HOUSEHOLD TAX ANALYSES

The following analyses illustrate the impact of selected County taxes on the "typical" household from FY 2013 to FY 2019. This period provides five years of actual data, estimates for FY 2018 based on year-to-date experience, and projections for FY 2019. Historical dollar amounts are converted to FY 2019 dollar equivalents for comparison purposes using the Consumer Price Index for All Urban Consumers (CPI-U) for the Washington-Baltimore area. The Washington metropolitan area has experienced average annual inflation of 1.0 percent from FY 2013 to FY 2017. Using a forecast from the Congressional Budget Office, inflation is projected to be 2.3 percent in both FY 2018 and FY 2019.

HOUSEHOLD TAXATION TRENDS: SELECTED CATEGORIES FY 2013 - FY 2019

The charts on the following pages show the trends in selected taxes (Real Estate Taxes, Personal Property Taxes, Sales Taxes and Consumer Utility Taxes) paid by the "typical" household in Fairfax County. The Real Estate Tax analysis includes the proposed FY 2019 Real Estate tax rate of \$1.155 per \$100 of assessed value. It is important to note that the following data are not intended to depict a comprehensive picture of a household's total tax burden in Fairfax County.

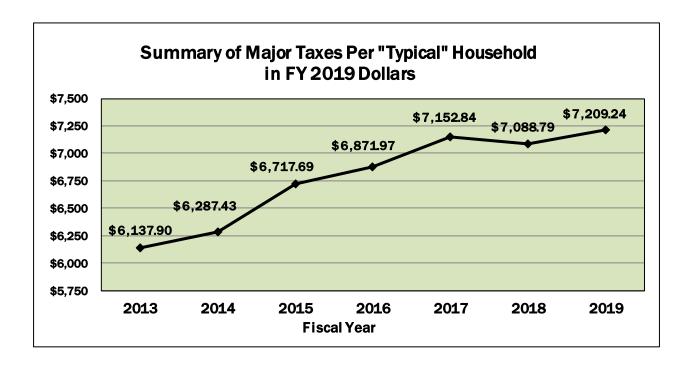
The "typical" household in Fairfax County is projected to pay \$7,209.24 in selected County General Fund taxes in FY 2019, \$120.45 more than in FY 2018 after adjusting for inflation. From FY 2013 to FY 2019, the inflation adjusted County taxes paid by the "typical" household have increased \$1071.34. Note that taxes paid in FY 2013 through FY 2019 reflect the Commonwealth's Personal Property Tax Relief Act, which reduces an individual's Personal Property Tax liability on vehicles valued up to \$20,000 (see the section entitled "Personal Property Tax per Typical Household" for more information.)

Summary of Major Taxes Per "Typical" Household

	Number of Households	Real Estate Tax in FY 2019 Dollars	Personal Property Tax in FY 2019 Dollars ¹	Sales Tax In FY 2019 Dollars	Consumer Utility Tax in FY 2019 Dollars	Total Taxes In FY 2019 Dollars ¹
FY 2013	399,500	\$5,267.44	\$354.47	\$454.93	\$61.06	\$6,137.90
FY 2014	401,000	\$5,431.29	\$353.40	\$441.92	\$60.82	\$6,287.43
FY 2015	403,900	\$5,826.43	\$364.82	\$466.71	\$59.73	\$6,717.69
FY 2016	402,400	\$5,966.01	\$379.29	\$468.58	\$58.09	\$6,871.97
FY 2017	405,800	\$6,262.54	\$377.64	\$455.54	\$57.12	\$7,152.84
FY 2018 ²	408,300	\$6,191.45	\$387.77	\$453.89	\$55.68	\$7,088.79
FY 2019 ²	411,200	\$6,320.38	\$382.97	\$451.57	\$54.32	\$7,209.24

¹ Personal Property Taxes paid incorporate reductions in Personal Property Tax bills sent to citizens under the state's Personal Property Tax Relief program. The reductions were 63.0 percent in both FY 2013 and FY 2014, 62.0 percent in FY 2015, FY 2016, and FY 2017, and 60.5 percent in FY 2018. The reduction in FY 2019 is anticipated to be set at 60.0 percent. The difference in revenue will be paid to the County by the Commonwealth.

