

ANALYSIS OF CURRENT WORKFORCE DEMANDS IN THE METROPOLITAN WASHINGTON REGION

Initial Findings

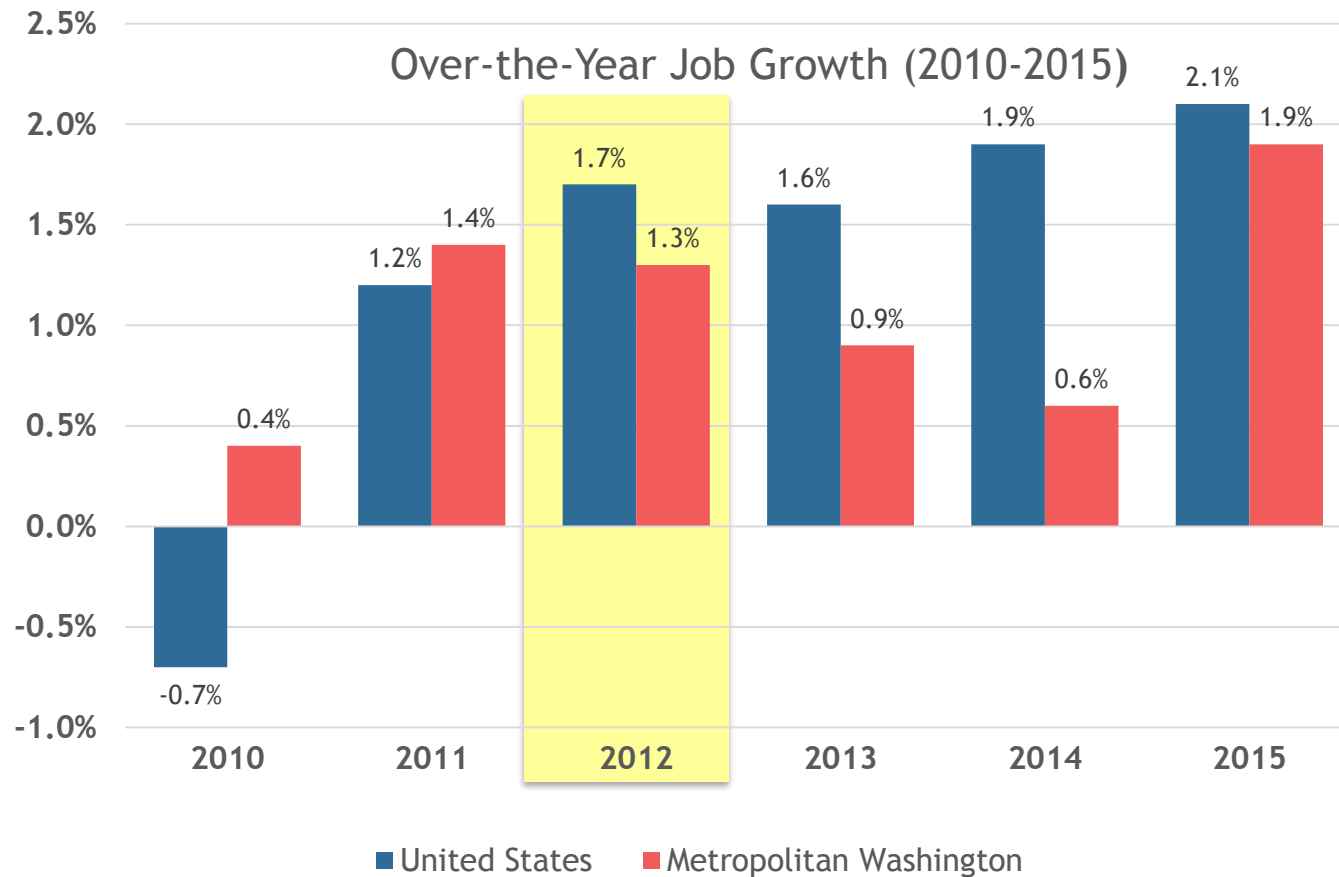
Nicole McCall
Planner, TPB

Cooperative Forecasting and Data Subcommittee
May 10, 2016

Presentation Overview

1. Job Growth: Region v. Nation
2. Job Postings: A Leading Indicator?
3. Ten Occupations Most in Demand

Job Growth in the Region Has Lagged the Nation since 2012

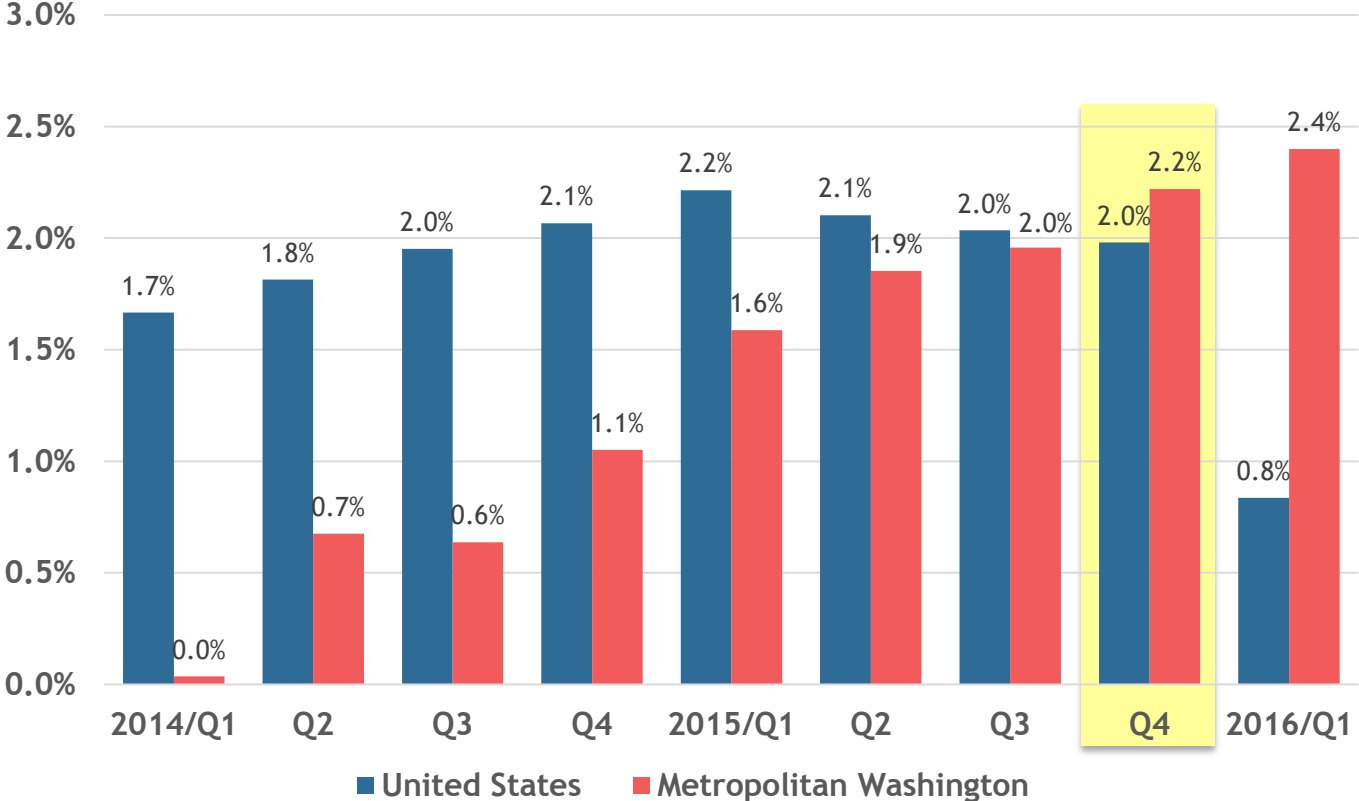


