Assessing Alexandria/Arlington’s Regional Labor Market

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March 6, 2017
Agenda

- Key demographic trends
- The labor force
- Economic trends
- The federal government and the federal workforce
- Sources of workforce demand
- Ongoing regional challenges
- Conclusions and takeaways
- Questions, and hopefully answers
Key demographic trends
After a period of flat/negative growth, A-A grew significantly after the recession.

- 382,000 residents
- 60 percent in Arlington
- 40 percent in Alexandria

Source: US Census Bureau Population Estimates Program
The region has experienced net domestic out-migration since 2011.

1 out of 4 residents are aged 25-34

Source: US Census Bureau, 2015 American Community Survey
The region has gotten slightly older in the past five years.

Source: US Census Bureau, 2015 American Community Survey
The region is less diverse than the DC metro area

*It is important to note that Hispanic or Latino is an ethnicity, and people identifying as such may fit into multiple racial categories.*

Source: US Census Bureau, 2015 American Community Survey
The labor force
Unemployment remains lower than the region, state & nation.

Reflecting demographic trends, LF participation remains very high.

![Chart showing labor force participation rates in different regions](chart_image)

Source: US Census Bureau, 2015 American Community Survey
Where A-A’s workers LIVE

2 out of 3 A-A-A residents (age 25+) have at least a 4-year degree

Source: US Census Bureau, 2015 American Community Survey
Earnings and education go hand in hand

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Alexandria</th>
<th>Arlington</th>
<th>Washington, DC Metro Area</th>
<th>Virginia</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school graduate</td>
<td>$21,432</td>
<td>$24,920</td>
<td>$32,475</td>
<td>$33,928</td>
<td>$32,475</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>$26,689</td>
<td>$29,158</td>
<td>$37,026</td>
<td>$34,241</td>
<td>$37,026</td>
</tr>
<tr>
<td>Some college or associate's degree</td>
<td>$32,475</td>
<td>$45,910</td>
<td>$56,341</td>
<td>$49,702</td>
<td>$56,341</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>$45,910</td>
<td>$70,159</td>
<td>$75,025</td>
<td>$68,904</td>
<td>$75,025</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>$56,341</td>
<td>$83,469</td>
<td>$90,904</td>
<td>$80,886</td>
<td>$90,904</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2015 American Community Survey
Economic trends
Arlington (#26) & Alexandria (#30) are two of America’s wealthiest counties.

In spite of steady growth, the region has relatively fewer sole proprietors.
Prof. and business services account for almost 30% of total employment

Source: Chmura Economics, Jobs EQ
The federal government and the federal workforce
Federal employment (as a % of total) has declined in Arlington over the past 15 years.

Source: US Bureau of Economic Analysis
Federal workers represent a larger share of total residents, than in many surrounding jurisdictions.
Roughly 1 in 5 workers living in Alexandria and Arlington work for the Federal Government

- **Arlington:**
  - 30,000 workers (21%)
  - 25,700 households (25%)

- **Alexandria**
  - 21,000 workers (21%)
  - 17,900 households (26%)

Source: US Census Bureau, 2015 ACS PUMS

Civilian workforce 194,495 (79%)

Federal Employee 51,023 (20.8%)

Military 4,570 (1.9%)
Federal job opportunities likely attract many younger workers to the region.

Source: US Census Bureau, 2015 ACS PUMS
Federal workers living in Alexandria-Arlington tend to earn higher wages

Source: US Census Bureau, 2015 ACS

Median Household Income (2015)
- Households with a Federal Employee: $142,000
- All Households: $108,100

Median Annual Wage (2015)
- Federal Employees: $100,000
- All Employees: $60,000
Federal workers that live in A-A are more likely to use Metro

Source: US Census Bureau, 2015 ACS PUMS
Sources of workforce demand
A-A has a polarized workforce with relatively few middle-skill jobs.

Source: Chmura Economics, JobsEQ, 2016 Q2
Projected higher paying, growth industries and occupations

• Industries
  • Mgmt, Sci., & Tech consulting services
  • Computer systems design & related services
  • Arch, Eng, & related services
  • Business, Prof., Labor, Political, & Similar Orgs.