² Estimated.



Real Estate Tax Per "Typical" Household

	Mean Assessed Value of Residential Property	Tax Rate per \$100	Tax per Household	Tax per Household in FY 2019 Dollars
FY 2013	\$449,964	\$1.075	\$4,837.11	\$5,267.44
FY 2014	\$467,394	\$1.085	\$5,071.22	\$5,431.29
FY 2015	\$500,146	\$1.090	\$5,451.59	\$5,826.43
FY 2016	\$519,134	\$1.090	\$5,658.56	\$5,966.01
FY 2017	\$529,567	\$1.130	\$5,984.11	\$6,262.54
FY 2018 ¹	\$535,597	\$1.130	\$6,052.25	\$6,191.45
FY 2019 ¹	\$547,219	\$1.155	\$6,320.38	\$6,320.38

¹ Estimated.

As shown in the preceding table, Real Estate Taxes per "typical" household are projected to increase \$268.13 between FY 2018 and FY 2019 to \$6,320.38, not adjusting for inflation. This increase is the result of the 2.17 percent increase in the mean assessed value of residential properties within the County and an increase in the proposed General Fund Real Estate Tax rate from \$1.13 to \$1.155 per \$100 of assessed value.

Since FY 2013, Real Estate Taxes have increased \$1,483.27, or an average annual increase of 4.6 percent per year, not adjusting for inflation. Adjusted for inflation, Real Estate Taxes per "typical" household are \$1,052.94 more than in FY 2013, an average annual increase of 3.1 percent.

Personal Property Tax Per "Typical" Household

				_	After PPTRA	
	Personal Property Taxes Attributed to Individuals	Number of Households	Tax per Household	Tax per Household in FY 2019 Dollars	Adjusted Tax per Household ¹	Adjusted Tax per Household in FY 2019 Dollars ¹
FY 2013	\$351,467,917	399,500	\$879.77	\$958.04	\$325.51	\$354.47
FY 2014	\$357,621,289	401,000	\$891.82	\$955.14	\$329.97	\$353.40
FY 2015	\$362,819,728	403,900	\$898.29	\$960.06	\$341.35	\$364.82
FY 2016	\$380,942,855	402,400	\$946.68	\$998.12	\$359.74	\$379.29
FY 2017	\$385,350,570	405,800	\$949.61	\$993.79	\$360.85	\$377.64
FY 2018 ²	\$391,812,132	408,300	\$959.62	\$981.69	\$379.05	\$387.77
FY 2019 ²	\$393,690,775	411,200	\$957.42	\$957.42	\$382.97	\$382.97

¹ Personal Property Taxes paid incorporate reductions in Personal Property Tax bills sent to citizens under the state's Personal Property Tax Relief program. The reductions were 63.0 percent in both FY 2013 and FY 2014, 62.0 percent in FY 2015, FY 2016, and FY 2017, and 60.5 percent in FY 2018. The reduction in FY 2019 is anticipated to be set at 60.0 percent. The difference in revenue will be paid to the County by the Commonwealth.

Personal Property Taxes paid by the "typical" household are shown in the preceding chart. Personal Property Taxes paid reflect the Commonwealth of Virginia's Personal Property Tax Relief Act (PPTRA), which reduces an individual's Personal Property Tax payment. In FY 2007, statewide reimbursements were capped at \$950 million, with each locality receiving a percentage allocation from this fixed amount determined by the locality's share of statewide tax year 2004 collections. Each year, County staff must determine the reimbursement percentage based on the County's fixed reimbursement of \$211.3 million and an estimate of the number and value of vehicles that will be eligible for tax relief. As the number and value of vehicles in the County vary, the percentage attributed to the state will fluctuate. Based on a County staff analysis, the effective state reimbursement percentage was 63.0 percent in both FY 2013 and FY 2014, 62.0 percent in FY 2015, FY 2016, and FY 2017, and 60.5 percent in FY 2018. The reimbursement percentage in FY 2019 is anticipated to be set at 60.0 percent.