Source: Bureau of Labor Statistics,
Current Employment Survey.
Washington-Arlington-Alexandria,
DC-VA-MD-WV MSA



Job Growth in the Region Began to Accelerate in 2014

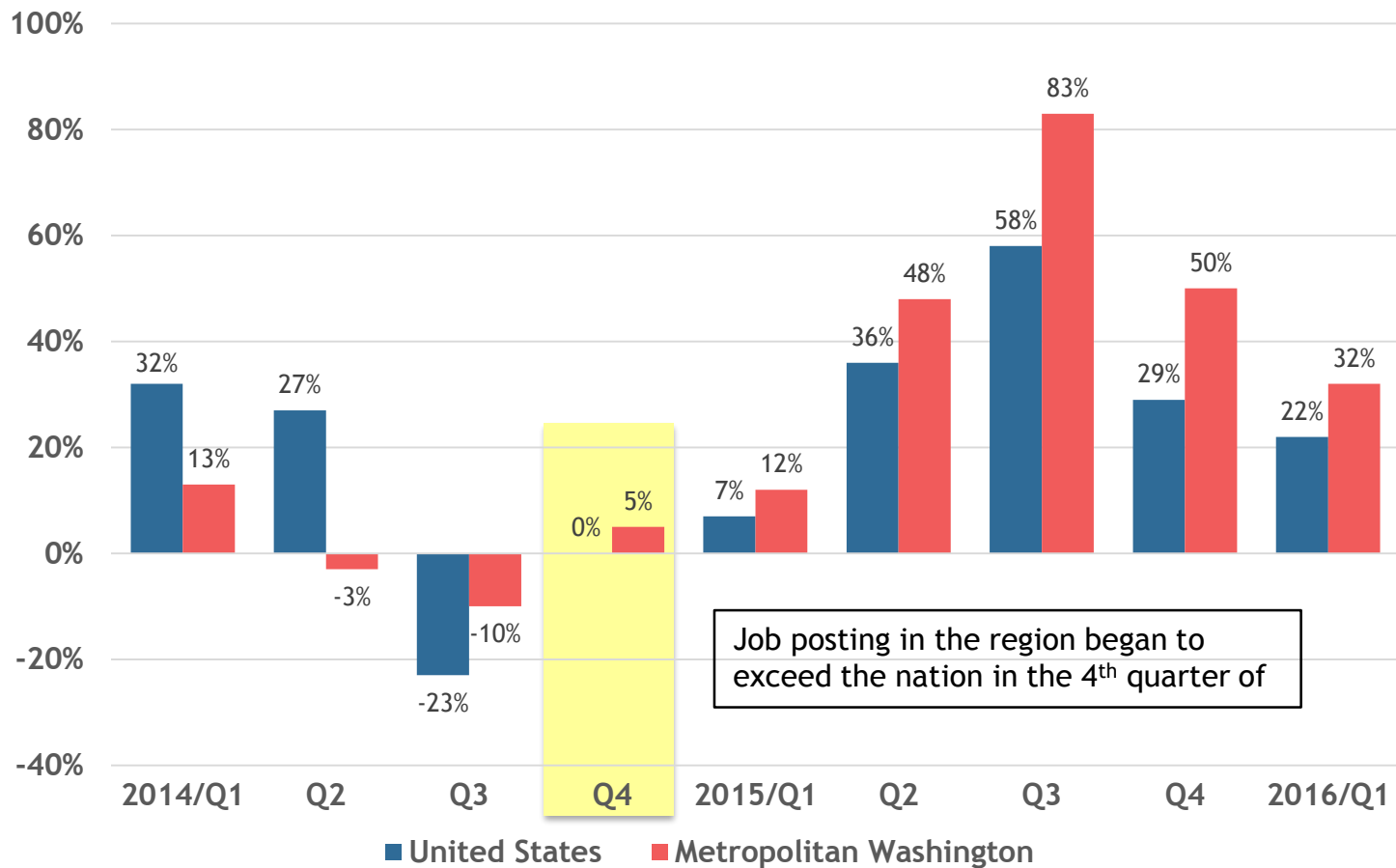
Over-the-Year Job Growth by Quarter 2014-2016



Source: Bureau of Labor Statistics, Current Employment Survey; 2016 Q1 preliminary, Washington-Arlington-Alexandria, DC-VA-MD-WV MSA

Job Postings as a Leading Indicator?

