

bae urban economics

Demographic and Economic Profile and Real Estate Market Analysis
for the Annapolis Comprehensive Plan Update

Prepared for the City of Annapolis

December 13, 2019



bae urban economics

December 13, 2019

Sally Nash
Acting Director
Department of Planning and Zoning
145 Gorman Street, 3rd Floor
Annapolis, MD 21401

Dear Ms. Nash:

BAE Urban Economics is pleased to submit the Demographic and Economic Profile and Real Estate Market Analysis for the Annapolis Comprehensive Plan Update. This report includes updated demographic and economic data for the city as well as current real estate market information. The real estate market information is presented by sector and includes a review of residential, retail, office, and industrial/flex market conditions and trends.

Summary details of this report will be included in the Annapolis Comprehensive Plan Update and will also serve as baseline information as the other components of the Comprehensive Plan are prepared. The data and information presented here will guide the development of recommendations for land use, transportation, and economic development that will make up the Comprehensive Plan.

We look forward to continuing our work with the city of Annapolis on the Comprehensive Plan Update.

Sincerely,



Mary Burkholder
Vice President, BAE Urban Economics

San Francisco

2600 10th St., Suite 300
Berkeley, CA 94710
510.547.9380

Sacramento

803 2nd St., Suite A
Davis, CA 95616
530.750.2195

Los Angeles

448 South Hill St., Suite 701
Los Angeles, CA 90013
213.471.2666

Washington DC

700 Pennsylvania Ave. SE, 2nd Floor
Washington, DC 20003
202.588.8945

New York City

234 5th Ave.
New York, NY 10001
212.683.4486

Table of Contents

INTRODUCTION.....	1
Purpose.....	1
Organization of Report.....	1
KEY FINDINGS	2
METHODOLOGY	9
Geographies	9
Data Sources	10
DEMOGRAPHIC AND ECONOMIC CONDITIONS AND TRENDS	12
Population and Households	12
Household Composition.....	13
Age Distribution.....	14
Race and Ethnicity	15
Educational Attainment	16
Household Income	17
Housing Tenure	18
Housing Cost Burdens	19
Labor Force Participation.....	22
Commute Patterns	22
Resident Employment.....	23
Jobs	25
PROJECTIONS.....	28
Population and Household Growth	28
Employment.....	28
REAL ESTATE MARKET CONDITIONS AND TRENDS	32
Residential.....	32
Subsidized Multifamily Rentals	42
Retail.....	43
Office.....	46

Industrial/Flex	49
APPENDIX	52

List of Tables

Table 1: Population and Households, 2010 – 2018	12
Table 2: Labor Force Participation, 2013 – 2017 Five-Year Data	22
Table 3: Commute Flows, City of Annapolis, 2015.....	23
Table 4: Principal Employers in the City of Annapolis, February 2019	27
Table 5: Population and Household Projections, Annapolis & Anne Arundel County, 2018 – 2040	28
Table 6: Employment Projections, Anne Arundel County, 2018 – 2040	30
Table 7: Market-Rate Multifamily Rental Overview, Q1 2019	34
Table 8: Retail Market Overview, Q1 2019.....	43
Table 9: Office Market Overview, Q1 2019.....	46
Table 10: Industrial/Flex Market Overview, Q1 2019.....	49

List of Figures

Figure 1: City of Annapolis.....	9
Figure 2: City of Annapolis, Anne Arundel County, and the State of Maryland.....	10
Figure 3: Percent Distribution of Households by Household Composition, 2018.....	13
Figure 4: Percent Change in Number of Households by Household Composition, 2010 – 2018	13
Figure 5: Age Distribution, 2018	14
Figure 6: Change in Number of Residents by Age Group, 2010 – 2018.....	15
Figure 7: Race and Ethnicity, 2018.....	16
Figure 8: Percent Change in Number of Residents by Race and Ethnicity, 2010 - 2018	16
Figure 9: Educational Attainment Rates, Residents Aged 25+, 2018.....	17
Figure 10: Median Household Income and Per Capita Income, 2018.....	18
Figure 11: Household Income Distribution, 2018.....	18
Figure 12: Occupied Housing Units by Tenure, 2018	19
Figure 13: Percent Change, Number of Housing Units by Tenure, 2010 – 2018.....	19
Figure 14: Percent of Households with Cost Burdens by Tenure, 2011 – 2015 Five Year Data	20
Figure 15: Cost-Burdened Owner Households in Annapolis by AMI Level, 2011 – 2015 Five-Year Data.....	21
Figure 16: Cost-Burdened Renter Households in Annapolis by AMI Level, 2011 – 2015 Five-Year Data.....	21
Figure 17: Resident Employment by Industry, 2018.....	24
Figure 18: Resident Employment by Occupation, 2018	25
Figure 19: Local Jobs by Industry, 2018.....	26
Figure 20: Change in Jobs in Anne Arundel County by Industry, 2018 – 2040	29

Figure 21: Projected Percent Change in Jobs by Industry in Top Sectors in the County and State, 2018 – 2040	31
Figure 22: Housing Units by Type, 2013 – 2017 Five-Year Data	32
Figure 23: Housing Units by Year Built, 2013 – 2017 Five-Year Data.....	33
Figure 24: Percent Distribution of Market-Rate Multifamily Rental Units by Size, Q1 2019.....	35
Figure 25: Average Market-Rate Multifamily Rent by Unit Size, Q1 2019.....	35
Figure 26: Average Rent, Market-Rate Multifamily Two-Bedroom Unit, 2010 – Q1 2019.....	36
Figure 27: Deliveries (Market-Rate Units), 2010 - 2018	37
Figure 28: Annual Market-Rate Unit Deliveries as a Share of Total Market-Rate Units, 2010 - 2018.....	37
Figure 29: Average Vacancy Rates, Market-Rate Multifamily Rental, 2010 – Q1 2019.....	38
Figure 30: Market-Rate Multifamily Rental Net Absorption Rate, 2010 – Q1 2019	38
Figure 31: Residential Sales by Unit Type, May 2018 – April 2019	39
Figure 32: Residential Sales by Unit Size, May 2018 – April 2019	40
Figure 33: Median Home Sale Price, May 2018 – April 2019	40
Figure 34: Average Home Sale Price Per Square Foot, May 2018 – April 2019	41
Figure 35: Median Home Sale Price, 2009 – 2018.....	41
Figure 36: Home Sales in Annapolis, April 2018 – March 2019	42
Figure 37: Average Annual Retail Rent PSF, 2010 – Q1 2019.....	44
Figure 38: Annual Retail Deliveries (SF) as a Share of Total Retail Inventory (SF), 2010 – 2018	44
Figure 39: Average Retail Vacancy Rates, 2010 – Q1 2019	45
Figure 40: Retail Net Absorption Rates, 2010 – 2018.....	45
Figure 41: Average Annual Office Rent PSF, 2010 – Q1 2019.....	47
Figure 42: Annual Office Deliveries (SF) as a Share of Total Office Inventory (SF), 2010 – 2018	47
Figure 43: Average Office Vacancy Rates, 2010 – Q1 2019	48
Figure 44: Office Net Absorption Rates, 2010 – 2018.....	48
Figure 45: Average Annual Industrial/Flex Rent PSF, 2010 – Q1 2019	50
Figure 46: Annual Industrial/Flex Deliveries (SF) as a Share of Total Industrial/Flex Inventory (SF), 2010 – 2018.....	50
Figure 47: Average Industrial/Flex Vacancy Rates, 2010 – Q1 2019.....	51
Figure 48: Industrial/Flex Net Absorption Rates, 2010 – 2018	51

INTRODUCTION

Purpose

This Demographic and Economic Profile and Real Estate Market Analysis is provided as a background resource for the Annapolis Comprehensive Plan Update. The analysis benchmarks existing conditions and offers a basis for planning of land use, transportation, and economic development in Annapolis through 2040. To the extent that the Comprehensive Plan Update considers targeted land use changes in specific locations, this market overview will provide useful information to help frame evaluation of options from an economic standpoint. For each land use type, the market analysis documents existing market conditions.

Organization of Report

This report has three primary sections:

- Demographic and Economic Conditions;
- Projections; and
- Real Estate Market Conditions and Trends.

The demographic and conditions section include a review of the most recent data available on population and households, household composition, age distribution, race and ethnicity, educational attainment, household income, housing tenure, housing cost burdens, labor force participation, commute patterns, resident employment, and jobs. This section includes these data for the city of Annapolis as well as for Anne Arundel County and the state of Maryland.

The next section of the report is projections for population and household growth and employment. Sources for these projections include the U.S. Bureau of Economic Analysis, the Baltimore Metropolitan Council, and the Maryland Department of Planning, Projections and State Data Center.

The last section of the report is a review of current real estate market conditions and trends in Annapolis. This includes market information on four primary real estate sectors: residential, retail, office, and industrial/flex. As is the case with the demographic and economic data presented in this report, the real estate information for Annapolis is compared to similar information for Anne Arundel County and the state of Maryland.

KEY FINDINGS

Demographic and Economic Conditions and Trends

- As of 2018, the City of Annapolis had 39,751 residents and 16,407 households. This represents a 3.6 percent increase in residents as compared to 2010, and a 1.7 percent increase in households. These growth rates are significantly lower than those in Anne Arundel County and the state of Maryland.
- Annapolis' average household size is 2.38, which is smaller than in Anne Arundel County as a whole (2.65) and the state of Maryland (2.64). From 2010 to 2018, the average household size increased in Annapolis, as well as in the county and the state.
- Annapolis' relatively small average household size is driven by a large proportion of non-family households. In Annapolis, 46.1 percent of households are non-family households, as compared to only 30.9 percent of households in the county and 33.5 percent in the state. The large proportion of non-family households in Annapolis is likely attributable to the city's large numbers of residents over the age of 65 as well as between the ages of 25 to 34.
- The fastest-growing age cohort in Annapolis, as well as in the county and the state, is comprised of residents aged 65 and older. From 2010 to 2018, residents in this age group increased by 36.2 percent in Annapolis.
- Other age groups that experienced an increase in residents from 2010 to 2018 in Annapolis include ages 35 to 44 (a 9.2 percent increase) and children under 18 (a 4.7 percent increase). This suggests that despite Annapolis' relatively low proportion of family households, there is a slight trend of growing numbers of new families in Annapolis. However, the majority of Annapolis' recent household growth is due to an influx of non-family households.
- From 2010 to 2018, Annapolis experienced a decrease in residents aged 18 to 34. This suggests that, more and more, recent college graduates and young professionals are deciding to leave Annapolis as they enter their prime years for launching and growing their careers.
- Approximately 48.7 percent of Annapolis' residents are white, 26.4 percent are black/African-American, 20.5 percent are Hispanic/Latino, and 2.2 percent are Asian. Annapolis' population is notably more diverse than that of Anne Arundel County, where nearly 68 percent of residents are white.

- From 2010 to 2018 in Annapolis, there was a 26.3 percent increase in Hispanic/Latino residents, a 9.1 percent increase in Asian residents, and a 6.5 percent increase in black/African-American residents during this timeframe. Meanwhile, the number of white residents decreased by 5.6 percent. Similar patterns were observed in the county and state.
- Nearly 48 percent of Annapolis residents hold a Bachelor's degree, while the same is true for only 40.7 percent of residents county-wide and 39.8 percent of residents statewide. More than 22 percent of Annapolis residents hold a graduate or professional degree, as compared to 17.5 percent of residents in the county and 18.9 percent of residents in the state.
- Annapolis has a lower median household income than the county (\$80,010 as compared to \$95,598) but a higher per capita income (\$46,602 as compared to \$44,604). This highlights that a significant portion of Annapolis' households are one-person households with relatively high incomes, which has the effect of pushing the median household income downward as compared to geographies with larger proportions of dual-earner households but results in relatively high per capita earnings.
- Nearly 69 percent of Annapolis households earn more than \$50,000 annually, while approximately 13 percent earn more than \$200,000 annually. Despite the large proportion of high-earning households, Annapolis also has a relatively large proportion of households that earn less than \$25,000 annually (15.4 percent as compared to 9.5 percent county-wide and 13.4 statewide).
- In Annapolis, nearly one-half of occupied units are renter-occupied, as compared to only 27.0 percent of occupied units in the county and 34.0 percent of occupied units in the state. However, from 2010 to 2018, Annapolis experienced a larger percent increase in the number of owner-occupied units (2.2 percent) as compared to renter-occupied units (1.2 percent). Both Anne Arundel County and the state of Maryland experienced significantly larger increases in both housing types, particularly renter-occupied units.
- Approximately 28.8 percent of Annapolis homeowner households are housing cost-burdened (as compared to 24.8 percent of Anne Arundel County households), while 45.5 percent of Annapolis renter households are housing cost-burdened (as compared to 43.4 percent of Anne Arundel County households). In Annapolis, 13 percent of homeowner households are severely housing cost-burdened (as compared to 9.8 percent of county households), while 21.1 percent of renter households are severely housing cost-burdened (as compared to 19.7 percent of county households).

- Among homeowner households in Annapolis, those that are most affected by housing cost burdens are households that earn less than 30 percent of AMI (of which 84.6 percent are cost-burdened), households that earn between 30 and 50 percent of AMI (of which 78.4 percent are cost-burdened), and households that earn between 50 and 80 percent of AMI (of which 59.0 percent are cost-burdened). Additionally, nearly 45 percent of moderate-income homeowner households (those that earn between 80 and 120 percent of AMI) are cost-burdened.
- Among renter households, those with the highest rate of housing cost burden earn between 50 to 80 percent of AMI (nearly 81 percent). Additionally, more than three quarters of households that earn less than 30 percent of AMI are cost-burdened, as well as 67.3 percent of households that earn between 30 and 50 percent of AMI.
- In Annapolis, the five-year unemployment rate for the 2011 – 2015 period was 3.2 percent, as compared to 3.5 percent in Anne Arundel County and 4.1 percent in the state of Maryland. Labor force participation rates are higher in Annapolis than in the other geographies (71.2 percent as compared to 67.9 percent in the county and 67.5 percent in the state).
- Over half of Annapolis' employed residents work in Anne Arundel County, and 19.9 percent work in the City of Annapolis itself. Significant shares of Annapolis' employed resident base also commute to Prince George's County (9.8 percent) and D.C. (6.7 percent).
- Of the workers who commute to jobs in Annapolis, 52.0 percent live in Anne Arundel County and 13.1 percent live in the City of Annapolis itself. Significant shares of Annapolis' workers also come from Baltimore County (6.5 percent) and Prince George's County (6.4 percent).
- The industries in which the largest shares of employed Annapolis residents work are professional, technical, and scientific services (13.6 percent), healthcare and social assistance (11.1 percent), public administration (10.6 percent), educational services (10.2 percent), retail trade (9.9 percent), and accommodation and food services (9.0 percent).
- The occupational categories that employ the largest proportions of Annapolis residents include office/administrative support (13.1 percent), management (11.0 percent), sales (9.1 percent), healthcare practitioner/technician (6.4 percent), and education/training/library (6.4 percent).
- A significantly large proportion of jobs in Annapolis are in the public administration sector (19.6 percent). Other industries that represent large shares of local

employment in Annapolis include accommodation and food services (13.9 percent) and retail trade (12.5 percent). Annapolis' share of jobs in the accommodation and food services sector is notably larger than countywide jobs in the same sector (13.9 percent versus 10.7 percent).

- The four largest employers in Annapolis are the State of Maryland (12,132 employees), Anne Arundel County (5,190 employees), the U.S. Naval Academy (3,240 employees), and the City of Annapolis (550 employees). Other large employers include the nonprofit organization ARC of the Central Chesapeake Region, several hotels and restaurants, and St. John's College.

Projections

- From 2018 to 2040, the City of Annapolis is expected to gain approximately 4,400 residents, representing a 11.1 percent increase. During the same time frame, Annapolis is expected to experience a net gain of only approximately 450 households, representing an increase of 2.5 percent. This indicates that most of the projected population growth will result from an increase in the average household size rather than an increase in the number of new households.
- From 2018 to 2040, Anne Arundel County will gain the largest numbers of new jobs in the following industries: healthcare and social assistance (9,330 jobs), professional and technical services (8,419 jobs), administrative and waste services (6,720 jobs), construction (6,181 jobs), and accommodation and food services (6,028 jobs). The industries that will experience the largest percent increases in jobs during this timeframe are management of companies and enterprises (53.6 percent), educational services (43.4 percent), and arts, entertainment, and recreation (30.7 percent). In both Anne Arundel County and Maryland, the manufacturing sector is expected to decline by more than 14 percent from 2018 to 2040.

Real Estate Market Conditions and Trends

General Housing Stock Characteristics

- Only 37.1 percent of homes in Annapolis are single family detached units, as compared to 61.0 percent of housing units in the county and 51.5 percent of units in the state. Approximately 22.6 percent of Annapolis' housing units are townhouses or rowhouses, while more than 40 percent of Annapolis' housing units are in multifamily buildings.
- Annapolis has a relatively large proportion of units built before 1950 (nearly 20 percent of units, as compared to 9.4 percent of units in the county and 17.4 percent of

units in the state). Approximately 12.4 percent of units in Annapolis were built in 2000 or later, as compared to 17.4 percent in the county and 14.9 percent in the state.

Multifamily Rental Market

- Overall, market-rate multifamily rental units in Annapolis are smaller than in Anne Arundel County and Maryland. Over 90 percent of units in Annapolis have less than three bedrooms, as compared to 85.6 percent of units in the county and 87.1 percent of units in the state.
- In the City, there are approximately 5,046 multifamily rental units. Of these multifamily rental units, approximately 42 percent or 2,126 units are subsidized.
- Since 2010, Annapolis' rents have consistently been higher than in the county and state. As of the second quarter of 2019, the average rent for a market-rate two-bedroom multifamily unit in Annapolis was \$1,662 as compared to \$1,512 in Anne Arundel County and \$1,393 in Maryland.
- According to CoStar, from 2010 to 2018, Annapolis only gained 11 market-rate multifamily rental units; all 11 of these were constructed in 2018. Multifamily development rates in the county and state were significantly higher during the 2010 – 2018 period than in Annapolis.
- From 2012 to 2018, average multifamily rental vacancy rates in Annapolis were lower than in the county and state; Annapolis reached its lowest average vacancy rate for this period in 2014 (3.6 percent). As of the first quarter of 2019, the average multifamily rental vacancy rate in all three geographies was between 6.0 and 6.1 percent.
- The multifamily net absorption rate generally held steady in Annapolis from 2010 to 2018, hovering just above zero percent. However, in 2016, it dropped to negative 3.9 percent. While this was likely a result of Anne Arundel County's 2016 increase in multifamily development, interestingly, the net absorption rate in Anne Arundel County held positive in 2016. As of 2018, the net absorption rate in Annapolis was 0.3 percent, as compared to 2.0 percent in the county and 1.9 percent in Maryland.

For-Sale Housing

- Overall, homes sold in Annapolis from May 2018 to April 2019 were smaller than homes in the county and state. Half of Annapolis homes sold were less than 1,500 square feet, as compared to only 33.9 percent of homes sold in Anne Arundel County and 39.4 percent of homes sold in Maryland.

- The median sale price for a single family home in Annapolis from May 2018 to April 2019 was \$500,000, which is significantly higher than in the county (\$375,000) and state (\$325,000). The median sale prices for townhomes and condos were also higher in Annapolis than in the other geographies. The median townhome sale price in Annapolis was \$325,000 (as compared to \$302,250 in the county and \$238,960 in the state) and the median sale price for condos was \$260,000 (as compared to \$235,000 in the county and \$205,000 in the state). Since 2009, the median home sale price in Annapolis has consistently been higher than that of Anne Arundel County or the state of Maryland.
- From May 2018 to April 2019, the most expensive homes in Annapolis (those that sold for between \$450,000 and \$649,999 as well as \$650,000 or more) were more likely to be located along the waterfront, while less expensive homes (those that sold for less than \$450,000) were more likely to be located further inland.

Retail

- From 2010 through 2016, retail rents in Annapolis were substantially higher – more than eleven dollars per square foot per year higher – than in the county and state. However, since 2017, the price differential between Annapolis and the county and state has narrowed, due to a significant drop in the average retail rent in Annapolis. As of the first quarter of 2019, the annual triple net retail rent in Annapolis was \$27.72, as compared to \$20.40 in Anne Arundel County and \$19.68 in Maryland.
- Annapolis increased its inventory of retail space by more than 2.0 percent in 2010 but has not added a significant amount of retail space since then. Anne Arundel County experienced spikes in retail development in 2010 (a 1.4 percent increase), 2011 (a 1.9 percent increase), and 2012 (a 1.8 percent increase), as well as 2017 (a 0.9 percent increase).
- In Annapolis, Anne Arundel County, and Maryland, the average vacancy rate significantly decreased between 2010 and the first quarter of 2019. In Annapolis, the retail vacancy rate was 5.8 percent in 2010 and had reached 2.7 percent by the beginning of 2019. This retail vacancy rate is even lower than that of Anne Arundel County (4.1 percent) and the state of Maryland (4.1 percent).
- From 2010 to 2018, retail absorption in Annapolis has mostly been positive, with the exception of in 2011, which was likely driven by the City's relatively large amount of new retail development in 2010, which resulted in increased vacancy immediately afterward. However, the net absorption rate for retail in Annapolis was also negative in 2018. Retail net absorption rates in the county and the state also appear to be

experiencing a downward trend. These trends are likely a reflection of the changing retail landscape in the U.S., driven by consumers' shift toward online shopping.

Office

- Since 2010, office rents in Annapolis have consistently been higher than those in the county and state. From 2014 to 2017, the average annual office rent in Annapolis increased from \$21.48 to \$27.12 (representing an increase of more than 26 percent). As of the first quarter of 2019, the average annual per-square-foot office rent in Annapolis was \$26.52, as compared to \$25.20 in Anne Arundel County and \$25.44 in Maryland.
- Annapolis increased its total office inventory by 1.2 percent in 2013, and again by 0.7 percent in 2014. In recent years, both Anne Arundel County and the state of Maryland have seen consistently higher rates of office development than Annapolis.
- During the 2010 – Q1 2019 period, the average office vacancy rate in Annapolis was consistently lower than in the county and state. From 2014 to 2018, all three geographies experienced a downward trend in average office vacancy rates. As of the first quarter of 2019, Annapolis' average office vacancy rate was 7.2 percent, as compared to 9.5 percent in the county and 10.1 percent in the state.
- In Annapolis, office net absorption rates have remained positive and have continuously risen since 2013. Office absorption rates in the county and state have also remained positive in recent years, although they have been more erratic than in Annapolis. In 2018, the net absorption rate for office in Annapolis was 2.5 percent, as compared to 2.0 percent in the county and 0.5 percent in the state.

Industrial

- Since 2019, industrial/flex rents have remained significantly higher in Annapolis than in the county and state. As of the first quarter of 2019, the average annual per-square-foot industrial/flex rent was \$13.68 in Annapolis, as compared to \$9.24 in Anne Arundel County and \$6.84 in the state.
- From 2010 to 2018, the City of Annapolis did not increase its inventory of retail/flex space. Meanwhile, the county increased its total square feet of inventory/flex space by 1.8 percent in 2010, 1.5 percent in 2014, 1.2 percent in 2017, and 2.1 percent in 2018. In Maryland, industrial/flex development rates have steadily increased from 2012 to 2018; since 2014 the state has increased its total inventory of industrial/flex space by approximately 1 percent of more every year.

- Industrial/flex vacancy rates have remained considerably lower in Annapolis than in the county and state overall. As of the first quarter of 2019, the average industrial/flex vacancy rate was 3.6 percent in Annapolis, as compared to 8.7 percent in Anne Arundel County and 6.9 percent in the state.

