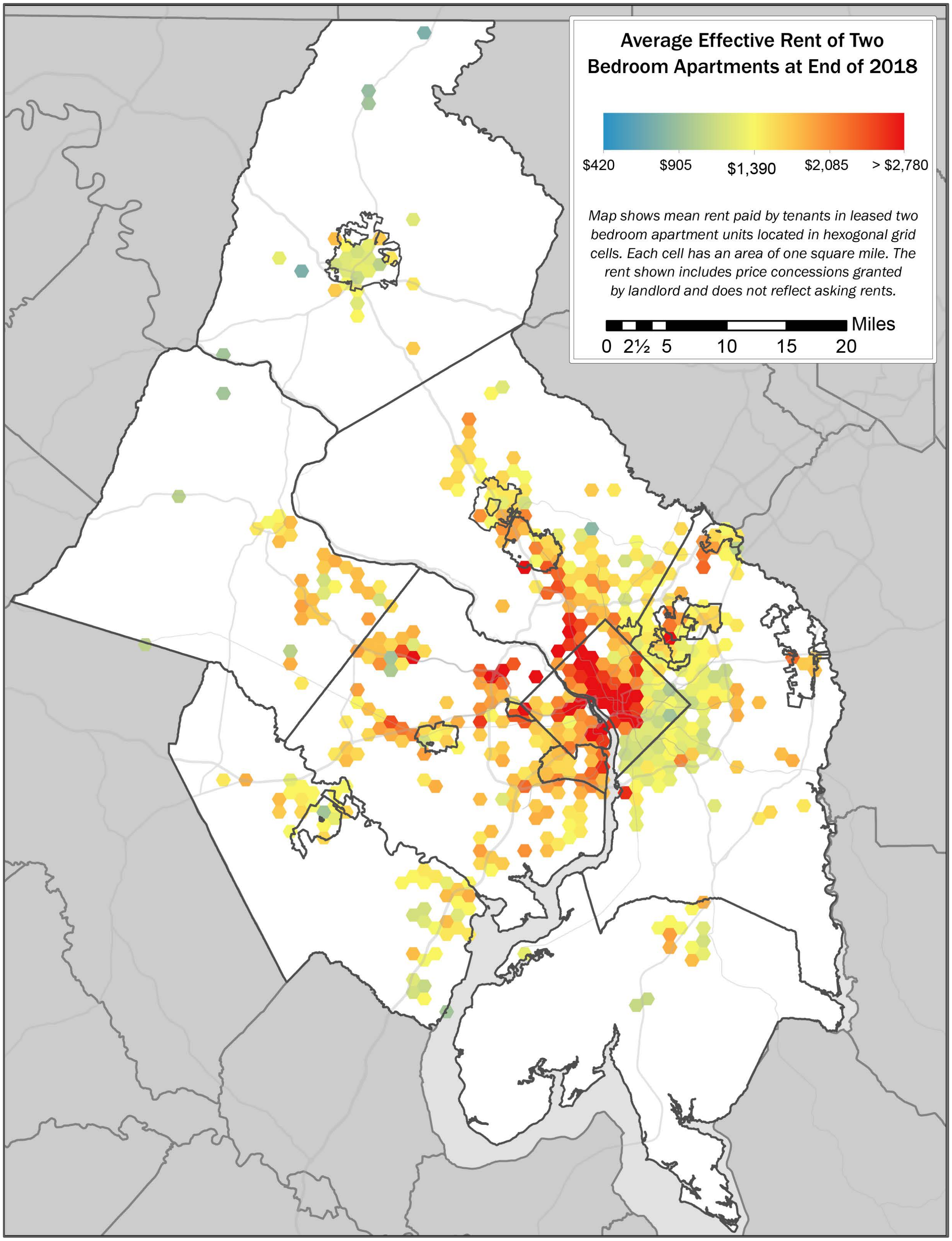
Figure 26. Effective Rents for Two-Bedroom Apartments at End of 2018



Source: CoStar

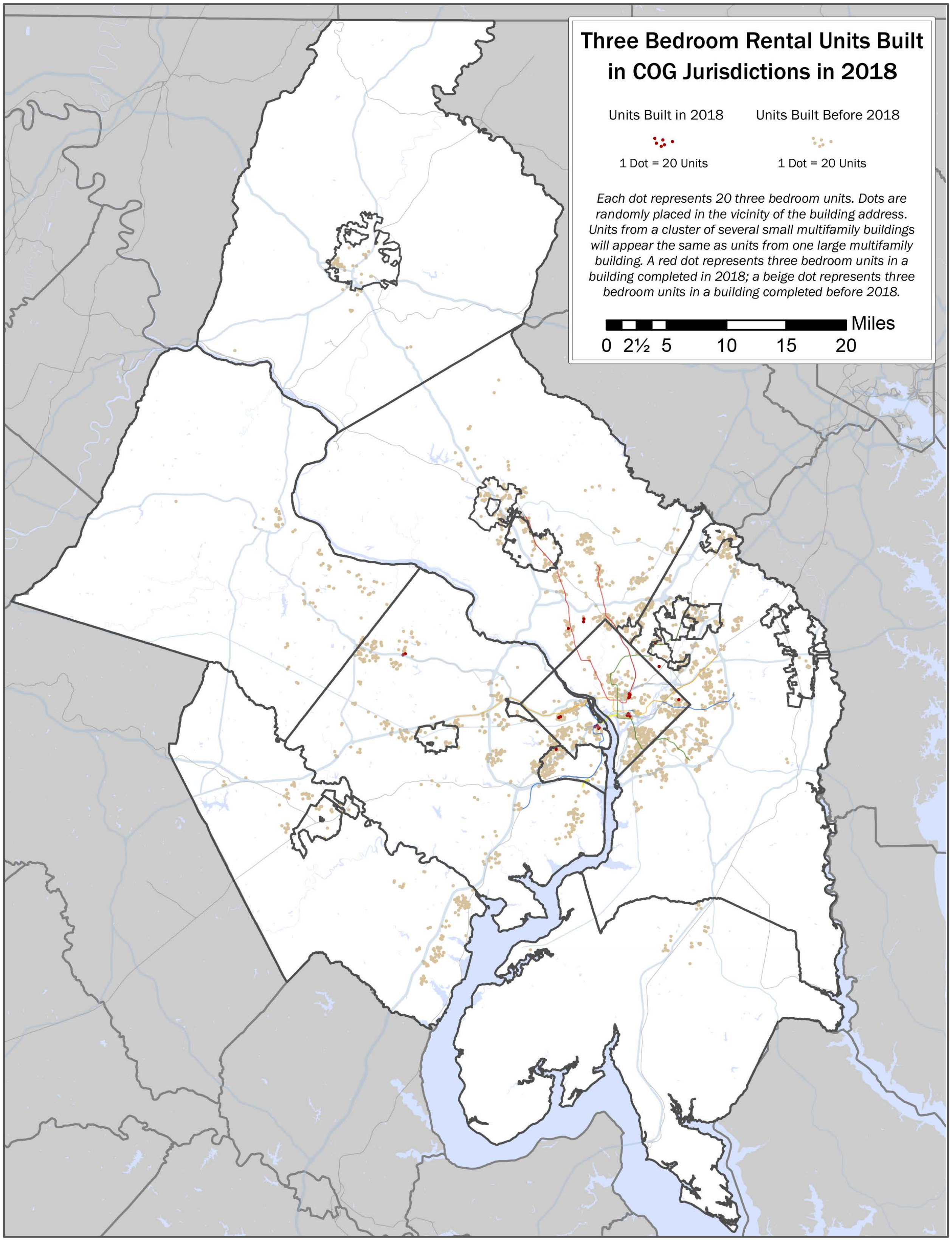
[7] See Appendix G for cost-burdened threshold calculation methodology.