Over-the-Year Growth in Job Postings by Quarter 2014-2016



Source: Burning Glass Labor Insight

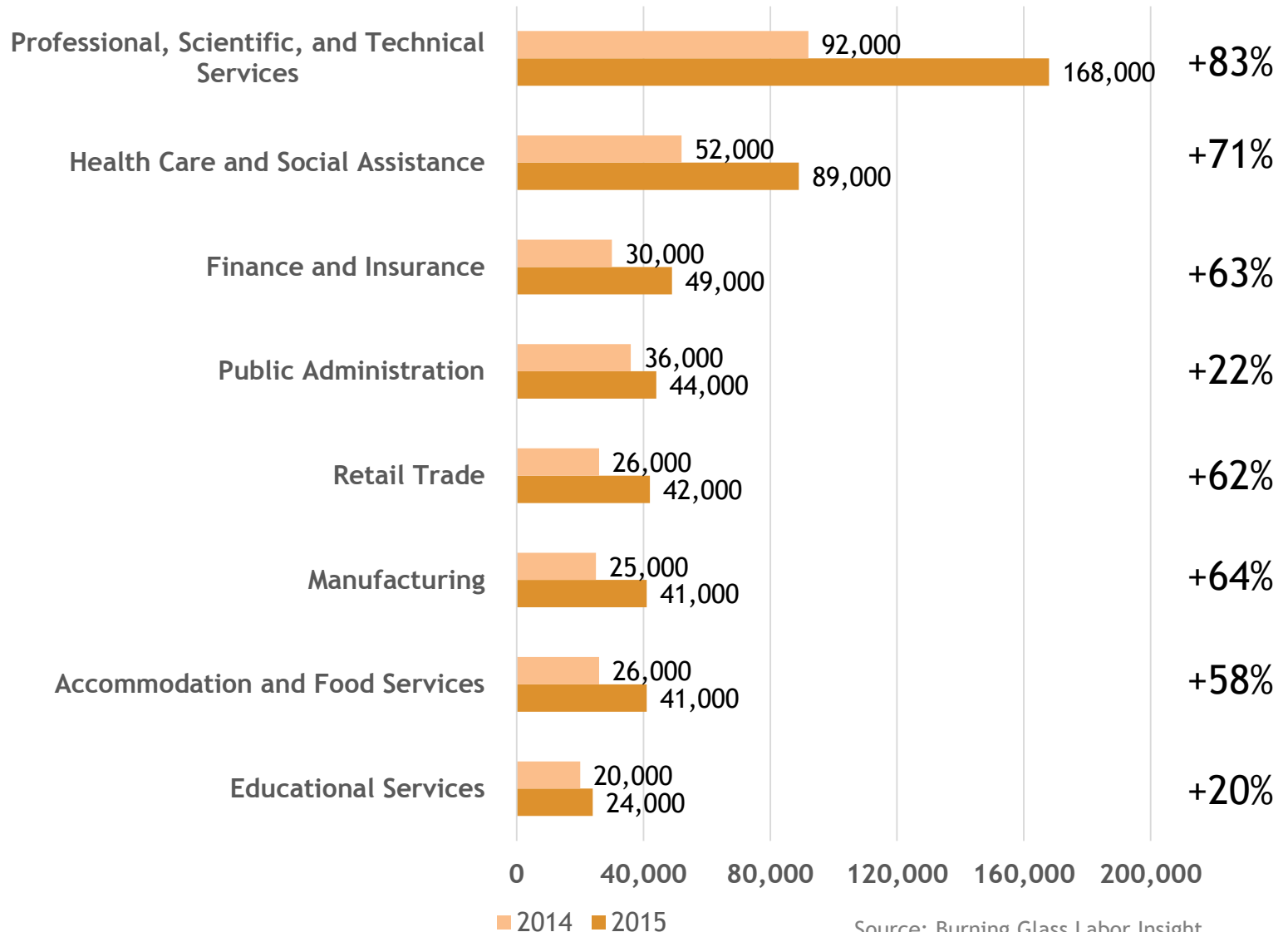


New Tools / Data Sources

- What can job postings tell us about where the region's economy is heading, the occupations in greatest demand and the education and skills needed by workers wanting to fill these jobs ?



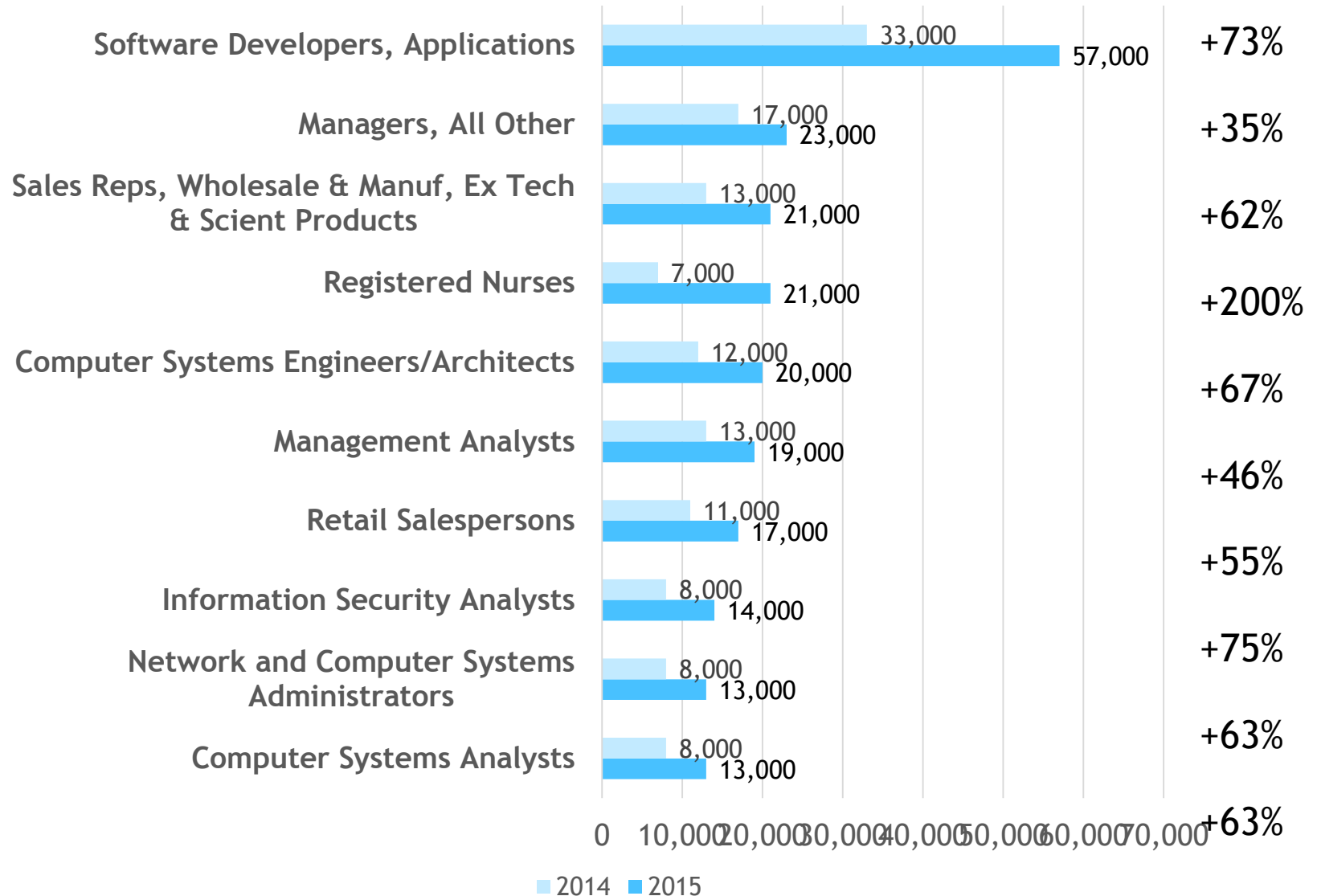
Job Postings by Industry Sector (2014, 2015)