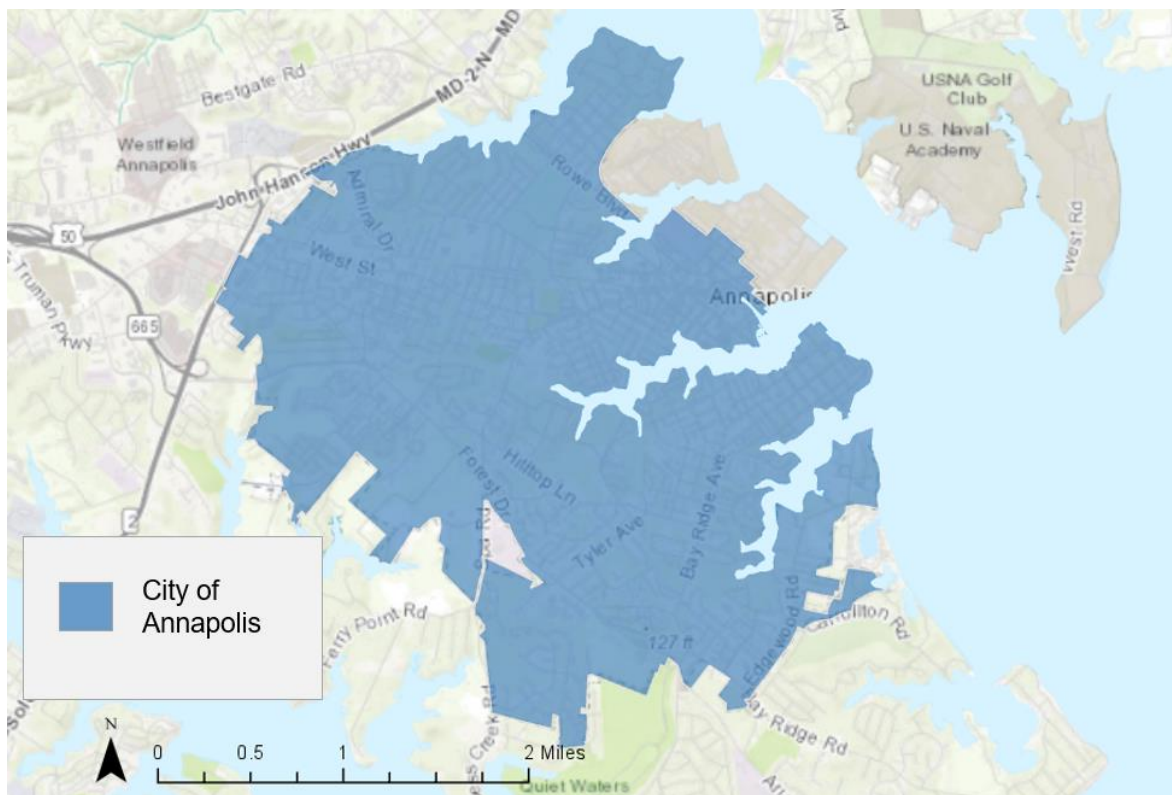
METHODOLOGY

The subsections below discuss the geographies that the analysis focuses on as well as the data sources that were used.

Geographies

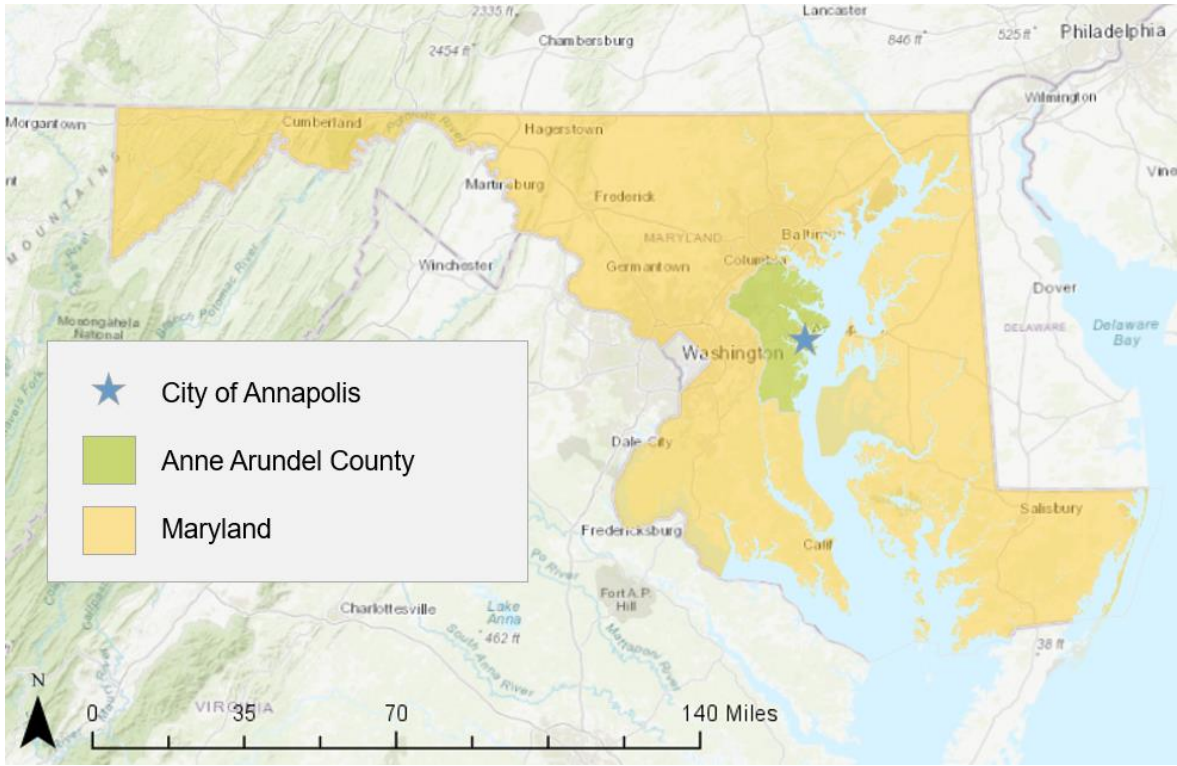
The analysis studies demographic, economic, and real estate market conditions and trends in the City of Annapolis (shown in Figure 1). For purposes of comparison, conditions and trends were also analyzed for Anne Arundel County and the State of Maryland (shown in Figure 2).

Figure 1: City of Annapolis



Sources: U.S. Census Bureau, 2018; Arc GIS Pro, 2019; BAE, 2019.

Figure 2: City of Annapolis, Anne Arundel County, and the State of Maryland



Sources: U.S. Census Bureau, 2018; Arc GIS Pro, 2019; BAE, 2019.

Data Sources

BAE utilized the following data sources to complete the analysis:

- **U.S. Census Bureau:** Jurisdictional boundaries were obtained from the U.S. Census Bureau Geography Program. BAE also utilized demographic data from the U.S. Census Bureau American Community Survey (ACS) as well as commute data from the U.S. Census Bureau Longitudinal Employer-Household Dynamics program (LEHD).
- **Esri Business Analyst:** Demographic data was obtained from Esri Business Analyst, a third-party tool that provides demographic, economic, and spatial data which is verified against U.S. Census data as well as other public sources.
- **Anne Arundel Economic Development Corporation:** Information about Annapolis' top employers was obtained from the City of Annapolis' website, which cites Anne Arundel Economic Development Corporation as its primary data source.

- **Baltimore Metropolitan Council:** Population and household growth projections for the City of Annapolis and Anne Arundel County are based on the most recent projections published by the Baltimore Metropolitan Council (Round 9 Cooperative Forecasts).
- **Maryland State Data Center:** Employment projections for Anne Arundel County and the state of Maryland are based on data published by the Maryland Department of Planning Maryland State Data Center.
- **CoStar:** Data about multifamily rental housing and office inventory, rents, vacancy rates, and absorption rates were obtained through CoStar, a third-party provider of real estate market data.
- **CoreLogic Group:** Data about home sales were obtained from CoreLogic, a third-party vendor of property sale data. BAE purchased the CoreLogic data sets from DQNews, an aggregator of CoreLogic data sets.

DEMOGRAPHIC AND ECONOMIC CONDITIONS AND TRENDS

The following section reviews demographic conditions and trends in Annapolis, Anne Arundel County, and the state of Maryland. This includes information about population and households, household composition, age, race/ethnicity, educational attainment, household income, housing tenure, housing cost burdens, resident employment and commute patterns, and local jobs.

Population and Households

As shown in Table 1, as of 2018, the City of Annapolis had 39,751 residents and 16,407 households. This represents a 3.6 percent increase in residents as compared to 2010, and a 1.7 percent increase in households. These growth rates are significantly lower than those in Anne Arundel County and the state of Maryland: from 2010 to 2018, the county's population increased by 8.5 percent while its household growth rate was 7.5 percent. In Maryland, the 2010 to 2018 population growth rate during this time period was 6.0 percent while the household growth rate was 5.1 percent.

Annapolis' average household size is 2.38, as compared to 2.65 in Anne Arundel County and 2.64 in the state of Maryland. In all three geographies, the average household size increased from 2010 to 2018.

Table 1: Population and Households, 2010 – 2018

Population	2010	2018	% Change 2010-2018
City of Annapolis	38,375	39,751	3.6%
Anne Arundel County	537,656	583,623	8.5%
State of Maryland	5,773,552	6,119,186	6.0%

Households	2010	2018	% Change 2010-2018
City of Annapolis	16,130	16,407	1.7%
Anne Arundel County	199,378	214,401	7.5%
State of Maryland	2,156,411	2,266,481	5.1%

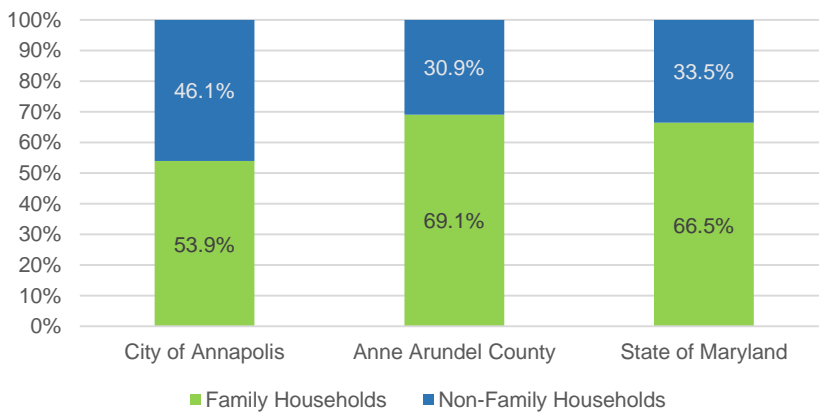
Average Household Size	2010	2018
City of Annapolis	2.34	2.38
Anne Arundel County	2.63	2.65
State of Maryland	2.61	2.64

Sources: Esri Business Analyst, 2019; BAE, 2019.

Household Composition

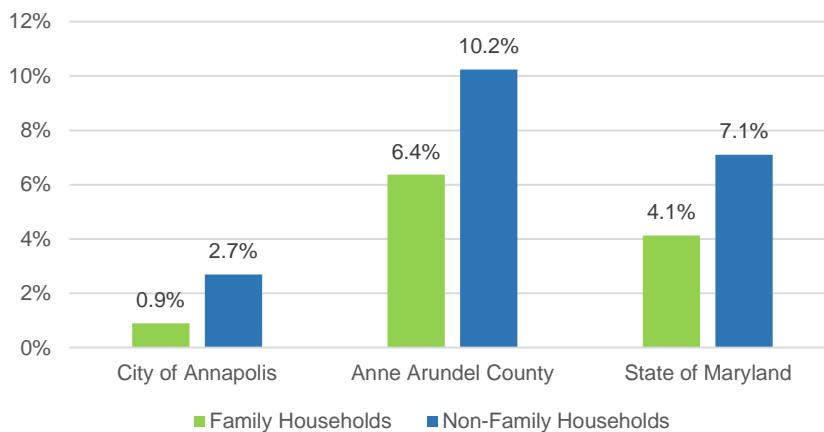
Figure 3 illustrates the breakdown of households in each geography by household type. In Annapolis, 46.1 percent of households are non-family households, as compared to only 30.9 percent of households in the county and 33.5 percent in the state. As shown in Figure 4, non-family households are the fastest-growing household type in all three geographies. From 2010 to 2018, the number of non-family households increased by 2.7 percent in Annapolis, 10.2 percent in Anne Arundel County, and 7.1 percent in the state of Maryland.

Figure 3: Percent Distribution of Households by Household Composition, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

Figure 4: Percent Change in Number of Households by Household Composition, 2010 – 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

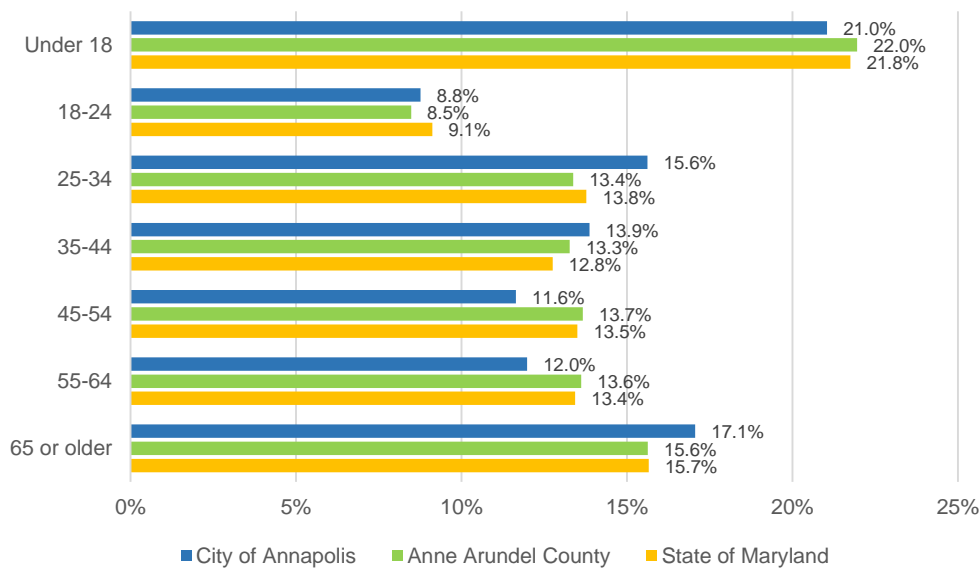
Age Distribution

Figure 5 illustrates the distribution of the population of each geography by age group. In Annapolis, residents under the age of 18 make up the largest age cohort (21.0 percent of all residents), followed by those aged 65 and older (17.1 percent), 25 to 34 (15.6 percent) and 35 to 44 (13.9 percent). Annapolis has a larger share of residents over the age of 65 than the comparison geographies, as well as residents aged 25 to 44. Meanwhile, Anne Arundel County and Maryland have larger shares of residents under the age of 18 as well as residents aged 45 to 64.

As shown in Figure 7, the fastest-growing age cohort in all three geographies is comprised of residents aged 65 and older. From 2010 to 2018, residents in this age group increased by 36.2 percent in Annapolis, 43.3 percent in the county, and 35.4 percent in the state. In Annapolis, other age groups that experienced an increase in residents include 35 to 44 (a 9.2 percent increase) and children under 18 (a 4.7 percent increase). This suggests that despite Annapolis' relatively low proportion of family households, there is a slight trend of growing numbers of new families in Annapolis. However, as discussed in the previous section, the majority of Annapolis' recent household growth is due to an influx of non-family households.

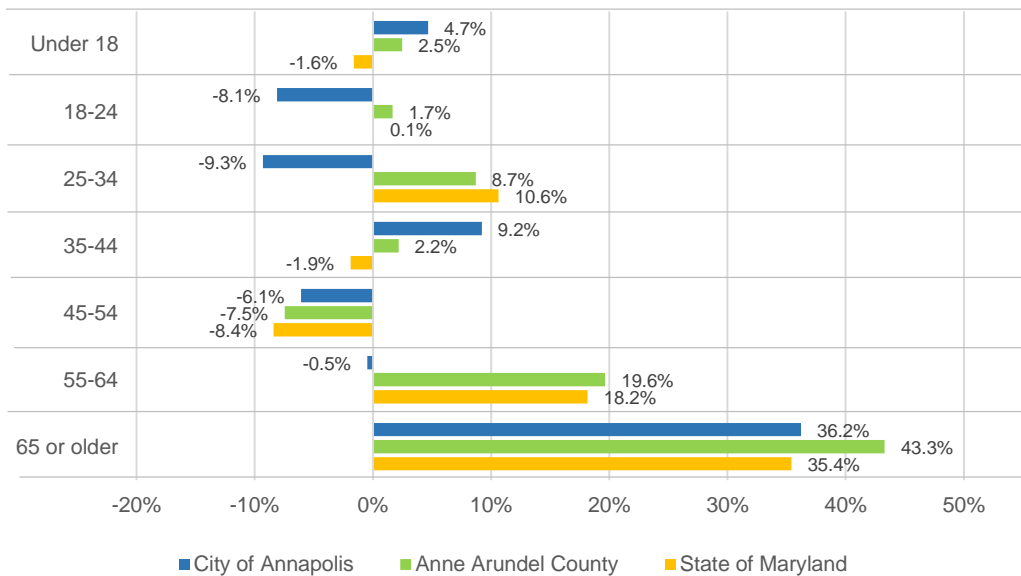
Annapolis experienced a decrease in residents aged 18 to 24, 25 to 34, and 45 to 54 during the 2010 to 2018 timeframe. The decline in the 18 to 34 age group suggests that, more and more, recent college graduates and young professionals are deciding to leave Annapolis as they enter their prime years for launching and growing their careers.

Figure 5: Age Distribution, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

Figure 6: Change in Number of Residents by Age Group, 2010 – 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

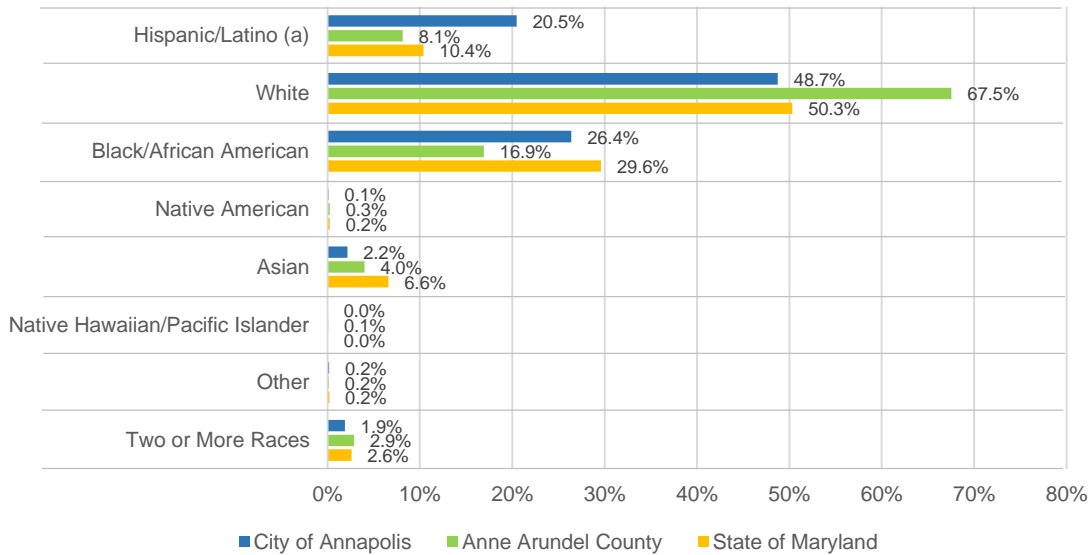
Race and Ethnicity

Figure 7 shows the populations of Annapolis, the county, and the state by race/ethnicity. Approximately 48.7 percent of Annapolis’ residents are white, 26.4 percent are black/African-American, 20.5 percent are Hispanic/Latino, and 2.2 percent are Asian. Annapolis’ population is notably more diverse than that of Anne Arundel County, where nearly 68 percent of residents are white.

Figure 8 illustrates percent changes in total numbers of residents by race/ethnicity in major racial and ethnic groups¹ from 2010 to 2018. In Annapolis, there was a 26.3 percent increase in Hispanic/Latino residents, a 9.1 percent increase in Asian residents, and a 6.5 percent increase in black/African-American residents during this timeframe. Meanwhile, the number of white residents decreased by 5.6 percent. Similar patterns are seen in the other geographies: In Maryland, all racial/ethnic groups experienced an increase in residents except for residents who identify as white. In Anne Arundel County, all racial/ethnic groups other than residents who identify as white experienced substantial increases; meanwhile the number of white residents remained relatively stagnant, increasing by only 1.2 percent in eight years.

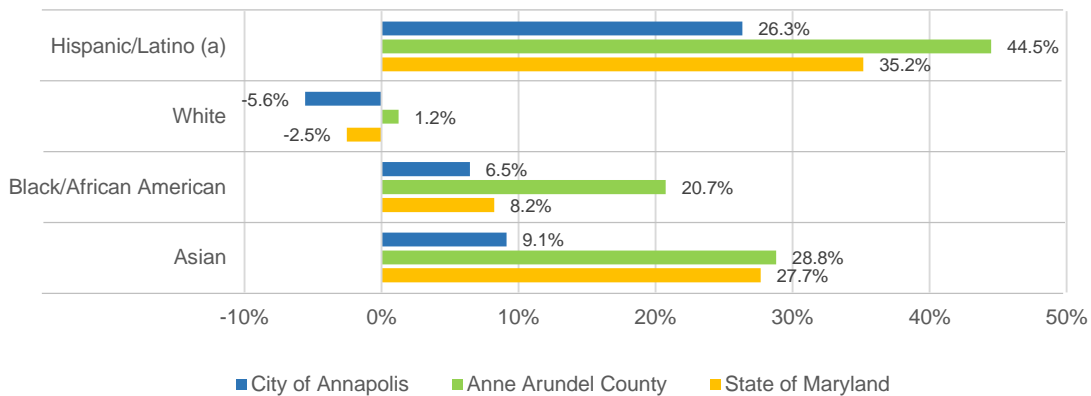
¹ Major racial and ethnic groups are considered those that represent at least three percent of the population in at least one of the three geographies. Racial/ethnic groups that contain less than three percent of a jurisdiction’s population will be especially sensitive to changes, potentially exaggerating perceived growth and/or declines in those categories.

Figure 7: Race and Ethnicity, 2018



Notes:
 (a) Includes all races for those of Hispanic/Latino background.
 Sources: Esri Business Analyst 2019; BAE, 2019.

Figure 8: Percent Change in Number of Residents by Race and Ethnicity, 2010 - 2018



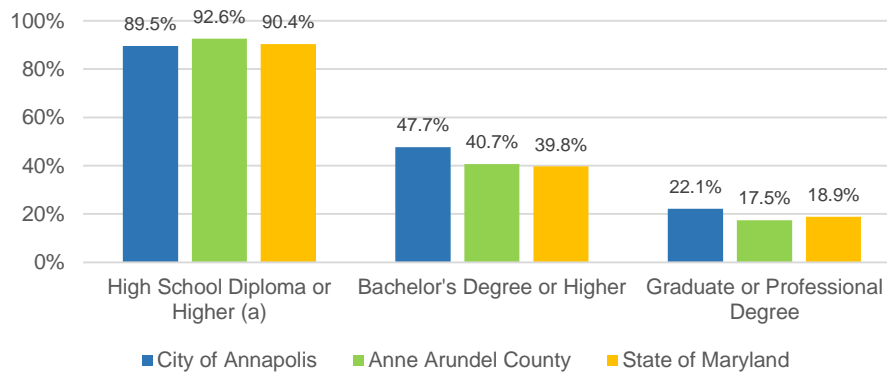
Notes:
 Only includes racial/ethnic groups that make up at least three percent of the population in at least one of the three geographies.
 (a) Includes all races for those of Hispanic/Latino background.
 Sources: Esri Business Analyst 2019; BAE, 2019.