Figure 27



Source: CoStar

Figure 28

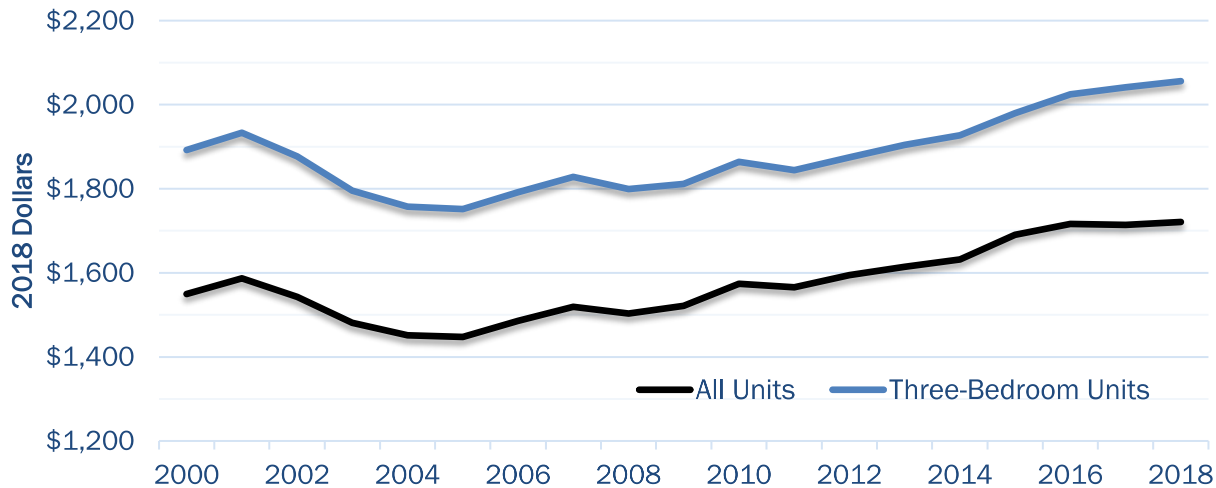


Source: CoStar

Three-Bedroom Apartments

Construction of three-bedroom units declined by three percent from 2017 to 2018. Three-bedroom apartment units accounted for five percent of all new multifamily rental construction, with 477 units. The average (mean) effective rent for new three-bedroom apartments built in 2018 was $5,069 per month and the area for the average new three-bedroom unit was 1,682 square feet.

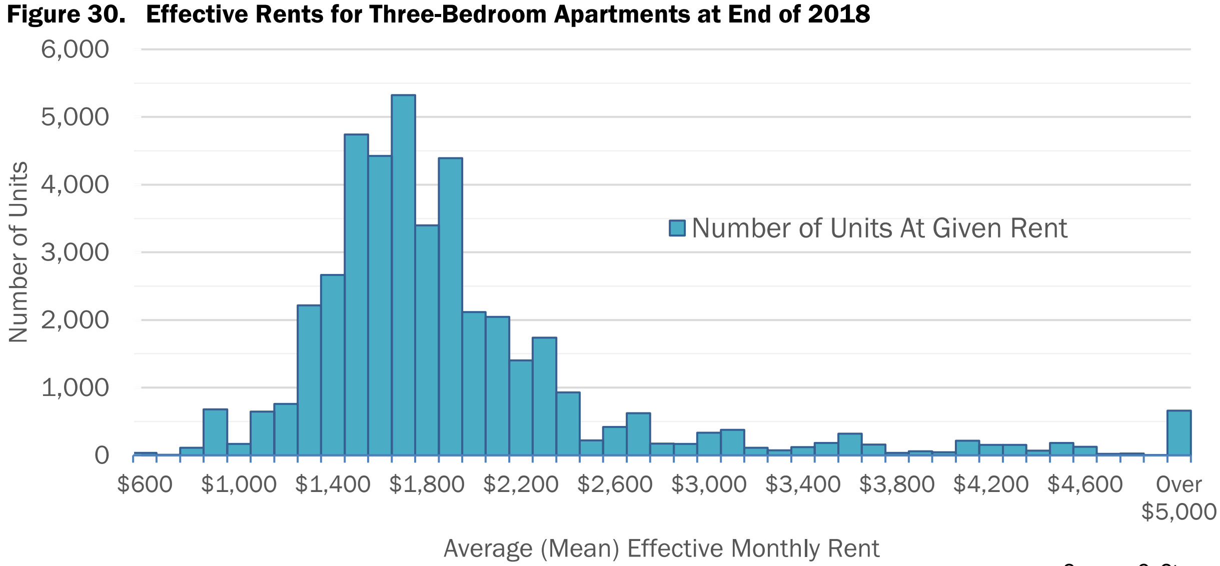
Figure 29. Inflation-Adjusted Average Effective Rent for Three-Bedroom Apartments, 2000 - 2018



Source: Bureau of Labor Statistics (CPI, all items less food and energy in U.S. city average, all urban consumers), CoStar, COG

According the data from the American Housing Survey (AHS), the median household income in 2018 for renters of three-bedroom units in the Washington Metropolitan Statistical Area was just under $76,000 per year. The median effective rent for three-bedroom apartments in the region was $1,795 at the end of 2018. The median effective rent in COG jurisdictions is roughly 28 percent of the median income of a three-bedroom apartment renter[8].

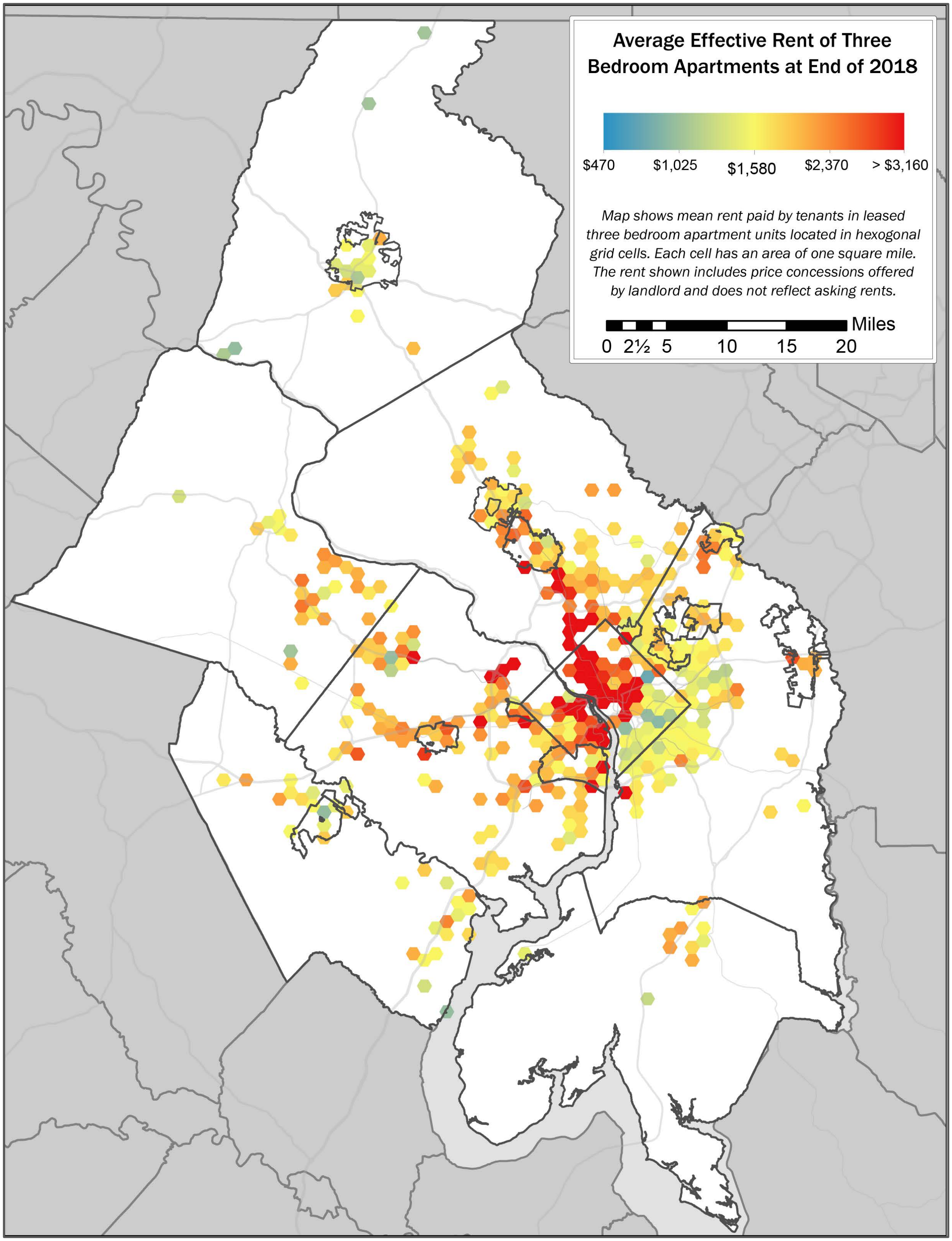
Figure 30. Effective Rents for Three-Bedroom Apartments at End of 2018