The tax per household analysis shown above assumes that the "typical" household's vehicle(s) are valued at \$20,000 or less in order to qualify for a reduction under the PPTRA. Adjusted for inflation, Personal Property Taxes per "typical" household are projected to decrease \$4.80 between FY 2018 and FY 2019 to \$382.97. The FY 2019 Personal Property Tax per "typical" household is \$57.46 higher than what was paid in FY 2013, not adjusting for inflation. When adjustments are made for inflation, the "typical" household is projected to pay \$28.50 more in FY 2019 than FY 2013. There have been no changes to the Personal Property Tax rate of \$4.57 per \$100 of assessed value for individuals during the FY 2013 to FY 2019 period, except for mobile homes and boats which are taxed at the prevailing Real Estate Tax rate each fiscal year.

² Estimated.

The <u>FY 2019 Advertised Budget Plan</u> also includes an annual Vehicle Registration Fee on motor vehicles. The fee will be levied at \$33 for passenger vehicles that weigh 4,000 pounds or less and \$38 on passenger vehicles that weight more than 4,000 pounds. The fee for motorcycles is \$18.

Sales Tax Per "Typical" Household

	Total Sales Tax	Number of Households	Tax per Household	Tax per Household in FY 2019 Dollars
FY 2013	\$166,893,847	399,500	\$417.76	\$454.93
FY 2014	\$165,459,545	401,000	\$412.62	\$441.92
FY 2015	\$176,374,517	403,900	\$436.68	\$466.71
FY 2016	\$178,839,665	402,400	\$444.43	\$468.58
FY 2017	\$176,640,592	405,800	\$435.29	\$455.54
FY 2018 ¹	\$181,157,888	408,300	\$443.69	\$453.89
FY 2019 ¹	\$185,686,835	411,200	\$451.57	\$451.57

¹ Estimated.

As shown in the table above, FY 2019 Sales Tax paid per household is estimated to be \$451.57 or \$33.81 more than FY 2013, not adjusting for inflation. This represents an average annual increase of 1.3 percent since FY 2013. Adjusting for inflation, FY 2019 Sales Tax paid per household is essentially unchanged compared to FY 2013, decreasing just \$3.36 during this period.

Because this analysis assumes all Sales Taxes are paid by individuals living in Fairfax County, the impact on the typical household is somewhat overstated. A segment of the County's Sales Tax revenues are paid by businesses and non-residents who either work in the County or are visiting. As the County becomes more of a major employment hub in the region, the contribution of non-residents to the County's Sales Tax revenues will continue to expand.

Consumer Utility Taxes - Gas & Electric Per "Typical" Household

Total Consumer				
Utility Taxes				
Paid by				
Residential				

	Paid by Residential Consumers	Number of Households	Tax per Household	Tax per Household in FY 2019 Dollars
FY 2013	\$22,399,854	399,500	\$56.07	\$61.06
FY 2014	\$22,771,865	401,000	\$56.79	\$60.82
FY 2015	\$22,573,422	403,900	\$55.89	\$59.73
FY 2016	\$22,171,148	402,400	\$55.10	\$58.09
FY 2017	\$22,148,894	405,800	\$54.58	\$57.12
FY 2018 ¹	\$22,223,766	408,300	\$54.43	\$55.68
FY 2019 ¹	\$22,334,885	411,200	\$54.32	\$54.32

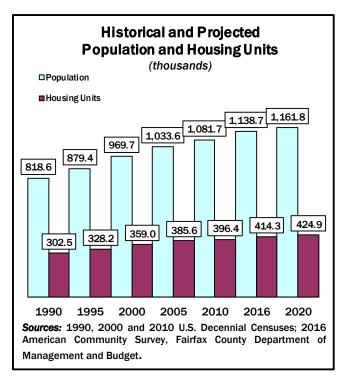
¹ Estimated.