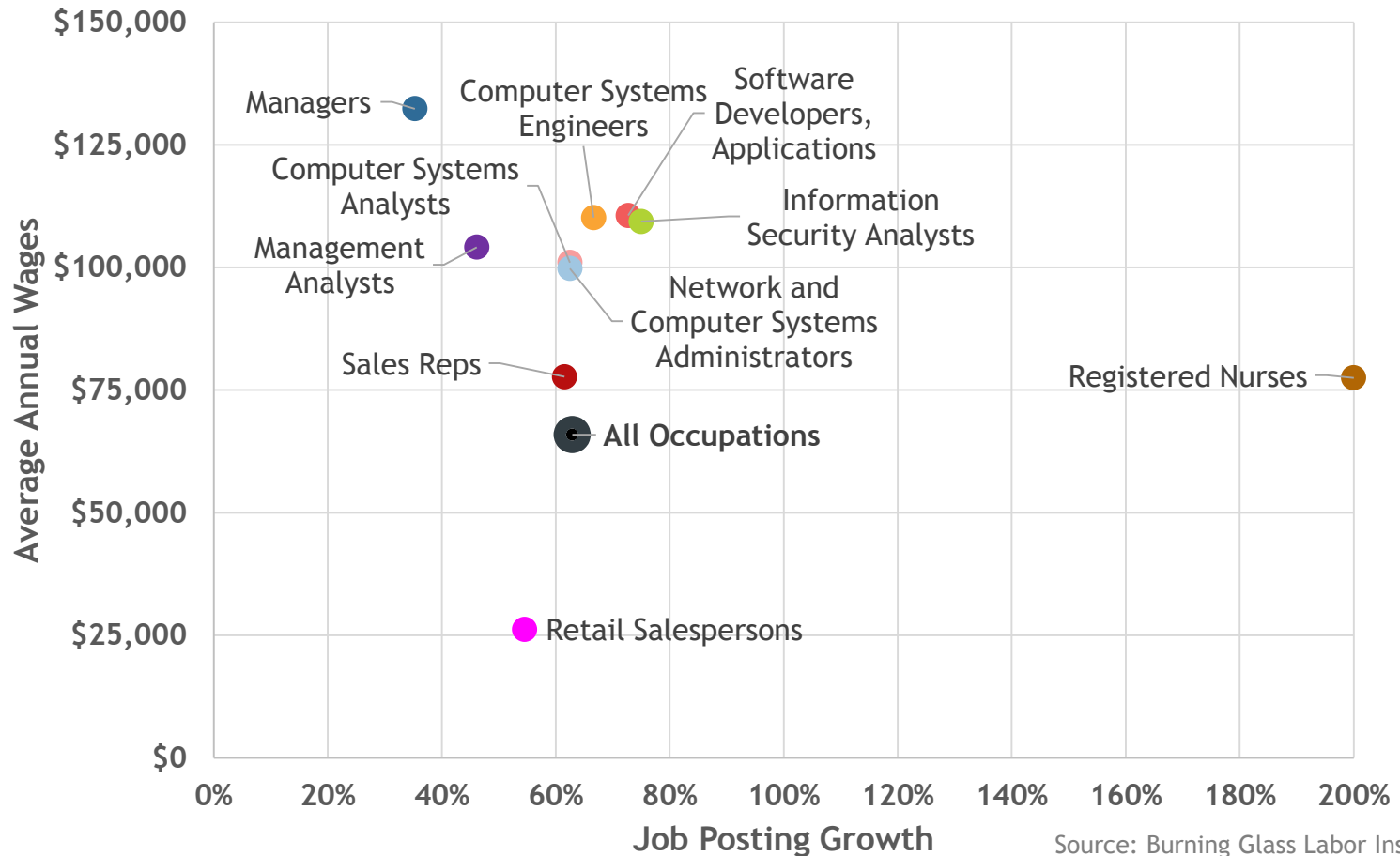
Source: Burning Glass Labor Insight



Top 10 Occupations in Greatest Demand (2014, 2015)



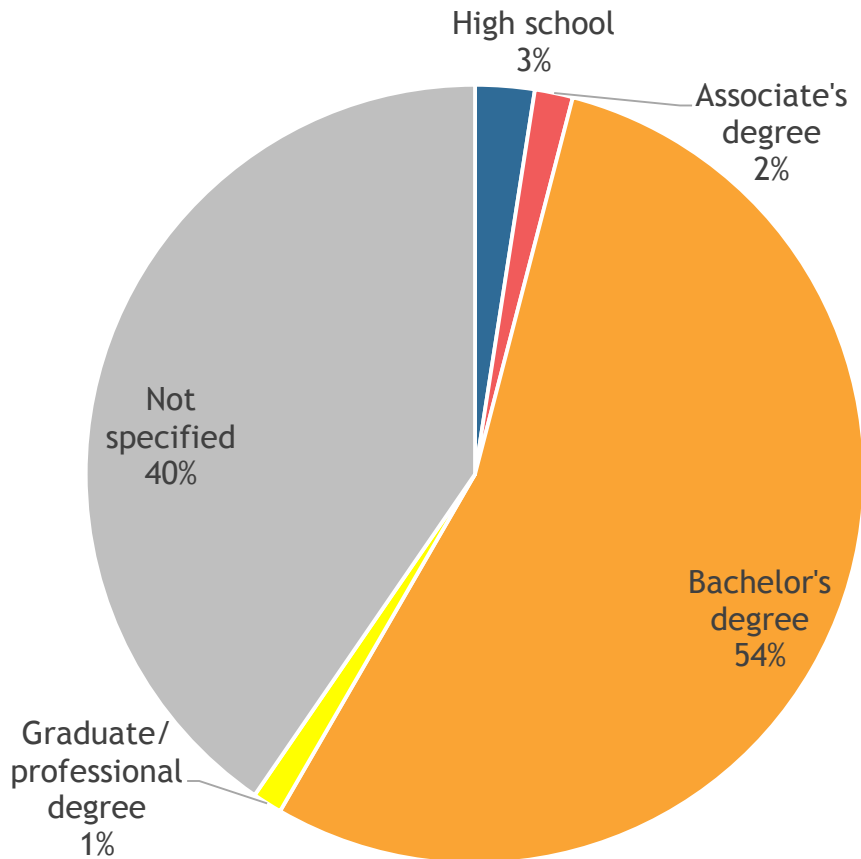
Job Posting Growth (2014-2015) and Average Annual Wages for Top Ten Occupations in Greatest Demand



