



Real Estate Lenders Association DC

The Washington Region's Economy in 2019 and Beyond

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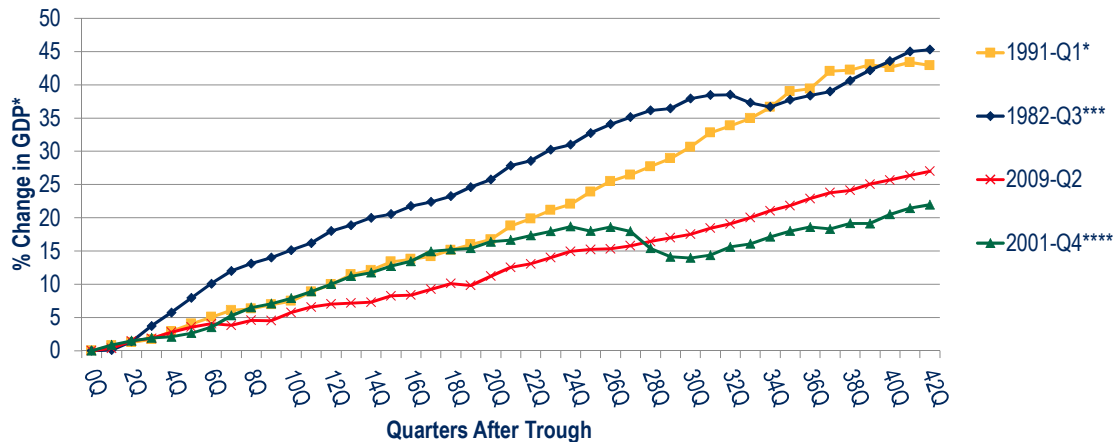


February 12, 2020

The Current Performance of the U.S. Economy



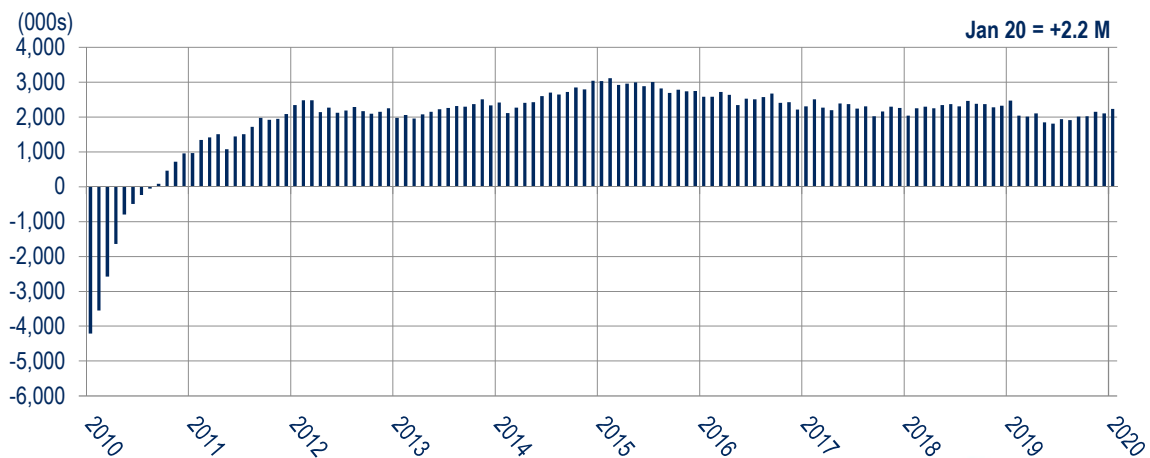
Recession Recovery Patterns of GDP Past Four Recessions*



*in 1992 or 2009 Chained Dollars; *Quarters 40+ include the 2001 Recession ***Quarters 32+ include the 1991 Recession;
****Quarters 25+ include the 2009 Recession Sources: Bureau of Economic Analysis, The Stephen S. Fuller Institute at the Schar School, GMU



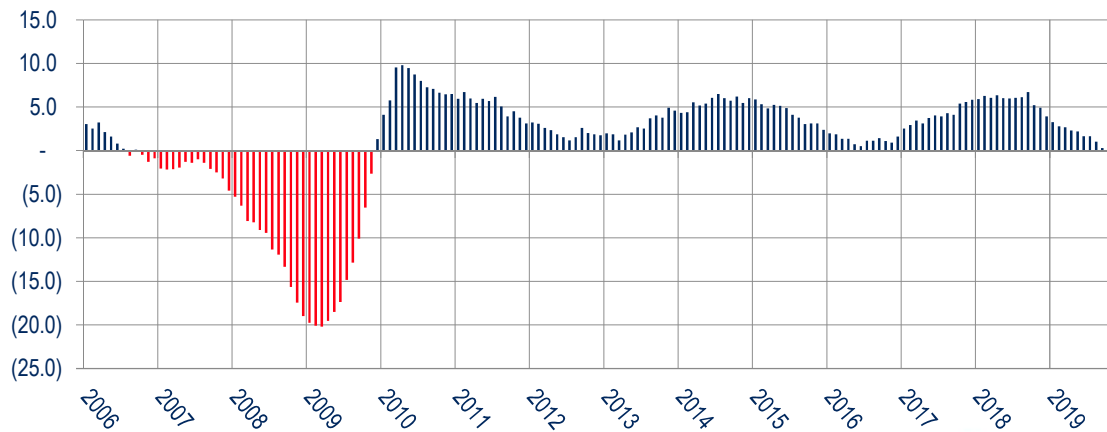
U.S. Annual Change in Payroll Jobs Month-Over-The-Year



Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
NOTE: Includes temporary Census hires



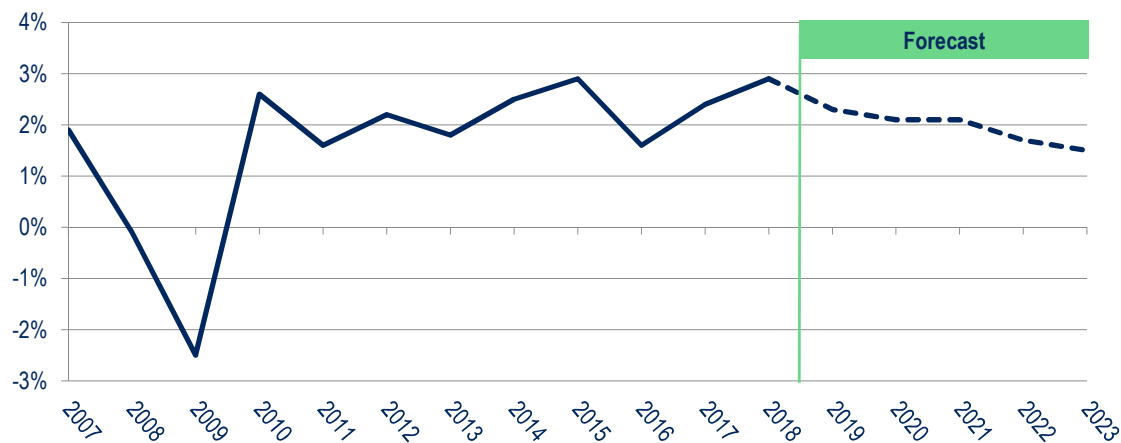
U.S. Leading Index Month-Over-Year Percent Change



Sources: The Conference Board, The Stephen S. Fuller Institute at the Schar School, GMU



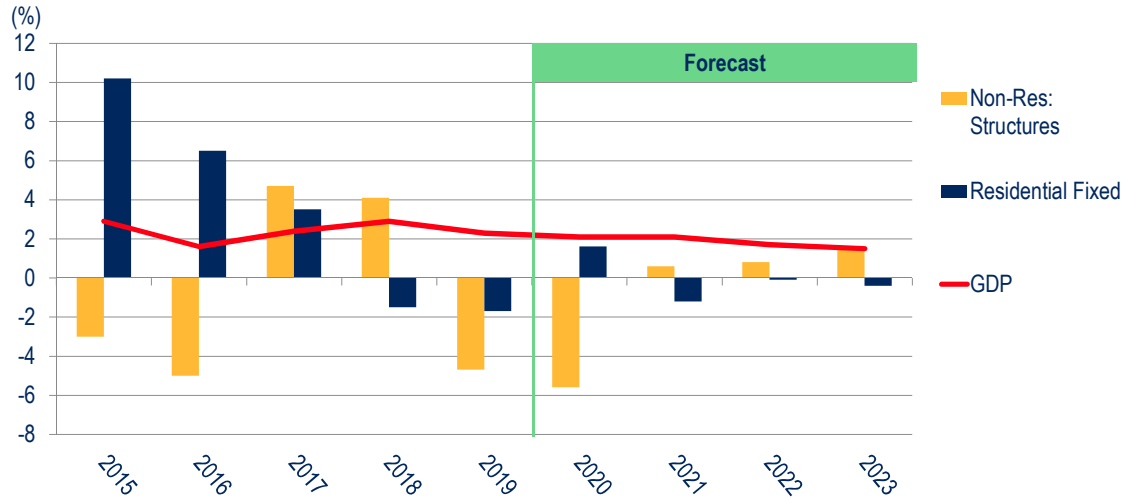
U.S. GDP 2007 – 2018 – 2023 (Annual % Change)