Source: CoStar

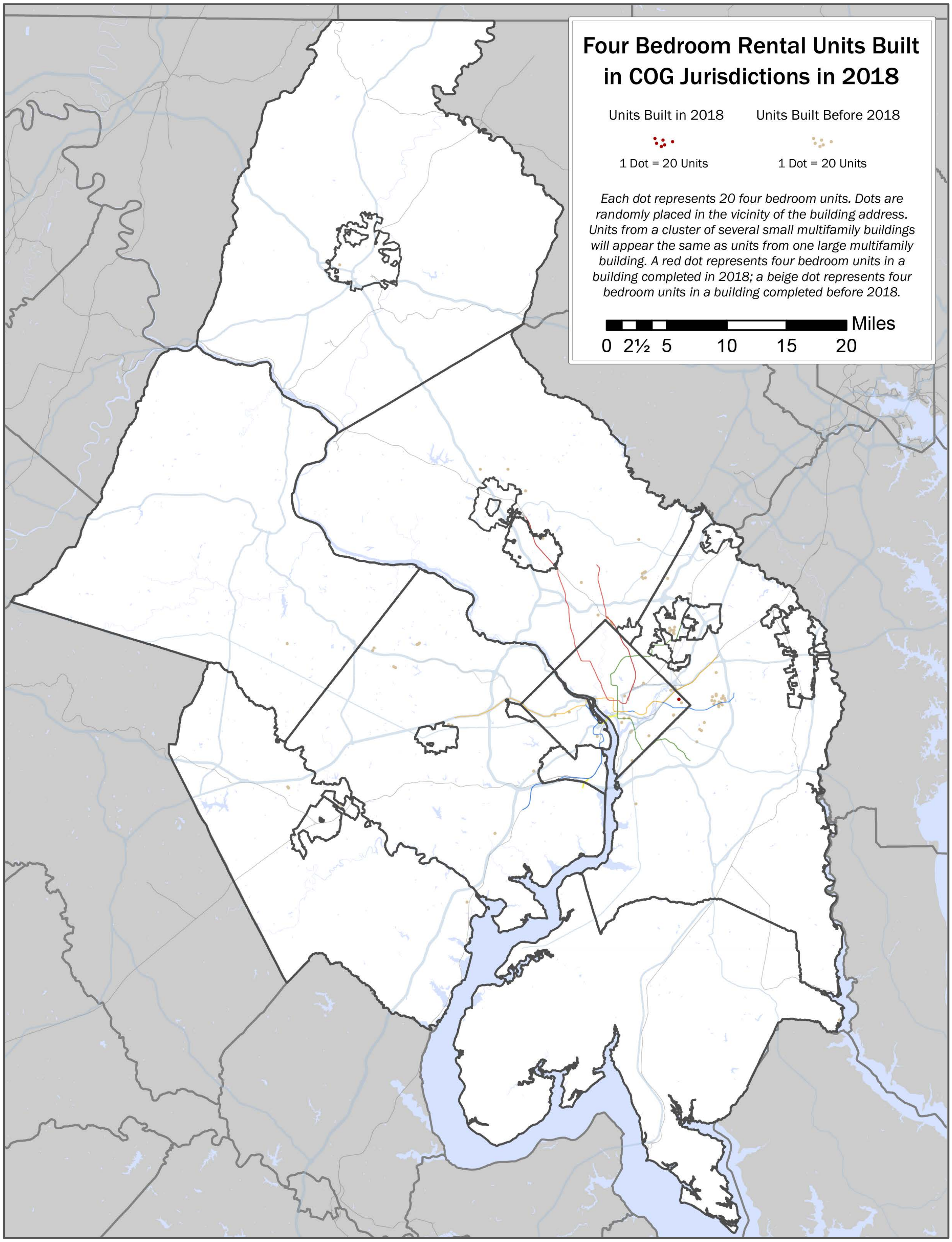
[8] See Appendix G for cost-burdened threshold calculation methodology.

Figure 31



Source: CoStar

Figure 32

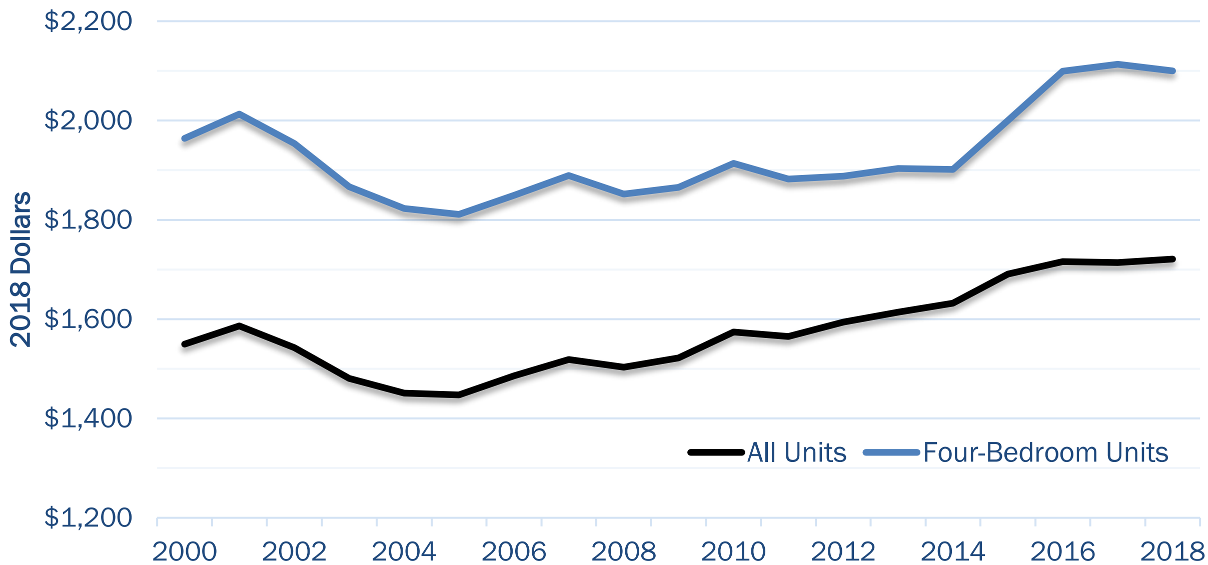


Source: CoStar

Apartments with Four or More Bedrooms

Apartment units with four or more bedrooms are not a significant part of the multifamily rental market. In 2018, 25 new units with four or more bedrooms were completed, accounting for less than one percent of all new units in the region.

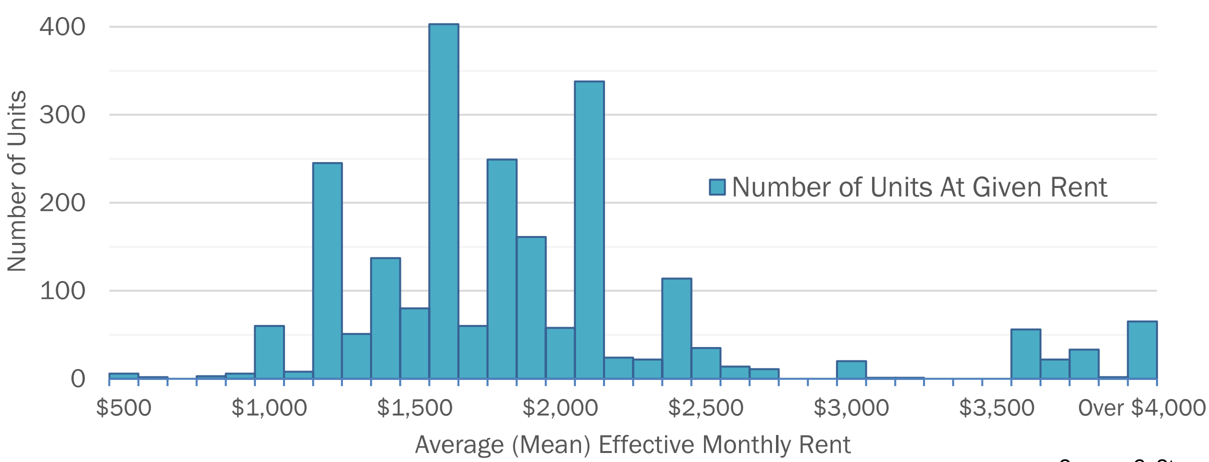
Figure 33. Inflation-Adjusted Average Effective Rent for Four-Bedroom Apartments, 2000 - 2018



Source: Bureau of Labor Statistics (CPI, all items less food and energy in U.S. city average, all urban consumers), CoStar, COG

According the data from the American Housing Survey (AHS), the median household income in 2018 for renters of units with four or more bedrooms in the Washington Metropolitan Statistical Area was just over $78,000 per year. The median effective rent for such apartment units in the region was $1,836 at the end of 2018. The median effective rent in COG jurisdictions is around 28 percent of the median income of a four or more-bedroom apartment renter[9].