Educational Attainment

Figure 9 illustrates the educational attainment rates of residents in Annapolis, Anne Arundel County, and Maryland. While a slightly smaller proportion of Annapolis residents have high school diplomas than in the other two geographies (89.5 percent as compared to 92.5 percent

in Anne Arundel County and 90.4 percent in the state of Maryland), larger proportions of Annapolis residents have bachelor’s and graduate/professional degrees than in the other two geographies. Nearly 48 percent of Annapolis residents hold a Bachelor’s degree, while the same is true for only 40.7 percent of residents county-wide and 39.8 percent of residents statewide. More than 22 percent of Annapolis residents hold a graduate or professional degree, as compared to 17.5 percent of residents in the county and 18.9 percent of residents in the state.

Figure 9: Educational Attainment Rates, Residents Aged 25+, 2018



Notes:

(a) Includes high school equivalency (e.g. GED)

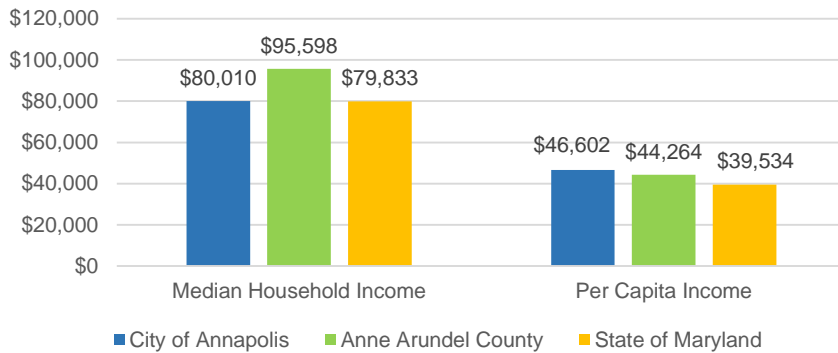
Sources: Esri Business Analyst, 2019; BAE, 2019.

Household Income

As shown in Figure 10, the median household income in Annapolis is \$80,010, which is lower than in Anne Arundel County (\$95,598) but comparable to the median household income in Maryland (\$79,833). However, the per capita income in Annapolis is higher than in both the county and state (\$46,602 as compared to \$44,604 in the county and \$39,534 in the state). This highlights that a significant portion of Annapolis’ households are one-person households with relatively high incomes, which has the effect of pushing the median household income downward as compared to geographies with larger proportions of dual-earner households but results in relatively high per capita earnings.

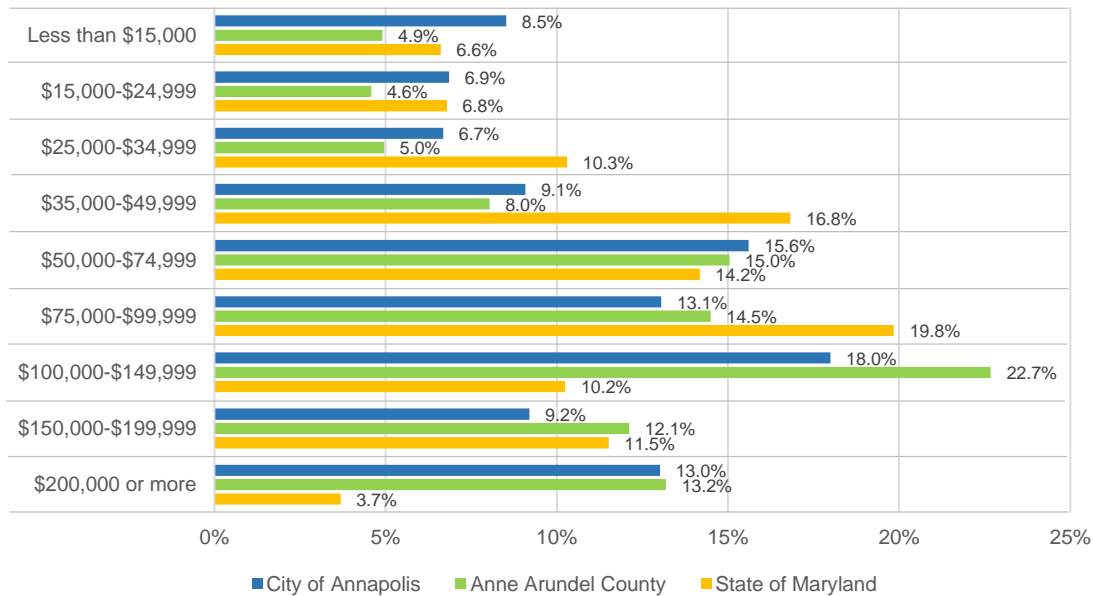
As shown in Figure 11, nearly 69 percent of Annapolis households earn more than \$50,000 annually. Approximately 13 percent earn more than \$200,000 annually, which is similar to the countywide proportion of households in this income group (13.2 percent) but significantly more than the statewide proportion (only 3.7 percent). Despite the large proportion of high-earning households, Annapolis also has a relatively large proportion of households that earn less than \$25,000 annually (15.4 percent as compared to 9.5 percent county-wide and 13.4 statewide).

Figure 10: Median Household Income and Per Capita Income, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

Figure 11: Household Income Distribution, 2018



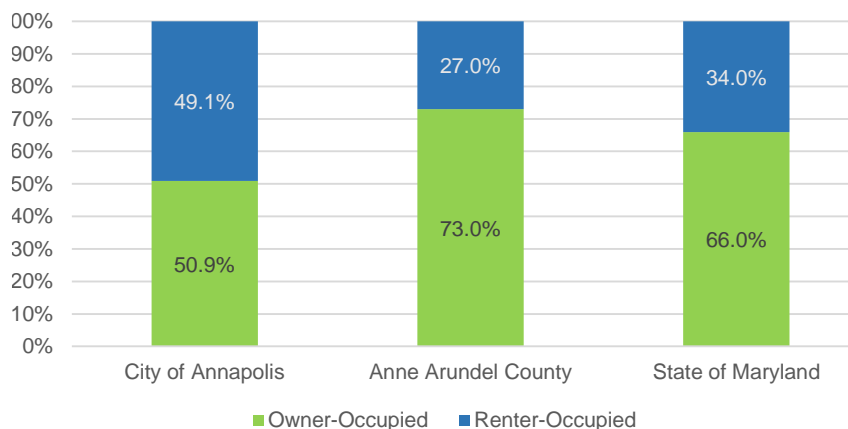
Sources: Esri Business Analyst, 2019; BAE, 2019.

Housing Tenure

Figure 12 shows the breakdown of occupied housing units by tenure in all three geographies. In Annapolis, nearly one-half of occupied units are renter-occupied, as compared to only 27.0 percent of occupied units in the county and 34.0 percent of occupied units in the state. However, as Figure 13 shows, from 2010 to 2018, Annapolis experienced a larger percent increase in the number of owner-occupied units (2.2 percent) as compared to renter-occupied

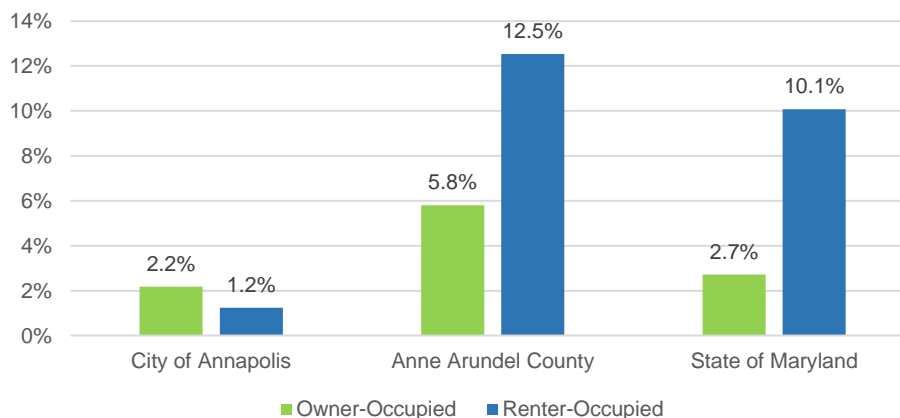
units (1.2 percent). Both Anne Arundel County and the state of Maryland experienced significantly larger increases in both housing types, particularly renter-occupied units.

Figure 12: Occupied Housing Units by Tenure, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

Figure 13: Percent Change, Number of Housing Units by Tenure, 2010 – 2018



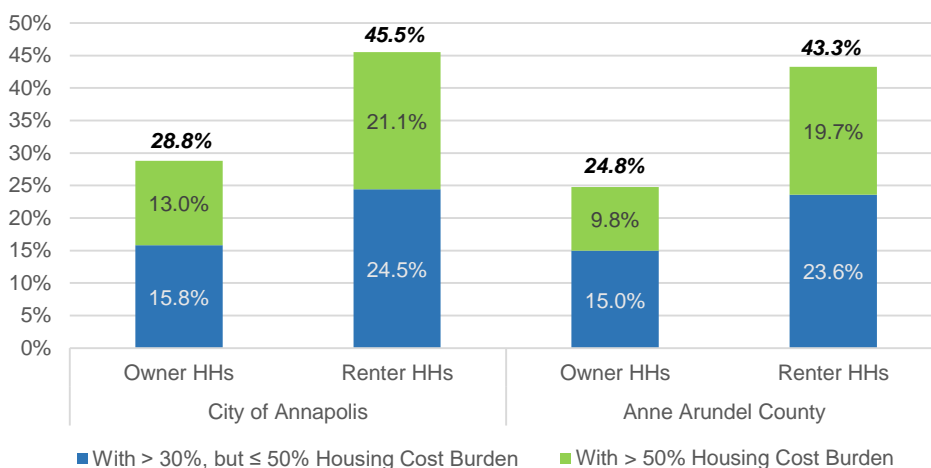
Sources: Esri Business Analyst, 2019; BAE, 2019.

Housing Cost Burdens

According to the U.S. Department of Housing and Urban Development (HUD), a household is considered housing cost-burdened if it pays more than 30 percent of its gross monthly income for housing costs. Housing costs include rental or mortgage payments and associated costs as well as utility payments. A household that spends more than 50 percent of its income on these costs is considered severely cost-burdened.

As shown in Figure 14, approximately 28.8 percent of Annapolis homeowner households are cost-burdened (as compared to 24.8 percent of Anne Arundel County households), while 45.5 percent of Annapolis renter households are cost-burdened (as compared to 43.4 percent of Anne Arundel County households). In Annapolis, 13 percent of homeowner households are severely cost-burdened (as compared to 9.8 percent of county households), while 21.1 percent of renter households are severely cost-burdened (as compared to 19.7 percent of county households).

Figure 14: Percent of Households with Cost Burdens by Tenure, 2011 – 2015 Five Year Data



Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.

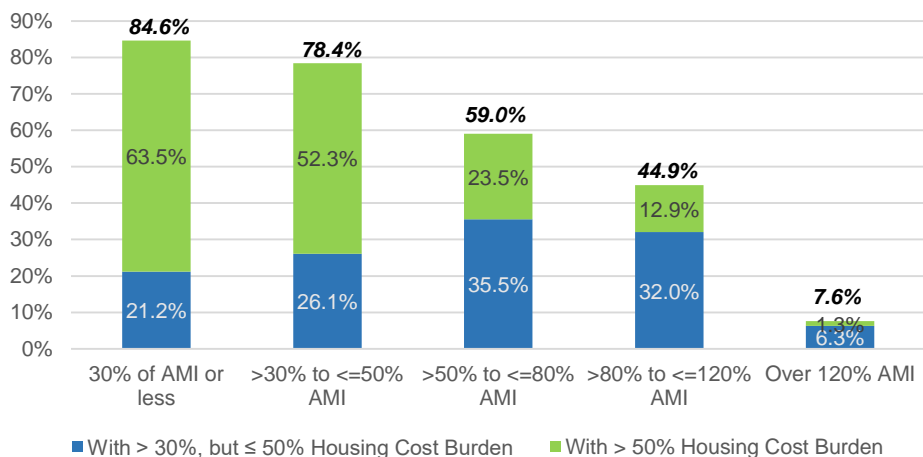
Sources: U.S. Department of Housing and Urban Development, CHAS, 2011-2015; BAE, 2019.

Figure 15 shows housing cost burdens in Annapolis among owner households with varying household income levels. Among homeowner households that earn less than 30 percent of Area Median Income (AMI), also referred to as “extremely low-income households,” nearly 84.6 percent are cost-burdened, and 63.5 percent are severely cost-burdened. Among owner households that earn between 30 and 50 percent of AMI (“very low-income households”), more than three-quarters of households are cost-burdened and over half of households are severely cost-burdened. Among households that earn between 50 and 80 percent of AMI (“low-income households”), 59.0 percent are cost-burdened, with 23.5 percent having severe cost burdens. A significant proportion of moderate-income owner households (80 percent of AMI to 120 percent of AMI) in Annapolis are also cost-burdened. Nearly 45 percent of such households are cost-burdened, with 12.9 percent of households severely cost burdened.

Figure 16 shows housing cost burdens in Annapolis among renter households with varying household income levels. Across all household income groups that earn less than 80 percent

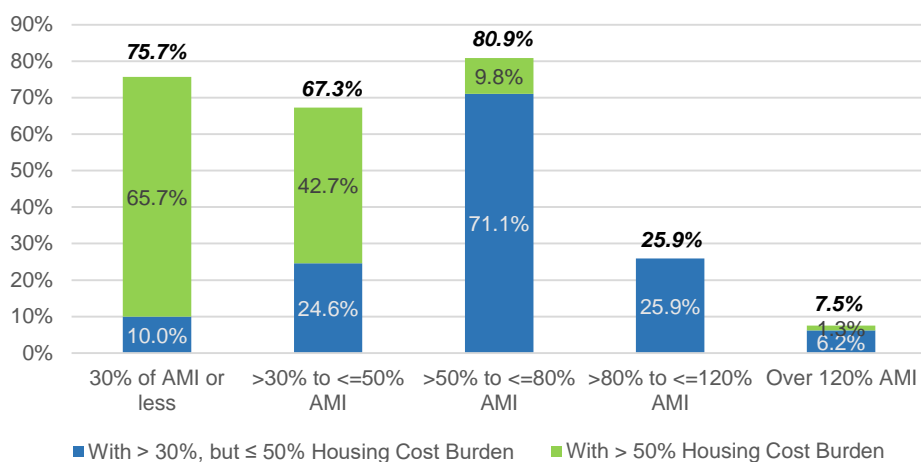
of AMI (extremely low-, very low-, and low-income households), the majority of renter households are cost-burdened. However, across most income groups, renter cost burdens are lower than owner cost burdens, with the exception of households that earn between 50 and 80 percent of AMI (also called “low-income households”). Nearly 81 percent of low-income renter households in Annapolis are cost-burdened.

Figure 15: Cost-Burdened Owner Households in Annapolis by AMI Level, 2011 – 2015 Five-Year Data



Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.
Sources: U.S. Department of Housing and Urban Development, CHAS, 2011-2015; BAE, 2019.

Figure 16: Cost-Burdened Renter Households in Annapolis by AMI Level, 2011 – 2015 Five-Year Data



Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.
Sources: U.S. Department of Housing and Urban Development, CHAS, 2011-2015; BAE, 2019.

Labor Force Participation

Table 2 shows labor force participation data for all three geographies according to 2013 – 2017 ACS data. In Annapolis, the five-year unemployment rate for this period was 3.2 percent, as compared to 3.5 percent in Anne Arundel County and 4.1 percent in the state of Maryland. Further, labor force participation rates are higher in Annapolis than in the other geographies (71.2 percent as compared to 67.9 percent in the county and 67.5 percent in the state).

Table 2: Labor Force Participation, 2013 – 2017 Five-Year Data

Income Category	City of Annapolis		Anne Arundel County		State of Maryland	
	Number	Percent	Number	Percent	Number	Percent
In Labor Force	22,856	72.3%	318,762	70.6%	3,267,069	68.1%
Civilian Labor Force	22,514	71.2%	306,519	67.9%	3,239,167	67.5%
Employed	21,492	68.0%	290,628	64.4%	3,040,792	63.3%
Unemployed	1,022	3.2%	15,891	3.5%	198,375	4.1%
Armed Forces	342	1.1%	12,243	2.7%	27,902	0.6%
Not in Labor Force	8,759	27.7%	132,795	29.4%	1,533,782	31.9%
Total Population 16+	31,615	100%	451,557	100%	4,800,851	100%

Sources: U.S. Census Bureau, American Community Survey 2013-2017 5-Year Sampling data, B23025; BAE, 2019.

Commute Patterns

As shown in Table 3, over half of Annapolis' employed residents work in Anne Arundel County, and 19.9 percent work in the City of Annapolis itself. Significant shares of Annapolis' employed resident base also commute to Prince George's County (9.8 percent) and D.C. (6.7 percent).

Of the workers who commute to jobs in Annapolis, 52.0 percent live in Anne Arundel County and 13.1 percent live in the City of Annapolis itself. Significant shares of Annapolis' workers also come from Baltimore County (6.5 percent) and Prince George's County (6.4 percent).

According to the Bureau of Labor Statistics Longitudinal Household-Employer Dynamics program (LEHD), as of 2015, the City of Annapolis had approximately 8,621 more workers than residents.

Table 3: Commute Flows, City of Annapolis, 2015

Residents by Place of Work			Workers by Place of Residence		
Place of Work	Employed Residents		Place of Residence	Workers	
	Number	Percent		Number	Percent
Anne Arundel County	8,874	53.9%	Anne Arundel County	13,051	52.0%
<i>Annapolis city</i>	3,280	19.9%	<i>Annapolis city</i>	3,280	13.1%
<i>Parole CDP</i>	2,355	14.3%	<i>Arnold CDP</i>	1,050	4.2%
<i>Balance of County</i>	3,239	19.7%	<i>Balance of County</i>	8,721	34.8%
Prince George's County	1,621	9.8%	Baltimore County	1,637	6.5%
District of Columbia, DC	1,109	6.7%	Prince George's County	1,605	6.4%
Montgomery County	902	5.5%	Baltimore city	1,445	5.8%
Howard County	781	4.7%	Queen Anne's County	948	3.8%
Baltimore city	761	4.6%	Montgomery County	915	3.6%
Baltimore County	639	3.9%	Howard County	712	2.8%
Fairfax County, VA	244	1.5%	Harford County	412	1.6%
Queen Anne's County	152	0.9%	St. Mary's County	318	1.3%
Calvert County	124	0.8%	Calvert County	279	1.1%
All Other Locations	1,256	7.6%	All Other Locations	3,762	15.0%
Total, Working Residents	16,463	100%	Total Workers	25,084	100%

Sources: Longitudinal Employer-Household Dynamics via OnTheMap; BAE, 2019.

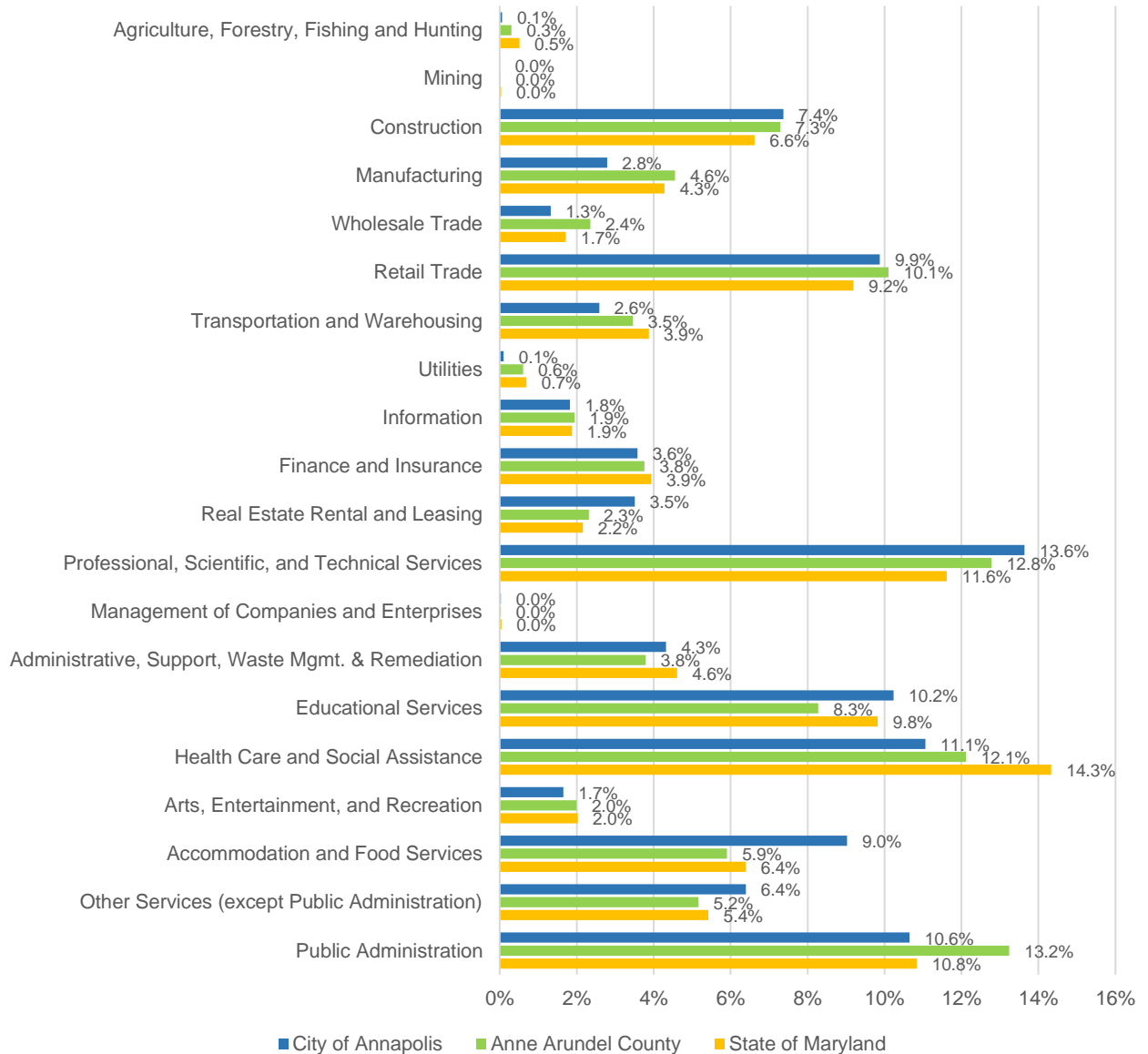
Resident Employment

The following section reviews resident employment by sector as well as occupation.

Resident Employment by Industry

As shown in Figure 17, the industries in which the largest shares of employed Annapolis residents work are professional, technical, and scientific services (13.6 percent), healthcare and social assistance (11.1 percent), public administration (10.6 percent), educational services (10.2 percent), retail trade (9.9 percent), and accommodation and food services (9.0 percent). Compared with Anne Arundel County as a whole, Annapolis has notably higher proportions of residents who work in educational services as well as accommodation and food services.