Sources: IHS Markit (December 2019); The Stephen S. Fuller Institute at the Schar School, GMU (forecast as of January 2020)



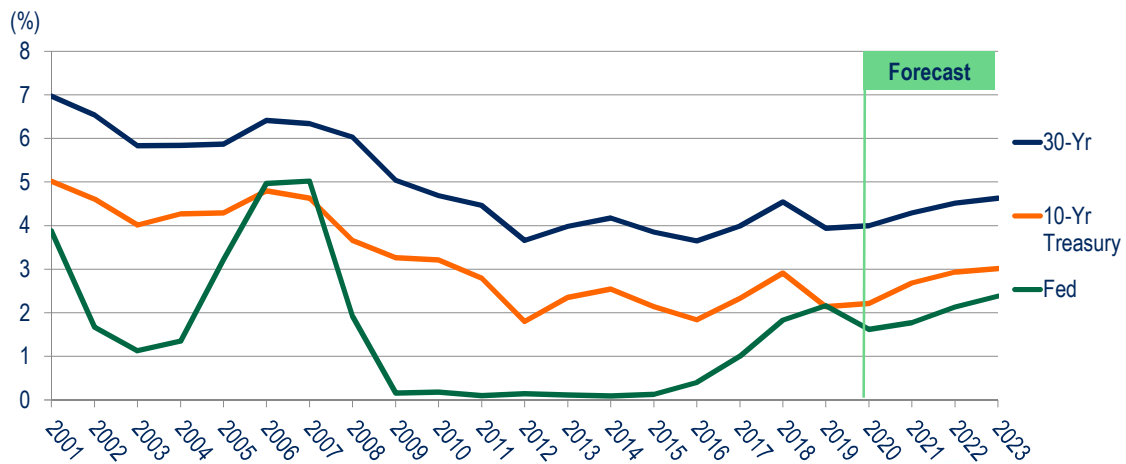
U.S. Economic Performance



Sources: U.S. Bureau of Economic Analysis, IHS Markit (January 2020), The Stephen S. Fuller Institute at the Schar School, GMU



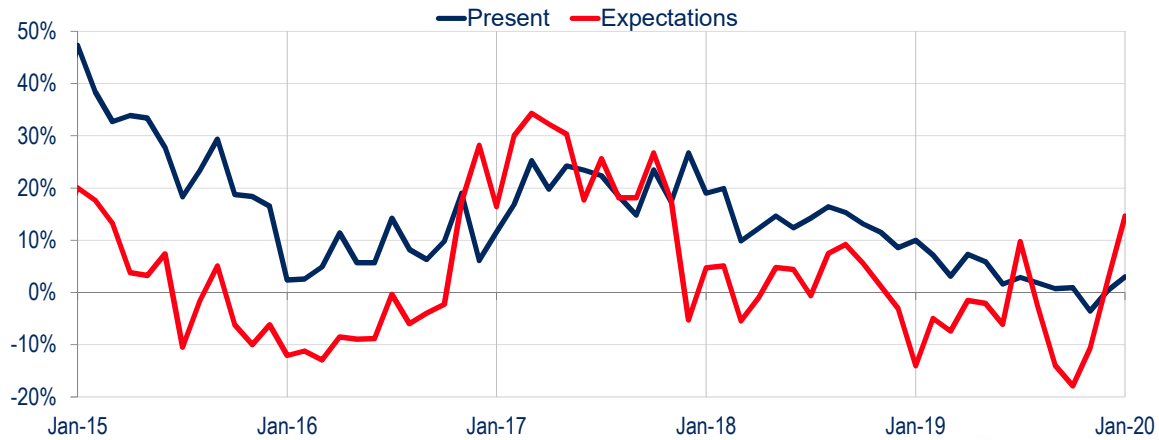
U.S. Interest Rates Average Annual, 2001 - 2023



Sources: IHS Markit (January 2020), The Stephen S. Fuller Institute at the Schar School, GMU



U.S. Consumer Confidence Monthly Over-the-Year Change January 2015 – January 2020



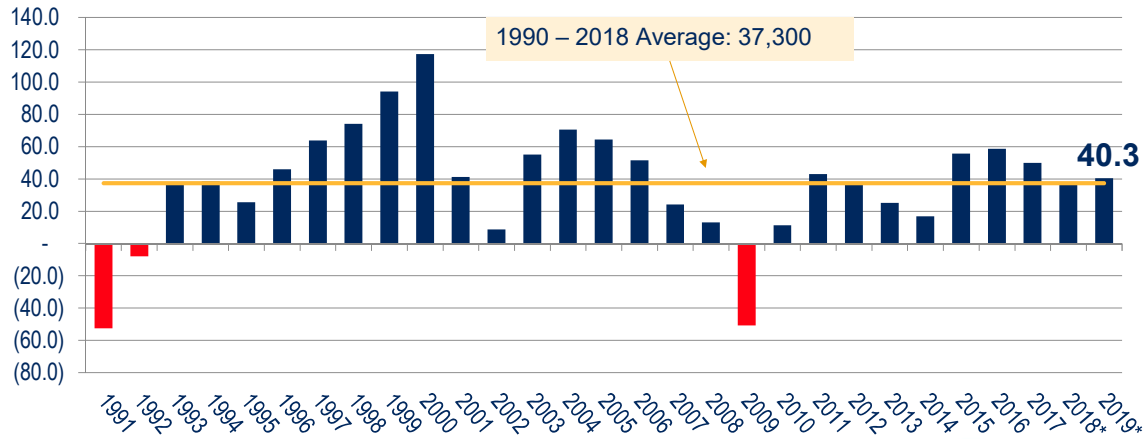
Sources: The Conference Board, The Stephen S. Fuller Institute at the Schar School, GMU



The Current and Near-Term Performance of the Washington Region's Economy



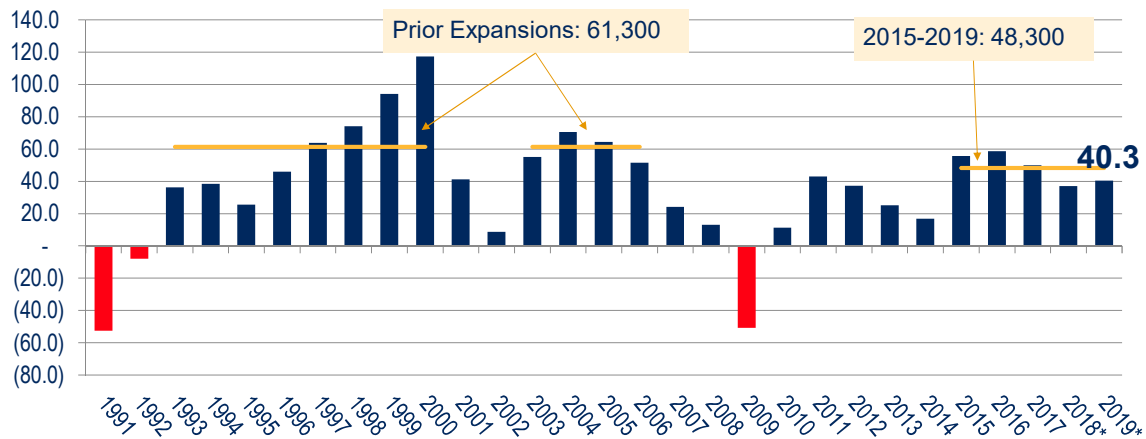
Job Change in the Washington Region 1991 – 2019* (000s)



Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
 *2018 and 2019 include projected revisions to the preliminary data and do not align with the estimates published by BLS.



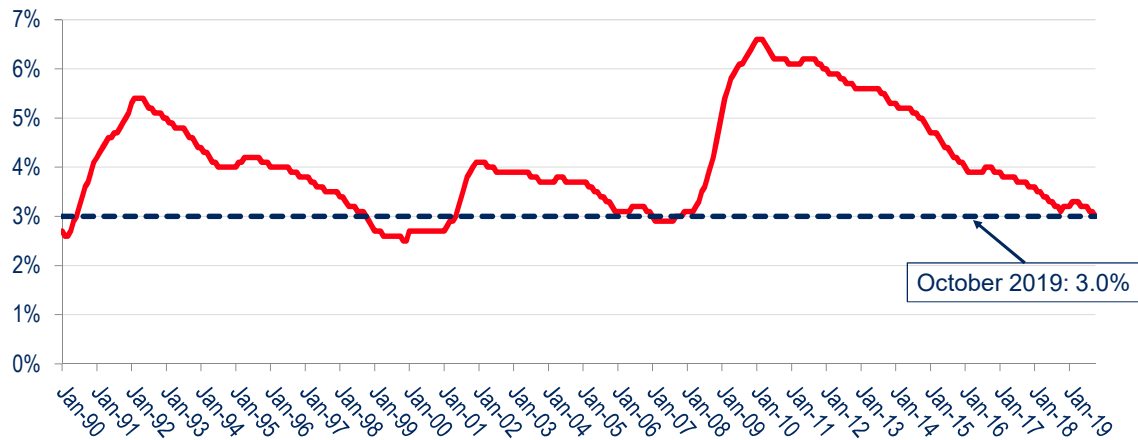
Job Change in the Washington Region 1991 – 2019* (000s)



Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
 *2018 and 2019 include projected revisions to the preliminary data and do not align with the estimates published by BLS.