• Occupations
  • IT-related
    • Software developers, computer systems analysts and programmers, network and computers systems administrators
  • Analysts
    • Management, market research
  • Managers
    • General & operations, Comp & info systems

• Some gov’t projected to create opportunity through replacement hiring.
  • Uncertainty remains
IT-related occupations are among the most advertised, high-skill occupations

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's or Graduate Degree</td>
<td>Computer Occupations, All Other</td>
<td>5,959</td>
<td>ACCENTURE</td>
<td>3,126</td>
</tr>
<tr>
<td></td>
<td>Computer Systems Analyst</td>
<td>4,491</td>
<td>Booz Allen Hamilton</td>
<td>2,618</td>
</tr>
<tr>
<td></td>
<td>Management Analysts</td>
<td>4,488</td>
<td>Deloitte</td>
<td>2,173</td>
</tr>
<tr>
<td></td>
<td>Information Security Analysts</td>
<td>4,386</td>
<td>CACI</td>
<td>1,696</td>
</tr>
<tr>
<td></td>
<td>Software Developers, Applications</td>
<td>4,257</td>
<td>Anthem, Inc.</td>
<td>1,095</td>
</tr>
<tr>
<td></td>
<td>Network &amp; Computer Systems Admin.</td>
<td>3,886</td>
<td>Inova Health System</td>
<td>1,071</td>
</tr>
<tr>
<td></td>
<td>Accountants &amp; Auditors</td>
<td>2,599</td>
<td>General Dynamics</td>
<td>936</td>
</tr>
<tr>
<td></td>
<td>Marketing Managers</td>
<td>2,139</td>
<td>Alion Science</td>
<td>901</td>
</tr>
<tr>
<td></td>
<td>Managers, All Other</td>
<td>1,785</td>
<td>Engility Corporation</td>
<td>810</td>
</tr>
<tr>
<td></td>
<td>Web Developers</td>
<td>1,667</td>
<td>CSRA RESA</td>
<td>781</td>
</tr>
</tbody>
</table>

Source: Help Wanted Online (1/1/16 to 11/28/16)

- Commonly required skills: Cyber Security, Java, SQL, Linux MS, MS Sharepoint
- Commonly demanded certifications: Security clearance
Healthcare and business services are more average paying industries

• Growing industries
  • Healthcare: Dentists offices, outpatient care centers, medical and diagnostic labs
  • Business services: Advertising, PR, and related services; Accounting, tax prep, bookkeeping and payroll services
  • Transport: Transit systems, air transportation

• Middle-skill occupations
  • IT-related
    • Computer-user support specialists, web developers
  • Healthcare
    • Nursing ass’ts, LPNs, medical and dental ass’ts
  • Office support
    • Paralegals and legal ass’ts, bookkeeping, accounting and auditing clerks
  • Maintenance
    • Auto service techs, aircraft mechs & techs,
IT and nursing occupations are among the most advertised middle-skill occupations.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Associate's Degree</td>
<td>Computer User Support Specialists</td>
<td>1,276</td>
<td>Inova Health System</td>
<td>323</td>
</tr>
<tr>
<td></td>
<td>Web Developers</td>
<td>1,155</td>
<td>Forward Air, Inc.</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Heavy &amp; Tractor-Trailer Truck Drivers</td>
<td>1,148</td>
<td>Virginia Hospital Center</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>Registered Nurses</td>
<td>892</td>
<td>US Patent and Trade Office</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>Hairdressers, Hairstylist &amp; Cosmetologists</td>
<td>232</td>
<td>INOVA Geo</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>LP/LV Nurses</td>
<td>219</td>
<td>Transportation Security Administration</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Network &amp; Computer Systems Admin.</td>
<td>153</td>
<td>Pentagon Federal Credit Union</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>Information Security Analysts</td>
<td>150</td>
<td>United States Army</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Exec. Secretaries &amp; Exec. Assistants</td>
<td>136</td>
<td>Hair Cuttery</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>General Maintenance &amp; Repair Workers</td>
<td>119</td>
<td>US Department of State</td>
<td>95</td>
</tr>
</tbody>
</table>

