Washington Area Economy: Performance and Outlook

Presentation to:

Arlington Economic Development Commission

Mark C. White, Ph.D.
Deputy Director
Center for Regional Analysis
Schar School of Policy and Government
George Mason University

June 12, 2018
Agenda

• US economic trends
• The Washington regional economy
• The continued influence of the federal government
• Additional ongoing challenges
• The contributions of foreign-born, non-citizen workers to the regional workforce
• Looking ahead
U.S. Gross Domestic Product

Source: Bureau of Economic Analysis (Seasonally Adjusted, Chained 2009 Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Real GDP (Billions)</th>
<th>Quarterly Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$18,000</td>
<td>+2.3%</td>
</tr>
</tbody>
</table>

2017 +2.3%     2018Q1 +2.2%

Source: Bureau of Economic Analysis (Seasonally Adjusted, Chained 2009 Dollars)
US Payroll Jobs

Source: Bureau of Labor Statistics (Seasonally Adjusted), GMU Center for Regional Analysis
The Washington Regional Economy
GDP Trends since 2001

Source: US Bureau of Economic Analysis, *2009 Chained Dollars
Annual Job Change - Washington MSA

Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis
15 Largest Job Markets
Job Change: April 2017 – April 2018

Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis
Unemployment Rates in the WMSA
By Sub-State Area

Professional & Business Services drive the regional economy – April 2018

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional &amp; Business Services</td>
<td>22.9%</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>13.7%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>11.1%</td>
</tr>
<tr>
<td>State &amp; Local Government</td>
<td>10.4%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>10.2%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>8.5%</td>
</tr>
<tr>
<td>Other Services</td>
<td>6.4%</td>
</tr>
<tr>
<td>Construction</td>
<td>4.9%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>4.9%</td>
</tr>
<tr>
<td>Information</td>
<td>2.3%</td>
</tr>
<tr>
<td>Transportation &amp; Utilities</td>
<td>2.1%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>1.9%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

# Job Change by Sector

## April 2017 – April 2018

### Washington MSA

<table>
<thead>
<tr>
<th>Sector</th>
<th>Change (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Trade</td>
<td>-1.6</td>
</tr>
<tr>
<td>Leisure &amp; Hosp.</td>
<td>-4.6</td>
</tr>
<tr>
<td>Construction</td>
<td>0.0</td>
</tr>
<tr>
<td>Financial</td>
<td>3.2</td>
</tr>
<tr>
<td>Information</td>
<td>-1.1</td>
</tr>
<tr>
<td>Transp. &amp; Util.</td>
<td>4.3</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>2.1</td>
</tr>
<tr>
<td>Other Services</td>
<td>2.1</td>
</tr>
<tr>
<td>State &amp; Local Govt.</td>
<td>8.5</td>
</tr>
<tr>
<td>Federal Govt.</td>
<td>9.7</td>
</tr>
<tr>
<td>Prof. &amp; Bus. Svcs</td>
<td>7.3</td>
</tr>
<tr>
<td>Educ &amp; Health Svcs</td>
<td>-6</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-4</td>
</tr>
<tr>
<td>State &amp; Local Govt.</td>
<td>2</td>
</tr>
<tr>
<td>Federal Govt.</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>38,700</td>
</tr>
</tbody>
</table>

(Ranked by Size in 2017)

Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis
Covered Employment in Washington MSA

Professional & Business Services: 22.6%
Government: 21.9%
Education & Health Services: 13.0%
Leisure & Hospitality: 10.5%
Retail Trade: 8.8%
Other Services: 5.5%
Construction: 5.0%
Financial Activities: 4.7%
Information: 2.2%
Transportation & Utilities: 2.0%
Manufacturing: 1.7%
Wholesale Trade: 1.7%

Source: EMSI
Covered Employment in Arlington

Source: EMSI
The Economic Influence of the Federal Government
Federal Government Washington MSA

Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis

February-18 Total: 362K
Federal Procurement in the Washington MSA
1980-2017 (Fiscal Years)

TOTAL = $1,388.5 Billion

Source: US Census, Consolidated Federal Funds Report and USAspending.gov
Source: Bureau of Labor Statistics (Not Seasonally Adjusted), GMU Center for Regional Analysis
Professional and Business Services Employment and Federal Employment in Washington, DC Metro Area Compared to the Previous Year, 2012-2018

The DC Metro is a leader in Cyber-security

Information Security Analysts (SOC 15-1122) by metro area, 2017

Washington: 13,520
New York: 7,380
Dallas: 3,560
Chicago: 3,400
Minneapolis: 3,200
Boston: 3,110
Los Angeles: 3,030
Philadelphia: 2,460
Atlanta: 2,430
Charlotte: 2,360
Phoenix: 2,360
SF-Oakland: 2,270
Baltimore: 2,170
St. Louis: 1,970
Denver: 1,740

Source: U.S BLS Occupational Employment Statistics (May 2017) and GMU Center for Regional Analysis
Additional ongoing challenges
Population and employment trends in the Washington Metro Area

Population and employment trends in Arlington

Arlington is fully immersed within the broader regional workforce

Where Arlington residents work (2015)


*19.5 percent of workers living in Arlington, also work in Arlington

*15.4 percent of workers working in Arlington, also live in Arlington

Source: US Census Bureau, Longitudinal Employer-Household Dynamics, OnTheMap
The region has experienced net domestic out-migration since 2013

- This trend started sooner in places like Arlington-Alexandria and suburban Maryland.