Figure 17: Resident Employment by Industry, 2018

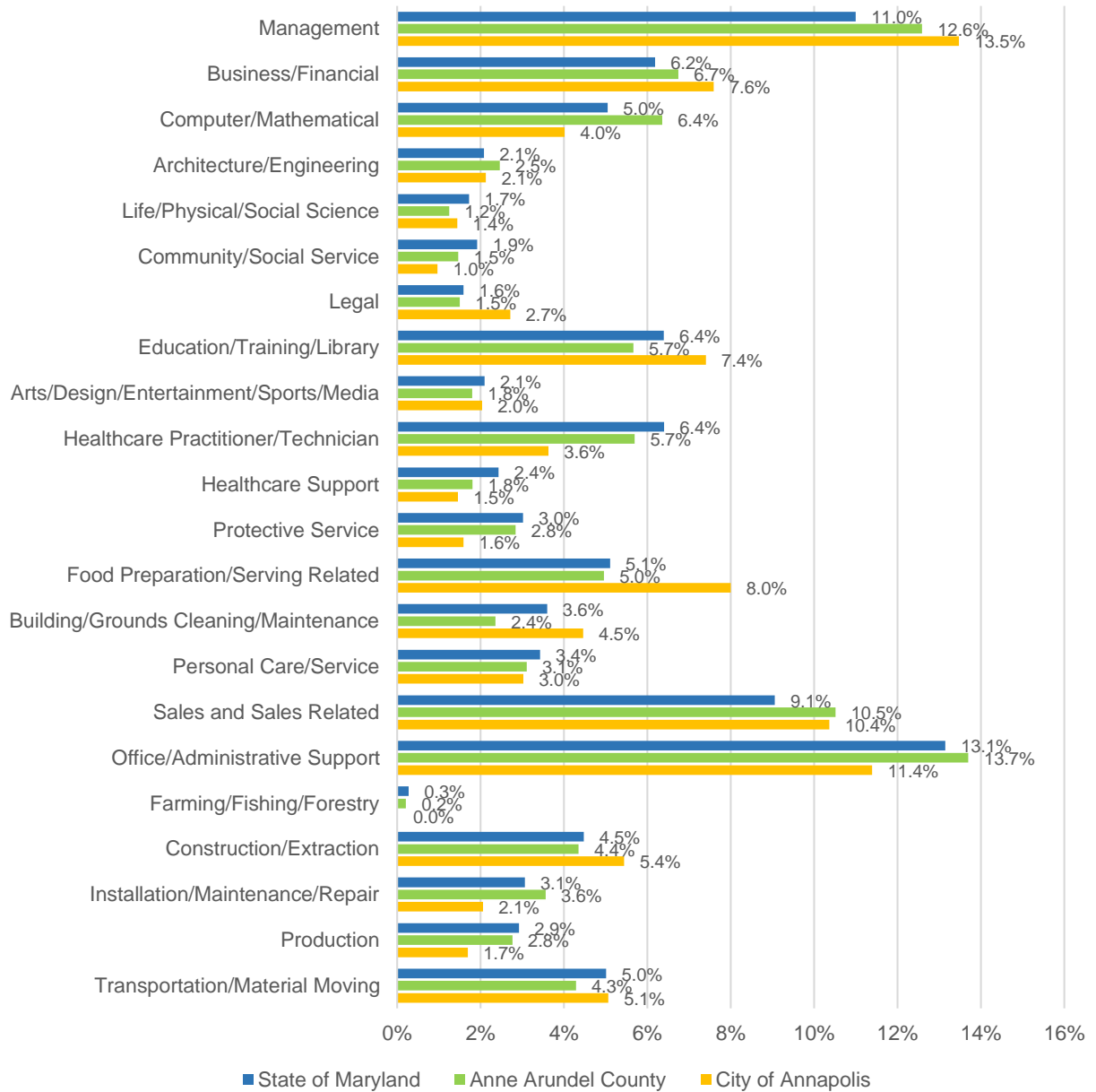


Sources: Esri Business Analyst, 2019; BAE, 2019.

Resident Employment by Occupation

As shown in Figure 18, the occupational categories that employ the largest proportions of Annapolis residents include office/administrative support (13.1 percent), management (11.0 percent), sales (9.1 percent), healthcare practitioner/technician (6.4 percent), and education/training/library (6.4 percent). Annapolis has a notably large proportion of residents employed in the healthcare practitioner/technician category as compared to the county and state.

Figure 18: Resident Employment by Occupation, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

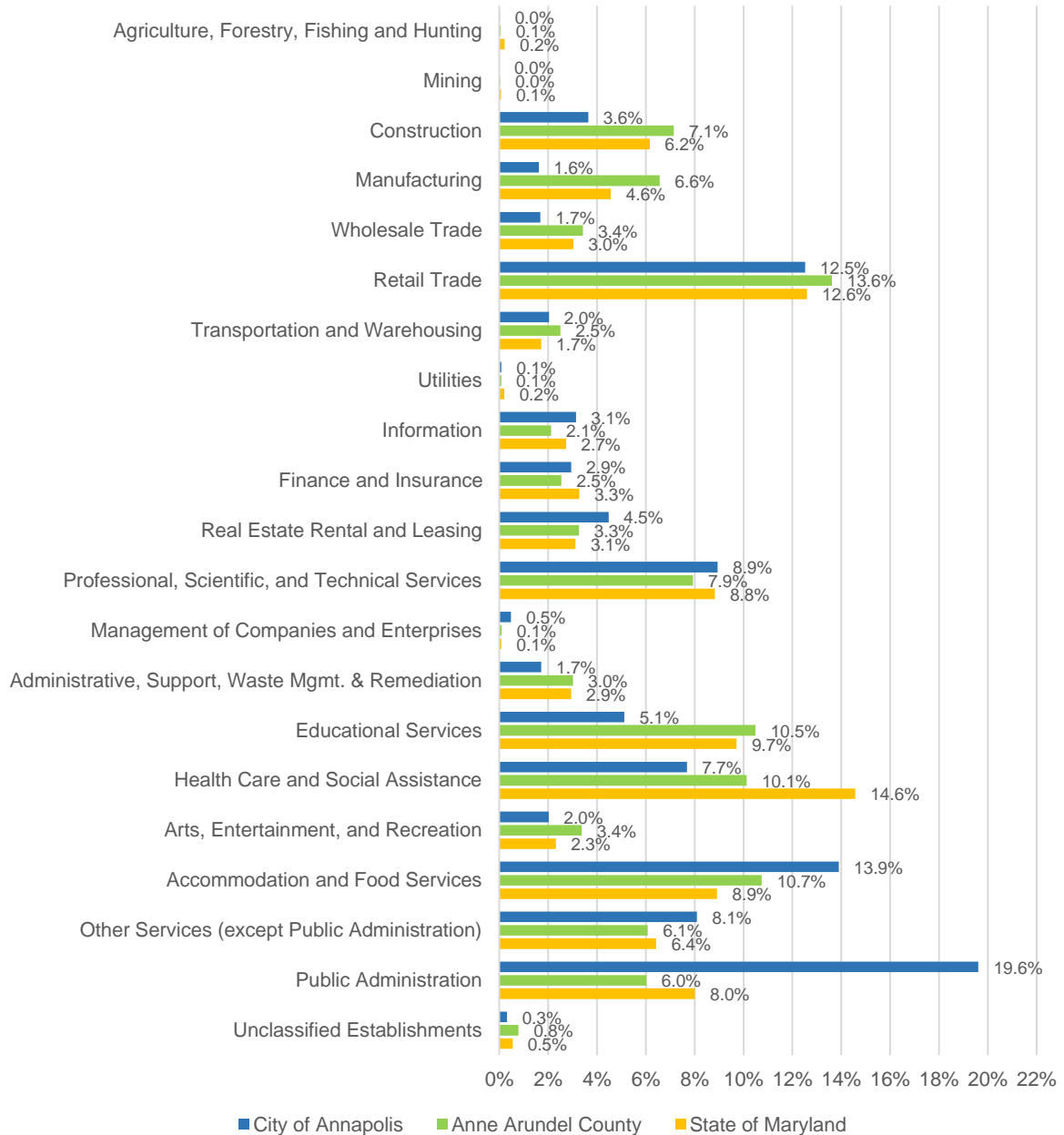
Jobs

The following section analyzes jobs in Annapolis, including workers' jobs by industry in Annapolis as compared to the surrounding geographies, as well as Annapolis' major employers.

Jobs by Industry

As shown in Figure 19, a significantly large proportion of jobs in Annapolis are in the public administration sector (19.6 percent). Other industries that represent large shares of local employment in Annapolis include accommodation and food services (13.9 percent) and retail trade (12.5 percent). Annapolis' share of jobs in the accommodation and food services sector is notably larger than countywide jobs in the same sector (13.9 percent versus 10.7 percent).

Figure 19: Local Jobs by Industry, 2018



Sources: Esri Business Analyst, 2019; BAE, 2019.

Major Employers

As shown in Table 4, the four largest employers in Annapolis are the State of Maryland (12,132 employees), Anne Arundel County (5,190 employees), the U.S. Naval Academy (3,240 employees), and the City of Annapolis (550 employees). These four entities employ a total of 20,212 workers, explaining Annapolis' relatively large share of public sector jobs as illustrated by Figure 19 in the previous section. Other large employers include the nonprofit organization ARC of the Central Chesapeake Region, several hotels and restaurants, and St. John's College.

Table 4: Principal Employers in the City of Annapolis, February 2019

Company	Business Description	Number of Employees
State of Maryland	State Government	12,132
Anne Arundel County Government	County Government	5,190
U.S. Naval Academy	Federal Naval Education	2,340
City of Annapolis Government	City Government	550
ARC of the Central Chesapeake Region	Nonprofit	450
Towne Parke, Ltd.	Parking Services	250
St. John's College	Education	220
Rams Head Tavern	Restaurant	188
Comtech Telecommunications Corp	Telecommunications Contractor	175
Annapolis Waterfront Hotel	Hotel and Restaurant	170
Westin Annapolis	Hotel and Meeting Space	170
Buddy's Crabs & Ribs, LLC	Restaurant	167
Main & Market	Restaurant and Catering	162
Spa Creek Center Genesis Healthcare	Skilled Nursing and Rehabilitation	160
Chart House Restaurant	Restaurant	157
Severn Savings Bank FSB	Banking Services	155
Ken's Creative Kitchen, LLC	Catering	150
Criswell Acura Audi	Auto Sales, Service & Auto Body Repair	140
Hotel Annapolis	Hotel	115
NMS Healthcare of Annapolis	Skilled Nursing and Rehabilitation	100

Sources: City of Annapolis via Anne Arundel Economic Development Corporation, February 2019; BAE, 2019.

PROJECTIONS

The following sections review projected changes in population, households, and employment through 2040 in Annapolis, Anne Arundel County, and/or the state of Maryland, depending on data availability. The primary sources for these projections are the Baltimore Metropolitan Council’s Round 9 Cooperative Forecasts and the Maryland Department of Planning, Projections and State Data Center.

Population and Household Growth

Table 5 shows the projected growth in population and households as estimated for Annapolis and Anne Arundel County from 2018 to 2040. During this timeframe, the City of Annapolis is expected to gain approximately 4,400 residents, representing an 11.1 percent increase over the period. During the same timeframe, Annapolis is expected to experience a net gain of only approximately 450 households, representing an increase of 2.7 percent. This indicates that most of the projected population growth will result from an increase in the average household size rather than an increase in the number of new households. Compared to Anne Arundel County as a whole, Annapolis is expected to experience a slightly higher rate of population growth (11.1 percent versus 9.4 percent), but a lower rate of household growth (2.7 percent versus 13.6 percent).

Table 5: Population and Household Projections, Annapolis & Anne Arundel County, 2018 – 2040

<u>Population</u>	<u>2018</u> (a)	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>	<u>% Change</u> <u>2018-2040</u>	<u>Avg. Annual</u> <u>Growth Rate</u>
City of Annapolis (b)	39,751	40,256	40,675	40,748	43,509	44,169	11.1%	0.5%
Anne Arundel County	583,623	587,532	598,030	610,078	625,091	638,276	9.4%	0.4%

<u>Households</u>	<u>2018</u> (a)	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>	<u>2040</u>	<u>% Change</u> <u>2018-2040</u>	<u>Avg. Annual</u> <u>Growth Rate</u>
City of Annapolis (b)	16,407	16,426	16,494	16,799	16,826	16,853	2.7%	0.1%
Anne Arundel County	214,401	215,891	222,651	229,826	236,660	243,514	13.6%	0.6%

Note:
Average annual growth rates for 2015 - 2040 as reported by Baltimore Metropolitan Council were applied to 2018 population and household counts as reported by Esri in order to produce projections through 2040. Growth rates calculated for 5-year increments.

(a) 2018 population and household counts as reported by Esri.

(b) City of Annapolis projected growth rates were calculated by taking the growth rate of the combined Traffic Analysis Zones that have their centers within the City’s boundaries.

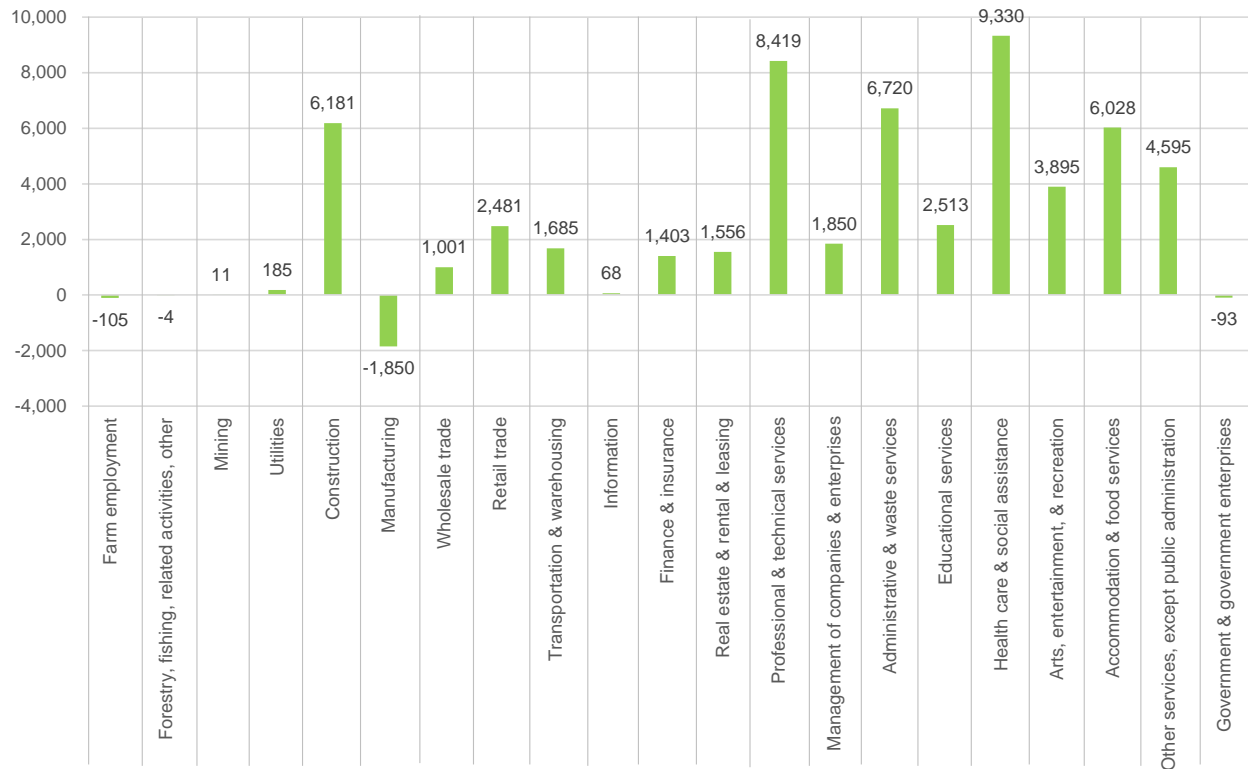
Sources: Esri; Baltimore Metropolitan Council, Round 9 Cooperative Forecasts, 2018; BAE, 2019.

Employment

Figure 20 and Table 6 show the expected change in jobs by industry in the Anne Arundel County from 2018 to 2040. The largest numbers of new jobs will come from the following industries: healthcare and social assistance (9,330 jobs), professional and technical services

(8,419 jobs), administrative and waste services (6,720 jobs), construction (6,181 jobs), and accommodation and food services (6,028 jobs).

Figure 20: Change in Jobs in Anne Arundel County by Industry, 2018 – 2040



Note:
Includes both full-time and part-time jobs.
Sources: Maryland Department of Planning, Projections and State Data Center; BAE, 2019.

The industries that will experience the largest percent increases in jobs from 2018 to 2040 are management of companies and enterprises (53.6 percent), educational services (43.4 percent), and arts, entertainment, and recreation (30.7 percent). Figure 21 shows how these projected rates of change by industry compare to those in the state of Maryland. In both Anne Arundel County and Maryland, the manufacturing sector is expected to decline by more than 14 percent from 2018 to 2040. Exhibit A-11 in the Appendix contains detailed information about employment projections in Maryland.

Table 6: Employment Projections, Anne Arundel County, 2018 – 2040

Jobs	Base Year (a)			Projected			% Change 2018-2040	Avg. Annual Growth Rate
	2018	2020	2025	2030	2035	2040		
Farm employment	15,608	15,500	15,300	14,800	14,500	14,100	-9.7%	-0.5%
Forestry, fishing, related activities, and other	6,328	6,300	6,100	6,100	6,000	6,000	-5.2%	-0.2%
Mining	5,396	5,400	5,200	4,900	4,600	4,400	-18.5%	-0.9%
Utilities	10,452	10,500	10,700	10,900	11,000	11,100	6.2%	0.3%
Construction	236,995	242,800	256,800	269,900	280,300	290,200	22.4%	0.9%
Manufacturing	110,336	108,400	105,100	101,200	97,500	93,900	-14.9%	-0.7%
Wholesale trade	98,931	99,700	101,600	102,900	104,400	106,000	7.1%	0.3%
Retail trade	356,785	359,600	364,700	368,300	370,200	372,700	4.5%	0.2%
Transportation and warehousing	105,442	107,300	109,600	111,800	113,800	116,200	10.2%	0.4%
Information	52,419	52,100	52,100	52,100	52,200	52,300	-0.2%	0.0%
Finance and insurance	183,379	185,900	190,800	192,600	194,300	196,000	6.9%	0.3%
Real estate and rental and leasing	177,240	178,800	182,500	184,500	186,000	188,000	6.1%	0.3%
Professional and technical services	369,730	376,700	395,600	408,700	421,400	435,700	17.8%	0.7%
Management of companies and enterprises	33,907	35,800	39,900	42,900	45,700	49,100	44.8%	1.7%
Administrative and waste services	238,212	244,200	259,500	271,000	282,900	296,400	24.4%	1.0%
Educational services	105,336	108,500	118,100	126,200	134,900	144,000	36.7%	1.4%
Health care and social assistance	454,281	464,400	488,900	509,100	529,500	550,900	21.3%	0.9%
Arts, entertainment, and recreation	97,012	100,200	107,100	112,200	117,400	123,000	26.8%	1.1%
Accommodation and food services	248,513	254,000	265,400	273,900	281,600	290,900	17.1%	0.7%
Other services, except public administration	222,639	227,200	237,000	245,100	253,200	262,800	18.0%	0.8%
Government and government enterprises	572,351	571,900	568,700	565,100	561,300	557,300	-2.6%	-0.1%
Total	3,701,292	3,755,200	3,880,700	3,974,200	4,062,700	4,161,000	12.4%	0.5%

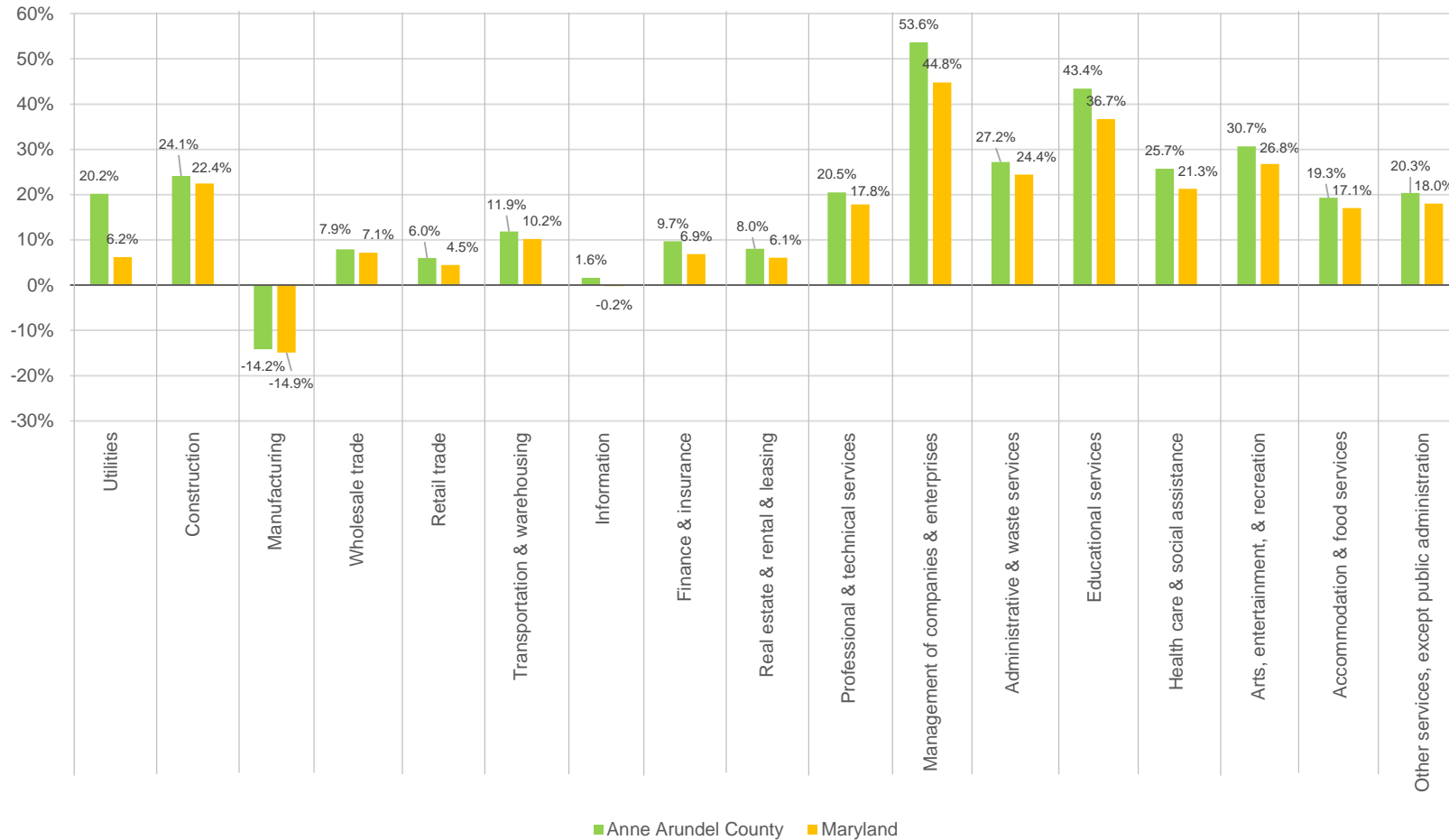
Notes:

Includes both full-time and part-time jobs.

(a) Based on data from U.S. BEA Table CA-25N, November 2014. Average annual growth rates for 2010 - 2040 were applied in order to produce an estimate for 2018.

Sources: Maryland Department of Planning, Projections and State Data Center; BAE, 2019.

Figure 21: Projected Percent Change in Jobs by Industry in Top Sectors in the County and State, 2018 – 2040



Notes:

Does not include industries that constitute less than one percent of existing and projected jobs in the county and state (farm employment; forestry, fishing, related activities, and other; mining; and utilities).

Includes both full-time and part-time jobs.

Sources: Maryland Department of Planning, Projections and State Data Center; BAE, 2019.

REAL ESTATE MARKET CONDITIONS AND TRENDS

The following section reviews the real estate markets for a variety of land uses including residential, retail, office, and industrial/flex.