Based on data from the utility companies, it is estimated that residential consumers pay approximately 43.0 percent of the Electric Taxes and 73.0 percent of the Gas Taxes received by the County. Utility Taxes per household have remained relatively stable from FY 2013 through FY 2019. In FY 2019, the "typical" household will pay an estimated \$54.32 in Consumer Utility Taxes, \$1.75 less than in FY 2013, without adjusting for inflation. From FY 2013 to FY 2019, the "typical" household has experienced an average annual decrease of 1.9 percent, or \$6.74 over the period, adjusted for inflation.

DEMOGRAPHIC TRENDS

Demographic trends strongly influence Fairfax County's budget. Changing demographics or population characteristics affect both the cost of government services provided, as well as tax revenues. The descriptions and charts contained in this section provide some examples of how various demographic trends affect the Fairfax County budget. Although these trends are discussed separately, the interactions between these demographic trends ultimately influence the direction of expenditures and revenues. While certain demographic trends may suggest reduced expenditures in a program area, other demographic trends may increase program expenditures at the same time. The following information is based on the most recent data available at the time of publication.

Population and Housing

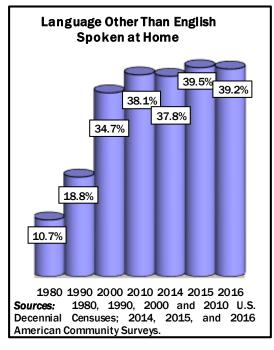


Some of the strongest demographic influences on Fairfax County expenditures and revenues are those associated with the growth in total population and housing units. From 1990 to 2000, the County added over 151,100 residents. This increase in Fairfax County's population between 1990 and 2000 is comparable to adding more than the entire population of the City of Alexandria to the County. The County's population growth decelerated, adding 112,000 residents between 2000 and 2010. Based on the 2016 American Community Survey, Fairfax County had a population of 1,138,652 residents in 2016. Between 2010 and 2020, the population of Fairfax County is expected to increase over 80,100 residents to 1,161,796.

Between 1990 and 2000, housing units grew 18.7 percent, just slightly above population growth of 18.5 percent. From 2000 to 2010, this trend reversed, with population growth at 11.5 percent,

surpassing housing unit growth of 10.4 percent. From 2010 to 2020, population and housing units are anticipated to grow 7.4 percent and 7.2 percent, respectively. Many County programs, such as fire prevention, transit, water and sewer, are impacted by the number of housing units. Other program areas such as libraries, recreation, and schools, are impacted more by the growth in population.

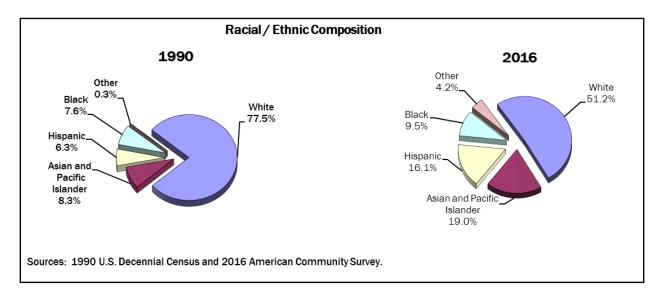
Cultural Diversity



Fairfax County's population is rich in diversity. Based on the 2016 American Community Survey, the number of persons speaking a language other than English at home is estimated to be approximately 417,469 residents, or 39.2 percent of the County's population age five years or older. In 1980, less than 11 percent of residents age five years or older spoke a language other than English at home. This percentage rose to nearly 19 percent in 1990. By 2000, it was 34.7 percent. The most frequently spoken languages other than English include Spanish, Korean, Vietnamese and Chinese.

These language trends affect many County programs. For example, the Fairfax County Public Schools have experienced rapid growth in English for Speakers of Other Languages (ESOL) programs. Between FY 2000 and FY 2017, total public school membership increased 21.3 percent, while ESOL enrollment grew 107.1 percent. Also, general government services such as the courts, police, fire

and emergency medical services, as well as human service programs and tax related programs are impacted by the County's cultural and language diversity. The County continues to develop various means to effectively communicate with residents for whom English is not their native language.



