

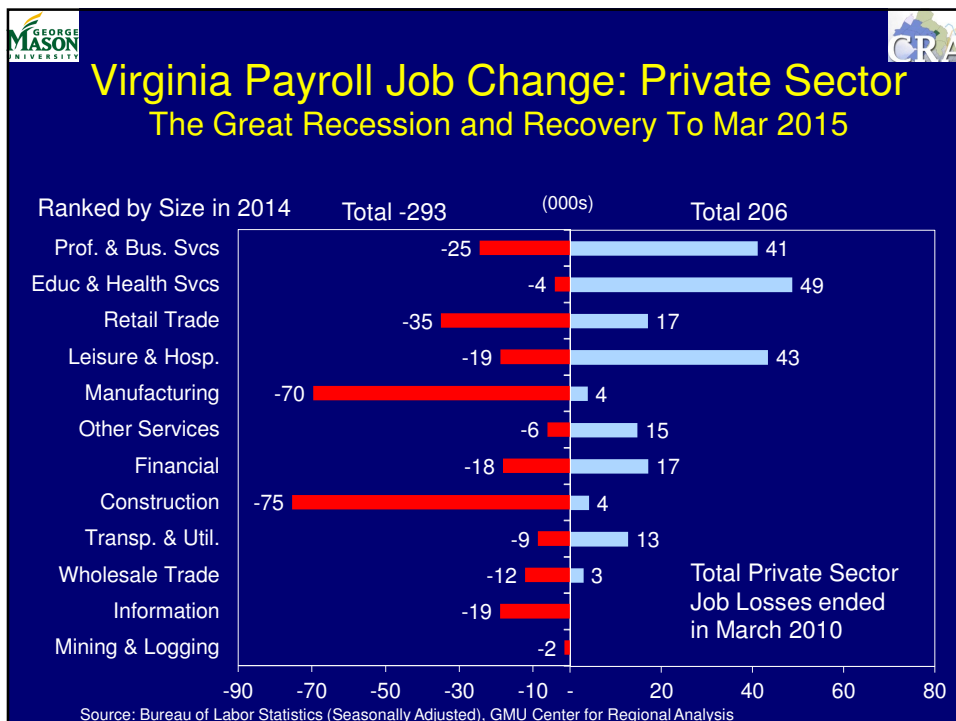





## Virginia Early Childhood Foundation Business Leaders Breakfast

# Changing Workforce Development Requirements in Virginia's Emerging Economy

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Director, Center for Regional Analysis  
George Mason University

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### The GSP\* Effects of Private Sector Job Change in the Commonwealth of Virginia, March 2008-March 2015 (in 2014\$s)