Residential

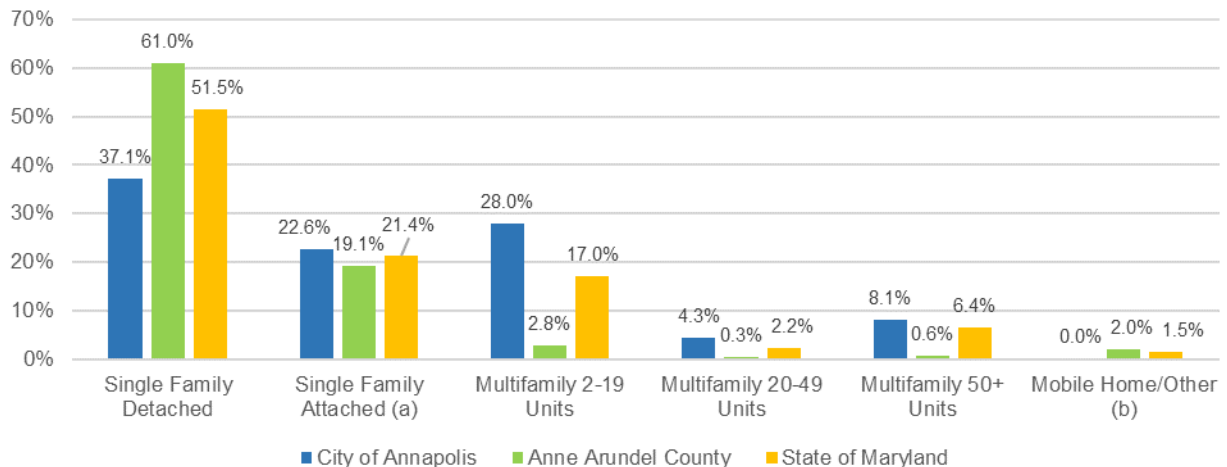
The residential real estate market conditions and trends discussed below are presented in three subsections. The first subsection covers general housing stock characteristics, the second subsection reviews the multifamily rental market, and the last subsection reviews the for-sale residential real estate market.

General Housing Stock Characteristics

Housing Units by Type

As shown in Figure 22, only 37.1 percent of homes in Annapolis are single family detached units, compared to 61.0 percent of housing units in the county and 51.5 percent of units in the state. Annapolis' proportion of attached single family homes (townhomes and rowhouses) is comparable to proportions seen in the county and state (22.6 percent in Annapolis, 19.1 percent in the county, and 21.4 percent in the state). Annapolis has a relatively large proportion of housing units in multifamily buildings. Over 40 percent of Annapolis' housing units are in multifamily buildings; 28.0 percent are in buildings of between two and 19 units.

Figure 22: Housing Units by Type, 2013 – 2017 Five-Year Data



Notes:

(a) Includes Townhomes and rowhouses.

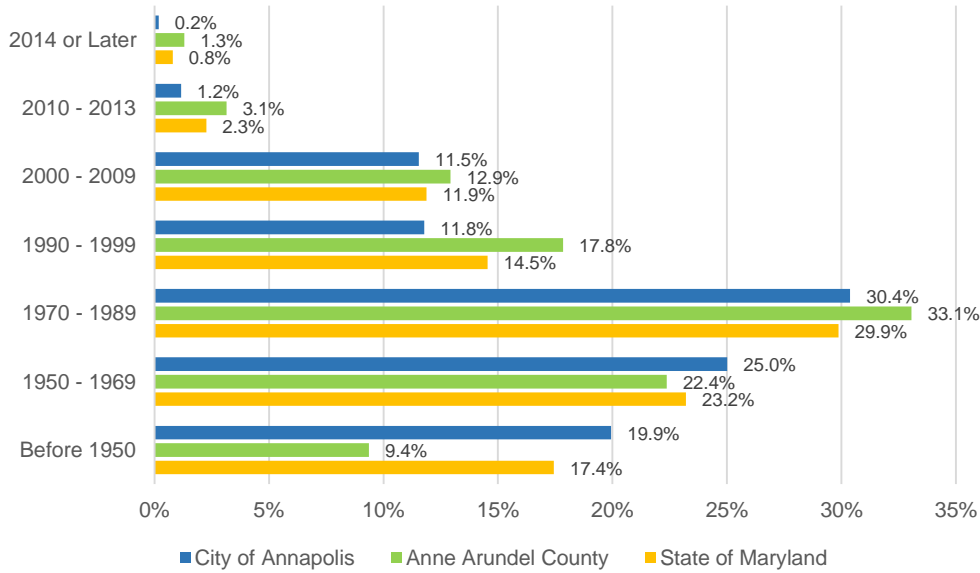
(b) Includes boats, RVs, vans, or any other non-traditional residences.

Sources: U.S. Census Bureau, American Community Survey 2013-2017 Five-Year Sampling data, B25024; BAE, 2019.

Housing Units by Age

Figure 23 illustrates the distribution of housing units in all three geographies by year built. Annapolis has a relatively large proportion of units built before 1950 (nearly 20 percent of units, as compared to 9.4 percent of units in the county and 17.4 percent of units in the state). Approximately 12.4 percent of units in Annapolis were built in 2000 or later, as compared to 17.4 percent in the county and 14.9 percent in the state.

Figure 23: Housing Units by Year Built, 2013 – 2017 Five-Year Data



Sources: U.S. Census Bureau, American Community Survey 2013-2017 Five-Year Sampling Data, B25034; BAE, 2019.

Multifamily Residential

Table 7 provides a summary of the multifamily rental market in Annapolis, Anne Arundel County, and Maryland. According to the CoStar database, Annapolis has approximately 2,822 market-rate multifamily rental units. The tables and figures in this subsection rely on data provided by this database and the analysis below shows the market conditions and trends for the market-rate apartments listed in CoStar. Public housing and other subsidized housing are covered briefly in a section below and more in depth in the Fiscal Year 2021-2025 Five Year Housing and Community Consolidated Plan and FY 2021 Annual CDBG Action Plan (Available Spring 2020).

Table 7: Market-Rate Multifamily Rental Overview, Q1 2019

City of Annapolis						
	Studio	1 BR	2 BR	3 BR	4+ BR	All Unit Types (a)
Inventory, Q1 2019 (units)	23	1,231	1,246	264	12	2,822
% of Units	0.8%	44.3%	44.9%	9.5%	0.4%	100.0%
Occupied Units	22	1,148	1,178	247	11	2,649
Vacant Units	1	83	68	17	1	173
Vacancy Rate	4.3%	6.7%	5.5%	6.4%	8.3%	6.1%
Average Rents, Q1 2018 - Q1 2019 (b)						
Average Rent, Q1 2018	\$1,192	\$1,391	\$1,662	\$1,934	\$2,442	\$1,567
Average Rent, Q1 2019	\$1,249	\$1,427	\$1,677	\$1,868	\$2,229	\$1,583
% Change Q1 2018 - Q1 2019	4.8%	2.6%	0.9%	-3.4%	-8.7%	1.0%
Anne Arundel County						
	Studio	1 BR	2 BR	3 BR	4+ BR	All Unit Types (a)
Inventory, Q1 2019 (units)	394	9,592	14,296	3,974	107	28,440
% of Units	1.4%	33.8%	50.4%	14.0%	0.4%	100.0%
Occupied Units	372	9,029	13,522	3,744	105	26,845
Vacant Units	22	563	774	230	2	1,595
Vacancy Rate	5.6%	5.9%	5.4%	5.8%	1.9%	5.6%
Average Rents, Q1 2018 - Q1 2019 (b)						
Average Rent, Q1 2018	\$1,433	\$1,342	\$1,512	\$1,720	\$2,196	\$1,473
Average Rent, Q1 2019	\$1,463	\$1,406	\$1,599	\$1,812	\$2,044	\$1,551
% Change Q1 2018 - Q1 2019	2.1%	4.8%	5.8%	5.3%	-6.9%	5.3%
Maryland						
	Studio	1 BR	2 BR	3 BR	4+ BR	All Unit Types (a)
Inventory, Q1 2019 (units)	13,149	131,635	172,231	41,630	5,177	373,247
% of Units	3.6%	36.2%	47.3%	11.4%	1.4%	100.0%
Occupied Units	12,226	123,108	162,385	39,302	4,850	350,745
Vacant Units	923	8,527	9,846	2,328	327	22,502
Vacancy Rate	7.0%	6.5%	5.7%	5.6%	6.3%	6.0%
Average Rents, Q1 2018 - Q1 2019 (b)						
Average Rent, Q1 2018	\$1,122	\$1,219	\$1,393	\$1,652	\$2,860	\$1,365
Average Rent, Q1 2019	\$1,143	\$1,261	\$1,441	\$1,700	\$2,924	\$1,409
% Change Q1 2018 - Q1 2019	1.9%	3.4%	3.4%	2.9%	2.2%	3.2%

Notes:

(a) Unit totals may not add up due to some units lacking classification by number of bedrooms.

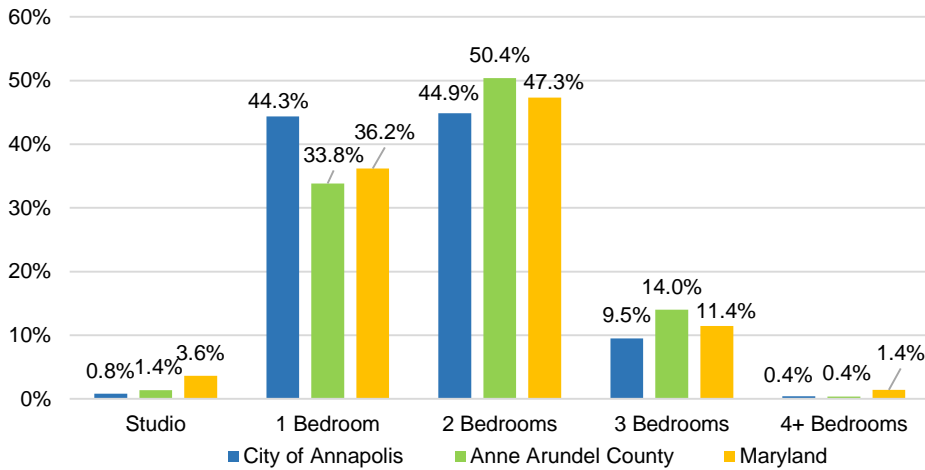
(b) Market-rate units only.

Sources: CoStar; BAE, 2019.

Unit Sizes

Overall, market-rate multifamily rental units in Annapolis are smaller than in Anne Arundel County and Maryland. As shown in Figure 24, over 90 percent of units in Annapolis have less than three bedrooms, as compared to 85.6 percent of units in the county and 87.1 percent of units in the state.

Figure 24: Percent Distribution of Market-Rate Multifamily Rental Units by Size, Q1 2019

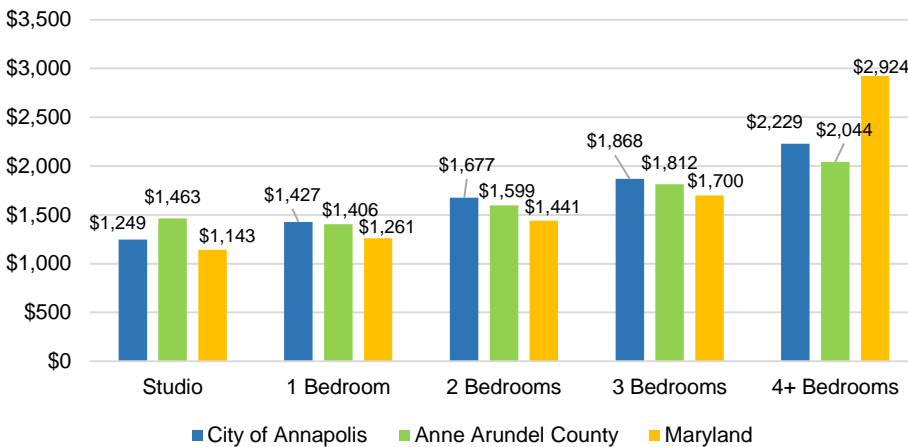


Note: Market-rate units only.
Sources: CoStar; BAE, 2019.

Rents

Figure 25 shows the average market-rate multifamily rents in each geography by bedroom size. Average rents are higher in Annapolis for units with one, two, and three bedrooms. Although Annapolis does not have the highest rents for studios and units with four or more bedrooms, units of these sizes make up relatively small proportions of total units in all three geographies, as shown in Figure 24 in the previous section.

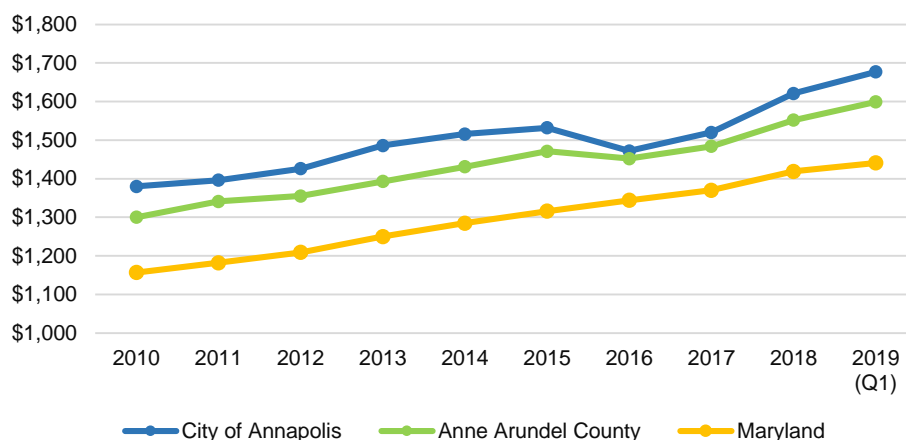
Figure 25: Average Market-Rate Multifamily Rent by Unit Size, Q1 2019



Note: Rents are effective rents; market-rate units only.
Sources: CoStar; BAE, 2019.

Figure 26 shows average market-rate rents for two-bedroom units from 2010 through the second quarter of 2019. Annapolis' rents have consistently been higher than in the county and state. As of the second quarter of 2019, the average rent for a market-rate two-bedroom multifamily unit in Annapolis was \$1,662 as compared to \$1,512 in Anne Arundel County and \$1,393 in Maryland.

Figure 26: Average Rent, Market-Rate Multifamily Two-Bedroom Unit, 2010 – Q1 2019

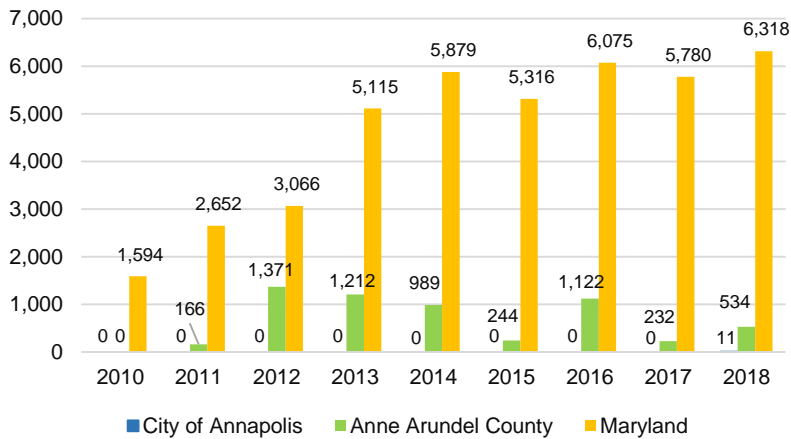


Note: Rents are effective rents; market-rate units only.
Sources: CoStar; BAE, 2019.

Inventory Growth

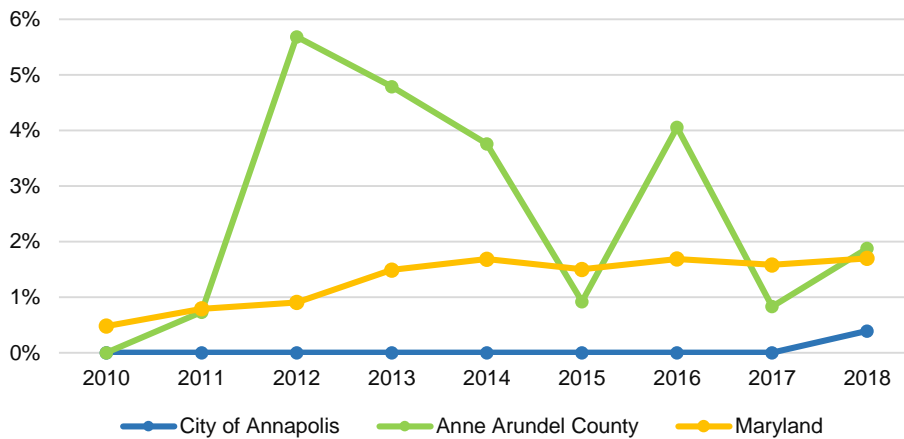
Figure 27 shows the total number of market-rate multifamily units in each geography from 2010 through 2018. According to CoStar, during this time period Annapolis gained only 11 units; all 11 of these were constructed in 2018. As shown in Figure 28, these 11 units represented less than a one percent increase in the city's total market-rate multifamily rental housing stock. In contrast, Anne Arundel County gained a total of 5,870 units during this period. As shown in Figure 28, the years in which the county's market-rate multifamily housing stock increased by the largest percentages were 2012 (a 5.7 percent increase), 2013 (a 4.8 percent increase), 2014 (a 3.8 percent increase), and 2016 (a 4.1 percent increase). In Maryland, 41,795 market-rate multifamily units were built during this period, with relatively stable increases in the overall market-rate multifamily housing stock between 2013 and 2018 (between one and two percent per year).

Figure 27: Deliveries (Market-Rate Units), 2010 - 2018



Note: Market-rate units only.
Sources: CoStar; BAE, 2019.

Figure 28: Annual Market-Rate Unit Deliveries as a Share of Total Market-Rate Units, 2010 - 2018



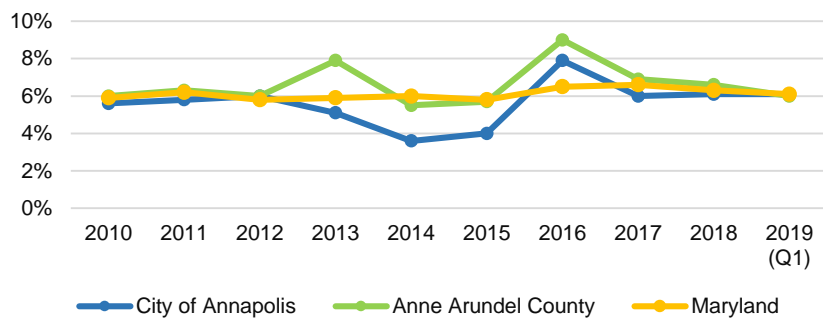
Note: Market-rate units only.
Sources: CoStar; BAE, 2019.

Vacancy

Figure 29 illustrates the average vacancy rates for market-rate multifamily rental developments in each geography from 2010 to 2019. From 2012 to 2018, average vacancy rates in Annapolis were lower than in the county and state; Annapolis reached its lowest average vacancy rate for this period in 2014 (3.6 percent). In both Annapolis and Anne Arundel County, vacancy rates spiked in 2016, reaching 7.9 percent in Annapolis and 9.0 percent in the county. This was likely driven by an increase in new development in the county,

as shown in the previous section in Figure 28. As of the first quarter of 2019, the average multifamily rental vacancy rate in all three geographies was between 6.0 and 6.1 percent.

Figure 29: Average Vacancy Rates, Market-Rate Multifamily Rental, 2010 – Q1 2019

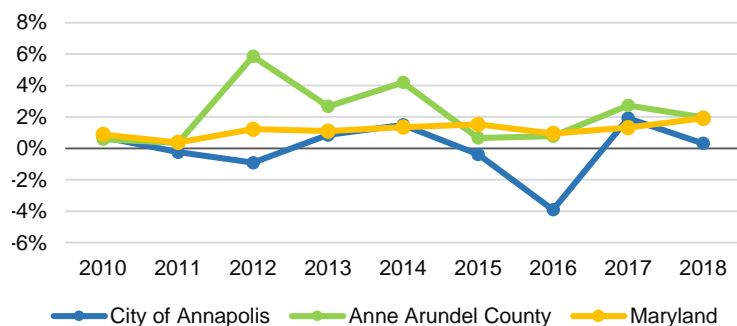


Note: Market-rate units only.
Sources: CoStar; BAE, 2019.

Absorption

Figure 30 illustrates the net absorption rates for each geography from 2010 through 2018. In Annapolis, absorption rates generally held steady during this period, hovering just above zero percent. However, in 2016, net absorption in Annapolis dropped to negative 3.9 percent. While this was likely a result of the county’s 2016 increase in multifamily development, interestingly, the net absorption rate in Anne Arundel County held positive in 2016. As of 2018, the net absorption rate in Annapolis was 0.3 percent, as compared to 2.0 percent in the county and 1.9 percent in Maryland.

Figure 30: Market-Rate Multifamily Rental Net Absorption Rate, 2010 – Q1 2019



Note: Market-rate units only.
Sources: CoStar; BAE, 2019.

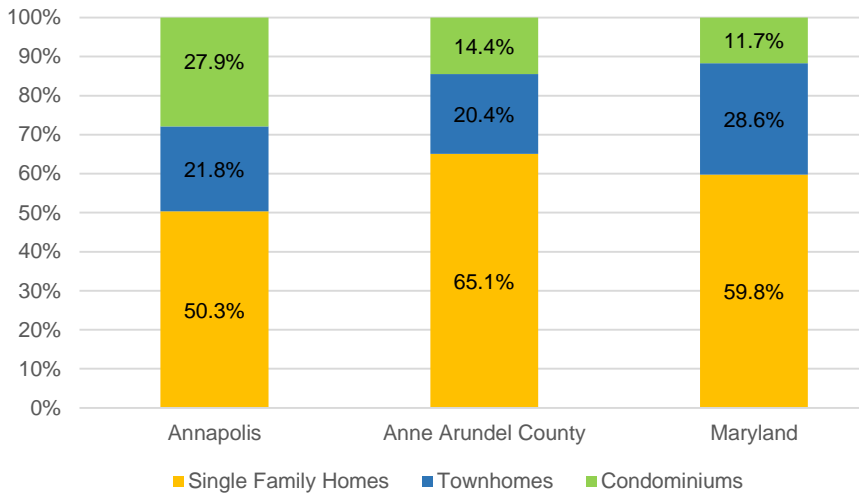
For-Sale Residential

The following section discusses the for-sale housing markets in the City of Annapolis, the county, and the state. This portion of the analyses relies on home sale records from May 2018 to April 2019 and reveals findings related to the for-sale housing stock by unit type, unit size, and sale prices.

Home Sales by Unit Type

Figure 31 shows the distribution of homes sold from May 2018 to April 2019 by type in each geography. Approximately half of homes sold during this period in Annapolis were single family homes, as compared to 65.1 percent of homes sold in the county and 59.8 percent of homes in the state. Meanwhile, 21.8 percent of units sold in Annapolis were townhomes, while 27.9 percent were condos. The proportion of units sold during this period that were condos is notably larger than in the county and state (14.4 percent and 11.7 percent, respectively).