Source: Help Wanted Online (1/1/16 to 11/28/16)

- Commonly required skills: Cyber Security, Java, SQL, Linux MS, MS Sharepoint
- Commonly demanded certifications: Security clearance, drivers license, CDL, HAZMAT, Nursing
Hospitality and personal services provide important opportunities for lower-wage workers

- **Industries**
  - Restaurants
  - Travel accommodation
  - Continued care facilities
  - Personal care services
  - Grocery stores
  - Services to buildings and dwellings
  - Employment services

- **Occupations**
  - Janitors & cleaners, maids and housekeepers
  - Waiters & waitresses
  - Restaurant cooks, food prep workers
  - Cashiers, sales reps, customer service representatives
Retail and hospitality employers are prominent advertisers of lower-skill jobs.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GED/High School</td>
<td>Retail Salespersons</td>
<td>1,505</td>
<td>Marriott</td>
<td>495</td>
</tr>
<tr>
<td></td>
<td>First-line Spvrs. of Retail Sales Workers</td>
<td>1,314</td>
<td>Hilton Worldwide</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>First-line Spvrs. of Food Prep. Workers</td>
<td>1,002</td>
<td>Macy's</td>
<td>353</td>
</tr>
<tr>
<td></td>
<td>First-line Spvrs. of Office &amp; Admin. Workers</td>
<td>791</td>
<td>Inova Health System</td>
<td>347</td>
</tr>
<tr>
<td></td>
<td>Customer Service Representatives</td>
<td>733</td>
<td>Harris Teeter</td>
<td>294</td>
</tr>
<tr>
<td></td>
<td>Maids &amp; Housekeeping Cleaners</td>
<td>707</td>
<td>Target Corporation</td>
<td>244</td>
</tr>
<tr>
<td></td>
<td>General Maintenance &amp; Repair Workers</td>
<td>568</td>
<td>Nordstrom</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>Managers, All Other</td>
<td>547</td>
<td>Sunrise Senior Living</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>Stock Clerks &amp; Order Fillers</td>
<td>452</td>
<td>Ritz-Carlton</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>Security Guards</td>
<td>451</td>
<td>United States Army</td>
<td>184</td>
</tr>
</tbody>
</table>

Source: Help Wanted Online (1/1/16 to 11/28/16)

- Commonly required skills: Food preparation, QC, Bilingual, Tech support, preventative maintenance
- Commonly demanded certifications: Drivers License, Clearance, OSHA, HAZMAT
Ongoing regional challenges

- Talent attraction and retention
- Secondary and postsecondary education
- Transportation and infrastructure
- Commercial and industrial development
- Entrepreneurship and innovation
A-A has a relatively larger proportion of working age veterans

<table>
<thead>
<tr>
<th></th>
<th>Veterans as a % of civilian pop. (Age 18+)</th>
<th>% of veteran pop. aged 18-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>7.6%</td>
<td>50.5%</td>
</tr>
<tr>
<td>Virginia</td>
<td>10.8%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Washington, DC Metro Area</td>
<td>8.3%</td>
<td>64.6%</td>
</tr>
<tr>
<td>Alexandria-Arlington</td>
<td>7.5%</td>
<td>68.0%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2015 American Community Survey
Creating opportunities for local talent through career pathways

Career Pathways for Computer User Support Specialists/Web Developers

- **Bachelor's degree**
  - Information Security Analysts
    - DC Metro Jobs: 3,566
    - Current postings: 3,097
  - Software Developers
    - DC Metro Jobs: 34,238
    - Current postings: 5,837
  - Network & Computer Systems Administrators
    - DC Metro Jobs: 13,119
    - Current postings: 5,269
  - Graphic Designers
    - DC Metro Jobs: 7,028
    - Current postings: 310
  - Marketing Managers
    - DC Metro Jobs: 5,567
    - Current postings: 2,605

- **Associate's degree**
  - Computer Network Support Specialists
    - DC Metro Jobs: 6,562
    - Current postings: 14