Unemployment Rate, Washington Region Jan 1990 – Oct 2019

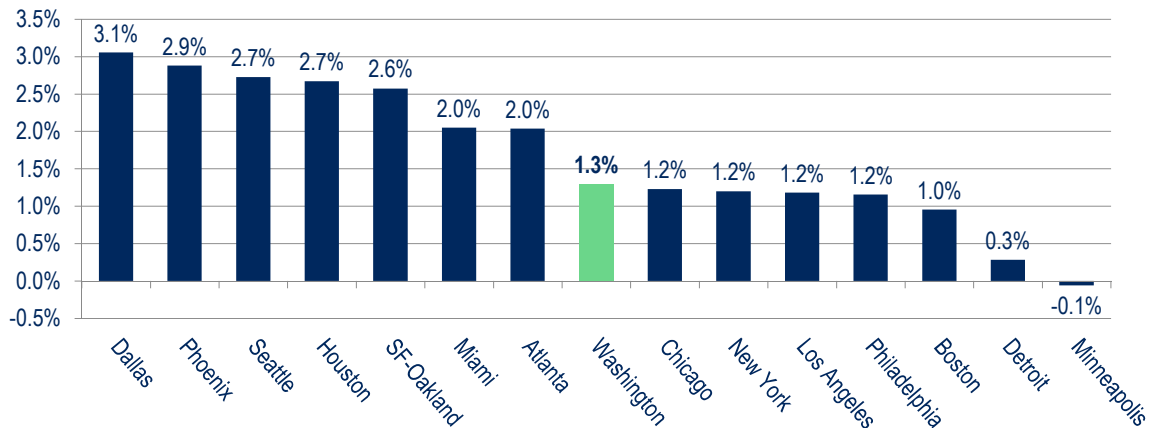


Sources: U.S. Bureau of Labor Statistics (Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU



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15 Largest U.S. Job Markets 2019* Job Change

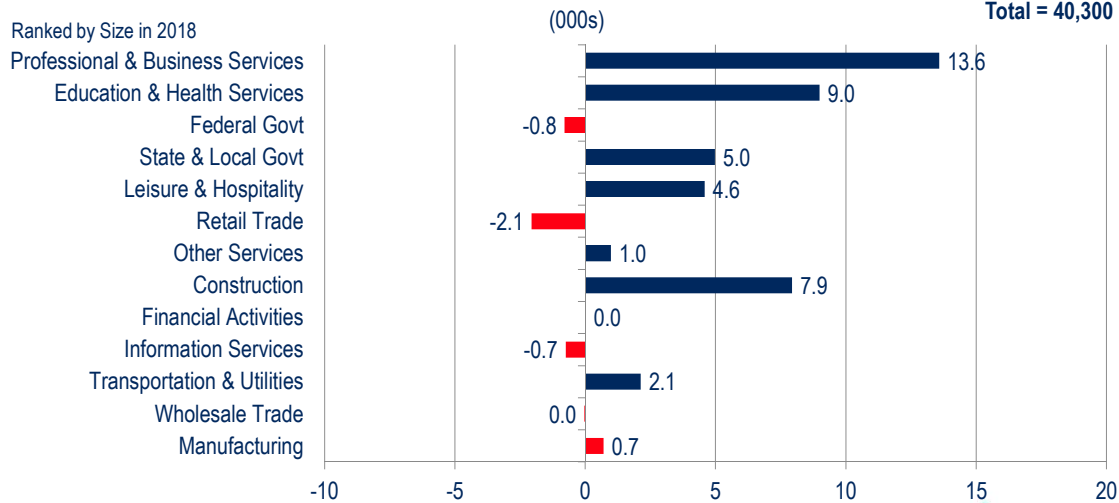


Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
*Through November **Includes projected revisions to the preliminary data and do not align with the estimates published by BLS.



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Washington Region Job Change by Sector, 2019*

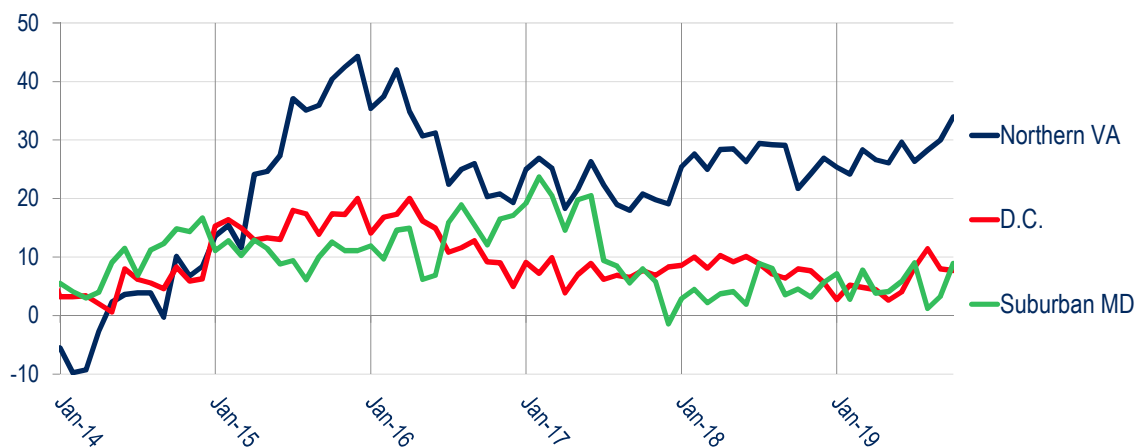


Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
 *Through October; includes projected revisions to the preliminary data and do not align with the estimates published by BLS.



Change in Jobs By Sub-State Area, 2014-2019*

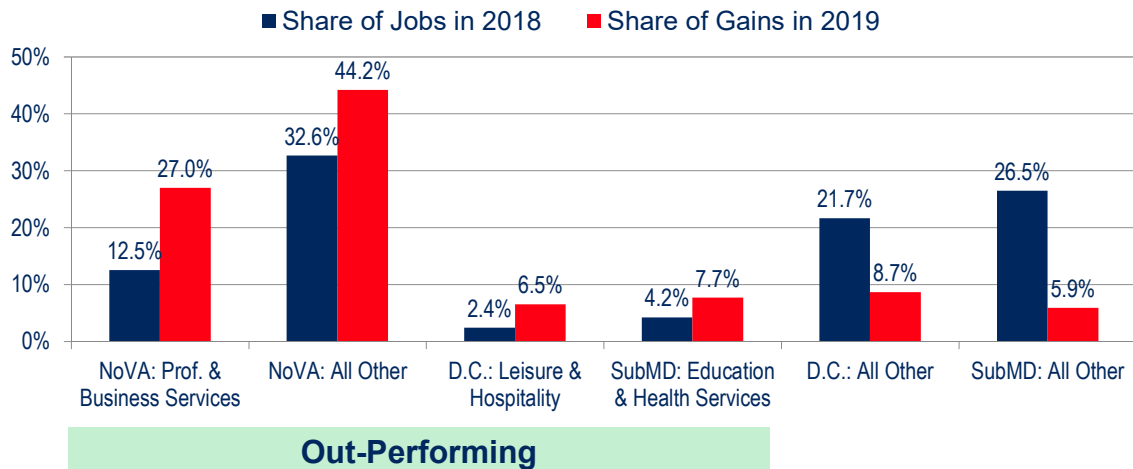
Monthly Over-the-Year Change (in 000s)



Sources: U.S. Bureau of Labor Statistics, The Stephen S. Fuller Institute at the Schar School, GMU
 *2018 and 2019 include projected revisions to the preliminary data and do not align with the estimates published by BLS.