Figure 31: Residential Sales by Unit Type, May 2018 – April 2019

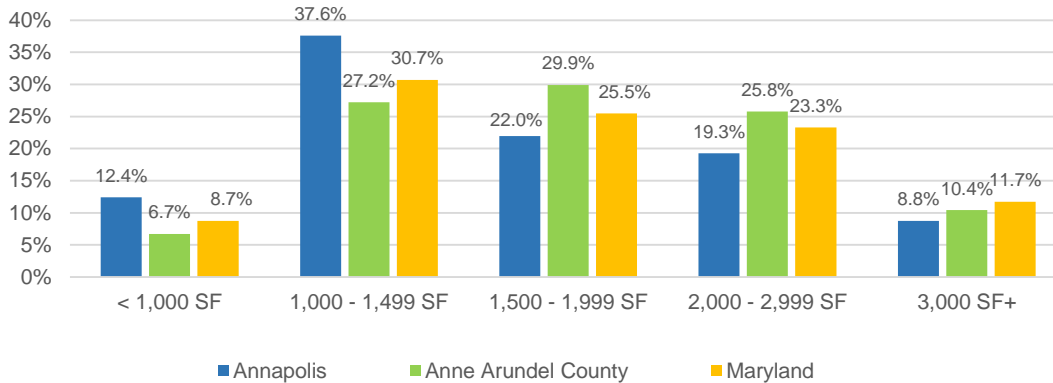


Note: Only Includes sales for which sale price and square footage data are available
Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Home Sales by Unit Size

Figure 32 illustrates the breakdown of homes sold from May 2018 to April 2019 by size. Overall, homes sold in Annapolis during this timeframe were smaller than homes in the county and state. Half of Annapolis homes sold were less than 1,500 square feet, as compared to only 33.9 percent of homes sold in Anne Arundel County and 39.4 percent of homes sold in Maryland. Only 28.1 percent of Annapolis homes sold during this timeframe were over 2,000 square feet, as compared to 36.2 percent of homes sold in the county and 35.0 percent of homes sold in the state.

Figure 32: Residential Sales by Unit Size, May 2018 – April 2019

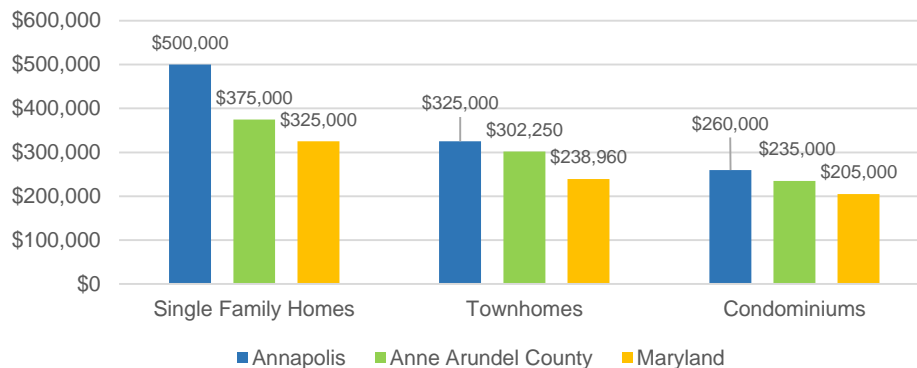


Notes: Only Includes sales for which sale price and square footage data are available.
Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Sale Prices

As shown in Figure 33, the median sale price for a single family home in Annapolis from May 2018 to April 2019 was \$500,000, which is significantly higher than in the county (\$375,000) and state (\$325,000). The median sale prices for townhomes and condos were also higher in Annapolis than in the other geographies. The median townhome sale price in Annapolis was \$325,000 (as compared to \$302,250 in the county and \$238,960 in the state) and the median sale price for condos was \$260,000 (as compared to \$235,000 in the county and \$205,000 in the state).

Figure 33: Median Home Sale Price, May 2018 – April 2019

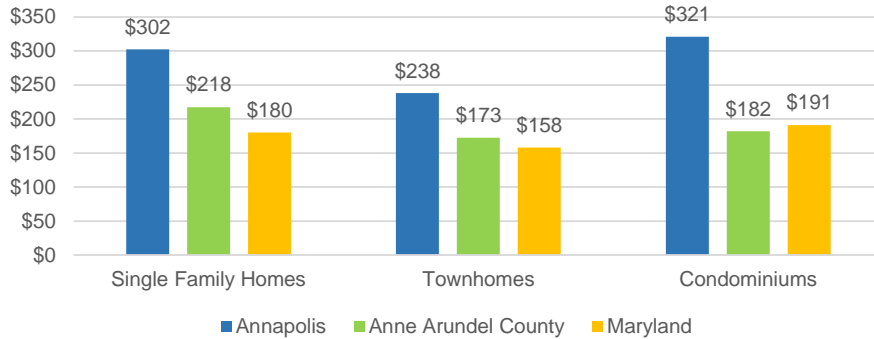


Note: Only Includes sales for which sale price and square footage data are available
Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

As shown in Figure 34, the average price per square foot of a home sold in Annapolis from May 2018 to April 2019 was substantially higher than in the other two geographies. This is

particularly true for single family homes, for which the average price per square foot in Annapolis was \$302 (as compared to \$218 in the county and \$180 in the state) and condos, for which the average price per square foot in Annapolis was \$321 (as compared to \$182 in the county and \$191 in the state).

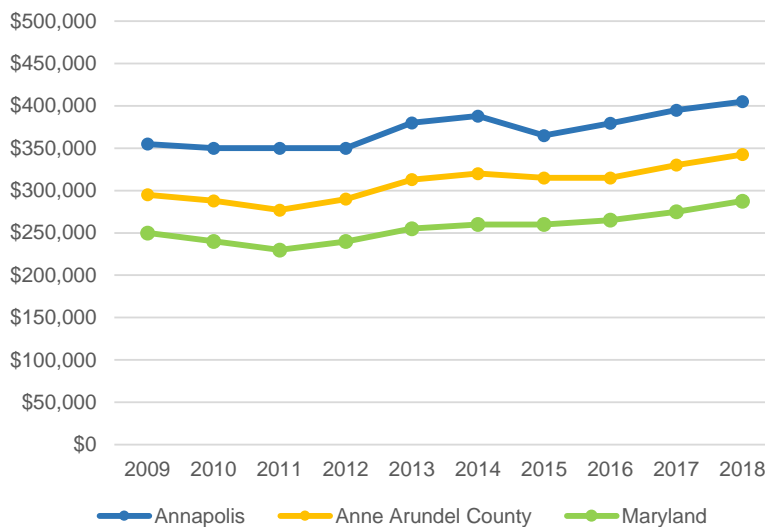
Figure 34: Average Home Sale Price Per Square Foot, May 2018 – April 2019



Note:
 Only Includes sales for which sale price and square footage data are available
 Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Figure 35 displays median home sale prices for all unit types in all three geographies from 2009 to 2018. Since 2009, the median home sale price in Annapolis has consistently been higher than that of Anne Arundel County or the state of Maryland.

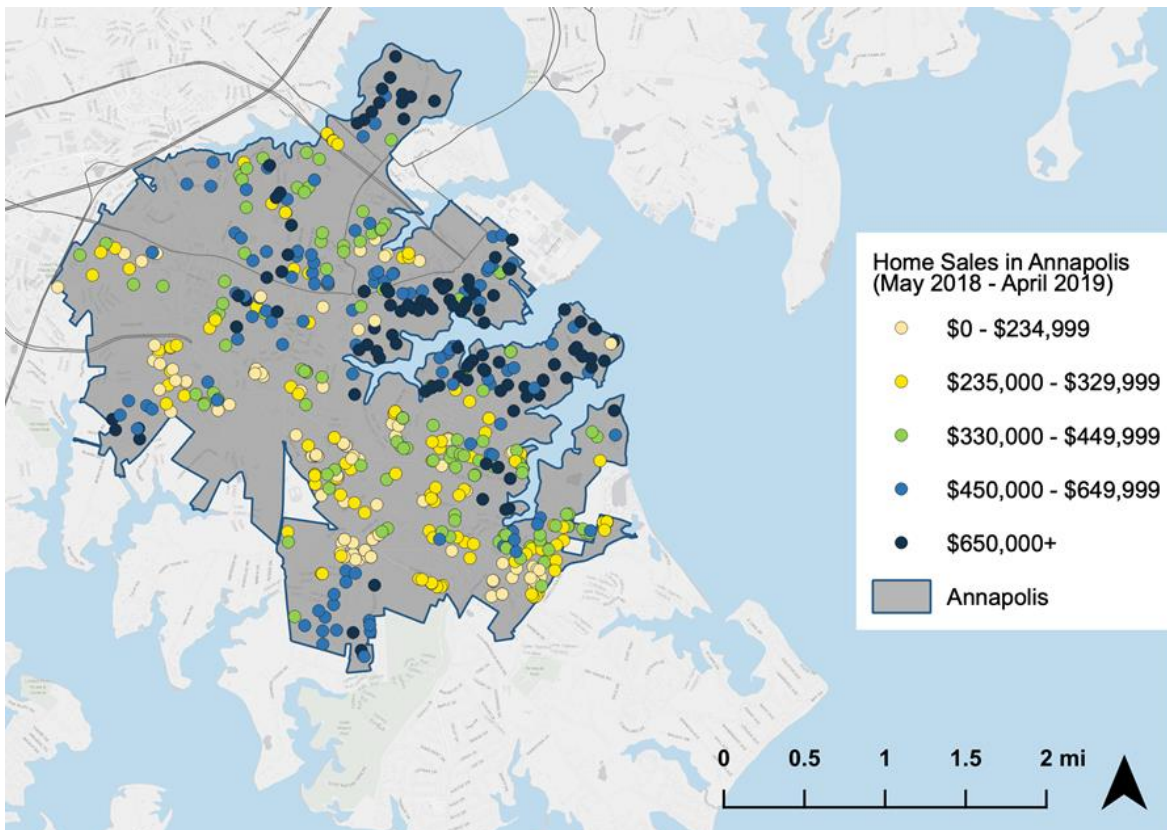
Figure 35: Median Home Sale Price, 2009 – 2018



Note:
 Includes all unit types (single family homes, condominiums, and townhomes).
 Sources: DQNews/CoreLogic; BAE, 2019.

Figure 36 shows the locations and price ranges of home sales in Annapolis from May 2018 to April 2019. The most expensive homes (those that sold for between \$450,000 and \$649,999 as well as \$650,000 or more) were more likely to be located along the waterfront, while less expensive homes (those that sold for less than \$450,000) were more likely to be located further inland.

Figure 36: Home Sales in Annapolis, April 2018 – March 2019



Sources: Corelogic/ListSource via DQNews; ArcGIS Pro; U.S. Census Bureau; BAE, 2019.

Subsidized Multifamily Rentals

Based on data provided by the Department of Planning & Zoning, there are approximately 5,046 multifamily rental units in the city. Of these multifamily rental units, 42 percent or 2,126 units are subsidized. Of these subsidized units, 62 percent are Low Income Housing Tax Credit (LIHTC) units or HUD Section 8 units, 37 percent are public housing units, and 1 percent are Moderately Priced Dwelling Units (MPDU). The city has another 42 LIHTC units in the pipeline. This development, Town Court, off West Street near the Monarch Academy should be completed by Spring 2021.

While there are relatively few MPDUs in Annapolis, an update to the program was approved by the Annapolis City Council in September 2019. The original MPDU program in the City was

established in 2004 and required 12 percent of new residential developments of 10 or more units be moderately priced. However, developers had the option to pay a fee in lieu of building affordable units. The adopted legislation removes the option to pay a fee-in-lieu and increased the required percentage of affordable units to 15 percent.

Retail

Table 8 provides an overview of the retail real estate markets in Annapolis, Anne Arundel County, and the state of Maryland. As of the first quarter of 2019, Annapolis had approximately 2.3 million square feet of retail space, with an average vacancy rate of 2.7 percent. The average annual per-square-foot rent was \$21.84.

Table 8: Retail Market Overview, Q1 2019

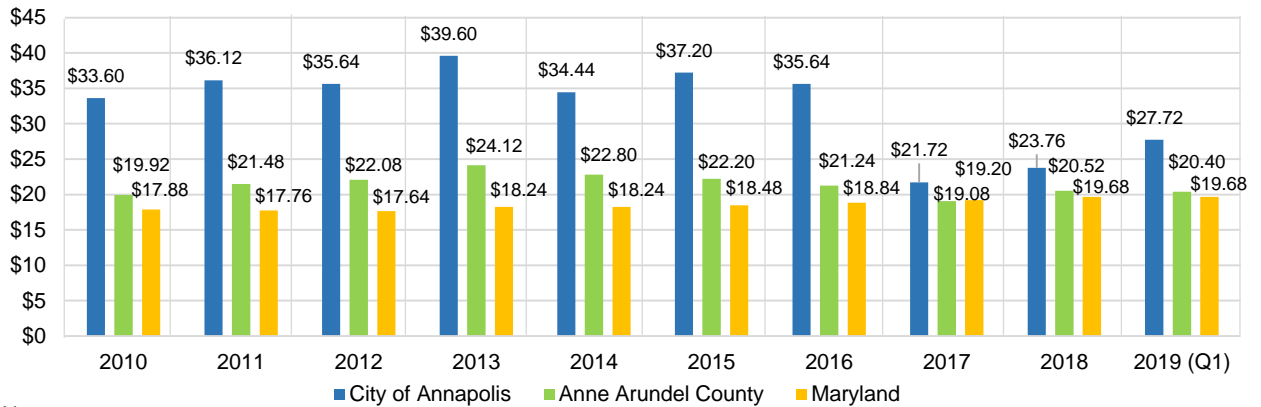
Summary, Q1 2019	City of Annapolis	Anne Arundel County	Maryland
Inventory (SF)	2,257,616	31,125,146	295,506,263
Occupied Stock (SF)	2,197,637	29,849,992	283,440,803
Vacant Stock (SF)	59,979	1,275,154	12,065,460
Vacancy Rate	2.7%	4.1%	4.1%
Annual Asking Rents, PSF			
Avg Asking Rent, NNN Direct, Q1 2018	\$21.84	\$20.16	\$19.44
Avg Asking Rent, NNN Direct, Q1 2019	\$27.72	\$20.40	\$19.68
% Change	26.9%	1.2%	1.2%
New Deliveries (bldgs), Q1 2009 - Q1 2019	5	85	888
New Deliveries (SF), Q1 2009 - Q1 2019	68,086	2,204,405	18,971,047
Under Construction (bldgs), Q1 2019	2	3	33
Under Construction (SF), Q1 2019	5,700	19,025	843,284

Sources: CoStar; BAE, 2019.

Rents

Figure 37 illustrates the per-square-foot triple net annual retail rents in each of the three geographies from 2010 through the first quarter of 2019. From 2010 through 2016, retail rents in Annapolis were substantially higher – more than 11 dollars per square foot per year higher – than in the county and state. However, since 2017, the price differential between Annapolis and the county and state has narrowed, due to a significant drop in the average retail rent in Annapolis. As of the first quarter of 2019, the annual triple net retail rent in Annapolis was \$27.72, as compared to \$20.40 in Anne Arundel County and \$19.68 in Maryland.

Figure 37: Average Annual Retail Rent PSF, 2010 – Q1 2019



Notes:

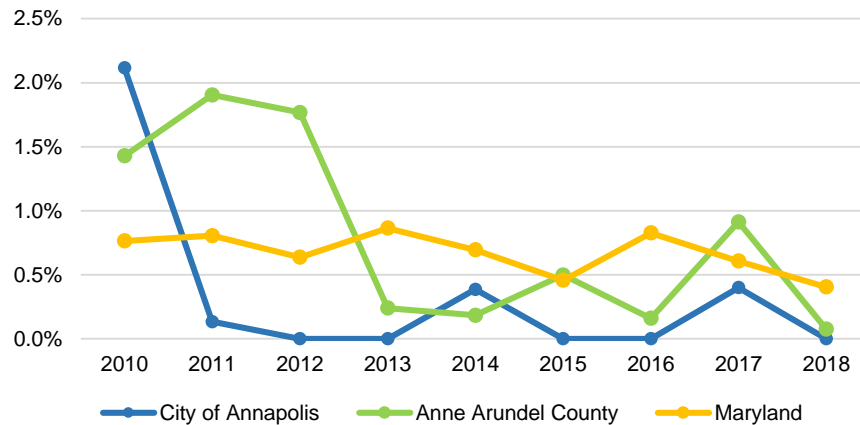
Rents reflect direct triple-net leases.

Sources: CoStar; BAE, 2019.

Inventory Growth

As shown in Figure 38, Annapolis increased its inventory of retail space by more than 2.0 percent in 2010 but has not added a significant amount of retail space since then. Anne Arundel County experienced spikes in retail development in 2010 (a 1.4 percent increase), 2011 (a 1.9 percent increase), and 2012 (a 1.8 percent increase), as well as 2017 (a 0.9 percent increase).

Figure 38: Annual Retail Deliveries (SF) as a Share of Total Retail Inventory (SF), 2010 – 2018

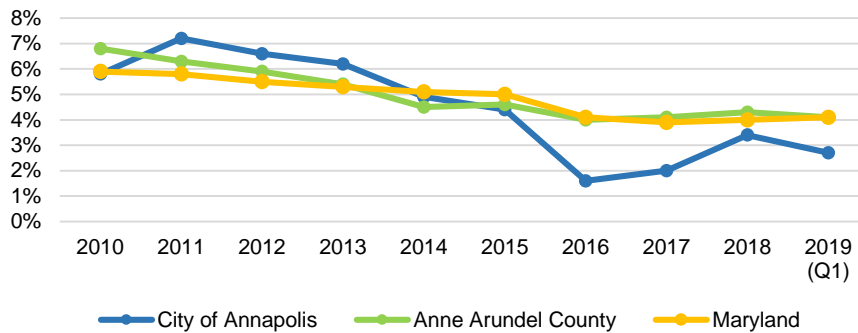


Sources: CoStar; BAE, 2019.

Vacancy

Figure 39 illustrates the average retail vacancy rates in each geography from 2010 through the first quarter of 2019. In all three geographies, the average vacancy rate significantly decreased during this period. In Annapolis, the retail vacancy rate was 5.8 percent in 2010 and had reached 2.7 percent by the beginning of 2019. This retail vacancy rate is even lower than that of Anne Arundel County (4.1 percent) and the state of Maryland (4.1 percent).

Figure 39: Average Retail Vacancy Rates, 2010 – Q1 2019

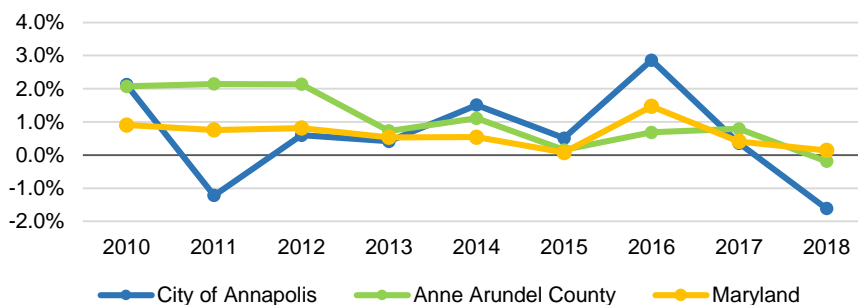


Sources: CoStar; BAE, 2019.

Absorption

Figure 40 illustrates the retail net absorption rates in each geography from 2010 to 2018. Over this time period, retail absorption in Annapolis has mostly been positive, with the exception of in 2011, which was likely driven by the City's relatively large amount of new retail development in 2010, which resulted in increased vacancy immediately afterward. However, the net absorption rate for retail in Annapolis was also negative in 2018. Retail net absorption rates in the county and the state also appear to be experiencing a downward trend. These trends are likely a reflection of the changing retail landscape in the U.S., driven by consumers' shift toward online shopping.

Figure 40: Retail Net Absorption Rates, 2010 – 2018



Sources: CoStar; BAE, 2019.

Office

As shown in Table 9, Annapolis has approximately 3.5 million square feet of office space with an average annual per-square-foot rent of \$25.92 and an average vacancy rate of 7.2 percent. This average rent is higher than the average office rents in the county and state, and the average vacancy rate is lower than those in the county and state.

Table 9: Office Market Overview, Q1 2019

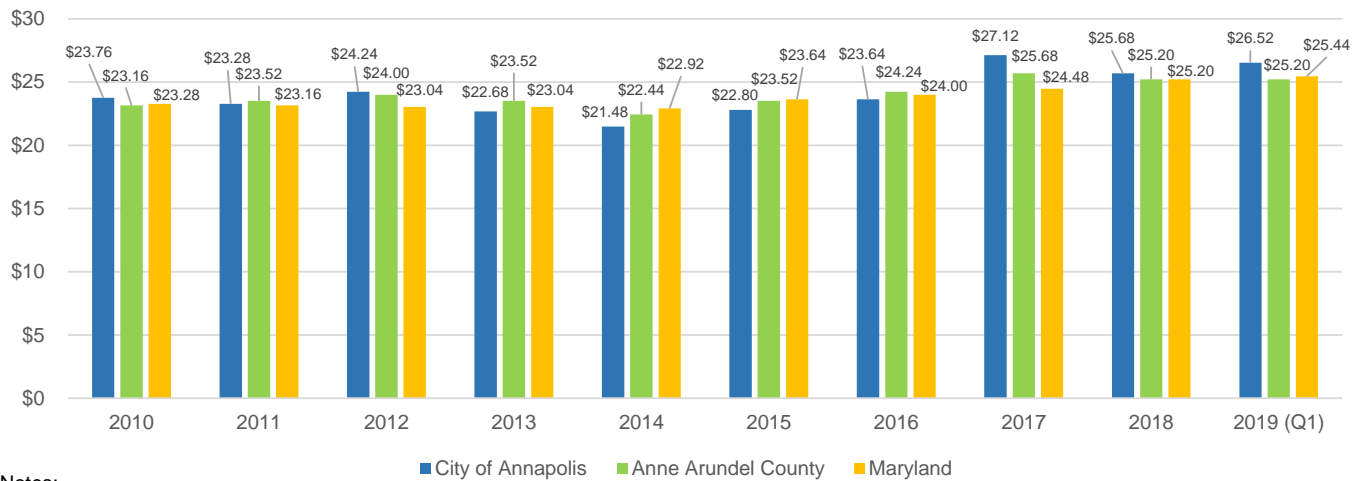
Summary, Q1 2019	City of Annapolis	Anne Arundel County	Maryland
Inventory (SF)	3,461,161	23,229,115	284,071,176
Occupied Stock (SF)	3,213,267	21,025,795	255,457,218
Vacant Stock (SF)	247,894	2,203,320	28,613,958
Vacancy Rate	7.2%	9.5%	10.1%
Annual Asking Rents, PSF			
Avg Asking Rent, Base Direct, Q1 2018	\$25.92	\$25.32	\$24.72
Avg Asking Rent, Base Direct, Q1 2019	\$26.52	\$25.20	\$25.44
% Change	2.3%	-0.5%	2.9%
New Deliveries (bldgs), Q1 2009 - Q1 2019			
	3	53	346
New Deliveries (SF), Q1 2009 - Q1 2019			
	65,854	3,735,912	23,047,843
Under Construction (bldgs), Q1 2019			
	0	3	18
Under Construction (SF), Q1 2019			
	0	111,200	4,124,897

Sources: CoStar; BAE, 2019.

Rents

Figure 41 shows the average annual per-square-foot office rents in all three geographies from 2010 through the first quarter of 2019. Office rents in Annapolis have consistently been higher than those in the county and state. From 2014 to 2017, the average annual office rent in Annapolis increased from \$21.48 to \$27.12 (representing an increase of more than 26 percent). As of the first quarter of 2019, the average annual per-square-foot office rent in Annapolis was \$26.52, as compared to \$25.20 in Anne Arundel County and \$25.44 in Maryland.

