Amazon in the Washington Region: Context & Forecast

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Amazon in Arlington: Context
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

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

Sources: U.S. Census; Cushman & Wakefield; 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

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

HQ2 Avg: +2,366 over 16 years
(= 7% of 2002-2017 net change)

Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
*Through July
IHS Forecast of Job Growth vs Amazon Job Growth Washington Region (in 000s)

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

Job Change in Arlington County*
2000 – 2017 (in thousands)

Sources: U.S. Bureau of Labor Statistics (QCEW), The Stephen S. Fuller Institute at the Schar School, GMU
*Excludes military jobs
IHS Forecast of Job Growth vs Amazon Job Growth
Arlington County

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

## Net Household Gain Related to HQ2:
Indicates households with a Direct or Indirect Induced Job
- 0 to +999
- +1,000 to +2,499
- +2,500 to +4,999
- +5,000 to +9,999

Source: The Stephen S. Fuller Institute at the Schar School of Policy and Government, George Mason University
NOTE: Assumes direct HQ2 employment of 37,850
*Inc. cities of Fairfax & Falls Church
**Inc. cities of Manassas and Manassas Park

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11/2/2019
Amazon-Related Renters in Select Jurisdictions
Assumes 37,850 HQ2 jobs, includes indirect & induced effects

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Renters at Full Build-Out</th>
<th>Renters in 2016</th>
<th>Total % Increase from 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virginia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arlington County</td>
<td>4,792</td>
<td>57,133</td>
<td>8.4%</td>
</tr>
<tr>
<td>Alexandria City</td>
<td>1,528</td>
<td>41,808</td>
<td>3.7%</td>
</tr>
<tr>
<td>Fairfax County*</td>
<td>4,893</td>
<td>134,425</td>
<td>3.6%</td>
</tr>
<tr>
<td>Prince William County**</td>
<td>1,087</td>
<td>49,891</td>
<td>2.2%</td>
</tr>
<tr>
<td>Loudoun County</td>
<td>716</td>
<td>25,552</td>
<td>2.8%</td>
</tr>
<tr>
<td>D.C.</td>
<td>2,968</td>
<td>169,875</td>
<td>1.7%</td>
</tr>
<tr>
<td><strong>Maryland</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery County</td>
<td>625</td>
<td>132,098</td>
<td>0.5%</td>
</tr>
<tr>
<td>Prince George’s County</td>
<td>396</td>
<td>121,333</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Sources: U.S. Census Bureau (2016 ACS Microdata); The Stephen S. Fuller Institute at the Schar School, GMU
*Includes the cities of Fairfax and Falls Church  ** Includes the cities of Manassas and Manassas Park

Growth vs Change
Private Sector Jobs in the Washington Region: Net Change Compared to Gross Flows By Year (000s)

Sources: U.S. Bureau of Labor Statistics; LEHD (j2J, Beta, v1Q2018); The Stephen S. Fuller Institute at the Schar School, GMU
* As of prior quarter

% 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
Share of Residents* That Moved in the Past Year By Place of Current Residence, 2017

Moved w/in County | Moved from Another County
---|---
Loudoun | 12.8% | 7.6%
Prince George’s | 14.5% | 7.2%
Montgomery | 14.5% | 6.7%
Fairfax | 14.7% | 7.8%
Alexandria | 17.6% | 12.1%
 DC | 19.1% | 9.7%
Arlington | 19.5% | 11.3%

Source: U.S. Census (2017 American Community Survey) The Stephen S. Fuller Institute at the Schar School, GMU
* Excludes children less than one years old

Number of Residents* That Moved in the Past Year By Place of Current Residence, 2017 (000s)

Moved w/in County | Moved from Another County
---|---
Alexandria | 27.9 | 45.1
Arlington | 19.1 | 26.2
Loudoun | 29.8 | 50.5
DC | 66.0 | 66.5
Prince George’s | 130.6 | 130.7
Montgomery | 152.3 | 69.8
Fairfax | 166.5 | 166.5

Source: U.S. Census (2017 American Community Survey) The Stephen S. Fuller Institute at the Schar School, GMU
* Excludes children less than one years old
Recent Economic Trends

Annual Job Change, 2002-2019
Washington Region

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

Jan 19 = +24.4
Washington Region Leading Index
Month-Over-The-Year Percent Change

12-Month Moving Average
12-Mo Avg: Forecast

Source: The Stephen S. Fuller Institute at the Schar School, GMU

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. GDP and Washington MSA GRP
2007 – 2018 – 2022
(Annual % Change)

Forecast

Thank You

For monthly reports on the Washington region’s economic performance go to sfullerinstitute.gmu.edu
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