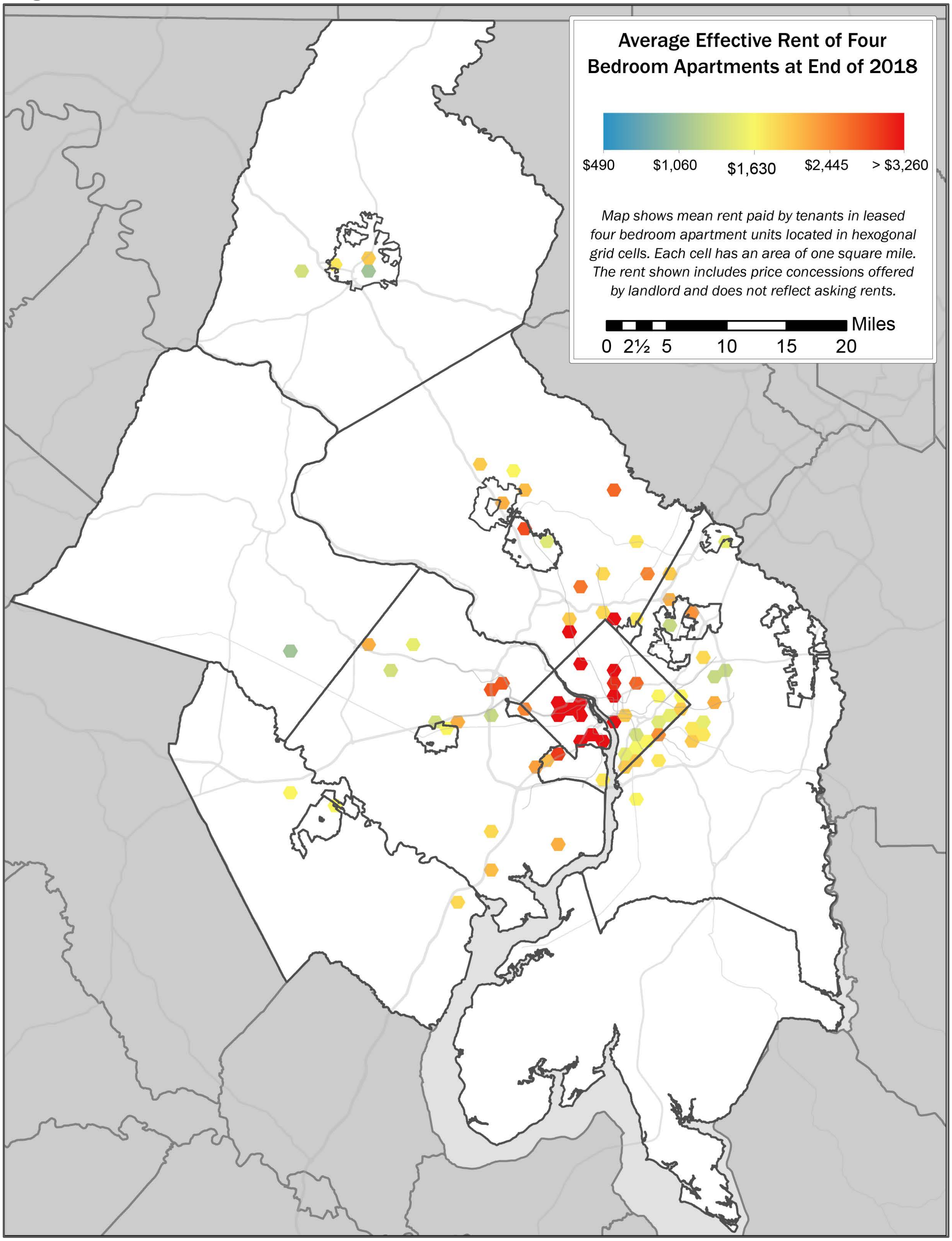
Figure 34. Effective Rents for Four-Bedroom Apartments at End of 2018



Source: CoStar

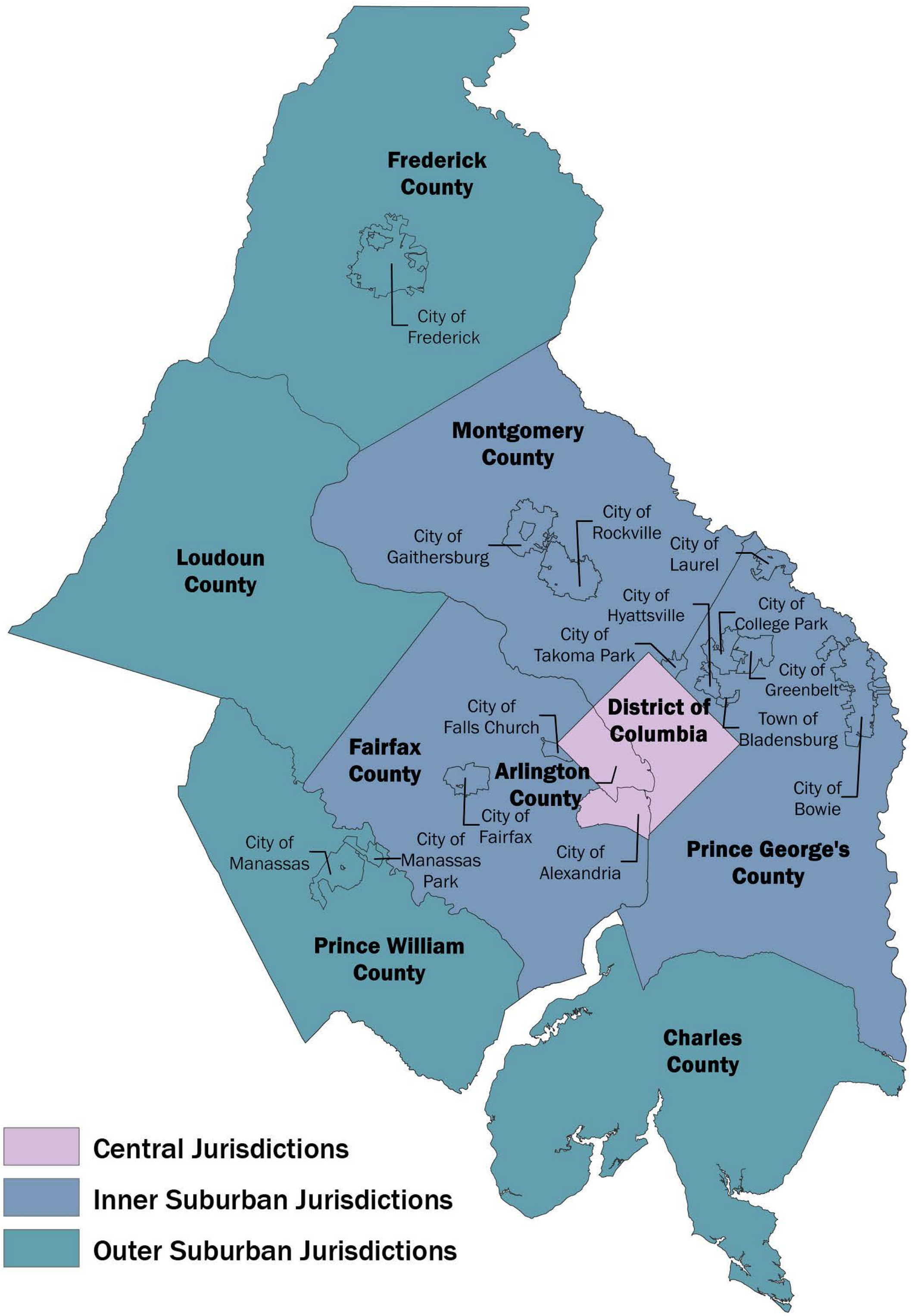
[9] See Appendix G for cost-burdened threshold calculation methodology.