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

1. Software Developers, Applications, \$110,600

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

1. Software Development Engineer
2. Java Software Developer
3. .Net Developer
4. Software Developer
5. Applications Developer

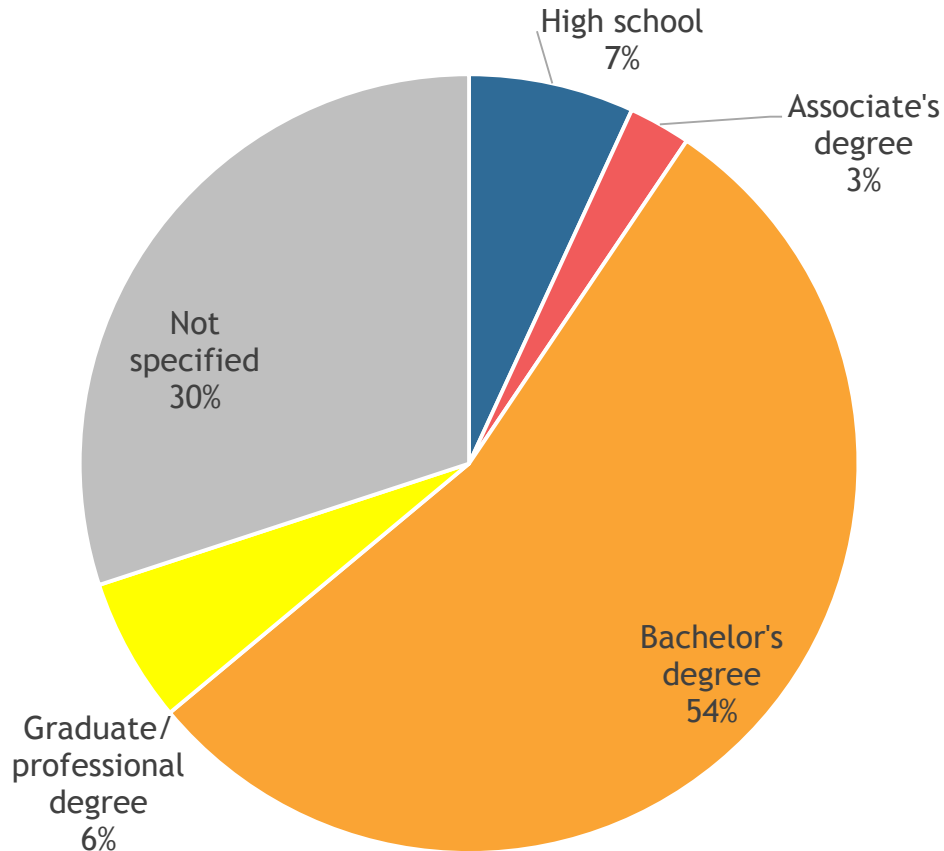
Skills

- | | |
|--------------------|----------------------|
| 1. JAVA | 6. Oracle |
| 2. Software Devel. | 7. XML |
| 3. SQL | 8. LINUX |
| 4. Software Eng. | 9. Microsoft C# |
| 5. JavaScript | 10. .NET Programming |



2. Managers, All Other, \$132,380

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

1. Project Manager
2. Program Manager
3. Senior Project Manager
4. Project Coordinator
5. Manager

Skills

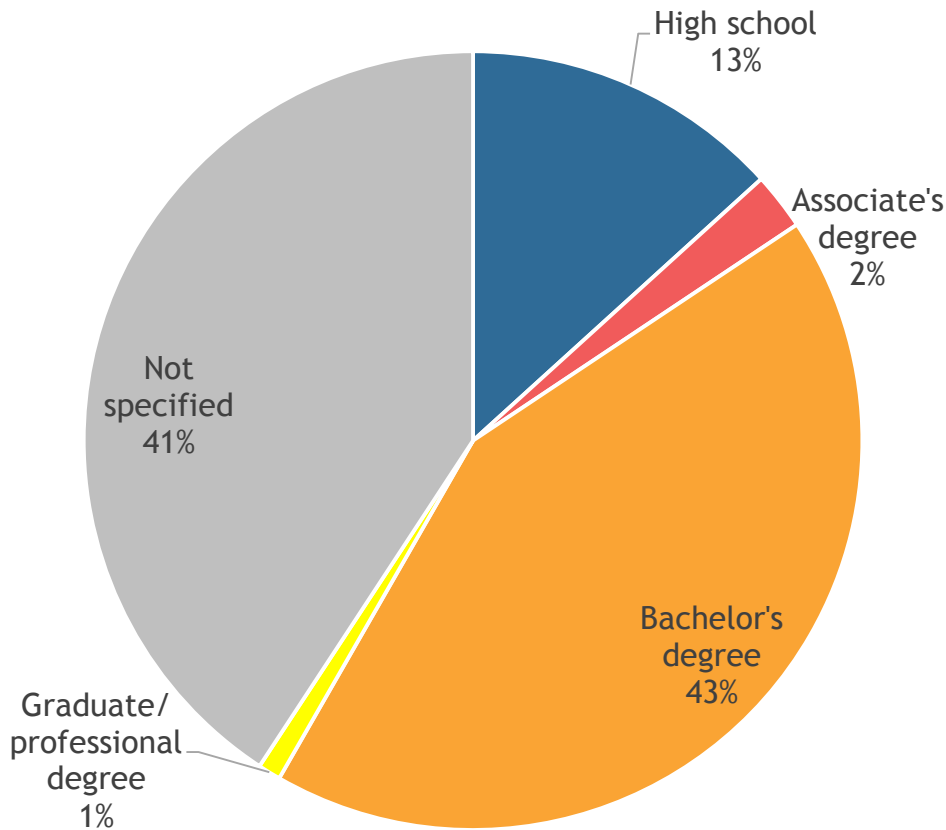
1. Project Mgmt
2. Budgeting
3. Scheduling
4. Program Mgmt
5. Supervisory Skills
6. Contract Mgmt
7. Staff Mgmt
8. Building Relat
9. Cust Service
10. Business Devel