Figure 41: Average Annual Office Rent PSF, 2010 – Q1 2019



Notes:

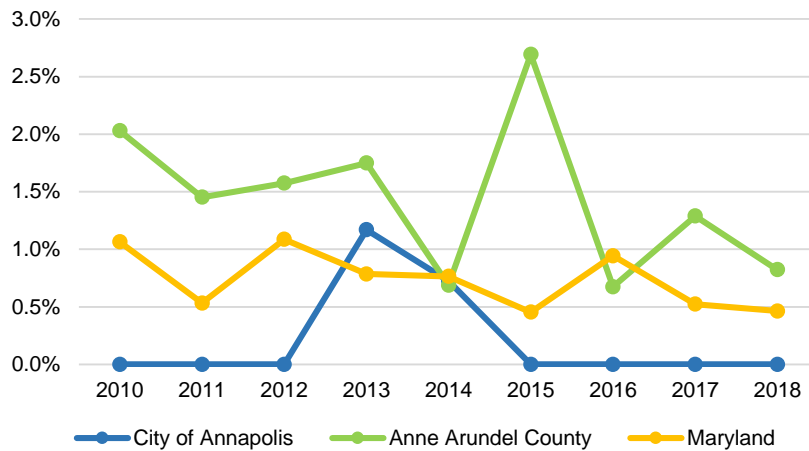
Rents reflect base rent on direct leases.

Sources: CoStar; BAE, 2019.

Inventory Growth

As shown in Figure 42, Annapolis increased its total office inventory by 1.2 percent in 2013, and again by 0.7 percent in 2014. In recent years, both Anne Arundel County and the state of Maryland have seen consistently higher rates of office development than Annapolis.

Figure 42: Annual Office Deliveries (SF) as a Share of Total Office Inventory (SF), 2010 – 2018



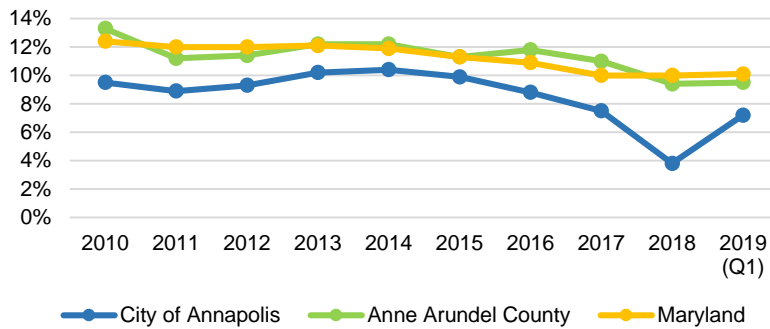
Note: Inventory and deliveries measured in square feet.

Sources: CoStar; BAE, 2019.

Vacancy

As shown in Figure 43, during the 2010 – Q1 2019 period, the average office vacancy rate in Annapolis was consistently lower than in the county and state. From 2014 to 2018, all three geographies experienced a downward trend in average office vacancy rates. As of the first quarter of 2019, Annapolis' average office vacancy rate was 7.2 percent, as compared to 9.5 percent in the county and 10.1 percent in the state.

Figure 43: Average Office Vacancy Rates, 2010 – Q1 2019

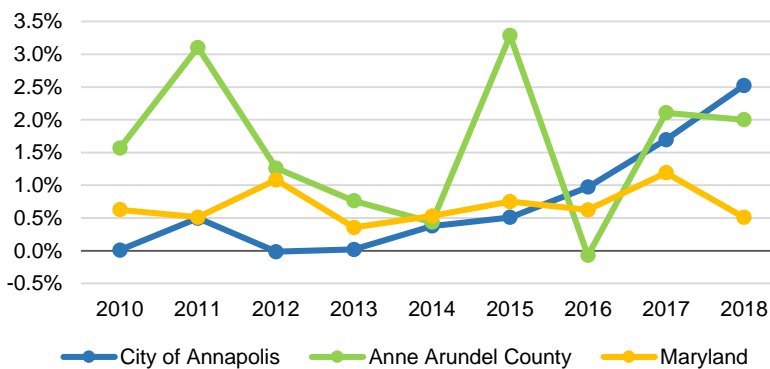


Sources: CoStar; BAE, 2019.

Absorption

As shown in Figure 44, office net absorption rates have remained positive and have continuously risen in Annapolis since 2013. Office absorption rates in the county and state have also remained positive in recent years, although they have been more erratic than in Annapolis. In 2018, the net absorption rate for office in Annapolis was 2.5 percent, as compared to 2.0 percent in the county and 0.5 percent in the state.

Figure 44: Office Net Absorption Rates, 2010 – 2018



Sources: CoStar; BAE, 2019.

Industrial/Flex

Table 10 provides a summary of the industrial and flex real estate market in Annapolis, Anne Arundel County, and the state of Maryland. As of the first quarter of 2019, Annapolis had approximately 1.2 million square feet of industrial and flex space. According to CoStar, the vacancy rate was 3.6 percent.

Table 10: Industrial/Flex Market Overview, Q1 2019

Summary, Q1 2019	City of Annapolis	Anne Arundel County	Maryland
Inventory (SF)	1,170,348	36,958,040	414,552,287
Occupied Stock (SF)	1,128,649	33,724,740	385,815,323
Vacant Stock (SF)	41,699	3,233,300	28,736,964
Vacancy Rate	3.6%	8.7%	6.9%
Annual Asking Rents, PSF (a)			
Avg Asking Rent, Direct, Q1 2018	\$13.44	\$7.68	\$6.60
Avg Asking Rent, Direct, Q1 2019	\$13.68	\$9.24	\$6.84
% Change	1.8%	20.3%	3.6%
New Deliveries (bldgs), Q1 2009 - Q1 2019	0	33	238
New Deliveries (SF), Q1 2009 - Q1 2019	0	2,664,263	28,091,625
Under Construction (bldgs), Q1 2019	0	9	38
Under Construction (SF), Q1 2019	0	656,090	10,038,994

Notes:

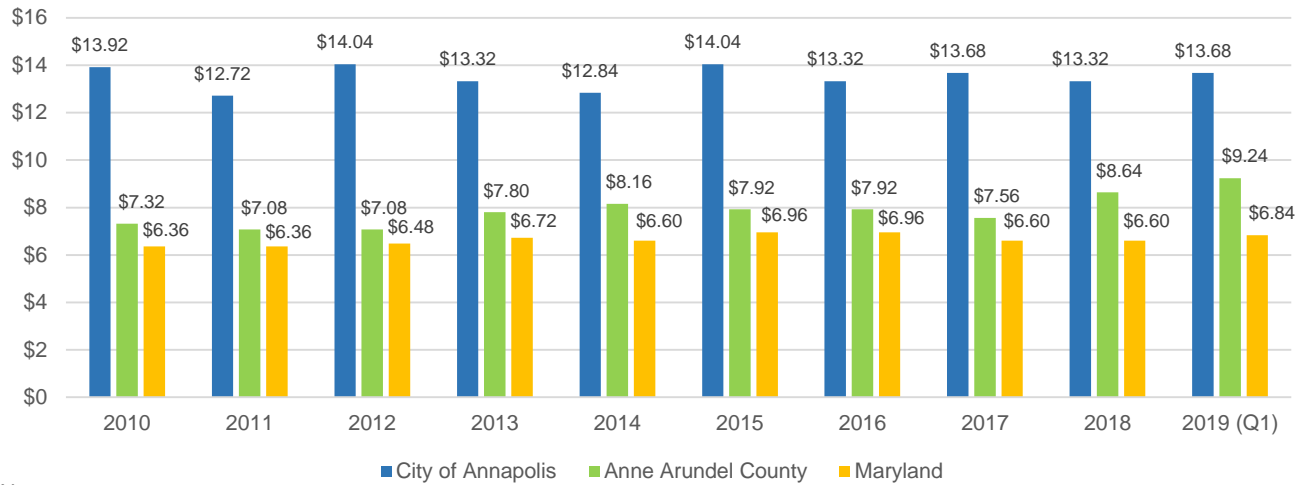
(a) Rents reflect direct leases of all service types.

Sources: CoStar; BAE, 2019.

Rents

As shown in Figure 45, industrial/flex rents are significantly higher in Annapolis than in the county and state. This trend has been apparent since at least 2010. As of the first quarter of 2019, the average annual per-square-foot industrial/flex rent was \$13.68 in Annapolis, as compared to \$9.24 in Anne Arundel County and \$6.84 in the state.

Figure 45: Average Annual Industrial/Flex Rent PSF, 2010 – Q1 2019

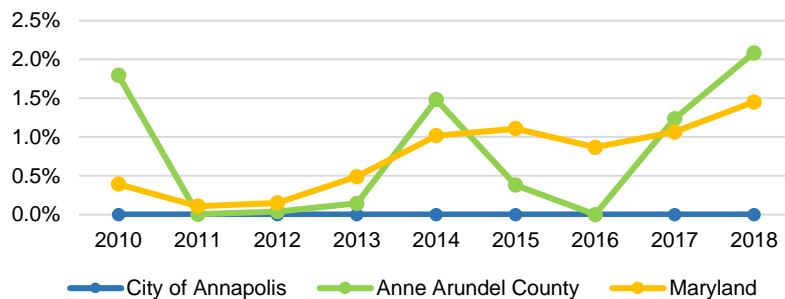


Notes:
 Rents reflect direct leases of all service types.
 Sources: CoStar; BAE, 2019.

Inventory Growth

As shown in Figure 46, from 2010 to 2018, the City of Annapolis did not increase its inventory of retail/flex space. Meanwhile, the county increased its total square feet of inventory/flex space by 1.8 percent in 2010, 1.5 percent in 2014, 1.2 percent in 2017, and 2.1 percent in 2018. In Maryland, industrial/flex development rates have steadily increased from 2012 to 2018; since 2014 the state has increased its total inventory of industrial/flex space by approximately 1 percent of more every year.

Figure 46: Annual Industrial/Flex Deliveries (SF) as a Share of Total Industrial/Flex Inventory (SF), 2010 – 2018

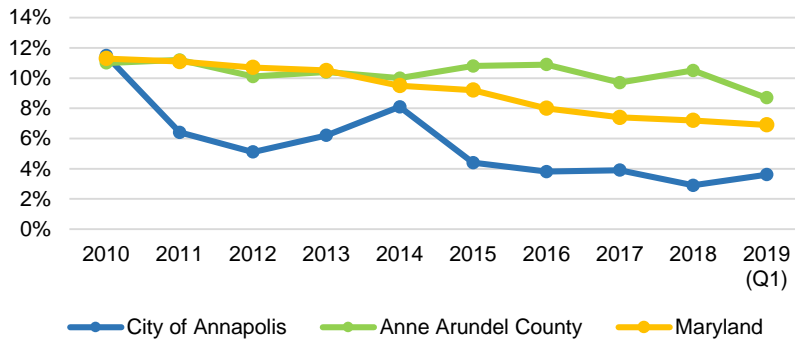


Note: Inventory and deliveries measured in square feet.
 Sources: CoStar; BAE, 2019.

Vacancy

As shown in Figure 47, since 2011, industrial/flex vacancy rates have remained considerably lower in Annapolis than in the county and state overall. As of the first quarter of 2019, the average industrial/flex vacancy rate was 3.6 percent in Annapolis, as compared to 8.7 percent in Anne Arundel County and 6.9 percent in the state.

Figure 47: Average Industrial/Flex Vacancy Rates, 2010 – Q1 2019

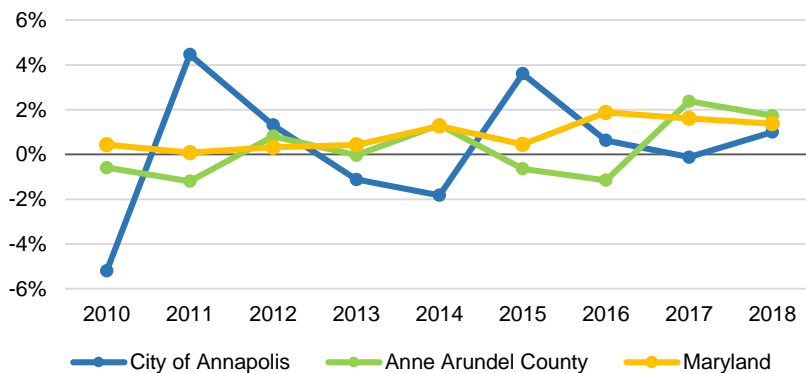


Sources: CoStar; BAE, 2019.

Absorption

Figure 48 illustrates the net absorption rates for industrial/flex space in all three geographies from 2010 to 2018. In 2010, the net absorption rate was relatively low in Annapolis (negative 5.2 percent), which was driven by the relatively high vacancy rate discussed in the previous section. In the following years, Annapolis' net absorption rate behaved somewhat erratically, alternating between positive and negative values. In 2018, the net absorption rate had settled at one percent, which is comparable with the industrial/flex net absorption rates in the county and state.

Figure 48: Industrial/Flex Net Absorption Rates, 2010 – 2018



Sources: CoStar; BAE, 2019.

APPENDIX

Exhibit A-1: Detailed Household Composition Data, 2010 – 2018

	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
City of Annapolis					
Family Households	8,770	54.4%	8,849	53.9%	0.9%
Non-Family Households	7,360	45.6%	7,558	46.1%	2.7%
Total Households	16,130	100%	16,407	100%	1.7%

	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
Anne Arundel County					
Family Households	139,262	69.8%	148,131	69.1%	6.4%
Non-Family Households	60,116	30.2%	66,270	30.9%	10.2%
Total Households	199,378	100%	214,401	100%	7.5%

	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
State of Maryland					
Family Households	1,447,002	67.1%	1,506,687	66.5%	4.1%
Non-Family Households	709,409	32.9%	759,794	33.5%	7.1%
Total Households	2,156,411	100%	2,266,481	100%	5.1%

Sources: Esri Business Analyst, 2019; BAE, 2019.

Exhibit A-3: Detailed Race and Ethnicity Data, 2010 – 2018

City of Annapolis	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
Hispanic/Latino (a)	6,445	16.8%	8,143	20.5%	26.3%
Not Hispanic/Latino	31,930	83.2%	31,609	79.5%	-1.0%
White	20,516	53.5%	19,374	48.7%	-5.6%
Black/African American	9,854	25.7%	10,490	26.4%	6.5%
Native American	51	0.1%	50	0.1%	-2.0%
Asian	789	2.1%	861	2.2%	9.1%
Native Hawaiian/Pacific Islander	9	0.0%	11	0.0%	22.2%
Other	79	0.2%	74	0.2%	-6.3%
Two or More Races	632	1.6%	749	1.9%	18.5%
Total Population (b)	38,375	100%	39,751	100%	3.6%

Anne Arundel County	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
Hispanic/Latino (a)	32,902	6.1%	47,543	8.1%	44.5%
Not Hispanic/Latino	504,754	93.9%	536,080	91.9%	6.2%
White	389,386	72.4%	394,231	67.5%	1.2%
Black/African American	81,819	15.2%	98,786	16.9%	20.7%
Native American	1,365	0.3%	1,479	0.3%	8.4%
Asian	18,154	3.4%	23,383	4.0%	28.8%
Native Hawaiian/Pacific Islander	392	0.1%	466	0.1%	18.9%
Other	880	0.2%	933	0.2%	6.0%
Two or More Races	12,758	2.4%	16,802	2.9%	31.7%
Total Population (b)	537,656	100%	583,623	100%	8.5%

State of Maryland	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
Hispanic/Latino (a)	470,632	8.2%	636,157	10.4%	35.2%
Not Hispanic/Latino	5,302,920	91.8%	5,483,029	89.6%	3.4%
White	3,157,958	54.7%	3,078,321	50.3%	-2.5%
Black/African American	1,674,229	29.0%	1,811,981	29.6%	8.2%
Native American	13,815	0.2%	14,543	0.2%	5.3%
Asian	316,694	5.5%	404,341	6.6%	27.7%
Native Hawaiian/Pacific Islander	2,412	0.0%	2,907	0.0%	20.5%
Other	11,972	0.2%	12,207	0.2%	2.0%
Two or More Races	125,840	2.2%	158,729	2.6%	26.1%
Total Population (b)	5,773,552	100%	6,119,186	100%	6.0%

Notes:

(a) Includes all races for those of Hispanic/Latino background.

(b) Totals may not match other tables due to independent rounding.

Sources: Esri Business Analyst 2019; BAE, 2019.

Exhibit A-4: Detailed Educational Attainment Data, 2018

Educational Attainment	City of Annapolis		Anne Arundel County		State of Maryland	
	Number	Percent	Number	Percent	Number	Percent
Less than 9th Grade	1,165	4.2%	9,102	2.2%	167,599	4.0%
9th to 12th Grade, No Diploma	1,760	6.3%	21,114	5.2%	238,274	5.6%
High School Graduate (incl. Equivalency)	5,763	20.7%	99,263	24.4%	1,073,015	25.4%
Some College, No Degree	4,361	15.6%	80,274	19.8%	791,173	18.7%
Associate Degree	1,532	5.5%	30,956	7.6%	276,347	6.5%
Bachelor's Degree	7,145	25.6%	94,379	23.2%	883,822	20.9%
Graduate/Professional Degree	6,175	22.1%	70,903	17.5%	800,018	18.9%
Total Population 25+ (a)	27,901	100%	405,991	100%	4,230,248	100%
Population 25+ High School Graduate (incl. Equivalency) or Higher (%)		89.5%		92.6%		90.4%
Population 25+ with Bachelor's Degree or Higher (%)		47.7%		40.7%		39.8%

Note:

(a) Totals may not match other tables due to independent rounding.

Sources: Esri Business Analyst, 2019; BAE, 2019.

Exhibit A-5: Detailed Household Income Data, 2018

Income Category	City of Annapolis		Anne Arundel County		State of Maryland	
	Number	Percent	Number	Percent	Number	Percent
Less than \$15,000	1,398	8.5%	10,524	4.9%	143,154	6.6%
\$15,000-\$24,999	1,124	6.9%	9,822	4.6%	146,999	6.8%
\$25,000-\$34,999	1,096	6.7%	10,627	5.0%	222,948	10.3%
\$35,000-\$49,999	1,490	9.1%	17,237	8.0%	364,136	16.8%
\$50,000-\$74,999	2,560	15.6%	32,247	15.0%	306,939	14.2%
\$75,000-\$99,999	2,141	13.1%	31,076	14.5%	429,620	19.8%
\$100,000-\$149,999	2,952	18.0%	48,619	22.7%	221,807	10.2%
\$150,000-\$199,999	1,510	9.2%	25,968	12.1%	249,316	11.5%
\$200,000 or more	2,135	13.0%	28,270	13.2%	79,833	3.7%
Total Households (a)	16,406	100%	214,390	100%	2,164,752	100%
Median HH Income		\$80,010		\$95,598		\$79,833
Per Capita Income		\$46,602		\$44,264		\$39,534

Note:

(a) Totals may not match other tables due to independent rounding.

Sources: Esri Business Analyst, 2019; BAE, 2019.

Exhibit A-6: Detailed Housing Tenure Data, 2010 – 2018

	2010		2018		% Change 2010-2018
	Number	Percent	Number	Percent	
City of Annapolis					
Owner-Occupied	8,168	50.6%	8,346	50.9%	2.2%
Renter-Occupied	7,962	49.4%	8,061	49.1%	1.2%
Total Occupied Units	16,130	100%	16,407	100%	1.7%
Anne Arundel County					
Owner-Occupied	148,006	74.2%	156,592	73.0%	5.8%
Renter-Occupied	51,372	25.8%	57,809	27.0%	12.5%
Total Occupied Units	199,378	100%	214,401	100%	7.5%
State of Maryland					
Owner-Occupied	1,455,775	67.5%	1,495,282	66.0%	2.7%
Renter-Occupied	700,636	32.5%	771,199	34.0%	10.1%
Total Occupied Units	2,156,411	100%	2,266,481	100%	5.1%

Sources: Esri Business Analyst, 2019; BAE, 2019.

Exhibit A-7: Detailed Housing Units by Structure Data, 2010 – 2018

Type of Residence	City of Annapolis		Anne Arundel County		State of Maryland	
	Number	Percent	Number	Percent	Number	Percent
Single Family Detached	6,436	37.1%	134,701	61.0%	1,250,376	51.5%
Single Family Attached	3,918	22.6%	42,104	19.1%	520,084	21.4%
Multifamily 2 Units	419	2.4%	1,698	0.8%	36,648	1.5%
Multifamily 3-19 Units	4,436	25.6%	4,436	2.0%	375,948	15.5%
Multifamily 20-49 Units	746	4.3%	746	0.3%	52,746	2.2%
Multifamily 50+	1,403	8.1%	1,403	0.6%	154,785	6.4%
Mobile Home/Other (a)	0	0.0%	4,413	2.0%	36,427	1.5%
Total All Housing Units	17,358	100%	220,641	86%	2,427,014	100%
Single Family Housing Units	10,354	59.6%	176,805	80.1%	1,770,460	72.9%
Multifamily Housing Units	7,004	40.4%	8,283	3.8%	620,127	25.6%

Note:

(a) Includes boats, RVs, vans, or any other non-traditional residences.

Sources: U.S. Census Bureau, American Community Survey 2013-2017 Five-Year Sampling data, B25024; BAE, 2019.

**Exhibit A-8: Detailed Data on Housing Units by Year Built, 2013 – 2017
Five-Year Data**

Year Built	City of Annapolis		Anne Arundel County		State of Maryland	
	Number	Percent	Number	Percent	Number	Percent
1939 or Earlier	2,588	14.9%	11,222	5.1%	293,679	12.1%
1940-1949	873	5.0%	9,447	4.3%	129,556	5.3%
1950-1959	1,953	11.3%	24,214	11.0%	282,354	11.6%
1960-1969	2,388	13.8%	25,137	11.4%	280,785	11.6%
1970-1979	3,340	19.2%	37,534	17.0%	348,846	14.4%
1980-1989	1,933	11.1%	35,388	16.0%	376,162	15.5%
1990-1999	2,044	11.8%	39,356	17.8%	353,057	14.5%
2000-2009	2,004	11.5%	28,523	12.9%	288,152	11.9%
2010-2013	202	1.2%	6,940	3.1%	55,016	2.3%
2014 or Later	33	0.2%	2,880	1.3%	19,407	0.8%
Total Housing Units	17,358	100%	220,641	100%	2,427,014	100%
Built before 1980	11,142	64.2%	107,554	48.7%	1,335,220	55.0%
Built after 2010	235	1.4%	9,820	4.5%	74,423	3.1%
Median Year Built	1973		1981		1977	

Sources: U.S. Census Bureau, American Community Survey 2013-2017 Five-Year Sampling Data, B25034; BAE, 2019.