Figure 35



Source: CoStar

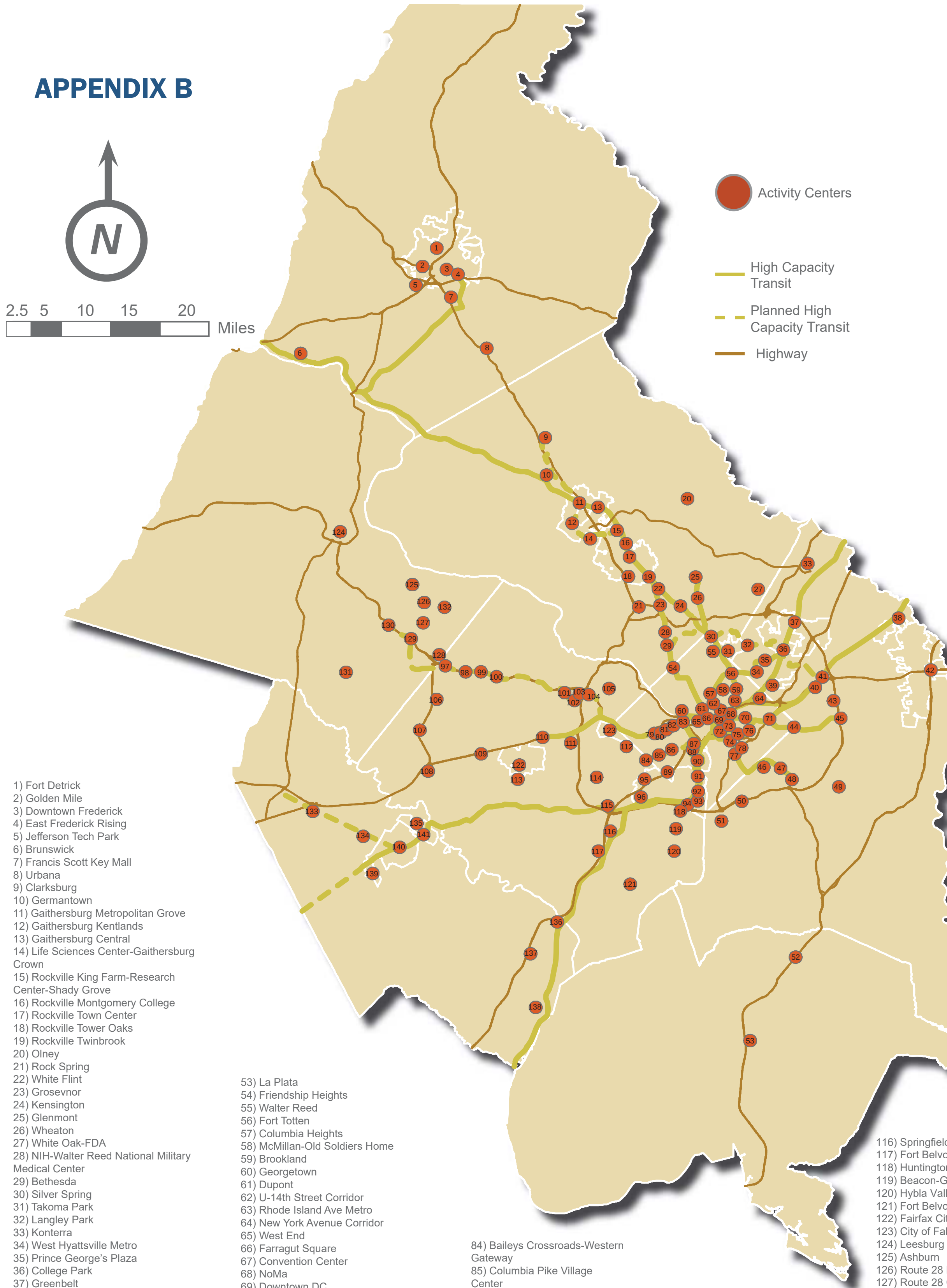
APPENDIX A. MAP OF REGIONAL "RING" JURISDICTIONAL GROUPINGS



Regional Activity Centers Map

Submitted to COG Board for Approval January 13, 2013

APPENDIX B



1) Fort Detrick
2) Golden Mile
3) Downtown Frederick
4) East Frederick Rising
5) Jefferson Tech Park
6) Brunswick
7) Francis Scott Key Mall
8) Urbana
9) Clarksburg
10) Germantown
11) Gaithersburg Metropolitan Grove
12) Gaithersburg Kentlands
13) Gaithersburg Central
14) Life Sciences Center-Gaithersburg Crown
15) Rockville King Farm-Research Center-Shady Grove
16) Rockville Montgomery College
17) Rockville Town Center
18) Rockville Tower Oaks
19) Rockville Twinbrook
20) Olney
21) Rock Spring
22) White Flint
23) Grosevnor
24) Kensington
25) Glenmont
26) Wheaton
27) White Oak-FDA
28) NIH-Walter Reed National Military Medical Center
29) Bethesda
30) Silver Spring
31) Takoma Park
32) Langley Park
33) Konterra
34) West Hyattsville Metro
35) Prince George's Plaza
36) College Park
37) Greenbelt
38) Bowie MARC
39) Port Towns
40) Landover Metro
41) New Carrollton
42) Bowie Town Center
43) Landover Mall
44) Capitol Heights-Addison Rd
45) Largo Town Center-Morgan Blvd
46) Naylor-Southern Ave
47) Suitland
48) Branch Ave
49) Westphalia
50) Oxon Hill
51) National Harbor
52) Waldorf
53) La Plata
54) Friendship Heights
55) Walter Reed
56) Fort Totten
57) Columbia Heights
58) McMillan-Old Soldiers Home
59) Brookland
60) Georgetown
61) Dupont
62) U-14th Street Corridor
63) Rhode Island Ave Metro
64) New York Avenue Corridor
65) West End
66) Farragut Square
67) Convention Center
68) NoMa
69) Downtown DC
70) H Street
71) Minnesota Ave
72) Monumental Core
73) Capitol Hill
74) Capital Riverfront
75) Southwest Waterfront
76) Stadium Armory
77) St. Elizabeths
78) Poplar Point
79) Ballston
80) Virginia Square
81) Clarendon
82) Courthouse
83) Rosslyn
84) Baileys Crossroads-Western Gateway
85) Columbia Pike Village Center
86) Columbia Pike Town Center
87) Pentagon
88) Pentagon City
89) Shirlington
90) Crystal City
91) Potomac Yard
92) Braddock Road Metro Area
93) King Street-Old Town
94) Carlyle-Eisenhower East
95) Beauregard
96) Landmark-Van Dorn
97) Fairfax Innovation Center
98) Herndon
99) Reston Town Center
100) Wiehle-Reston East
101) Tysons West
102) Tysons Central 7
103) Tysons Central 123
104) Tysons East
105) McLean
106) Dulles East
107) Dulles South
108) Centreville
109) Fairfax Center
110) Vienna
111) Dunn Loring-Merrifield
112) Seven Corners
113) George Mason University
114) Annandale
115) Beltway South
116) Springfield
117) Fort Belvoir North Area
118) Huntington-Penn Daw
119) Beacon-Groveton
120) Hybla Valley-Gum Springs
121) Fort Belvoir
122) Fairfax City
123) City of Falls Church
124) Leesburg
125) Ashburn
126) Route 28 North
127) Route 28 Central
128) Route 28 South
129) Ashburn Station
130) Loudoun Gateway Station
131) Arcola
132) Dulles Town Center
133) Gainesville
134) Innovation
135) Yorkshire
136) North Woodbridge
137) Potomac Town Center
138) Potomac Shores
139) City of Manassas Regional Airport
140) City of Manassas
141) Manassas Park

APPENDIX C. ACTIVITY CENTER TOTALS

Activity Center	Built Prior to 2018			2018 Completions			Average Effective Rent in 1 BR Units at End of 2018
	Buildings	Total Units	Regional Share	Buildings	Total Units	Regional Share	
Annandale	0	0	0.0%	0	0	0.0%	--
Arcola	8	248	0.0%	0	0	0.0%	$1,534
Ashburn	57	1,621	0.3%	0	0	0.0%	$1,570
Ashburn Station	88	2,472	0.4%	0	0	0.0%	$1,578
Baileys Crossroads-Western Gateway	105	5,192	0.9%	0	0	0.0%	$1,460
Ballston	86	4,700	0.8%	1	173	1.7%	$1,830
Beacon-Groveton	1	290	0.1%	0	0	0.0%	$1,554
Beauregard	279	8,431	1.5%	1	93	0.9%	$1,458
Beltway South	7	498	0.1%	0	0	0.0%	$1,880
Bethesda	146	6,230	1.1%	2	331	3.3%	$1,818
Bowie MARC	0	0	0.0%	0	0	0.0%	--
Bowie Town Center	81	1,840	0.3%	0	0	0.0%	$1,501
Braddock Road Metro Area	90	2,507	0.4%	2	299	3.0%	$1,873
Branch Ave	51	962	0.2%	0	0	0.0%	$1,101
Brookland	49	975	0.2%	0	0	0.0%	$1,675
Brunswick	7	100	0.0%	0	0	0.0%	$965
Capitol Heights-Addison Rd	97	1,152	0.2%	0	0	0.0%	$1,000
Capitol Hill	85	1,350	0.2%	0	0	0.0%	$2,350
Capitol Riverfront	37	1,623	0.3%	0	0	0.0%	$1,895
Carlyle-Eisenhower East	31	3,209	0.6%	0	0	0.0%	$2,018
Centreville	100	2,540	0.5%	0	0	0.0%	$1,484
City of Falls Church	51	2,528	0.5%	0	0	0.0%	$1,726
City of Manassas	137	2,348	0.4%	1	87	0.9%	$1,144
City of Manassas Regional Airport	0	0	0.0%	0	0	0.0%	--
Clarendon	24	1,920	0.3%	0	0	0.0%	$2,318
Clarksburg	29	450	0.1%	0	0	0.0%	$1,590
College Park	4	299	0.1%	0	0	0.0%	$1,695
Columbia Heights	280	11,187	2.0%	0	0	0.0%	$1,771
Columbia Pike Town Center	151	4,146	0.7%	0	0	0.0%	$1,552
Columbia Pike Village Center	148	2,829	0.5%	0	0	0.0%	$1,354
Courthouse	73	5,378	1.0%	0	0	0.0%	$2,021
Crystal City	27	7,064	1.3%	2	451	4.5%	$1,935