In 1990, racial and ethnic minorities comprised less than a quarter of Fairfax County's population. In 2016, almost 49 percent of County's population consisted of ethnic minorities. The two fastest growing groups are Hispanics and Asians and Pacific Islanders, which have both more than doubled their share of the County's population between 1990 and 2016. These two minority groups are anticipated to remain the County's most rapidly expanding racial or ethnic groups during the next five years. As the County's population continues to become more diverse, the number of persons speaking a language other than English at home is anticipated to continue to grow and impact a wide range of services provided by the County.

Population Age Distribution

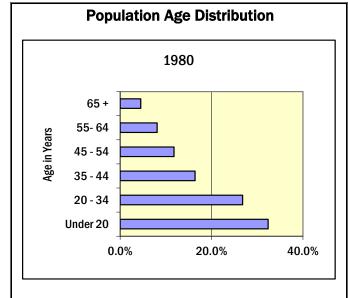
Fairfax County's population has grown steadily older since 1980. Between 1980 and 2010, the percentage of children age 19 years and younger became a smaller proportion of the total population, dropping from 32.4 percent to 26.4 percent in 2010. It is anticipated that the percentage of children will decrease somewhat through 2020, with the percentage of those 19 years old and younger decreasing slightly to 25.1 percent.

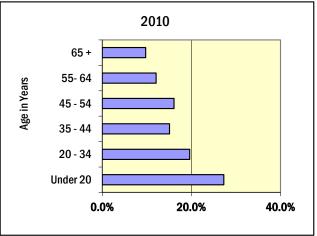
The number of adults age 45 to 54 years expanded rapidly between 1980 and 2010, as the first "baby boomers" began to enter into their fifties. This age group's sharp growth trend will begin to reverse between 2010 and 2020, as the final "baby boomers" enter this age group and the oldest of the "baby boom" generation move to the next age group.

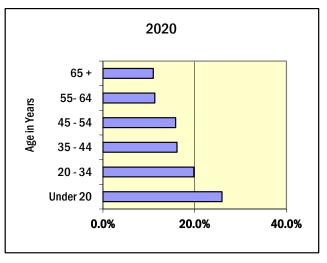
Between 1980 and 2010, the seniors' population, those age 65 years and older, more than doubled in size and was the fastest growing segment of County residents. This age group is expected to continue increasing in size, with its share of the population reaching 15.9 percent by 2020.

The age distribution of Fairfax County's population greatly impacts the demand and, therefore, the costs of providing many local government services. For example, the number, location, and size of school and day care facilities are directly affected by the number proportion of children. Transportation expenditures for both street maintenance and public transportation are influenced by the number and proportion of driving age adults and their work locations. The growing number of persons age 65 years and older will influence expenditures for programs such as adult day care, senior centers, and health care.

Public safety programs also are impacted by age demographics. Crime rates, for example,



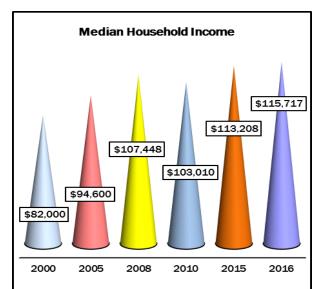




Sources: 1980 and 2010 U.S. Decennial Censuses and 2020 Fairfax County Department of Management and Budget.

are highest among persons age 15 to 34. In addition, the youngest and the oldest drivers have the greatest probability of being involved in traffic accidents.

Household Income



Sources: 2000 and 2010 U.S. Decennial Censuses; 1998 Household Survey; 2000 Fairfax-Falls Church Community Assessment Survey; 2005, 2008, 2010, 2015 and 2016 American Community Surveys.

 The median household income in Fairfax County was \$115,717 in 2016, one of the highest in the nation for counties with a population of 250,000 or more. Fairfax County's 2016 median household income increased 2.2 percent compared to 2015. Consequently, households in Fairfax County had more disposable income to spend or save. Since 2000, median household income in the County has risen at a rate of 2.0 percent per year.

Income growth does not directly impact Fairfax County tax revenues because localities in Virginia do not tax income; however, revenues are indirectly affected because changes in income impact the County's economic health. Tax categories affected by income include Sales Tax receipts, Residential Real Estate Taxes and Personal Property Taxes.