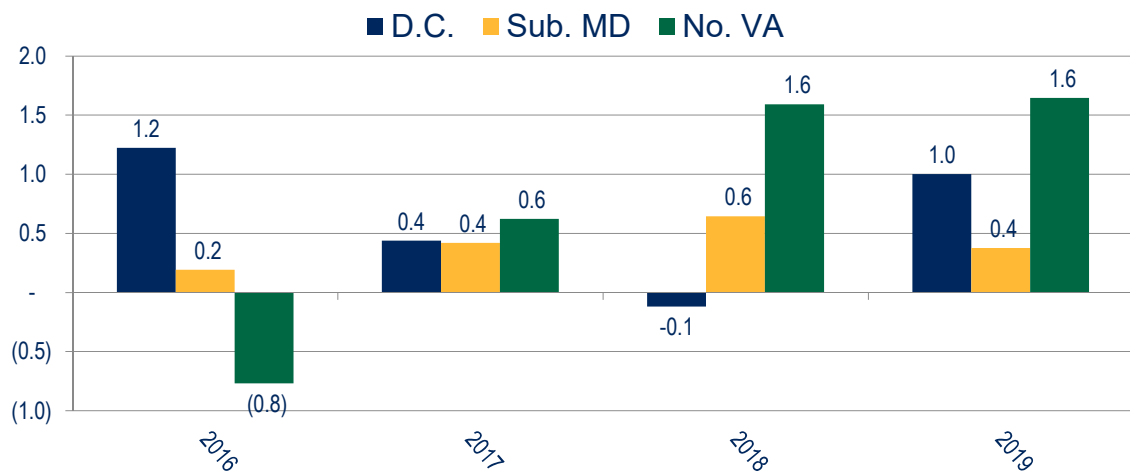
Distribution of Job Growth in the Washington Region, 2019*



Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
 *Through October; includes projected revisions to the preliminary data and do not align with the estimates published by BLS.



Office Absorption (MMs of SF)



Sources: Newmark Knight Frank



Employment Change by Sub-State Area (000s)

| | 2016 | 2017 | 2018* | 2019* | 2020 | 2021 | 2022 | 2023 |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| D.C. | 13.1 | 7.4 | 8.3 | 5.9 | 8.9 | 4.9 | 4.2 | 3.6 |
| Sub. MD | 13.4 | 12.9 | 4.4 | 5.4 | 9.2 | 7.2 | 5.2 | 1.3 |
| No. VA | 28.8 | 21.9 | 26.8 | 27.9 | 22.6 | 23.6 | 17.8 | 12.9 |
| Residual** | 3.3 | 7.6 | (2.6) | 1.1 | 0.2 | 0.1 | 0.2 | 0.1 |
| REGION | 58.6 | 49.8 | 36.9 | 40.3 | 40.9 | 35.8 | 27.4 | 17.9 |

Source: BLS, IHS Economics, The Stephen S. Fuller Institute at the Schar School, GMU (forecast as of December 2019)

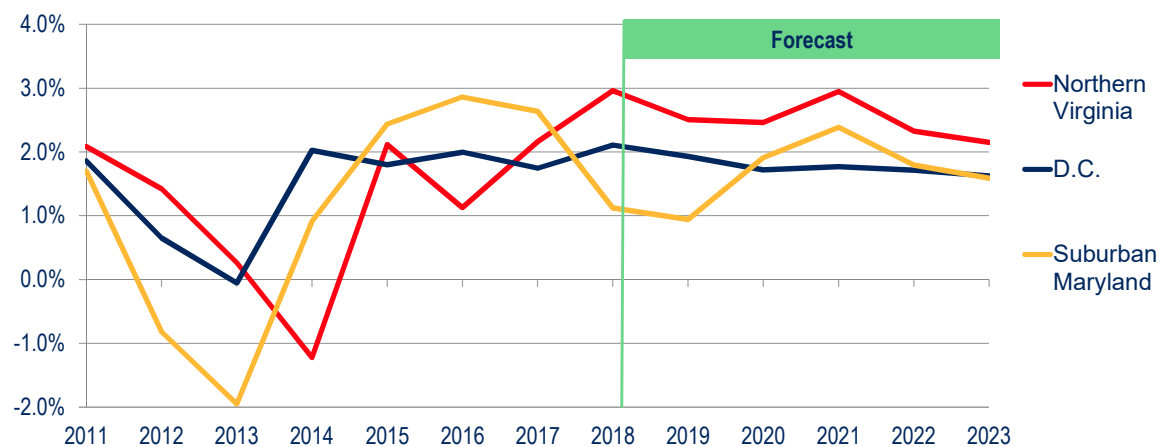
*2018 and 2019 include projected revisions to the preliminary data and do not align with the estimates published by BLS.

**Residual includes Jefferson, WV and jobs that cannot be attributed to a sub-state area.



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Washington Region GRP by Sub-State Area 2011 – 2018 - 2023 (Annual % Change)

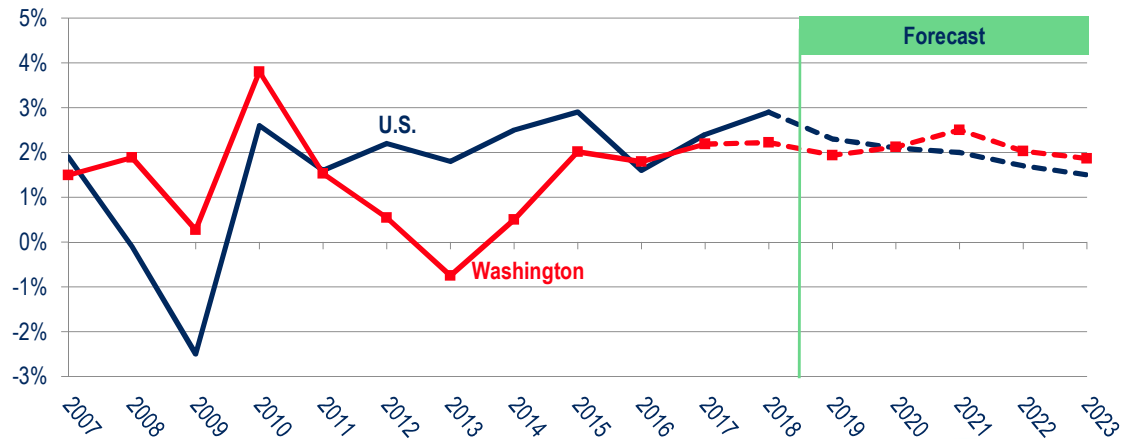


Sources: IHS Markit (November 2019); The Stephen S. Fuller Institute at the Schar School, GMU (forecast as of December 2019)



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U.S. GDP and Washington Region GRP 2007 – 2018 – 2023 (Annual % Change)



Sources: IHS Markit (December 2019); The Stephen S. Fuller Institute at the Schar School, GMU (forecast as of December 2019)



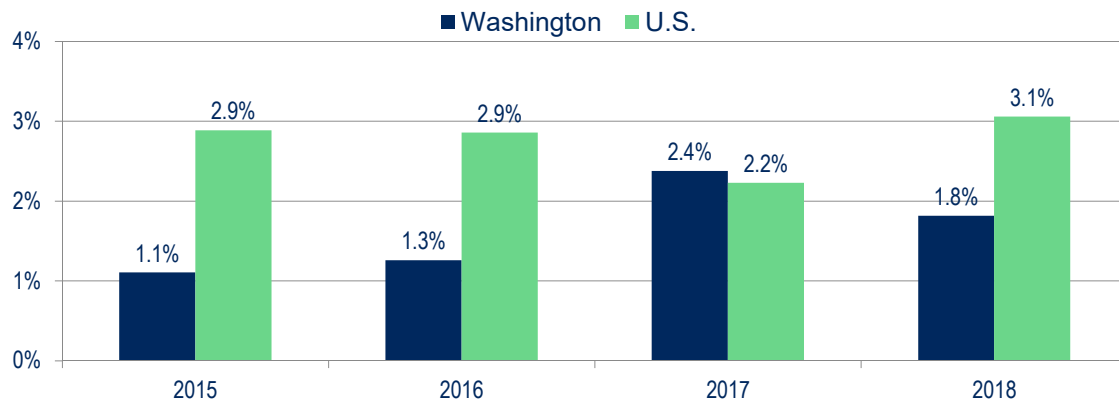
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The Changing Structure of the Washington Region's Economy



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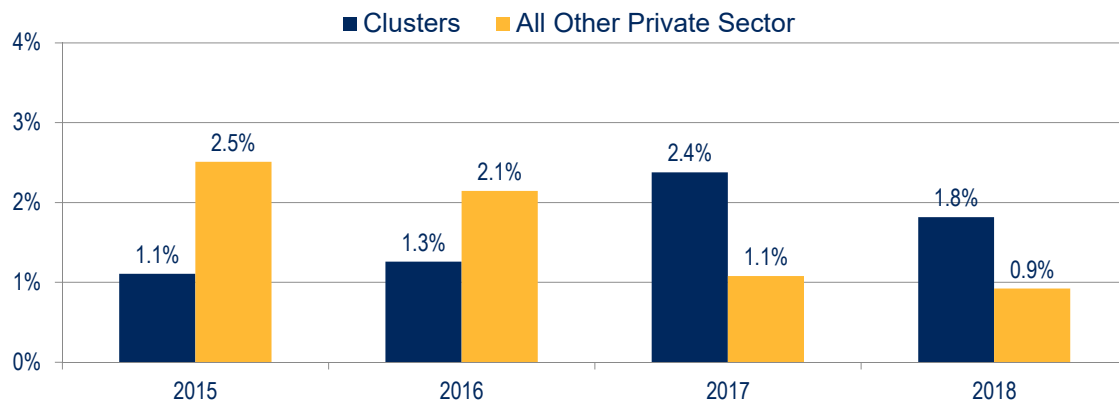
Growth Rates of the Washington Region's Advanced Industrial Clusters



Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



Growth Rates of the Washington Region's Advanced Industrial Clusters & Private Sector



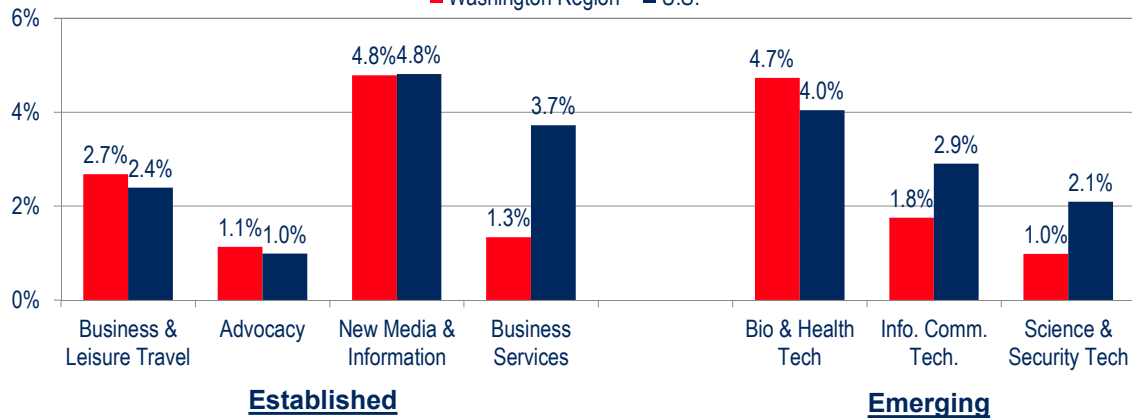
Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



Growth in the Washington Region's Advanced Industrial Clusters, 2014-2018

Annualized Growth

■ Washington Region ■ U.S.

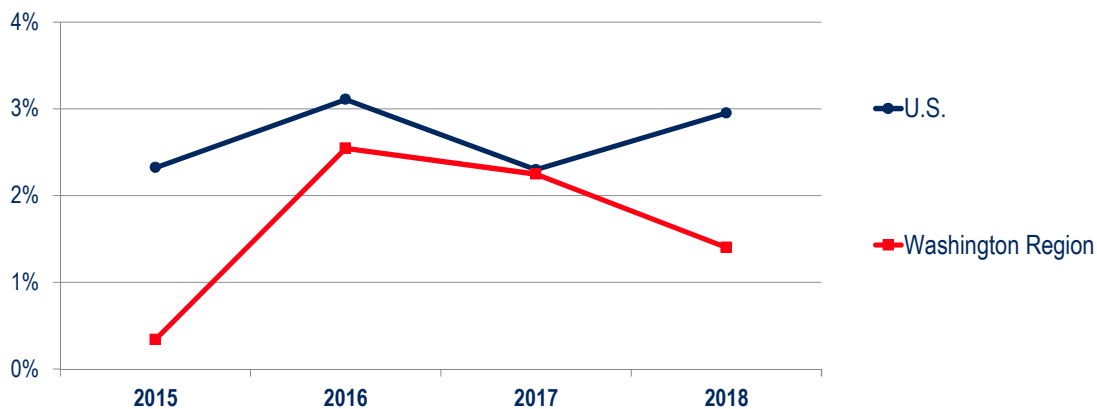


Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



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The Washington Region's Established Clusters: Influence, Management Services & Travel

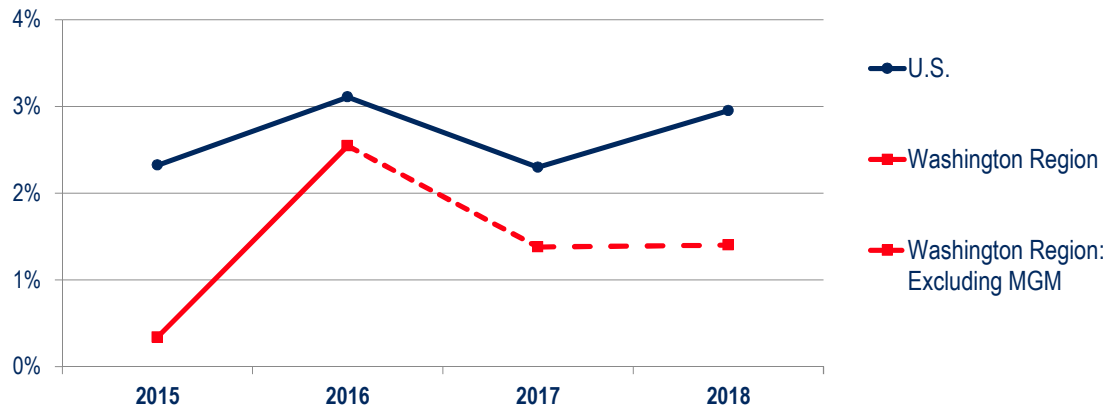


Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



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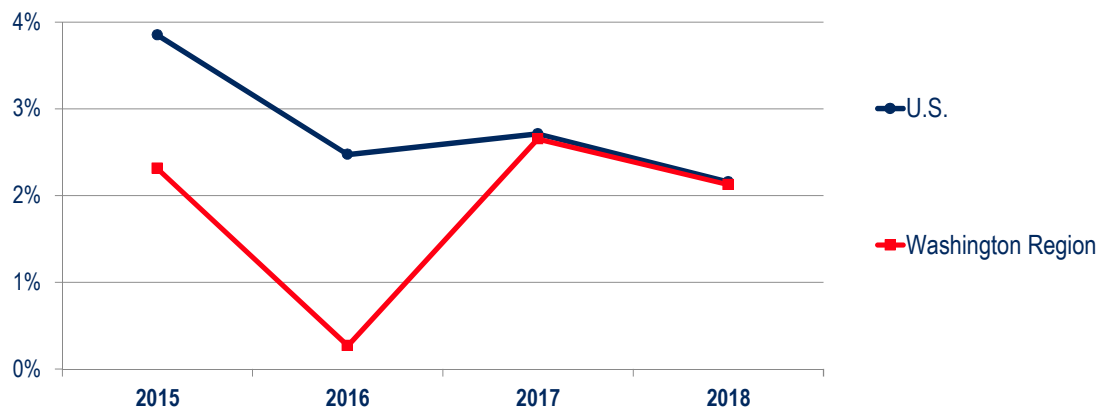
The Washington Region's Established Clusters: Influence, Management Services & Travel



Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



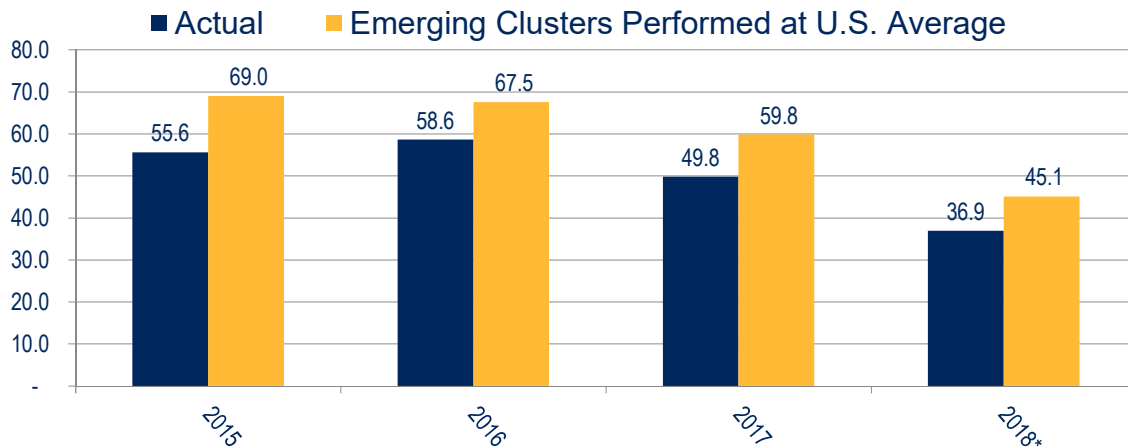
The Washington Region's Emerging Clusters: Science, Security, Information & Health Technology



Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



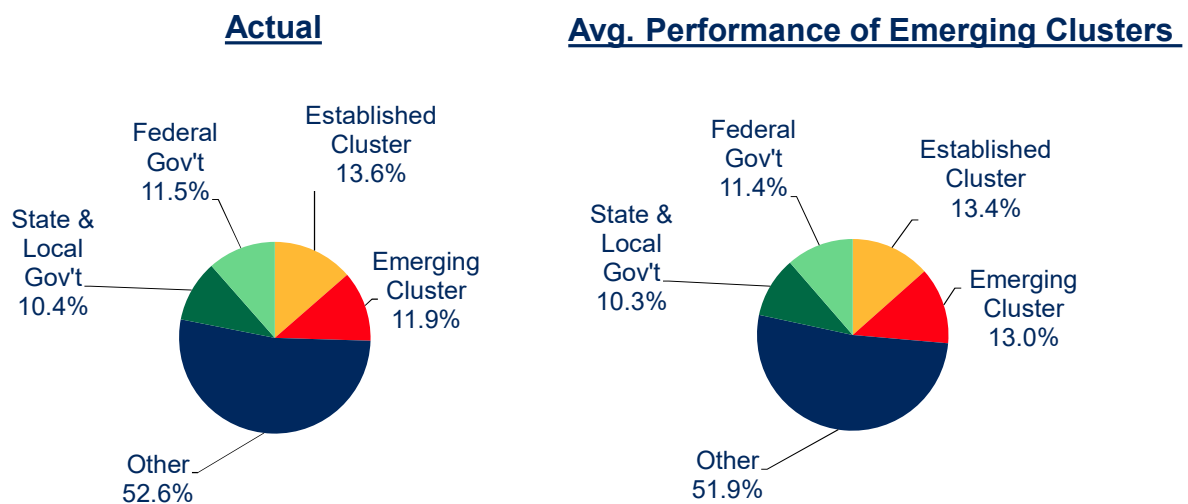
Job Change Scenarios in the Washington Region 2015-2018



Sources: U.S. Bureau of Labor Statistics, The Stephen S. Fuller Institute at the Schar School, GMU
 *2018 and 2019 include projected revisions to the preliminary data and do not align with the estimates published by BLS.



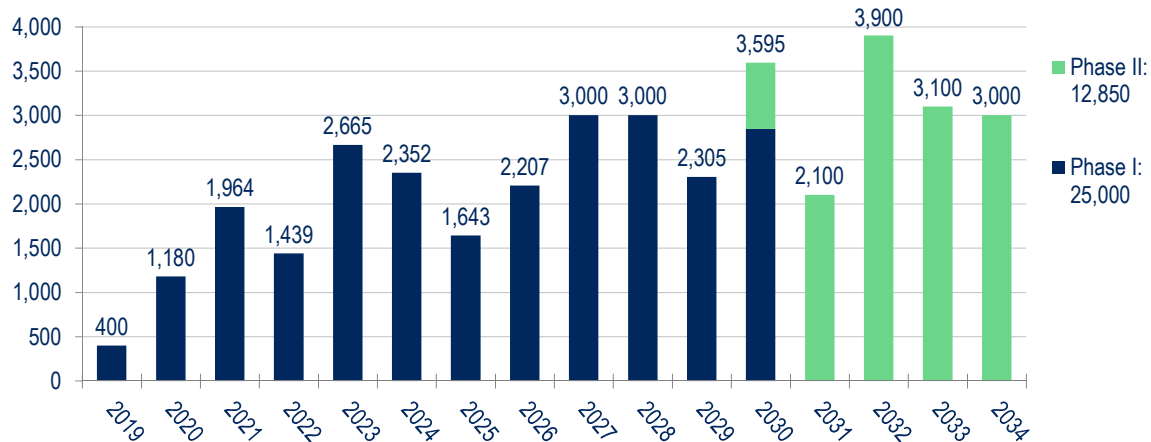
Distribution of Jobs in the Washington Region, 2018



Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU



HQ2 Employment Schedule



Sources: Commonwealth of Virginia MOU; The Stephen S. Fuller Institute at the Schar School, GMU



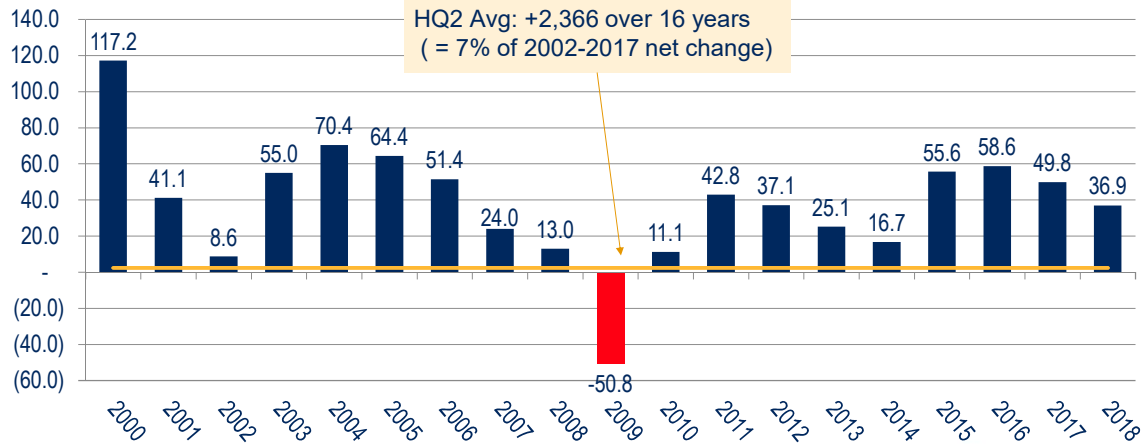
The Economic Impacts of Amazon's HQ2: Post-Construction Outlays

| | <u>Arlington County</u> | <u>Washington Region</u> |
|------------------------------|-------------------------|--------------------------|
| <u>Post-Construction \$s</u> | | |
| Direct Outlays | \$1.3 – \$2.0 b | \$2.5 - \$3.8 billion |
| Total Output* | \$1.7 – \$2.5 b | \$4.2 – 6.4 billion |
| Personal Income | \$124 -\$186 m | \$1.2 - \$1.9 billion |
| Jobs Supported | 1,150 – 1,735 | 38,400 – 58,375 |
| Local FT-equ Jobs | 1,000 – 1,600 | 14,500 – 23,500 |

Sources: VEDP, The Stephen S. Fuller Institute at the Schar School, GMU *reflects Arlington and MSA multipliers of 1.273 and 1.6804 respectively



Job Change in the Washington Region 2000 – 2018 (in thousands)

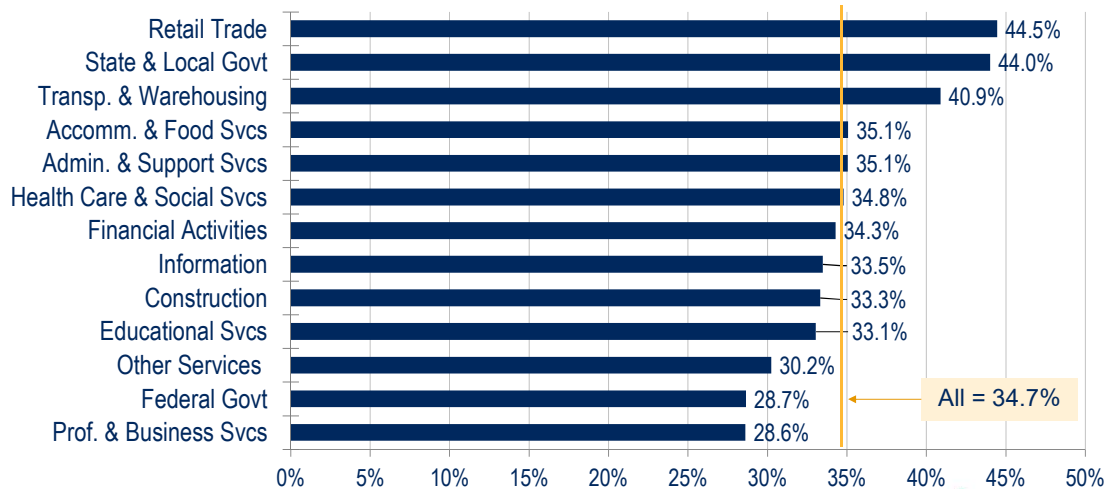


Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU



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% of the Washington Region's Workers Born in DC, VA, or MD by Industry

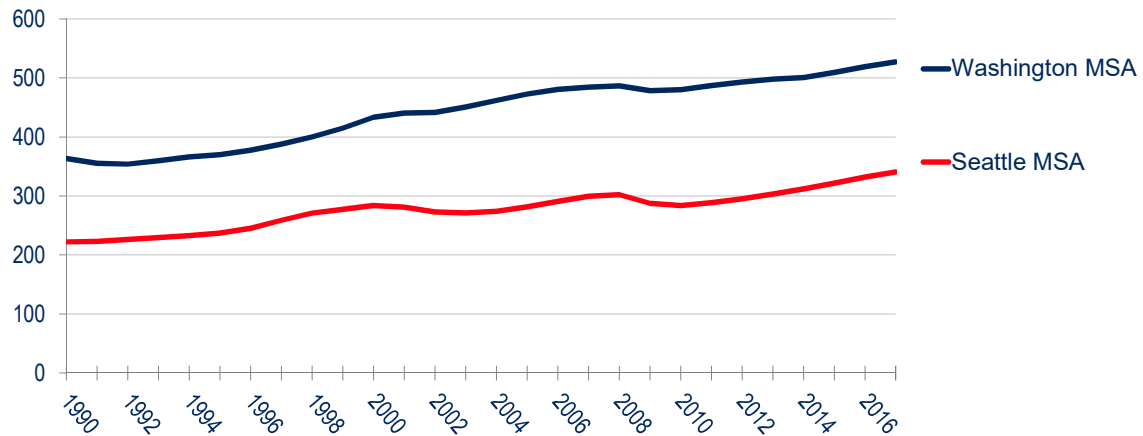


Sources: U.S. Census Bureau (2014-2016 ACS Microdata); The Stephen S. Fuller Institute at the Schar School, GMU