Activity Center	Built Prior to 2018			2018 Completions			Average Effective Rent in 1 BR Units at End of 2018
	Buildings	Total Units	Regional Share	Buildings	Total Units	Regional Share	
Downtown DC	81	9,600	1.7%	3	761	7.6%	$2,141
Downtown Frederick	103	1,648	0.3%	0	0	0.0%	$1,033
Dulles East	1	342	0.1%	0	0	0.0%	$1,449
Dulles South	15	360	0.1%	0	0	0.0%	--
Dulles Town Center	40	1,556	0.3%	0	0	0.0%	$1,539
Dunn Loring-Merrifield	164	4,554	0.8%	2	222	2.2%	$1,723
Dupont	170	7,234	1.3%	1	197	2.0%	$2,250
East Frederick Rising	12	126	0.0%	0	0	0.0%	$914
Fairfax Center	224	7,310	1.3%	0	0	0.0%	$1,609
Fairfax City	92	1,379	0.2%	0	0	0.0%	$1,540
Fairfax Innovation Center	99	3,829	0.7%	0	0	0.0%	$1,569
Farragut Square	32	3,769	0.7%	0	0	0.0%	$2,433
Fort Belvoir	4	390	0.1%	0	0	0.0%	$1,675
Fort Belvoir North Area	0	0	0.0%	0	0	0.0%	--
Fort Detrick	38	642	0.1%	0	0	0.0%	$1,217
Fort Totten	44	2,055	0.4%	0	0	0.0%	$1,682
Francis Scott Key Mall	25	159	0.0%	0	0	0.0%	$996
Friendship Heights	13	2,212	0.4%	1	100	1.0%	$1,955
Gainesville	1	200	0.0%	0	0	0.0%	$1,603
Gaithersburg Central	181	3,081	0.6%	0	0	0.0%	$1,262
Gaithersburg Kentlands	25	712	0.1%	0	0	0.0%	$1,642
Gaithersburg Metropolitan Grove	71	1,216	0.2%	0	0	0.0%	$1,412
George Mason University	0	0	0.0%	0	0	0.0%	--
Georgetown	123	1,522	0.3%	0	0	0.0%	$1,695
Germantown	191	3,761	0.7%	0	0	0.0%	$1,297
Glenmont	108	1,272	0.2%	0	0	0.0%	$1,391
Golden Mile	211	3,744	0.7%	0	0	0.0%	$1,098
Greenbelt	73	3,179	0.6%	0	0	0.0%	$1,301
Grosvenor	14	1,508	0.3%	0	0	0.0%	$1,726
H Street	205	3,159	0.6%	0	0	0.0%	$1,232
Herndon	63	1,949	0.3%	0	0	0.0%	$1,539
Huntington-Penn Daw	86	2,709	0.5%	0	0	0.0%	$1,552
Hybla Valley-Gum Springs	10	298	0.1%	0	0	0.0%	$1,042
Innovation	34	248	0.0%	0	0	0.0%	--
Jefferson Tech Park	6	228	0.0%	0	0	0.0%	$1,339
Kensington	27	457	0.1%	0	0	0.0%	$1,149

Activity Center	Built Prior to 2018			2018 Completions			Average Effective Rent in 1 BR Units at End of 2018
	Buildings	Total Units	Regional Share	Buildings	Total Units	Regional Share	
King Street-Old Town	42	677	0.1%	0	0	0.0%	$1,328
Konterra	11	419	0.1%	0	0	0.0%	$1,807
La Plata	43	421	0.1%	0	0	0.0%	$1,113
Landmark-Van Dorn	138	7,398	1.3%	0	0	0.0%	$1,464
Landover Mall	106	1,985	0.4%	0	0	0.0%	$1,199
Landover Metro	97	2,672	0.5%	0	0	0.0%	$1,069
Langley Park	349	3,918	0.7%	0	0	0.0%	$1,133
Largo Town Center-Morgan Blvd	152	3,111	0.6%	0	0	0.0%	$1,489
Leesburg	59	1,367	0.2%	0	0	0.0%	$1,369
Life Sciences Center-Gaithersburg Crown	95	3,362	0.6%	6	629	6.3%	$1,608
Loudoun Gateway Station	0	0	0.0%	0	0	0.0%	--
Manassas Park	49	1,259	0.2%	1	101	1.0%	$1,328
McLean	1	256	0.0%	0	0	0.0%	$1,769
McMillan-Old Soldiers Home	50	712	0.1%	1	9	0.1%	$1,409
Minnesota Ave	203	4,290	0.8%	0	0	0.0%	$1,022
Monumental Core	33	2,554	0.5%	2	452	4.5%	$2,272
National Harbor	1	262	0.0%	0	0	0.0%	$1,875
Naylor-Southern Ave	79	2,440	0.4%	0	0	0.0%	$1,065
New Carrollton	136	2,672	0.5%	0	0	0.0%	$1,258
New York Avenue Corridor	44	1,233	0.2%	0	0	0.0%	$1,359
NIH-Walter Reed Nat'l Mil Medical Ctr	0	0	0.0%	0	0	0.0%	--
NoMa	104	7,378	1.3%	3	680	6.8%	$2,156
North Woodbridge	16	694	0.1%	0	0	0.0%	$1,494
Olney	24	281	0.1%	0	0	0.0%	$1,240
Oxon Hill	35	510	0.1%	0	0	0.0%	$1,216
Pentagon	0	0	0.0%	0	0	0.0%	--
Pentagon City	16	5,042	0.9%	0	0	0.0%	$2,060
Poplar Point	176	3,418	0.6%	0	0	0.0%	$1,055
Port Towns	45	422	0.1%	2	151	1.5%	$1,008
Potomac Shores	80	1,207	0.2%	0	0	0.0%	$1,256
Potomac Town Center	5	900	0.2%	0	0	0.0%	$1,513
Potomac Yard	28	2,540	0.5%	0	0	0.0%	$1,854
Prince George's Plaza	64	2,069	0.4%	1	351	3.5%	$1,432
Reston Town Center	2	648	0.1%	4	965	9.7%	$1,833
Rhode Island Ave Metro	58	3,104	0.6%	0	0	0.0%	$1,336
Rock Spring	24	672	0.1%	0	0	0.0%	$1,516
Rockville King Farm-Research Ctr-Shady Grove	45	2,245	0.4%	0	0	0.0%	$1,739
Rockville Montgomery College	24	331	0.1%	0	0	0.0%	$1,657