Incomes peak among persons aged 45 to 64 years, who are in their prime earning years. As the number of households headed by this age group is projected to shrink during the next 10 years, various tax revenues may be impacted. Sales Tax revenues, for instance, may experience more modest growth. The median income for heads of households between the ages of 45 and 64 was \$137,412 in 2016.

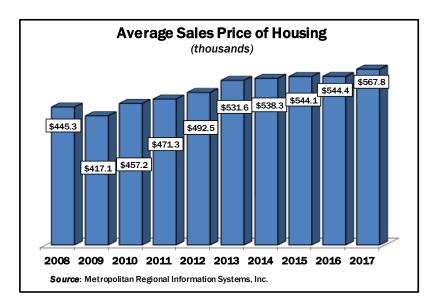
The median household income of people age 65 or older drops to \$95,856. A population containing a larger number of seniors, age 65 and older, will put downward pressure on tax revenues. These senior households are typically on a fixed income and have less discretionary money to spend. In addition, persons in this age group own fewer motor vehicles and may qualify for Real Estate Tax Relief.

ECONOMIC TRENDS

Housing Market

In FY 2019, Real Estate Tax revenue is projected to comprise over 65 percent of all General Fund Revenues and residential properties make up the majority of the value of the Real Estate Tax base. As a result, the changes in the residential housing market have a very significant impact on Fairfax County's revenues.

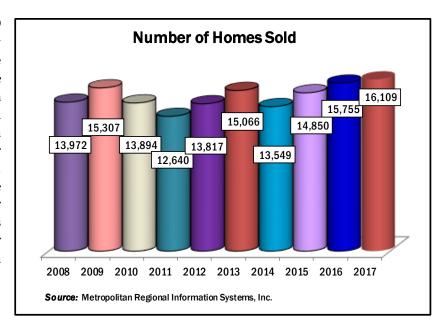
Average Sales Price of Housing



Based on data from the Metropolitan Regional Information Systems, Inc. (MRIS), the average sales price for all types of homes sold in Fairfax County increased 4.3 percent from \$544,416 in 2016 to \$567,829 in 2017. Due to the recession, home prices fell each year from 2006 through 2009. Since 2009, the average sales price of housing has risen 36.1 percent, or an average annual growth of 3.9 percent.

Homes Sold in Fairfax County

Based on data from MRIS, 16,109 homes were sold in Fairfax County during 2017, a 2.3 percent increase over the 15,755 sold in 2016. The number of homes sold peaked in 2004, when 25,717 homes were sold and hit a nine-year low of 12,640 in 2011. Including 2017, the number of homes sold has averaged 15,571 over the past three years. The average days on the market for active residential real estate listings in Fairfax County was 45 days for all of 2017, down from 52 days in 2016.

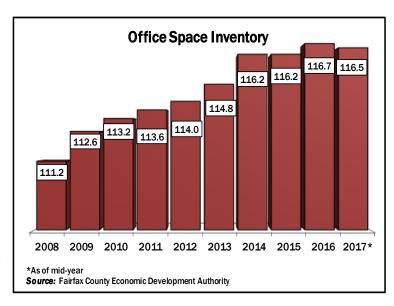


Office Market

Business activity has an effect on Real Estate Taxes, business Personal Property Tax revenues and Business, Professional and Occupational License (BPOL) revenues. Business expansion also influences expenditures for water and sewer services, transportation improvements, police and fire services, and refuse disposal. According to the Fairfax County Economic Development Authority, the commercial real estate market in 2017 is gradually improving.