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Density by Metro Area: Jobs Per Land Square Mile



Sources: U.S. Bureau of Labor Statistics; The Stephen S. Fuller Institute at the Schar School, GMU



Density: Arlington County vs. City of Seattle

| | Arlington County | Seattle City | Arlington as a % of Seattle |
|-------------------------------|------------------|--------------|-----------------------------|
| Sq. Mi. | 26 | 83 | 31% |
| Residents | 234,965 | 724,745 | 32% |
| --- Per Sq. Mi. | 9,037 | 8,732 | 103% |
| Private Office Space (MMs SF) | 32 | 55 | 58% |
| --- Per Sq. Mi. | 1.2 | 0.7 | 186% |

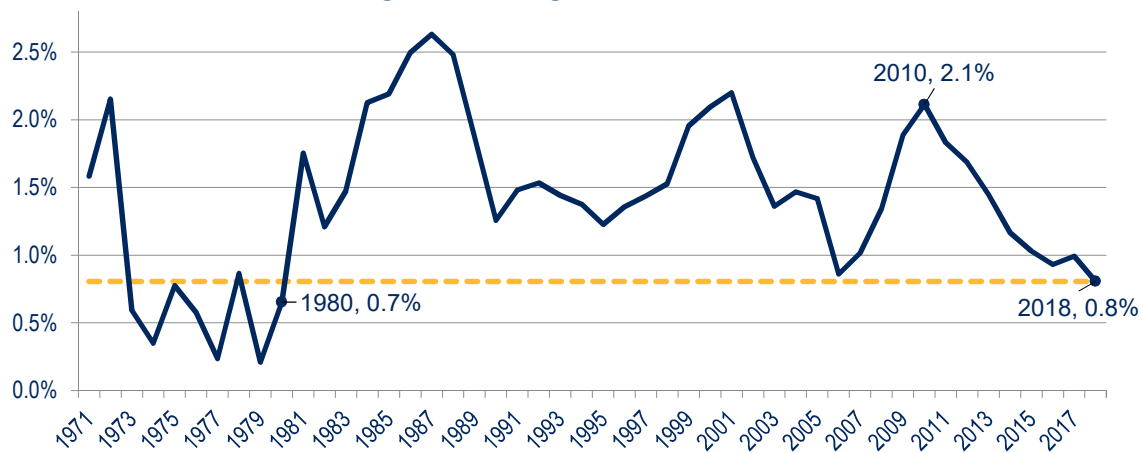
Sources: U.S. Census; Cushman & Wakefield; The Stephen S. Fuller Institute at the Schar School, GMU



The Washington Region's Population Trends



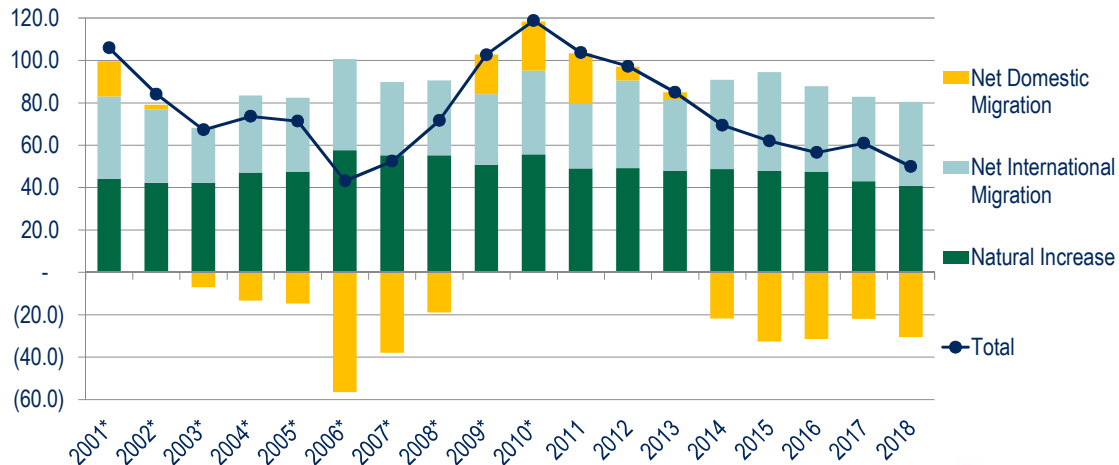
Population Growth Washington Region, 1971 to 2018



Sources: U.S. Census Bureau (Intercensal & v2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



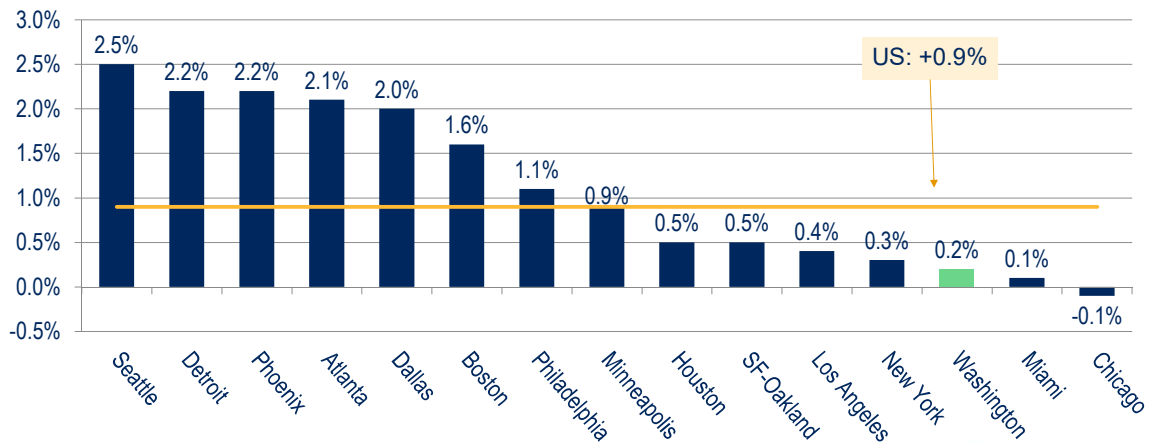
Population Growth By Component Change Washington Region (in 000s)



Sources: U.S. Census Bureau (Intercensal, v2009 and v2017 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU
*Estimate



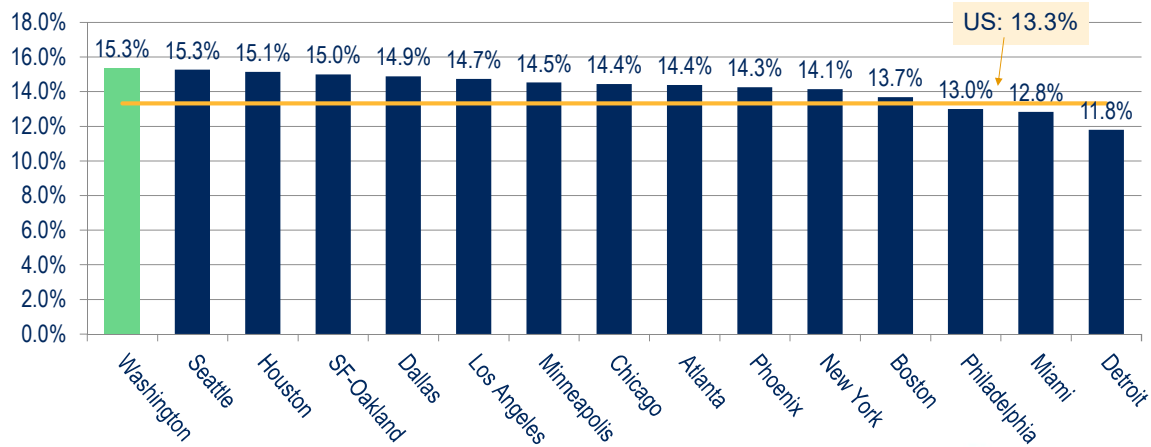
Percent Change in 25-34 Years Olds Largest 15 Metros, 2017 - 2018



Sources: U.S. Census Bureau (Vintage 2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