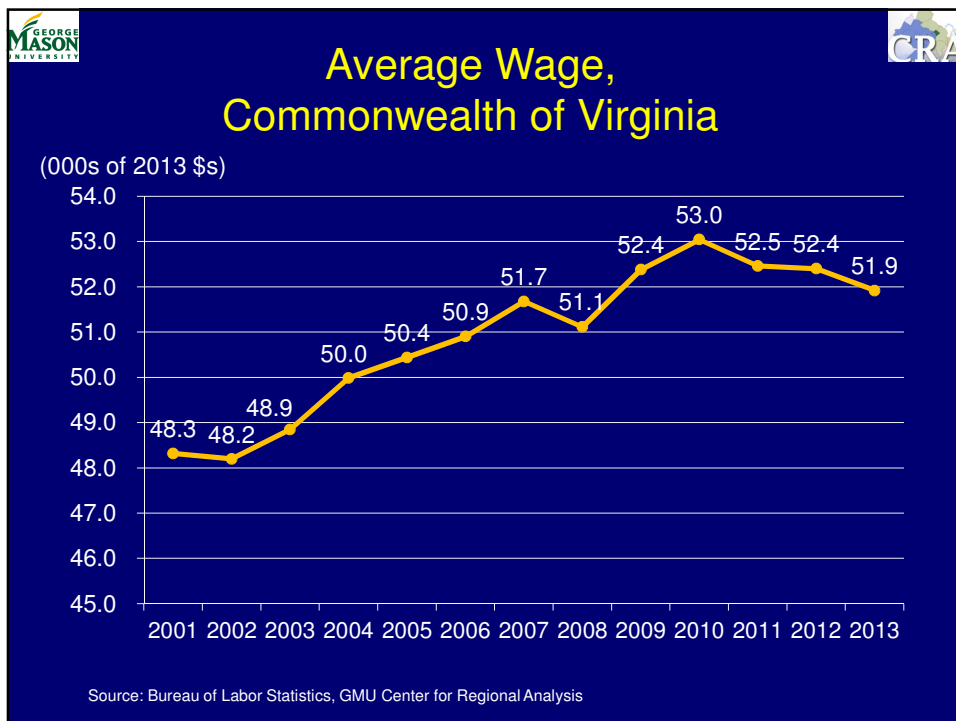
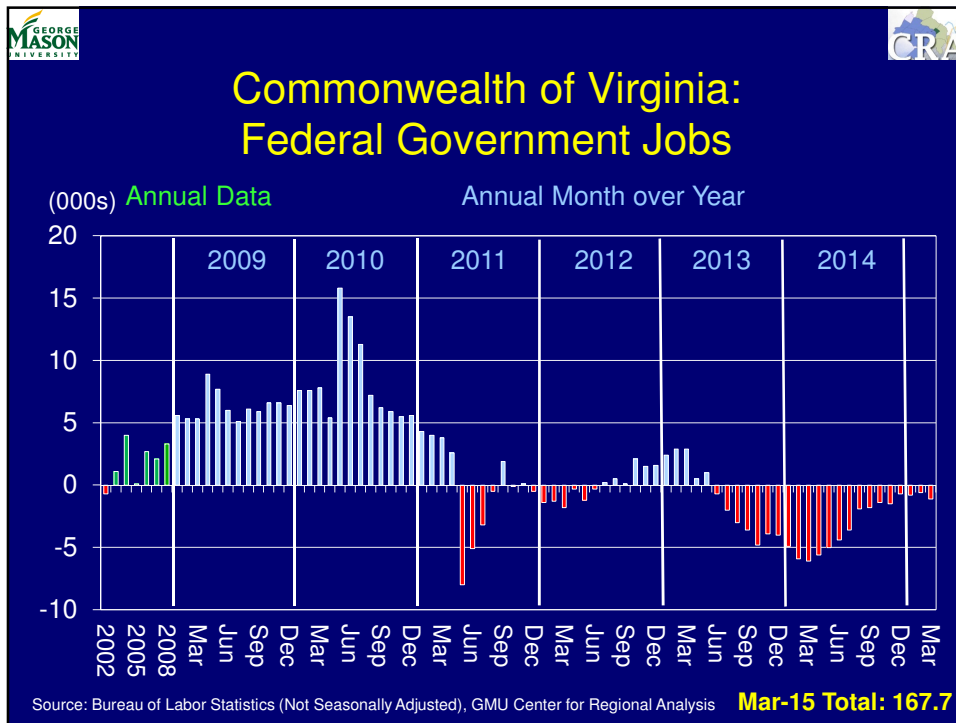
<u>Job Change</u>	<u>Average GSP Value</u>	<u>Total GSP Value</u>
-293,400	\$147,465	- \$43,266,201,000
+ <u>205,500</u>	\$102,802	<u>21,125,716,000</u>
- 87,900		- \$21,082,450,000