3. Sales Reps, \$77,700

(Wholesale and Manufacturing, Excluding Technical and Scientific Products)

Education Requirements



Titles

1. Sales Representative
2. Account Manager
3. Sales Consultant
4. Sales Specialist
5. Outside Sales Representative

Skills

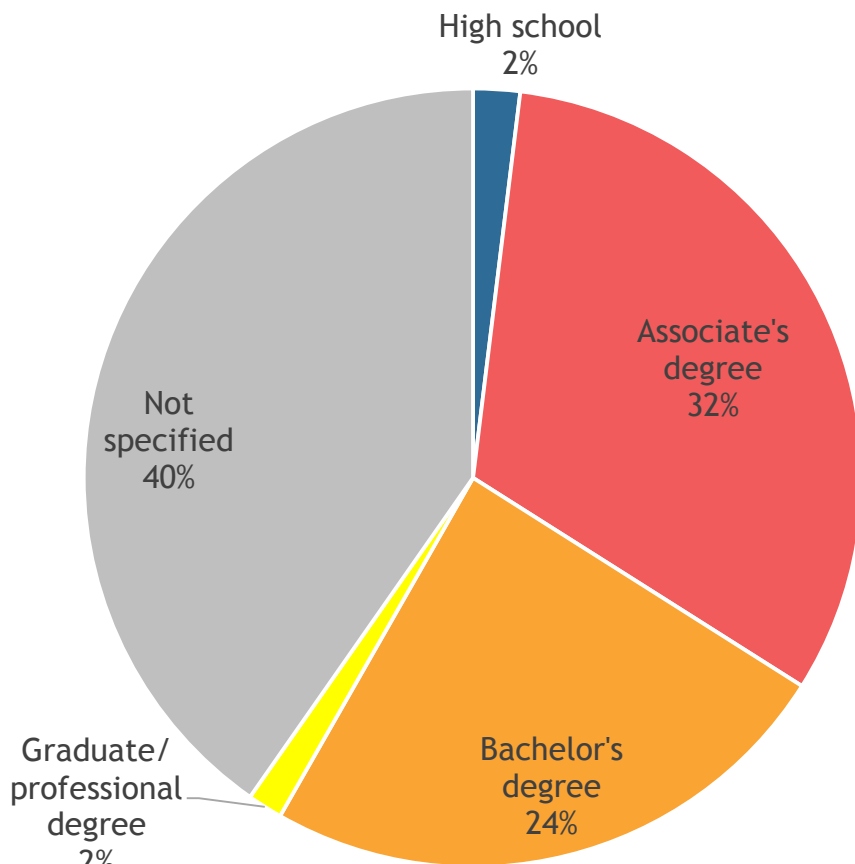
- | | |
|---------------------|-------------------|
| 1. Sales | 6. Sales Mgmt |
| 2. Building Relat. | 7. Sales Goals |
| 3. Business Devel. | 8. Prosp. Clients |
| 4. Customer Service | 9. Cust. Contact |
| 5. Outside Sales | 10. Product Sales |

Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics



4. Registered Nurses, \$77,490

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

1. Registered Nurse
2. Travel Registered Nurse
3. Emergency Room Registered Nurse
4. Operating Room Registered Nurse
5. Clinical Nurse

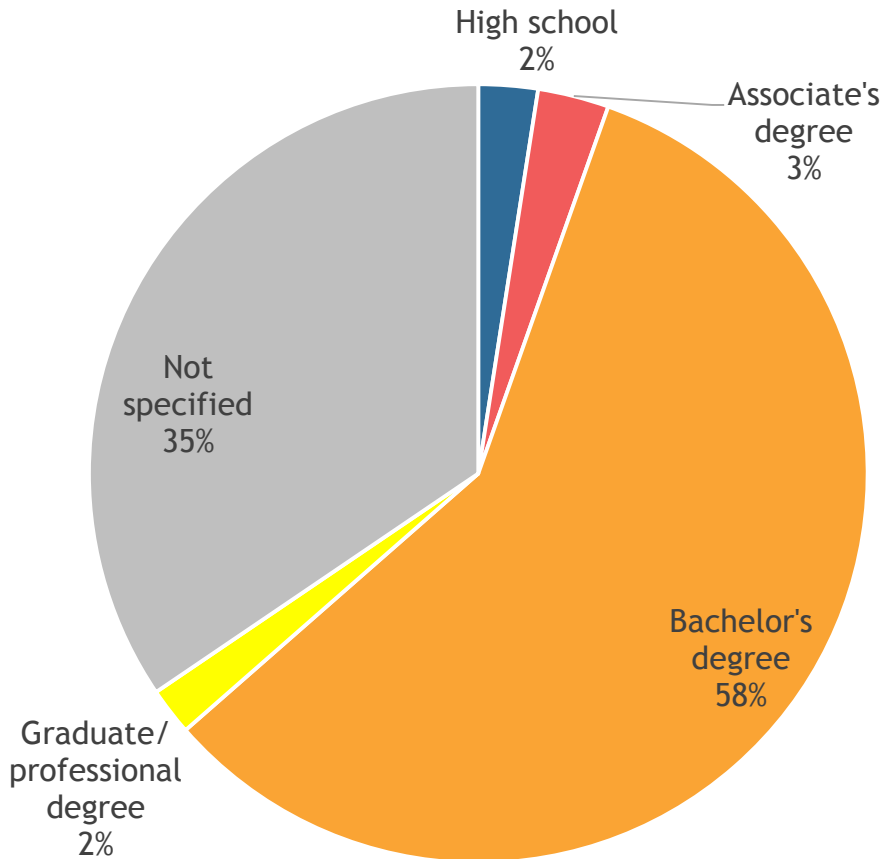
Skills

- | | |
|---|-----------------------------------|
| 1. Patient Care | 6. Treatment Plng |
| 2. CPR | 7. Teaching |
| 3. Supervisory Skills | 8. Patient Direction |
| 4. Advanced Cardiac Life Support (ACLS) | 9. Patient/Family Educ & Instruct |
| 5. Case Management | 10. Acute Care |