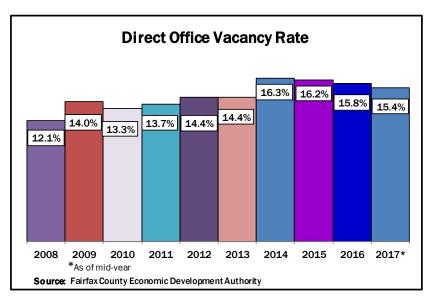
Office Space Inventory

largest component of residential space in the County is office space. The office space inventory was 116.5 million square feet as of mid-year 2017, a decrease of 0.2 million square feet from 2016. The decrease is due to the demolition of two office buildings to make way for new developments. Since 2008, the total inventory of office space in Fairfax County has risen about 5.3 million square feet. As of mid-year 2017, more than 3.1 million square feet of space were under construction in the County. Submarkets near Metro



stations, especially Reston and Tysons on the Silver Line, have begun to see increased redevelopment activity as older buildings are demolished to make way for new development.

Office Vacancy Rates

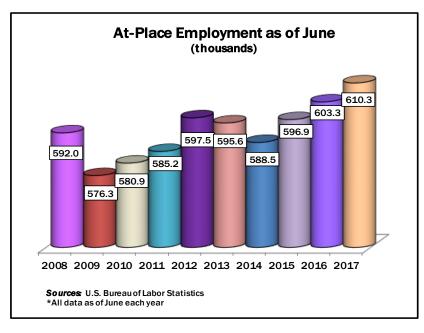


The direct office vacancy rate decreased from 15.8 percent in 2016 to 15.4 percent as of mid-year 2017. The rate has decreased for three years in a row. Demand for newer space, and space near Metro stations, remained strong while many older properties experienced increased vacancies. Including sublet space, the overall office vacancy rate as of mid-year 2017 was 16.2 percent, down from the 16.8 percent recorded as of year-end 2016. The amount of empty office space fell to 18.9 million square feet. Industry

experts anticipate vacancy rates to remain relatively stable through 2018 as tenants monitor economic conditions and the direction of the federal budget. Total office leasing activity in the first half of 2017 was 5.6 million square feet, an increase of 15.3 percent over the 4.9 million square feet leased in the second half of 2016.

Employment

Employment serves as a gauge of the number of jobs created by businesses located in Fairfax County. Growth in both employment and the number of businesses generate increased tax revenues and additional expenditures for Fairfax County. Unemployment rates show the strength of the Fairfax County economy by indicating how many Fairfax County residents are actively seeking but are unable to obtain employment.



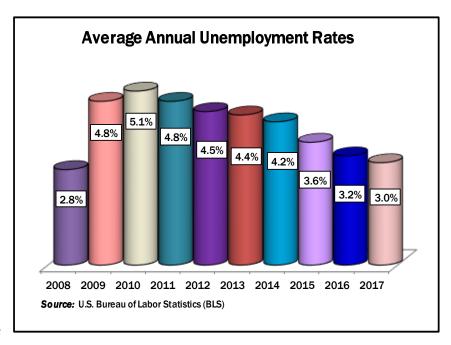
At-Place Employment

According to data from the Bureau of Labor Statistics, the number of jobs in Fairfax County remained flat in 2008 before dropping by 15,700 jobs, a 2.6 percent decline, in 2009 due to the recession. Jobs in the County expanded at modest rates of 0.8 percent and 0.7 percent in 2010 and 2011, respectively. In 2012, employment growth rose by 12,400 jobs, or 2.1 percent, and the number of jobs exceeded its prerecession peak. However, job losses occurred in 2013 and 2014 primarily due to federal spending reduced

employment and professional and business services employment. Employment fell 0.3 percent in 2013 and 1.2 percent in 2014. Employment increased 1.4 percent in 2015, and 1.1 percent in 2016. As of June 2017, the estimated number of jobs in the County totals 610,318. This represents an increase of almost 7,000 jobs over June 2016, or 1.2 percent, and is the highest employment level ever in Fairfax County.

Unemployment Rates

During the last decade, residents **Fairfax** County experienced low unemployment during even economic recessions. Near the start of the economic downturn, the average unemployment rate in 2008 was 2.8 percent. Job losses accelerated 2009 and the average unemployment rate rose two percentage points to 4.8 percent. In 2010, the unemployment rate rose again to 5.1 percent. unemployment rate has fallen each year since 2010. In 2017, the estimated unemployment rate of



3.0 percent was the lowest in nine years.