Exhibit A-9: Housing Cost Burden by Household Income Level and Tenure, City of Annapolis, 2011-2015

City of Annapolis	Renter-Occupied Units		Owner-Occupied Units		All Occupied Units	
	Number	Percent	Number	Percent	Number	Percent
Household Income <=30% HAMFI	1,505	100%	520	100%	2,025	100%
With ≤ 30% Housing Cost Burden	300	20.0%	0	0.0%	300	14.9%
With > 30%, but ≤ 50% Housing Cost Burden	150	10.0%	110	21.2%	260	12.9%
With > 50% Housing Cost Burden	985	65.7%	330	63.5%	1,315	65.1%
Not Computed (No or Negative Income)	65	4.3%	80	15.4%	145	7.2%
Household Income >30% to <=50% HAMFI	1,060	100%	555	100%	1,615	100%
With ≤ 30% Housing Cost Burden	345	32.7%	120	21.6%	465	28.9%
With > 30%, but ≤ 50% Housing Cost Burden	260	24.6%	145	26.1%	405	25.2%
With > 50% Housing Cost Burden	450	42.7%	290	52.3%	740	46.0%
Household Income >50% to <=80% HAMFI	1,330	100%	915	100%	2,245	100%
With ≤ 30% Housing Cost Burden	255	19.2%	375	41.0%	630	28.1%
With > 30%, but ≤ 50% Housing Cost Burden	945	71.1%	325	35.5%	1,270	56.6%
With > 50% Housing Cost Burden	130	9.8%	215	23.5%	345	15.4%
Household Income >80% to <=120% HAMFI	1,345	100%	1,275	100%	2,620	100%
With ≤ 30% Housing Cost Burden	1,000	74.1%	705	55.1%	1,705	64.8%
With > 30%, but ≤ 50% Housing Cost Burden	350	25.9%	410	32.0%	760	28.9%
With > 50% Housing Cost Burden	0	0.0%	165	12.9%	165	6.3%
Household Income >120% HAMFI	2,330	100%	4,945	100%	7,275	100%
With ≤ 30% Housing Cost Burden	2,155	92.5%	4,565	92.4%	6,720	92.4%
With > 30%, but ≤ 50% Housing Cost Burden	145	6.2%	310	6.3%	455	6.3%
With > 50% Housing Cost Burden	30	1.3%	65	1.3%	95	1.3%
Total Households (a)	7,570	100%	8,210	100%	15,780	100%
With ≤ 30% Housing Cost Burden	4,055	53.6%	5,765	70.2%	9,820	62.3%
With > 30%, but ≤ 50% Housing Cost Burden	1,850	24.5%	1,300	15.8%	3,150	20.0%
With > 50% Housing Cost Burden	1,595	21.1%	1,065	13.0%	2,660	16.9%
Not Computed (No or Negative Income)	65	0.9%	80	1.0%	145	0.9%

Note:

(a) Figures may not sum to totals due to rounding.

Sources: U.S. Department of Housing and Urban Development, CHAS, 2011-2015; BAE, 2019.

Exhibit A-10: Housing Cost Burden by Household Income Level and Tenure, Anne Arundel County, 2011-2015

Anne Arundel County	Renter-Occupied Units		Owner-Occupied Units		All Occupied Units	
	Number	Percent	Number	Percent	Number	Percent
Household Income <=30% HAMFI	8,015	100%	8,275	100%	16,290	100%
With ≤ 30% Housing Cost Burden	1,705	21.3%	730	8.8%	2,435	14.9%
With > 30%, but ≤ 50% Housing Cost Burden	495	6.2%	1,450	17.5%	1,945	11.9%
With > 50% Housing Cost Burden	5,325	66.4%	5,160	62.4%	10,485	64.3%
Not Computed (No or Negative Income)	495	6.2%	935	11.3%	1,430	8.8%
Household Income >30% to <=50% HAMFI	7,010	100%	9,435	100%	16,445	100%
With ≤ 30% Housing Cost Burden	1,060	15.1%	3,590	38.0%	4,650	28.3%
With > 30%, but ≤ 50% Housing Cost Burden	2,240	31.9%	1,885	20.0%	4,125	25.1%
With > 50% Housing Cost Burden	3,715	53.0%	3,960	42.0%	7,675	46.7%
Household Income >50% to <=80% HAMFI	9,650	100%	14,975	100%	24,625	100%
With ≤ 30% Housing Cost Burden	2,665	27.6%	6,970	46.5%	9,635	39.1%
With > 30%, but ≤ 50% Housing Cost Burden	5,775	59.9%	4,850	32.4%	10,625	43.2%
With > 50% Housing Cost Burden	1,205	12.5%	3,155	21.1%	4,360	17.7%
Household Income >80% to <=120% HAMFI	11,185	100%	26,375	100%	37,560	100%
With ≤ 30% Housing Cost Burden	7,940	70.9%	16,760	63.5%	24,700	65.7%
With > 30%, but ≤ 50% Housing Cost Burden	3,115	27.8%	7,905	30.0%	11,020	29.3%
With > 50% Housing Cost Burden	140	1.3%	1,715	6.5%	1,855	4.9%
Household Income >120% HAMFI	17,085	100%	91,320	100%	108,405	100%
With ≤ 30% Housing Cost Burden	16,170	94.6%	84,170	92.2%	100,340	92.5%
With > 30%, but ≤ 50% Housing Cost Burden	875	5.1%	6,445	7.1%	7,320	6.8%
With > 50% Housing Cost Burden	45	0.3%	715	0.8%	760	0.7%
Total Households (a)	52,950	100%	150,385	100%	203,335	100%
With ≤ 30% Housing Cost Burden	29,540	55.8%	112,220	74.6%	141,760	69.7%
With > 30%, but ≤ 50% Housing Cost Burden	12,500	23.6%	22,535	15.0%	35,035	17.2%
With > 50% Housing Cost Burden	10,430	19.7%	14,705	9.8%	25,135	12.4%
Not Computed (No or Negative Income)	495	0.9%	935	0.6%	1,430	0.7%

Note:

(a) Figures may not sum to totals due to rounding.

Sources: U.S. Department of Housing and Urban Development, CHAS, 2011-2015; BAE, 2019.

Exhibit A-11: Employment Projections, Maryland, 2018 – 2040

Jobs	Base Year (a)		Projected				% Change 2018-2040	Avg. Annual Growth Rate
	2018	2020	2025	2030	2035	2040		
Farm employment	15,608	15,500	15,300	14,800	14,500	14,100	-9.7%	-0.5%
Forestry, fishing, related activities, and other	6,328	6,300	6,100	6,100	6,000	6,000	-5.2%	-0.2%
Mining	5,396	5,400	5,200	4,900	4,600	4,400	-18.5%	-0.9%
Utilities	10,452	10,500	10,700	10,900	11,000	11,100	6.2%	0.3%
Construction	236,995	242,800	256,800	269,900	280,300	290,200	22.4%	0.9%
Manufacturing	110,336	108,400	105,100	101,200	97,500	93,900	-14.9%	-0.7%
Wholesale trade	98,931	99,700	101,600	102,900	104,400	106,000	7.1%	0.3%
Retail trade	356,785	359,600	364,700	368,300	370,200	372,700	4.5%	0.2%
Transportation and warehousing	105,442	107,300	109,600	111,800	113,800	116,200	10.2%	0.4%
Information	52,419	52,100	52,100	52,100	52,200	52,300	-0.2%	0.0%
Finance and insurance	183,379	185,900	190,800	192,600	194,300	196,000	6.9%	0.3%
Real estate and rental and leasing	177,240	178,800	182,500	184,500	186,000	188,000	6.1%	0.3%
Professional and technical services	369,730	376,700	395,600	408,700	421,400	435,700	17.8%	0.7%
Management of companies and enterprises	33,907	35,800	39,900	42,900	45,700	49,100	44.8%	1.7%
Administrative and waste services	238,212	244,200	259,500	271,000	282,900	296,400	24.4%	1.0%
Educational services	105,336	108,500	118,100	126,200	134,900	144,000	36.7%	1.4%
Health care and social assistance	454,281	464,400	488,900	509,100	529,500	550,900	21.3%	0.9%
Arts, entertainment, and recreation	97,012	100,200	107,100	112,200	117,400	123,000	26.8%	1.1%
Accommodation and food services	248,513	254,000	265,400	273,900	281,600	290,900	17.1%	0.7%
Other services, except public administration	222,639	227,200	237,000	245,100	253,200	262,800	18.0%	0.8%
Government and government enterprises	572,351	571,900	568,700	565,100	561,300	557,300	-2.6%	-0.1%
Total	3,701,292	3,755,200	3,880,700	3,974,200	4,062,700	4,161,000	12.4%	0.5%

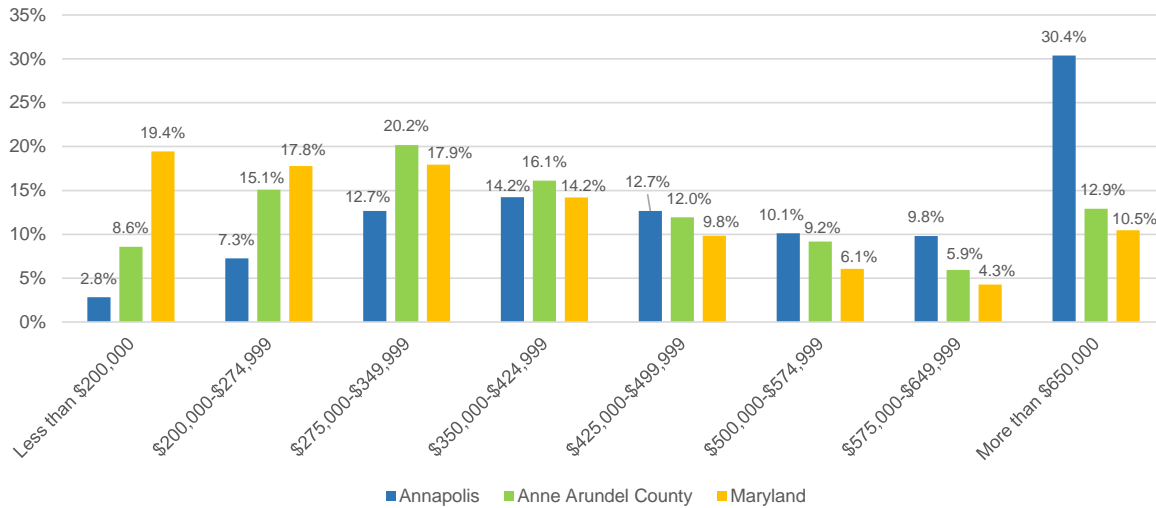
Notes:

Includes both full-time and part-time jobs.

(a) Based on data from U.S. BEA Table CA-25N, November 2014. Average annual growth rates for 2010 - 2040 were applied in order to produce an estimate for 2018.

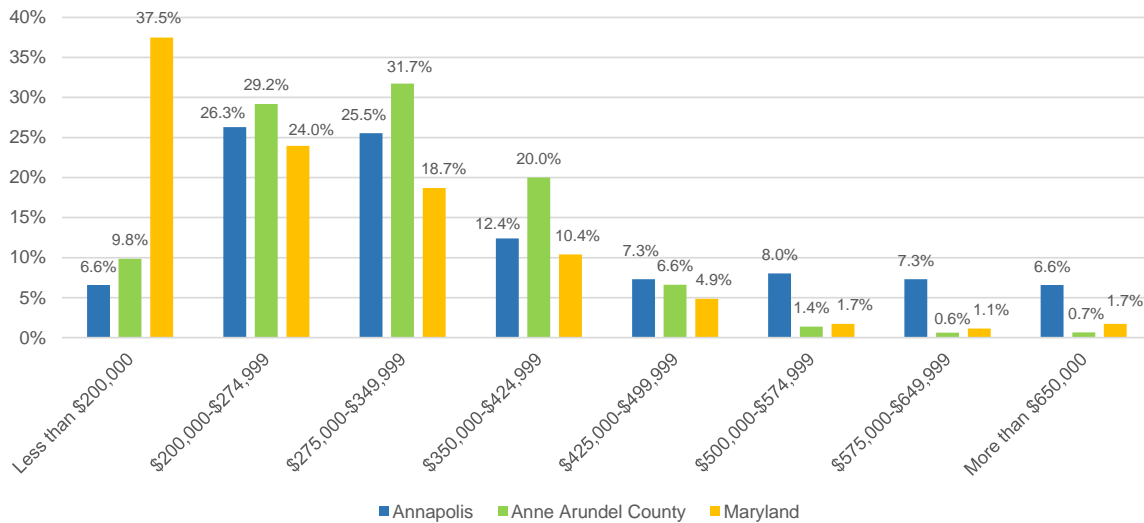
Sources: Maryland Department of Planning, Projections and State Data Center; BAE, 2019.

Exhibit A-12: Home Sale Price Distribution, May 2018 - April 2019 (Single Family Homes)



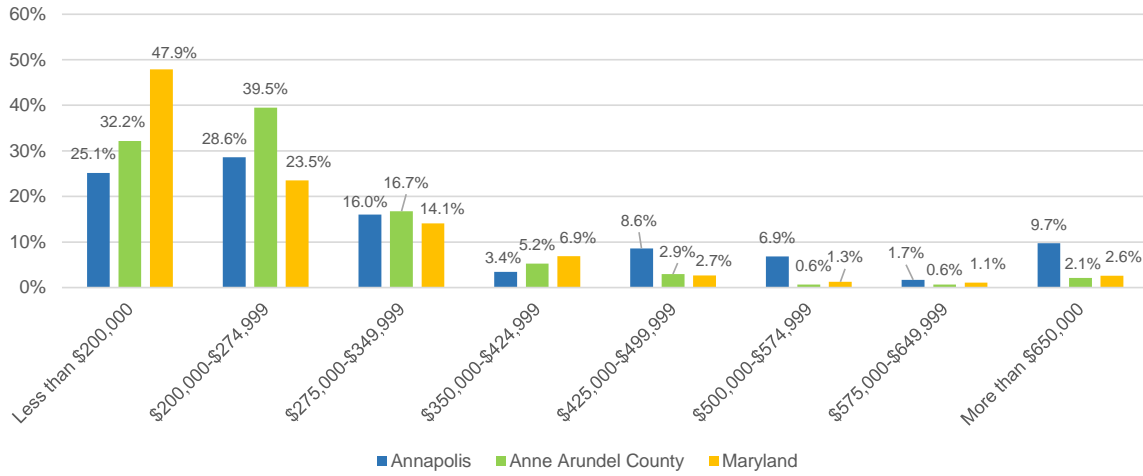
Note: Only Includes sales for which sale price and square footage data are available
 Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Exhibit A-13: Home Sale Price Distribution, May 2018 - April 2019 (Townhomes)



Note: Only Includes sales for which sale price and square footage data are available
 Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Exhibit A-14: Home Sale Price Distribution, May 2018 - April 2019 (Condominiums)



Note: Only Includes sales for which sale price and square footage data are available
 Sources: ListSource/CoreLogic; DQNews/Corelogic; BAE, 2019.

Exhibit A-15: Home Sales in the City of Annapolis, May 2018 – April 2019

Single Family Homes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	4	3	1	1	-	9	2.8%
\$200,000-\$274,999	11	8	1	3	-	23	7.3%
\$275,000-\$349,999	11	19	7	2	1	40	12.7%
\$350,000-\$424,999	1	19	21	4	-	45	14.2%
\$425,000-\$499,999	-	16	17	7	-	40	12.7%
\$500,000-\$574,999	-	5	9	10	8	32	10.1%
\$575,000-\$649,999	1	4	7	10	9	31	9.8%
More than \$650,000	1	3	17	42	33	96	30.4%
Total Number	29	77	80	79	51	316	100.0%
% Total	9.2%	24.4%	25.3%	25.0%	16.1%	100.0%	
Median Sale Price	\$270,000	\$362,500	\$450,000	\$682,500	\$800,000	\$500,000	
Average Sale Price	\$281,858	\$386,591	\$535,011	\$695,527	\$1,036,193	\$596,629	
Average Price/SF	\$318	\$322	\$309	\$283	\$285	\$302	
Townhomes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	1	6	2	-	-	9	6.6%
\$200,000-\$274,999	4	26	6	-	-	36	26.3%
\$275,000-\$349,999	-	17	17	1	-	35	25.5%
\$350,000-\$424,999	-	3	2	12	-	17	12.4%
\$425,000-\$499,999	1	-	1	7	1	10	7.3%
\$500,000-\$574,999	-	3	1	6	1	11	8.0%
\$575,000-\$649,999	-	4	4	2	-	10	7.3%
More than \$650,000	-	2	-	5	2	9	6.6%
Total Number	6	61	33	33	4	137	100.0%
% Total	4.4%	44.5%	24.1%	24.1%	2.9%	100.0%	
Median Sale Price	\$233,500	\$268,000	\$307,500	\$439,900	\$787,500	\$325,000	
Average Sale Price	\$261,167	\$312,001	\$335,511	\$549,680	\$807,500	\$387,156	
Average Price/SF	\$347	\$245	\$197	\$243	\$258	\$238	
Condos							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	20	24	-	-	-	44	25.1%
\$200,000-\$274,999	11	28	11	-	-	50	28.6%
\$275,000-\$349,999	8	15	5	-	-	28	16.0%
\$350,000-\$424,999	1	5	-	-	-	6	3.4%
\$425,000-\$499,999	3	12	-	-	-	15	8.6%
\$500,000-\$574,999	-	12	-	-	-	12	6.9%
\$575,000-\$649,999	-	2	1	-	-	3	1.7%
More than \$650,000	-	-	8	9	-	17	9.7%
Total Number	43	98	25	9	-	175	100.0%
% Total	24.6%	56.0%	14.3%	5.1%	-	100.0%	
Median Sale Price	\$225,000	\$250,000	\$282,000	\$840,000	-	\$260,000	
Average Sale Price	\$226,321	\$305,905	\$431,697	\$862,889	-	\$346,161	
Average Price/SF	\$499	\$253	\$256	\$384	-	\$321	

Sources: ListSource/CoreLogic; BAE, 2019.

Only includes sales for which sale price and square footage data are available.

Exhibit A-16: Home Sales in Anne Arundel County, May 2018 – April 2019

Single Family Homes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	146	229	122	33	9	539	8.6%
\$200,000-\$274,999	163	434	286	59	5	947	15.1%
\$275,000-\$349,999	56	443	598	161	8	1,266	20.2%
\$350,000-\$424,999	17	141	493	331	30	1,012	16.1%
\$425,000-\$499,999	6	37	204	421	82	750	12.0%
\$500,000-\$574,999	3	23	83	329	138	576	9.2%
\$575,000-\$649,999	2	10	23	154	184	373	5.9%
More than \$650,000	4	25	67	210	504	810	12.9%
Total Number	397	1,342	1,876	1,698	960	6,273	100.0%
% Total	6.3%	21.4%	29.9%	27.1%	15.3%	100.0%	
Median Sale Price	\$218,000	\$275,000	\$339,900	\$468,500	\$659,945	\$375,000	
Average Sale Price	\$229,469	\$311,778	\$358,051	\$500,567	\$803,901	\$446,822	
Average Price/SF	\$266	\$246	\$206	\$209	\$195	\$218	

Townhomes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	51	114	28	1	-	194	9.8%
\$200,000-\$274,999	10	325	224	16	-	575	29.2%
\$275,000-\$349,999	-	78	320	227	-	625	31.7%
\$350,000-\$424,999	-	18	78	296	2	394	20.0%
\$425,000-\$499,999	1	3	8	98	20	130	6.6%
\$500,000-\$574,999	-	3	2	13	9	27	1.4%
\$575,000-\$649,999	-	7	3	-	2	12	0.6%
More than \$650,000	-	1	2	5	5	13	0.7%
Total Number	62	549	665	656	38	1,970	100.0%
% Total	3.1%	27.9%	33.8%	33.3%	1.9%	100.0%	
Median Sale Price	\$133,875	\$240,000	\$290,000	\$365,000	\$482,500	\$302,250	
Average Sale Price	\$141,183	\$242,174	\$294,358	\$380,163	\$531,565	\$308,143	
Average Price/SF	\$160	\$188	\$170	\$165	\$162	\$173	

Condos							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	165	248	32	3	-	448	32.2%
\$200,000-\$274,999	13	376	152	9	-	550	39.5%
\$275,000-\$349,999	6	58	110	59	-	233	16.7%
\$350,000-\$424,999	-	22	22	29	-	73	5.2%
\$425,000-\$499,999	3	17	6	14	1	41	2.9%
\$500,000-\$574,999	-	5	1	3	-	9	0.6%
\$575,000-\$649,999	-	5	2	2	-	9	0.6%
More than \$650,000	-	-	15	9	5	29	2.1%
Total Number	187	731	340	128	6	1,392	100.0%
% Total	13.4%	52.5%	24.4%	9.2%	0.4%	100.0%	
Median Sale Price	\$165,000	\$225,000	\$265,000	\$345,000	\$1,035,000	\$235,000	
Average Sale Price	\$169,880	\$226,922	\$294,321	\$391,981	\$994,167	\$254,206	
Average Price/SF	\$197	\$183	\$175	\$171	\$288	\$182	

Sources: DQNews/CoreLogic; BAE, 2019.

Only includes sales for which sale price and square footage data are available.

Exhibit A-17: Home Sales in Maryland, May 2018 – April 2019

Single Family Homes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	1,775	4,708	2,646	1,133	220	10,482	19.4%
\$200,000-\$274,999	808	3,523	3,413	1,646	201	9,591	17.8%
\$275,000-\$349,999	411	2,537	3,401	2,855	467	9,671	17.9%
\$350,000-\$424,999	99	905	2,212	3,382	1,065	7,663	14.2%
\$425,000-\$499,999	17	260	860	2,614	1,548	5,299	9.8%
\$500,000-\$574,999	14	117	354	1,370	1,413	3,268	6.1%
\$575,000-\$649,999	6	53	185	780	1,278	2,302	4.3%
More than \$650,000	14	151	385	1,389	3,696	5,635	10.5%
Total Number	3,144	12,254	13,456	15,169	9,888	53,911	100.0%
% Total	5.8%	22.7%	25.0%	28.1%	18.3%	100.0%	
Median Sale Price	\$180,399	\$230,000	\$288,000	\$390,000	\$575,000	\$325,000	
Average Sale Price	\$189,412	\$243,301	\$305,282	\$421,470	\$680,152	\$385,884	
Average Price/SF	\$220	\$195	\$175	\$175	\$165	\$180	
Townhomes							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	1,308	5,978	1,962	362	56	9,666	37.5%
\$200,000-\$274,999	254	2,969	2,276	657	20	6,176	24.0%
\$275,000-\$349,999	43	1,280	2,071	1,388	38	4,820	18.7%
\$350,000-\$424,999	9	288	971	1,338	77	2,683	10.4%
\$425,000-\$499,999	9	106	276	766	97	1,254	4.9%
\$500,000-\$574,999	2	29	92	242	84	449	1.7%
\$575,000-\$649,999	-	22	62	150	57	291	1.1%
More than \$650,000	9	30	71	182	156	448	1.7%
Total Number	1,634	10,702	7,781	5,085	585	25,787	100.0%
% Total	6.3%	41.5%	30.2%	19.7%	2.3%	100.0%	
Median Sale Price	\$107,000	\$181,900	\$260,000	\$355,000	\$500,000	\$238,960	
Average Sale Price	\$162,768	\$190,794	\$272,557	\$369,753	\$562,597	\$257,413	
Average Price/SF	\$197	\$151	\$158	\$160	\$157	\$158	
Condos							
Sale Price Range	< 1,000 SF	1,000 - 1,499 SF	1,500 - 1,999 SF	2,000 - 2,999 SF	3,000 SF+	Total	% Total
Less than \$200,000	2,349	2,263	386	35	2	5,035	47.9%
\$200,000-\$274,999	453	1,399	555	66	3	2,476	23.5%
\$275,000-\$349,999	217	545	432	275	14	1,483	14.1%
\$350,000-\$424,999	57	285	173	173	34	722	6.9%
\$425,000-\$499,999	18	113	74	62	14	281	2.7%
\$500,000-\$574,999	8	47	36	33	11	135	1.3%
\$575,000-\$649,999	2	48	30	25	8	113	1.1%
More than \$650,000	8	49	85	96	38	276	2.6%
Total Number	3,112	4,749	1,771	765	124	10,521	100.0%
% Total	29.6%	45.1%	16.8%	7.3%	1.2%	100.0%	
Median Sale Price	\$147,000	\$204,000	\$265,000	\$350,000	\$462,500	\$205,000	
Average Sale Price	\$164,024	\$227,109	\$303,941	\$436,610	\$728,622	\$242,526	
Average Price/SF	\$207	\$187	\$180	\$182	\$201	\$191	

Sources: DQNews/CoreLogic; BAE, 2019.

Only includes sales for which sale price and square footage data are available.