Activity Center	Built Prior to 2018			2018 Completions			Average Effective Rent in 1 BR Units at End of 2018
	Buildings	Total Units	Regional Share	Buildings	Total Units	Regional Share	
Rockville Tower Oaks	0	0	0.0%	0	0	0.0%	--
Rockville Town Center	17	1,386	0.2%	1	275	2.8%	$1,654
Rockville Twinbrook	70	3,539	0.6%	14	389	3.9%	$1,473
Rosslyn	83	3,823	0.7%	0	0	0.0%	$2,056
Route 28 Central	0	0	0.0%	0	0	0.0%	--
Route 28 North	0	0	0.0%	0	0	0.0%	--
Route 28 South	0	0	0.0%	0	0	0.0%	--
Seven Corners	137	1,446	0.3%	0	0	0.0%	$1,376
Shirlington	20	1,620	0.3%	0	0	0.0%	$1,691
Silver Spring	262	13,640	2.4%	0	0	0.0%	$1,600
Southwest Waterfront	108	6,255	1.1%	2	554	5.6%	$2,174
Springfield	57	1,200	0.2%	0	0	0.0%	$1,588
St. Elizabeth's	159	2,563	0.5%	0	0	0.0%	$1,086
Stadium Armory	123	1,643	0.3%	0	0	0.0%	$1,193
Suitland	246	3,450	0.6%	0	0	0.0%	$1,147
Takoma Park	61	1,841	0.3%	0	0	0.0%	$1,069
Tysons Central 123	48	3,581	0.6%	0	0	0.0%	$2,050
Tysons Central 7	16	217	0.0%	0	0	0.0%	$1,814
Tysons East	80	1,496	0.3%	1	319	3.2%	$1,812
Tysons West	3	1,078	0.2%	0	0	0.0%	$1,741
U-14th Street Corridor	160	6,693	1.2%	3	390	3.9%	$2,174
Urbana	8	352	0.1%	0	0	0.0%	$1,503
Vienna	15	802	0.1%	0	0	0.0%	$1,734
Virginia Square	44	2,657	0.5%	0	0	0.0%	$1,907
Waldorf	4	62	0.0%	0	0	0.0%	$1,501
Walter Reed	114	2,968	0.5%	0	0	0.0%	$1,357
West End	33	4,035	0.7%	1	93	0.9%	$2,428
West Hyattsville Metro	264	3,805	0.7%	0	0	0.0%	$1,158
Westphalia	0	0	0.0%	0	0	0.0%	--
Wheaton	69	2,346	0.4%	0	0	0.0%	$1,632
White Flint	44	2,864	0.5%	0	0	0.0%	$1,925
White Oak-FDA	115	3,124	0.6%	0	0	0.0%	$1,303
Wiehle-Reston East	2	869	0.2%	1	385	3.9%	$1,866
Yorkshire	23	517	0.1%	0	0	0.0%	$1,267
Inside of Activity Centers Total	*9,734*	*312,838*	*56.1%*	*59*	*8,457*	*84.8%*	*$1,700*
Outside of Activity Centers Total	*14,218*	*244,653*	*43.9%*	*23*	*1,514*	*15.2%*	*$1,352*
Regional Total	**23,952**	**557,491**	**100.0%**	**82**	**9,971**	**100.0%**	**$1,560**

Source: CoStar, COG

APPENDIX D. METRO STATION WALKSHED TOTALS

Metrorail Station Half-Mile Walkshed	Built Prior to 2018			2018 Completions			Percent Built Since Station Opened	Avg. 1 BR Rent in 2018
	Buildings	Units	Regional Share	Buildings	Units	Regional Share		
Addison Road-Seat Pleasant	12	221	0.0%	0	0	0.0%	0%	$1,144
Anacostia	98	1,279	0.2%	0	0	0.0%	20%	$1,088
Archives-Navy Mem-Penn Qtr	7	881	0.2%	0	0	0.0%	97%	$2,342
Arlington Cemetery	0	0	0.0%	0	0	0.0%	--	--
Ballston-MU	42	5,539	1.0%	1	173	1.7%	94%	$1,914
Benning Road	107	1,566	0.3%	0	0	0.0%	13%	$1,022
Bethesda	39	2,879	0.5%	1	112	1.1%	69%	$2,099
Braddock Road	59	1,784	0.3%	1	270	2.7%	72%	$1,866
Branch Avenue	15	1,388	0.2%	0	0	0.0%	100%	$1,611
Brookland-CUA	27	767	0.1%	0	0	0.0%	78%	$1,873
Capitol Heights	28	659	0.1%	0	0	0.0%	63%	$1,028
Capitol South	34	1,060	0.2%	1	334	3.3%	71%	$2,307
Cheverly	0	0	0.0%	0	0	0.0%	--	--
Clarendon	29	2,930	0.5%	0	0	0.0%	90%	$2,202
Cleveland Park	31	2,614	0.5%	0	0	0.0%	8%	$1,976
College Park-Univ of Maryland	17	162	0.0%	0	0	0.0%	0%	$925
Columbia Heights	188	7,394	1.3%	0	0	0.0%	14%	$1,822
Congress Heights	198	1,906	0.3%	0	0	0.0%	20%	$929
Court House	92	5,693	1.0%	0	0	0.0%	88%	$2,075
Crystal City	20	5,756	1.0%	0	0	0.0%	53%	$1,975
Deanwood	53	638	0.1%	0	0	0.0%	0%	$870
Dunn Loring-Merrifield	70	2,340	0.4%	0	0	0.0%	66%	$1,671
Dupont Circle	115	4,918	0.9%	1	197	2.0%	21%	$2,414
East Falls Church	1	214	0.0%	0	0	0.0%	100%	$2,522
Eastern Market	73	1,119	0.2%	0	0	0.0%	20%	$1,751
Eisenhower Avenue	7	1,517	0.3%	0	0	0.0%	100%	$1,937
Farragut North	13	1,909	0.3%	0	0	0.0%	24%	$2,250
Farragut West	11	1,205	0.2%	0	0	0.0%	39%	$2,567
Federal Center SW	3	307	0.1%	0	0	0.0%	0%	$1,911
Federal Triangle	2	135	0.0%	0	0	0.0%	100%	$2,530
Foggy Bottom-GWU	33	3,848	0.7%	1	93	0.9%	40%	$2,495
Forest Glen	24	295	0.1%	0	0	0.0%	0%	$1,255
Fort Totten	8	855	0.2%	0	0	0.0%	97%	$2,068
Franconia-Springfield	0	0	0.0%	0	0	0.0%	--	--
Friendship Heights	8	1,468	0.3%	0	0	0.0%	29%	$1,993

Metrorail Station Half-Mile Walkshed	Built Prior to 2018			2018 Completions			Percent Built Since Station Opened	Avg. 1 BR Rent in 2018
	Buildings	Units	Regional Share	Buildings	Units	Regional Share		
Gallery Place-Chinatown	40	5,823	1.0%	1	324	3.2%	92%	$2,239
Georgia Ave-Petworth	84	2,036	0.4%	1	9	0.1%	42%	$1,615
Glenmont	12	165	0.0%	0	0	0.0%	0%	--
Greenbelt	0	0	0.0%	0	0	0.0%	--	$1,363
Greensboro	16	217	0.0%	0	0	0.0%	0%	$1,814
Grosvenor-Strathmore	14	1,508	0.3%	0	0	0.0%	100%	$1,726
Huntington	15	913	0.2%	0	0	0.0%	86%	$1,721
Judiciary Square	20	3,821	0.7%	1	324	3.2%	89%	$2,203
King Street-Old Town	22	1,133	0.2%	0	0	0.0%	85%	$2,198
Landover	0	0	0.0%	0	0	0.0%	--	--
Largo Town Center	8	776	0.1%	0	0	0.0%	86%	$1,541
L'Enfant Plaza	6	76	0.0%	0	0	0.0%	0%	--
McLean	26	875	0.2%	1	319	3.2%	62%	$2,031
McPherson Square	25	4,067	0.7%	0	0	0.0%	34%	$2,503
Medical Center	1	359	0.1%	0	0	0.0%	100%	$2,374
Metro Center	17	2,430	0.4%	0	0	0.0%	46%	$2,381
Minnesota Avenue	45	1,457	0.3%	0	0	0.0%	57%	$1,042
Morgan Boulevard	12	478	0.1%	0	0	0.0%	100%	$1,503
Mt Vernon Sq-7th St-Convention Ctr	85	8,216	1.5%	2	437	4.4%	58%	$2,164
Navy Yard-Ballpark	82	6,252	1.1%	2	554	5.6%	87%	$2,180
Naylor Road	5	774	0.1%	0	0	0.0%	0%	$1,105
New Carrollton	1	278	0.0%	0	0	0.0%	100%	$1,696
NOMA-Gallaudet	11	3,454	0.6%	2	568	5.7%	100%	$2,276
Pentagon	0	0	0.0%	2	451	4.5%	100%	$2,525
Pentagon City	18	5,648	1.0%	2	451	4.5%	85%	$2,069
Potomac Avenue	47	944	0.2%	0	0	0.0%	22%	$920
Prince George's Plaza	10	281	0.1%	0	0	0.0%	93%	$1,801
Rhode Island Ave-Brentwood	8	724	0.1%	0	0	0.0%	85%	$1,746
Rockville	6	952	0.2%	1	275	2.8%	91%	$1,825
Ronald Reagan Wash. National Airpt	0	0	0.0%	0	0	0.0%	--	--
Rosslyn	38	2,878	0.5%	0	0	0.0%	82%	$2,241
Shady Grove	1	333	0.1%	0	0	0.0%	100%	$1,838
Shaw-Howard Univ	115	3,793	0.7%	1	6	0.1%	50%	$2,071
Silver Spring	131	7,695	1.4%	0	0	0.0%	52%	$1,679
Smithsonian	0	0	0.0%	0	0	0.0%	--	--
Southern Avenue	1	25	0.0%	0	0	0.0%	0%	--
Spring Hill	2	804	0.1%	0	0	0.0%	100%	$1,979