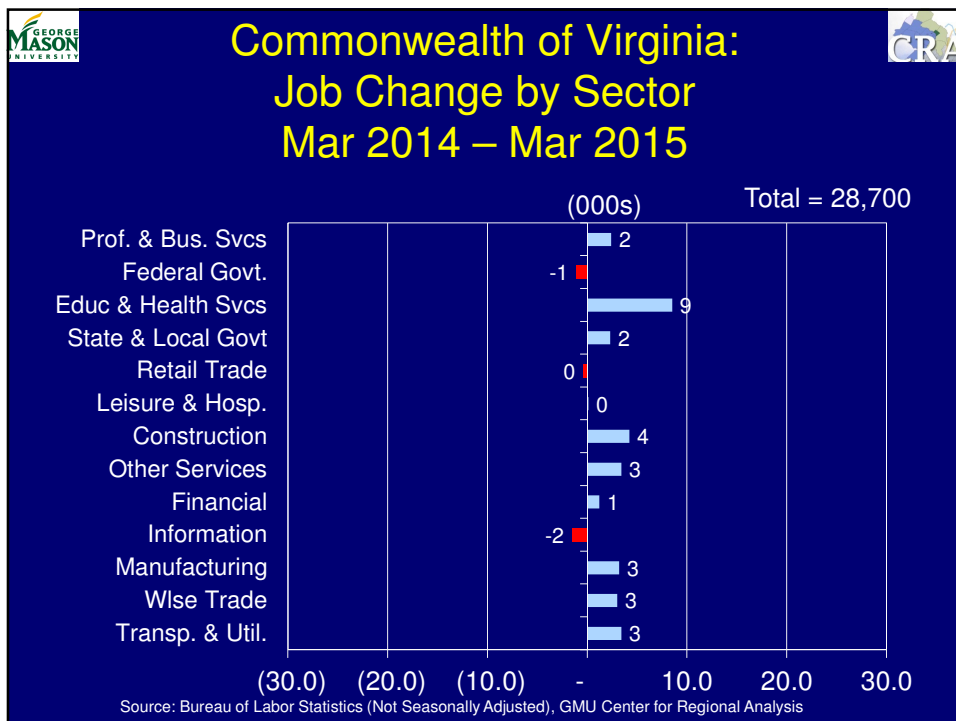
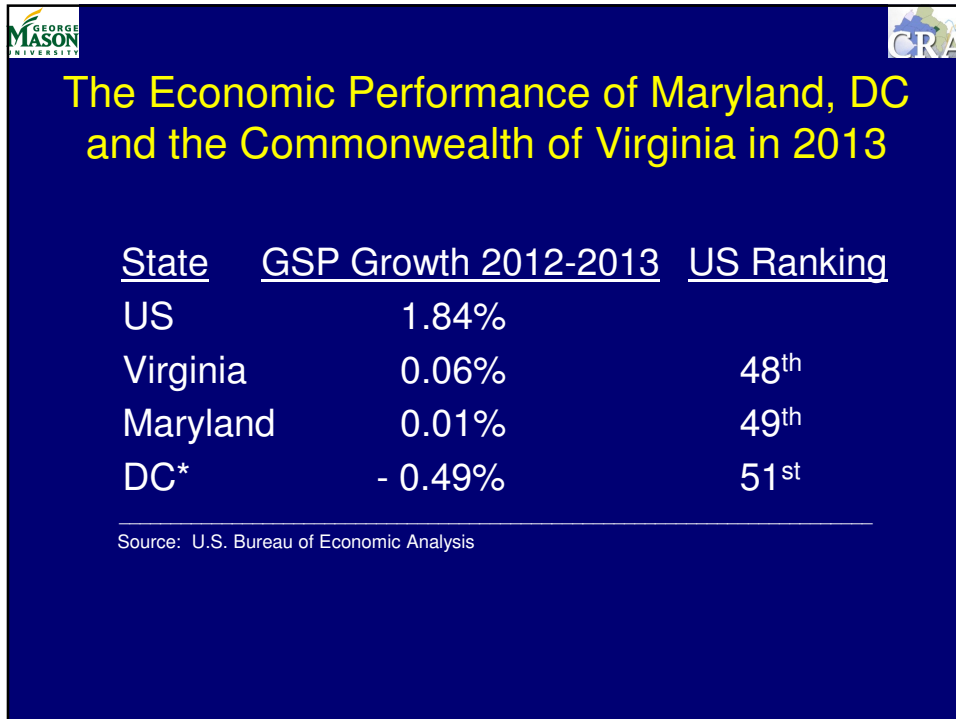
Source: GMU Center for Regional Analysis  
\*Gross State Product