5. Computer Systems Engineers/Architects, \$110,180

Education Requirements



Titles

1. Systems Engineer
2. Solutions Architect
3. Senior Systems Engineer
4. Systems Architect
5. Enterprise Architect

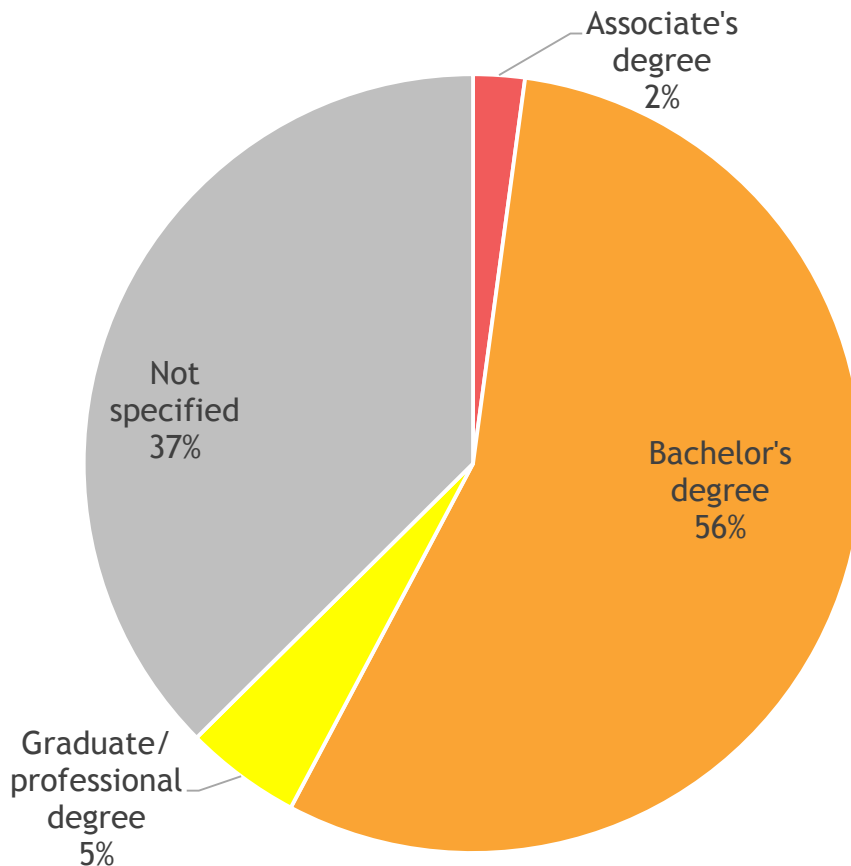
Skills

1. Systems Engineer
2. LINUX
3. VMware
4. Software Devel.
5. SQL
6. Project Mgmt
7. System Architect
8. Oracle
9. UNIX
10. JAVA

Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

6. Management Analysts, \$104,140

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

1. Business Analyst
2. Program Analyst
3. Management Analyst
4. Management and Program Analyst
5. Business Process Analyst

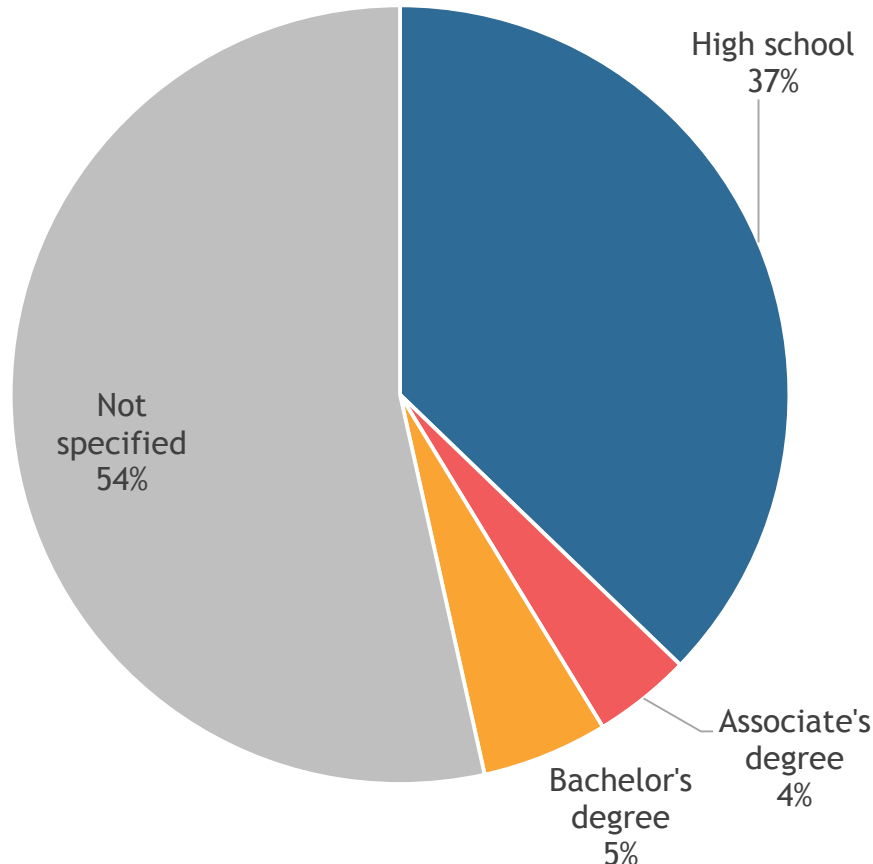
Skills

- | | |
|----------------------|--------------------|
| 1. Business Analysis | 6. Cust Service |
| 2. Project Mgmt | 7. Building Relat |
| 3. Business Process | 8. Business Devel |
| 4. Budgeting | 9. SQL |
| 5. Scheduling | 10. Inform Systems |