- **Some college, certificate**
  - Computer User Support Specialists
    - DC Metro Jobs: 21,248
    - Current postings: 4,790

- **HS degree**
  - Computer Operators
    - DC Metro Jobs: 1,650
    - Current postings: 6
  - Customer Service Representatives
    - DC Metro Jobs: 50,280
    - Current postings: 2,324

Median House Sales Price

Source: Metropolitan Regional Information Systems (MRIS), GMU Center for Regional Analysis
On-time graduation vary, but tend to lag for Hispanic students

<table>
<thead>
<tr>
<th>High School</th>
<th>All Students</th>
<th>White</th>
<th>African-American</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yorktown (APS)</td>
<td>97.0%</td>
<td>100.0%</td>
<td>91.3%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Washington-Lee (APS)</td>
<td>94.8%</td>
<td>100.0%</td>
<td>98.4%</td>
<td>86.3%</td>
</tr>
<tr>
<td>Wakefield (APS)</td>
<td>88.1%</td>
<td>91.8%</td>
<td>93.4%</td>
<td>81.1%</td>
</tr>
<tr>
<td>T.C. Williams (ACPS)</td>
<td>82.1%</td>
<td>92.8%</td>
<td>84.6%</td>
<td>70.5%</td>
</tr>
<tr>
<td><strong>Virginia</strong></td>
<td><strong>91.3%</strong></td>
<td><strong>93.9%</strong></td>
<td><strong>88.3%</strong></td>
<td><strong>82.8%</strong></td>
</tr>
</tbody>
</table>

*Source: Virginia Department of Education*
Less than two-thirds of A-A-A workers drive to work

<table>
<thead>
<tr>
<th>Means of Transportation to Work</th>
<th>United States</th>
<th>Virginia</th>
<th>Washington metro area</th>
<th>Alexandria-Arlington</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car, truck or van</td>
<td>85.6%</td>
<td>86.6%</td>
<td>75.0%</td>
<td>63.6%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>5.2%</td>
<td>4.7%</td>
<td>14.4%</td>
<td>24.0%</td>
</tr>
<tr>
<td>Walked</td>
<td>2.8%</td>
<td>2.3%</td>
<td>3.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>0.6%</td>
<td>0.4%</td>
<td>0.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Other</td>
<td>1.2%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Worked at home</td>
<td>4.6%</td>
<td>4.6%</td>
<td>5.1%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Source: US Census Bureau, 2015 American Community Survey
Metrorail ridership is in decline

Source: Washington Metropolitan Area Transit Authority (WMATA)
Several factors have led to significant increases in office vacancy rates.

### Office Vacancy Rate

<table>
<thead>
<tr>
<th>Location</th>
<th>2011 Q1</th>
<th>2016 Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington</td>
<td>9.5%</td>
<td>20.3%</td>
</tr>
<tr>
<td>Prince Georges</td>
<td>17.1%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Fairfax</td>
<td>15.4%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Alexandria</td>
<td>12.4%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>12.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Loudoun</td>
<td>17.7%</td>
<td>13.6%</td>
</tr>
<tr>
<td>DC</td>
<td>10.7%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>

Source: CoStar and Arlington Economic Development
The region must develop more innovative companies to move beyond being a ‘Federal City’

- The region possesses numerous innovation assets
  - Federal: DARPA, ONR, AFOSR, NSF
  - Campuses of 3 R1 Institutions

- Growing number of facilities (e.g. 1776, Eastern Foundry, Capitol Post, TechShop) and services (e.g., Mason Enterprise Center, Alexandria SBDC) to support entrepreneurs and growth companies

- Success will depend on the region’s ability to keep emerging companies as they grow and develop
Key conclusions

• Uncertainty about the direction of the federal gov’t creates uncertainty about the regional economic and workforce development issues.

• The region is very much part of the broader DC region.

• The region is very much a services-based economy at all levels
  • High-end professional and business services
  • Lower wages services but vital services like hospitality
  • Fewer opportunities in the middle.

• Economic diversification will requires multi-faceted, collaborative strategies
Questions?
Thank you

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• 703-993-2401
• mwhite34@gmu.edu