### Summary of Federal Spending Trends in the Commonwealth of Virginia, 2010-2014

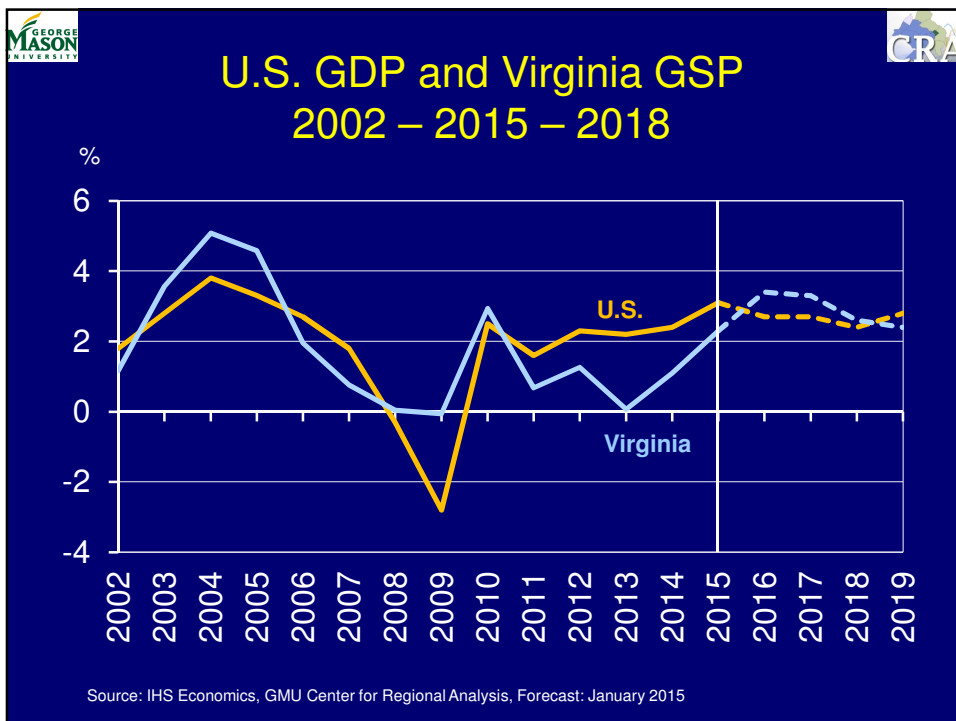
- Federal Procurement Outlays declined \$6.8 billion or 11.6% between FY 2010 and FY 2014.
- Federal employment—civilian and military—has lost 16,760 since peaking 2010 through November 2014, a decline of 5.1%.
- Federal payroll declined by \$1.0 billion between FY 2010 and FY 2014 and will continue to decline as the workforce shrinks and older workers retire and are replaced by younger workers.





GEORGE MASON UNIVERSITY CRA

# Economic Outlook for the Commonwealth of Virginia: 2014-2019



**Commonwealth of Virginia  
Change in Jobs, Summary  
2014 – 2019**

Year	Total Jobs	Net New (% Change)	Replacement (% Change)	Openings (% Change)
2014	3,658,465			
2014-2019	3,822,424	163,959	450,949	614,908
		4.5%	12.3%	16.8%

Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis

**Commonwealth of Virginia  
Change in All Jobs by Occupation, 2014 – 2019**

<u>Occupation 2-Digit SOC</u>	<u>Net New</u>	<u>%Total</u>	<u>%Change</u>
Healthcare (All)	27,239	16.6	9.8
Construction & Extraction	15,192	9.3	10.0
Computer & Mathematical	12,724	7.8	7.9
Food Prep & Serving Related	12,541	7.6	3.9
Education, Training, & Library	12,049	7.3	4.9
Office & Administrative Support	11,533	7.0	2.0
Personal Care & Service	11,449	7.0	10.0
Sales & Related	11,059	6.7	3.0
Business & Financial Operations	10,163	6.2	4.8
Management	8,404	5.1	4.4
All Others	30,164	18.4	2.9
<b>Totals, All</b>	<b>163,959</b>	<b>100.0</b>	<b>4.5</b>



Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis

<b>2-Digit to 6-Digit SOC</b>	<b>Net New</b>	<b>%Total</b>	<b>%Change</b>
<b>Healthcare (All)</b>	<b>27,239</b>	<b>16.6</b>	<b>9.8</b>
Registered Nurses	4,275	15.8	7.3
Home Health Aides	4,017	14.9	20.0
Nursing Assistants	2,589	9.6	8.3
Medical Assistants	1,764	6.5	12.2
Licensed Nurses	1,614	6.0	1.0
<b>Construction &amp; Extraction</b>	<b>15,192</b>	<b>9.3</b>	<b>10.0</b>
Construction Laborers	3,275	21.7	12.7
Carpenters	2,297	15.2	12.6
Supervisors of workers	1,577	10.4	11.4
Electricians	1,390	9.2	8.2
Plumbers, Pipe & Steamfitters	987	6.5	8.4
<b>Total, All</b>	<b>163,959</b>	<b>100.0</b>	<b>4.5</b>



Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis

<b>2-Digit to 6-Digit SOC</b>	<b>Net New</b>	<b>%Total</b>	<b>%Change</b>
<b>Computer &amp; Mathematical</b>	<b>12,724</b>	<b>7.8</b>	<b>7.9</b>
Software Developers, Apps	2,975	23.6	10.0
Computer Sys Analysts	2,514	19.9	11.0
Computer User Support	1,811	14.3	8.6
Software Developers, Sys	1,739	13.8	10.3
Network & Syst Admin	672	5.3	5.0
<b>Food Prep &amp; Serving Related</b>	<b>12,541</b>	<b>7.6</b>	<b>3.9</b>
Combined, incl Fast Food	5,191	41.7	6.1
Cooks, Restaurant	1,885	15.1	6.5
First-Line Supervisors	1,336	10.7	5.8
Waiters & Waitresses	1,326	10.7	2.0
Cooks, Institution & Cafeteria	604	4.9	5.6
<b>Total, All</b>	<b>163,959</b>	<b>100.0</b>	<b>4.5</b>

Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis



 <b>Commonwealth of Virginia Change in</b> 			
<b>Jobs by Detailed Occupations 2014 – 2019</b>			
<u>2-Digit to 6-Digit SOC</u>	<u>Net New</u>	<u>%Total</u>	<u>%Change</u>
<b><u>Educ, Train, &amp; Library</u></b>	<b><u>12,049</u></b>	<b><u>7.3</u></b>	<b><u>4.9</u></b>
Element. School Teachers	2,475	20.6	6.1
Teacher Assistants	1,383	11.5	3.9
Middle School Teachers	1,147	9.6	6.1
Substitute Teachers	882	7.4	4.7
Second. School Teachers	808	6.7	2.8
<b><u>Office &amp; Admin Support</u></b>	<b><u>11,533</u></b>	<b><u>7.0</u></b>	<b><u>2.0</u></b>
Secretaries & Assistants*	3,090	28.6	5.1
Customer Service Reps	2,791	25.8	4.3
Bookkeeping, Acct, Clerks	2,001	18.5	4.5
Medical Secretaries	1,957	18.1	15.4
First-Line Supervisors	1,701	15.7	4.7
<b>Total, All</b>	<b>163,959</b>	<b>100.0</b>	<b>4.5</b>

Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis \*Except Legal, Medical, and Executive

 <b>Commonwealth of Virginia</b> 			
<b>Net New Jobs by Educational Requirements</b>			
<b>2014 - 2019</b>			
<u>Educational Requirements</u>	<u>Net New</u>	<u>%Total</u>	<u>%Change</u>
Postgraduate degree	10,537	6.8	6.4
Bachelor's degree	37,662	23.0	5.7
Associate's degree	14,072	8.6	6.8
Post-secondary / College, no award	12,219	7.5	6.6
High School diploma or equivalent	58,840	35.9	4.0
Less than High School	30,629	18.2	4.8
<b>All Levels</b>	<b>163,959</b>	<b>100.0</b>	<b>4.5</b>

Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis



## Commonwealth of Virginia Replacement Jobs by Occupation, 2014 – 2019

<u>Occupation 2-Digit SOC</u>	<u>Replacement</u>	<u>%Total</u>	<u>%Change</u>
Office & Administrative Support	65,659	14.6	11.5
Sales & Related	60,285	13.4	16.1
Food Prep & Serving Related	58,913	13.1	18.4
Healthcare (All)	26,952	6.0	9.7
Transport & Material Moving	25,792	5.7	12.2
Education, Training, & Library	25,375	5.6	10.3
Management	22,895	5.1	12.0
Production Occupations	22,266	4.9	11.9
Business & Financial Operations	22,011	4.9	10.3
Install, Maintenance & Repair	16,491	3.7	11.9
All Others	104,349	23.1	11.3
<b>Totals, All</b>	<b>450,949</b>	<b>100.0</b>	<b>12.3</b>

Sources: JobsEQ® as of 2014Q4 and GMU Center for Regional Analysis




# Thank You & Questions

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