- People move here for jobs, then choose a place to live in the region.
  - Many factors cause them to consider other metro areas

- Note the continued importance of Int’l migration to the region’s continued growth

Source: US Census Bureau, Population Estimates Program, V2017
Long commutes diminish quality of life

Proportion of workers with travel time to work of 60 or more minutes

- New York: 21.8%
- Washington: 17.8%
- SF-Oakland: 17.2%
- Atlanta: 14.5%
- Chicago: 14.1%
- Boston: 13.8%
- Los Angeles: 13.3%
- Seattle: 12.2%
- Philadelphia: 11.6%
- Houston: 11.2%
- Miami: 10.7%
- Dallas: 9.3%
- United States: 9.1%
- Phoenix: 7.6%
- Detroit: 7.2%
- Minneapolis: 5.5%
- Arlington: 7.6%

Source: US Census Bureau, 2016 American Community Survey, Table S0802
Median House Sales Price

Washington MSA

Arlington

May 2018

Source: Metropolitan Regional Information Systems (MRIS), GMU Center for Regional Analysis
The contributions of foreign-born, non-citizen workers to the Washington region’s workforce
Foreign Born, Non-Citizen Workers
Greater Washington Region

Source: 2016 American Community Survey, Public Use Microdata Sample (PUMS) files
Most Foreign Born, Non-Citizens originate from Latin America

Proportion of Total Foreign-Born, Non-Citizen Workers

- El Salvador: 23.5%
- India: 6.2%
- Guatemala: 6.1%
- Mexico: 5.8%
- Honduras: 5.6%
- Ethiopia: 3.1%
- China: 3.0%
- Bolivia: 2.9%
- Philippines: 2.7%
- Canada: 1.0%
- Bangladesh: 0.7%

Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis
World Region of Origin
Foreign Born, Non-Citizen Workers
Greater Washington Region

Source: 2016 American Community Survey, Public Use Microdata Sample (PUMS) files
Majority of foreign-born, non-citizen workers have been here 10 years or more

Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis
Foreign-born, non-citizen workers are about as likely to have a post-secondary degree as all workers nationwide.

Source: US Census Bureau ACS 2016, GMU Center for Regional Analysis
Several occupational groups rely heavily on foreign-born, non-citizen workers

<table>
<thead>
<tr>
<th>Occupation Group</th>
<th>Foreign-Born, Non-Citizen Workers</th>
<th>% of Total Occupation Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction &amp; extraction</td>
<td>65,940</td>
<td>52.4%</td>
</tr>
<tr>
<td>Cleaning &amp; maintenance</td>
<td>52,750</td>
<td>48.6%</td>
</tr>
<tr>
<td>Farming, fishing, &amp; forestry</td>
<td>1,150</td>
<td>38.0%</td>
</tr>
<tr>
<td>Food preparation &amp; serving</td>
<td>43,770</td>
<td>32.6%</td>
</tr>
<tr>
<td>Production</td>
<td>14,220</td>
<td>28.0%</td>
</tr>
<tr>
<td>Healthcare support</td>
<td>10,300</td>
<td>21.6%</td>
</tr>
<tr>
<td>Personal care &amp; service</td>
<td>21,160</td>
<td>21.3%</td>
</tr>
<tr>
<td>Transportation &amp; material moving</td>
<td>22,870</td>
<td>20.7%</td>
</tr>
<tr>
<td>Life, physical, &amp; social science</td>
<td>10,890</td>
<td>18.1%</td>
</tr>
<tr>
<td>Installation, maintenance, &amp; repair</td>
<td>9,190</td>
<td>16.6%</td>
</tr>
<tr>
<td>Sales</td>
<td>33,990</td>
<td>14.1%</td>
</tr>
<tr>
<td>Computer &amp; mathematical</td>
<td>21,520</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Source: 2016 American Community Survey, Public Use Microdata Sample (PUMS) files
Looking ahead

• Now/This Year:
  • On a roll
  • Apple/Amazon
  • Federal Budget (We have one!)
  • Job growth constrained by labor availability
  • Building permits not booming
  • Lack of housing inventory, lack of affordable housing

• Looking Forward
  • Economic Development = Talent Attraction
  • Quality of Life is key
  • Net effects of new tax laws on worker take home
  • Increasing debate about 1099 work versus employment
  • Immigration
  • Construction costs
  • AI
Thank You
Questions

mwhite34@gmu.edu
cra.gmu.edu