Metrorail Station Half-Mile Walkshed	Built Prior to 2018			2018 Completions			Percent Built Since Station Opened	Avg. 1 BR Rent in 2018
	Buildings	Units	Regional Share	Buildings	Units	Regional Share		
Stadium-Armory	25	487	0.1%	0	0	0.0%	57%	$1,580
Suitland	115	999	0.2%	0	0	0.0%	0%	$1,159
Takoma	19	849	0.2%	0	0	0.0%	59%	$1,564
Tenleytown-AU	5	203	0.0%	1	100	1.0%	53%	$1,848
Twinbrook	10	1,602	0.3%	14	389	3.9%	87%	$1,598
Tysons Corner	2	890	0.2%	0	0	0.0%	100%	$2,124
U St/Afr-Amer Civil War Mem/Cardozo	96	5,124	0.9%	2	384	3.9%	57%	$2,283
Union Station	11	1,195	0.2%	2	334	3.3%	89%	$2,155
Van Dorn Street	5	226	0.0%	0	0	0.0%	100%	$1,815
Van Ness-UDC	22	3,195	0.6%	0	0	0.0%	19%	$1,947
Vienna-Fairfax-GMU	15	802	0.1%	0	0	0.0%	100%	$1,734
Virginia Square-GMU	69	5,384	1.0%	0	0	0.0%	91%	$1,928
Waterfront	87	3,946	0.7%	3	672	6.7%	31%	$2,045
West Falls Church-VT/UVA	0	0	0.0%	0	0	0.0%	--	--
West Hyattsville	0	0	0.0%	0	0	0.0%	--	--
Wheaton	67	2,206	0.4%	0	0	0.0%	74%	$1,634
White Flint	11	2,339	0.4%	0	0	0.0%	97%	$1,914
Wiehle-Reston East	2	869	0.2%	0	0	0.0%	100%	$1,866
Woodley Park-Zoo/Adams Morgan	39	2,644	0.5%	0	0	0.0%	16%	$2,256
DC Station Walkshed Totals	*1,551*	*70,226*	*12.6%*	*17*	*3,236*	*32.5%*	*47%*	*$2,065*
Maryland Station Walkshed Totals	*502*	*27,267*	*4.9%*	*16*	*776*	*7.8%*	*66%*	*$1,709*
Virginia Station Walkshed Totals	*492*	*38,618*	*6.9%*	*5*	*1,213*	*12.2%*	*83%*	*$1,999*
Inside Walkshed Total	*2,545*	*136,111*	*24.4%*	*38*	*5,225*	*52.4%*	*61%*	*$1,975*
Outside Walkshed Total	*21,407*	*421,380*	*75.6%*	*44*	*4,746*	*47.6%*	*41%*	*$1,395*
Regional Total	**23,952**	**557,491**	**100.0%**	**82**	**9,971**	**100.0%**	**46%**	**$1,560**

Source: CoStar, COG

Half-Mile Walkshed Geography Methodology

The geography used to calculate walkshed totals for Metrorail stations was created by Transportation Planning Board (TPB) staff in 2019. Station areas with more intersections, smaller blocks and fewer barriers will have a walkshed with a larger total area. The largest theoretical area is .79 square miles—the area of a circle with a radius of 0.5 miles. Stations areas with higher unit totals could be the result of having more construction activity or having a more extensive half-mile walkshed (or both). The analysis was only performed on walksheds as they exist in 2019. The same 2019 vintage walkshed geography was used for looking at past construction. Therefore, the station area totals for previous years are for an area that may not been accessible via a half-mile walk until a later time—or even had a station built yet. More information on walksheds can be found on the [TPB blog](#).

APPENDIX E

Multifamily Construction Definitions (adapted from CoStar Glossary[10])

AVERAGE EFFECTIVE RENT
Weighted mean rent of all units within a defined area. Effective rents for buildings with more units are weighed more heavily, in proportion to share of the total market. Rents are for units that are available to be rented by a new tenant.

COMPLETION
Projects with buildings that are completed and are ready for occupancy. A certificate of occupancy has been received.

EFFECTIVE RENT
Expressed as a monthly amount, the average rent paid over the term adjusted downward for concessions paid for by the landlord (such as free rent, moving expenses, or other allowances).

MULTIFAMILY RENTAL HOUSING PROJECT
A residential property with one or more completed buildings that leases five or more apartment units. Condominiums, cooperative housing, mobile home parks, assisted-living facilities, military housing and student housing are not included.

[10] http://www.costar.com/about/costar-glossary

APPENDIX F. MAPPING METHODOLOGY

Mapping Rent Data in Hexagonal Grid Cells

This report maps rents using aggregated unit-based data and a grid of 3,768 identical hexagonal cells, each with an area of one square mile. This method was chosen to make neighborhood-level trends in unit-based data uniformly apparent, without being influenced by building size, neighborhood size or jurisdictional borders.

Mapping Units in Vicinity of Building Location

This report displays unit data for each building by generating points at random within the vicinity of the building's address. Regional unit data is distributed within a circle with an area of 100,000 square feet for each unit in the building; one dot is randomly placed within the defined circle for every 20 units in the building. Unit data for the Beltway area is distributed within circle with an area of 25,000 square feet for each unit in the building; one dot is randomly placed within the defined circle for every five units in the building. This method was chosen to make neighborhood-level trends in unit-based data uniformly apparent, without being influenced by building size, neighborhood size or jurisdictional borders. However, neighborhoods with several buildings will have less space between each dot compared with neighborhood with only a single building that has a lot of units.

The map for units in transit walksheds and Activity Centers uses the same methodology but only distribute dots within the portion of the defined circle that falls within the walkshed or Activity Center.

APPENDIX G. INCOME AND RENTS

American Housing Survey Data

This report relies on data from CoStar for mean and median monthly rents but uses data from the U.S. Census's American Housing Survey (AHS) for median renter income. An alternative source that is commonly used in housing research is the annual American Community Survey (ACS). For this report, the AHS is preferable to ACS data because the ACS reports median income by occupant tenure (renter vs. owner), as well as the number of bedrooms in unit.

The AHS reports median income for the Washington Metropolitan Statistical Area (MSA), a region with 24 counties and county-equivalents that includes the District of Columbia and parts of Maryland, Virginia, and West Virginia—a larger geography and population than the 14-county and county-equivalent COG region. The American Housing Survey is released on odd years only, so this report inflation-adjusted (July) 2017 renter income data from the AHS so it could be compared to the (December) 2018 monthly rent data from CoStar, as shown in Table 49 below:

Figure 36. Affordable Rents for Renters with Median Income for the Washington MSA

Unit Size	2017 AHS Median Renter Income	Adjusted 2018 Median Renter Income*	2018 Monthly Income for Renters	Rent Threshold for Cost-Burden (One-Fourth Monthly Income)
Studio	$46,000	$47,212	$3,934	$984
1 BR	$51,100	$52,446	$4,370	$1,093
2 BR	$65,000	$66,712	$5,559	$1,390
3 BR	$74,000	$75,949	$6,329	$1,582
4+ BR	$76,300	$78,310	$6,526	$1,631

**The BLS CPI Inflation Calculator's inflation rate from July 2017 to December 2018 was 2.63 percent*

Calculating Housing Cost-Burden for Renters

The US Department of Housing and Urban Development (HUD) has defined those spending more than 30 percent of monthly gross income on housing to be cost burdened. Five percent of income is set aside for utilities and other fees, leaving 25 percent for rent[11]. The final column of Table 36 shows the highest possible rent that a renter earning the median income in the Washington MSA can pay without being cost-burdened.

[11] Housing programs also have more exact ways of calculating utility allowances but five percent is appropriate for a general allowance (See page 5-78 in Chapter 5 of the HUD Occupancy Handbook).

Metropolitan Washington
Council of Governments

777 North Capitol Street NE, Suite 300
Washington, DC 20002

mwcog.org