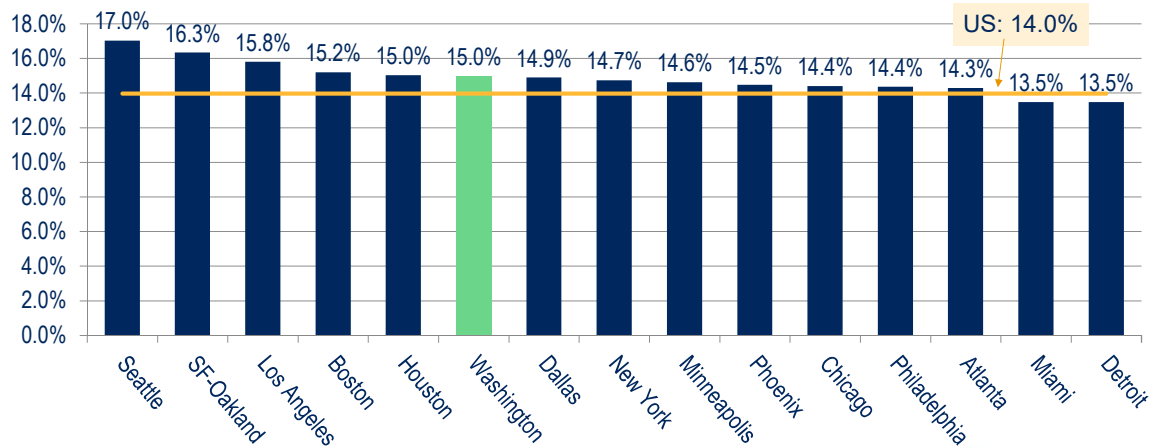
Share of 25-34 Year Olds Largest 15 Metros, 2010



Sources: U.S. Census Bureau (Vintage 2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



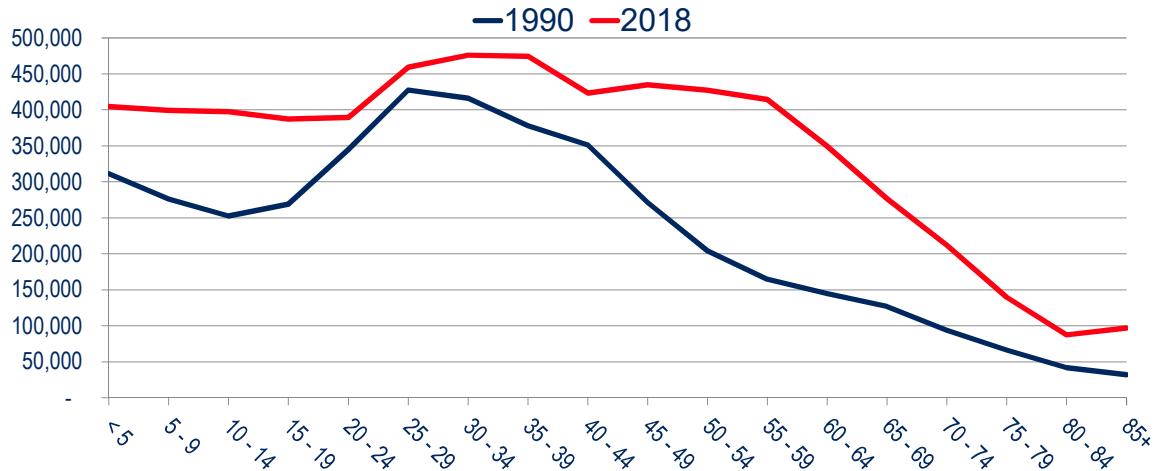
Share of 25-34 Year Olds Largest 15 Metros, 2018



Sources: U.S. Census Bureau (Vintage 2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



Population by Age, Washington Region

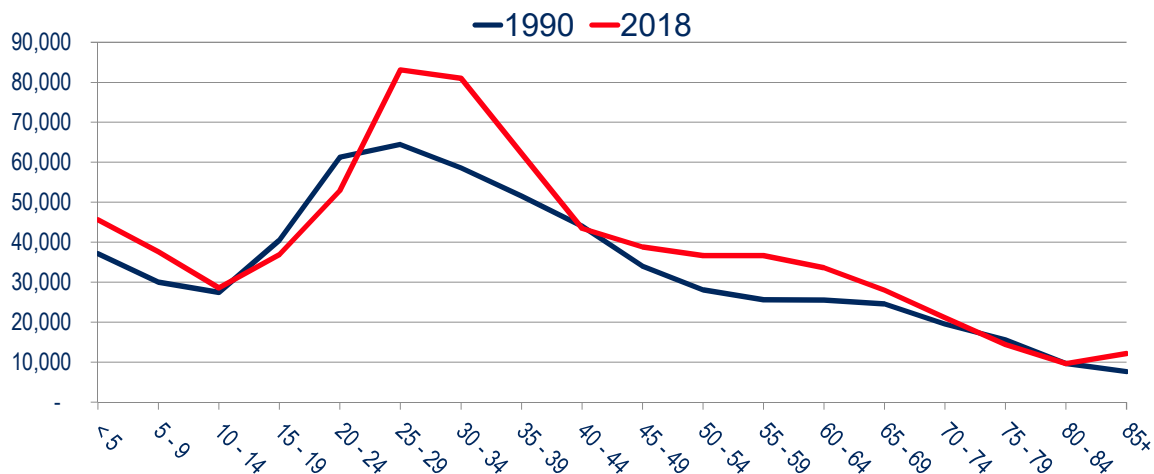


Sources: U.S. Census Bureau (1970-79 Intercensal Estimates & v2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



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Population by Age, D.C.

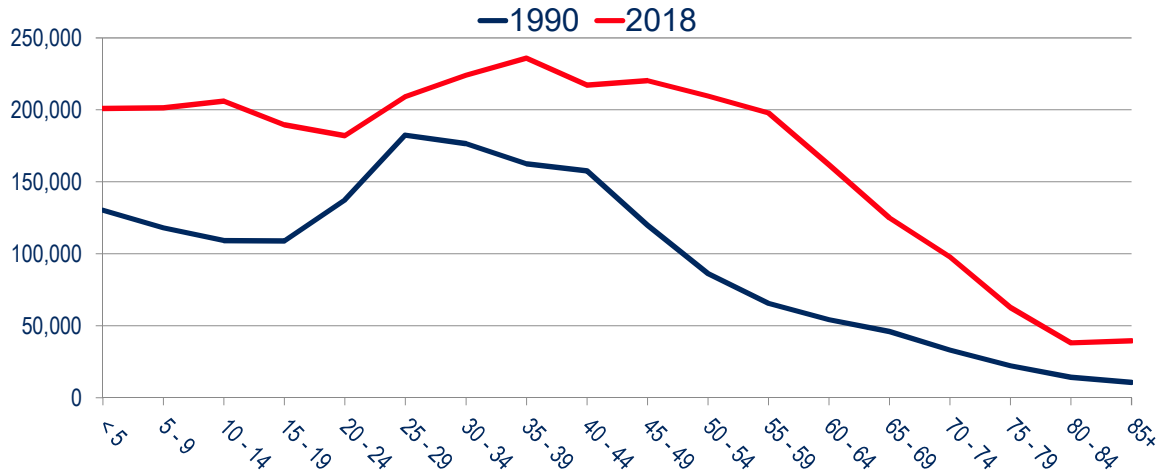


Sources: U.S. Census Bureau (1990-99 Intercensal Estimates & v2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



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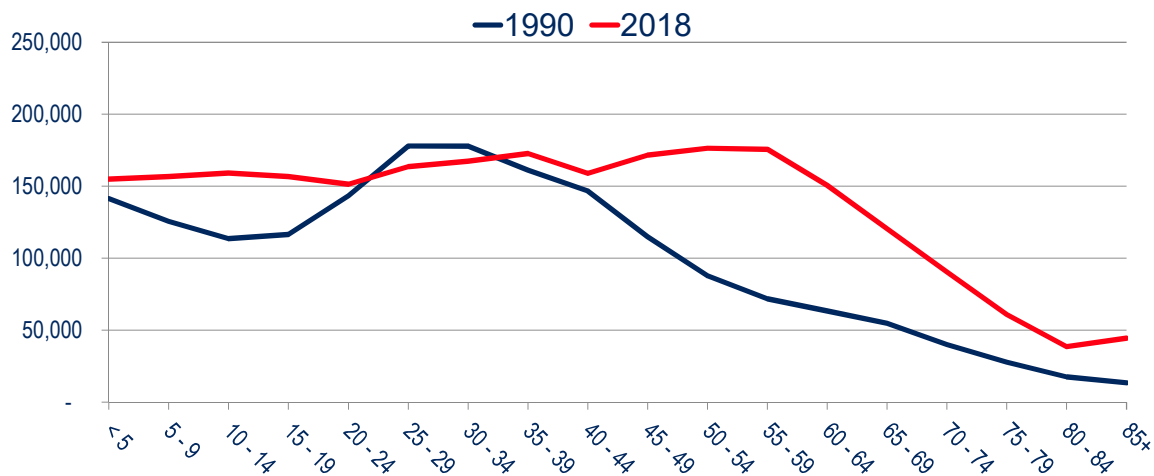
Population by Age, Northern Virginia



Sources: U.S. Census Bureau (1990-99 Intercensal Estimates & v2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



Population by Age, Suburban Maryland



Sources: U.S. Census Bureau (1990-99 Intercensal Estimates & v2018 Population Estimates); The Stephen S. Fuller Institute at the Schar School, GMU



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