7. Retail Salespersons, \$26,200

Education Requirements



Titles

1. Sales Associate
2. Sales Consultant
3. Retail Sales Associate
4. Beauty Advisor
5. Store Associate

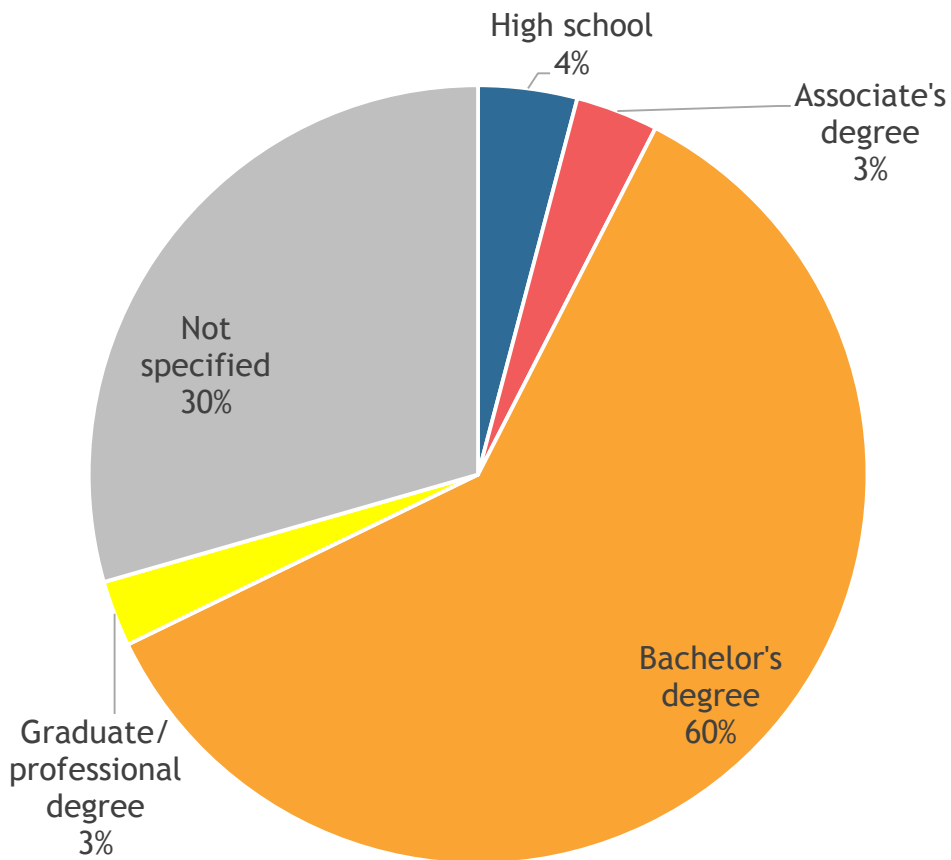
Skills

- | | |
|---------------------|--------------------|
| 1. Sales | 6. Prod. Knowledge |
| 2. Customer Service | 7. Merchandising |
| 3. Retail Setting | 8. Cust. Contact |
| 4. Retail Sales | 9. Mathematics |
| 5. Building Relat. | 10. Sales Goals |

Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

8. Information Security Analysts, \$109,390

Education Requirements



Titles

1. Security Engineer
2. Security Analyst
3. Security Specialist
4. Information Security Engineer
5. Information Security Analyst

Skills

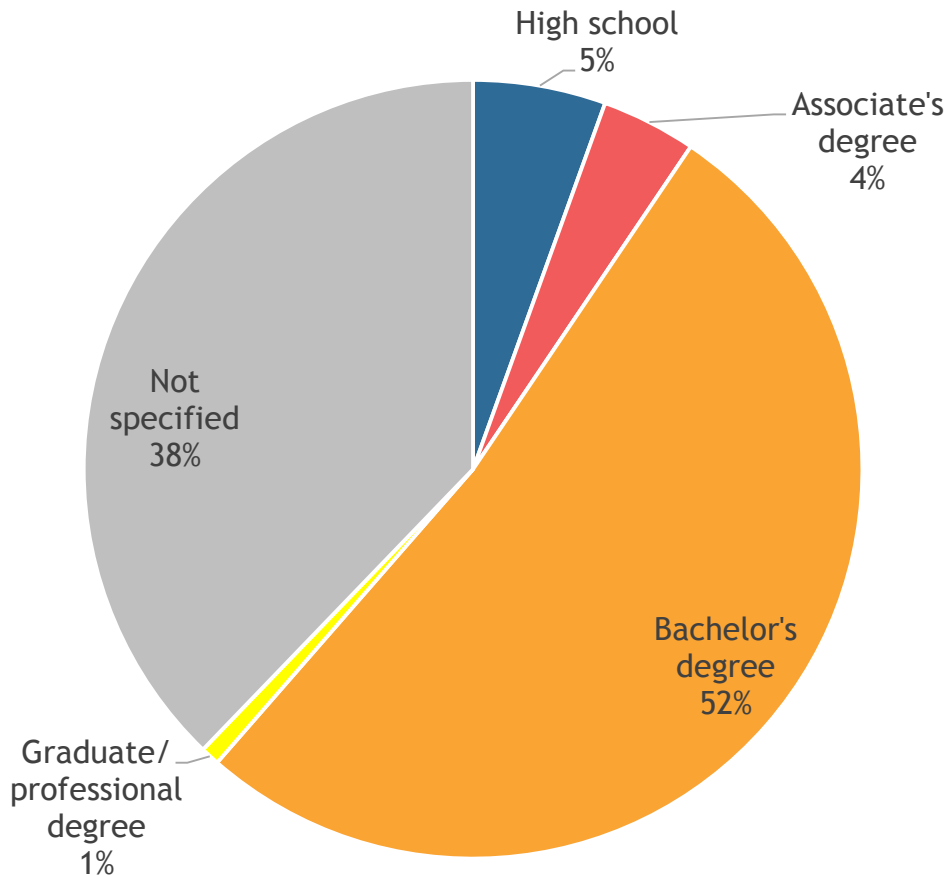
- | | |
|-------------------------|---------------------------------------|
| 1. Information Security | 6. Scanners |
| 2. Information Systems | 7. Customer Service |
| 3. Information Assur. | 8. UNIX |
| 4. Network Security | 9. Fed. Information Security Mgmt Act |
| 5. LINUX | 10. Project Mgmt |

Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics



9. Network and Computer Systems Admin., \$99,790

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

1. Systems Administrator
2. Senior Systems Administrator
3. Network Administrator
4. Linux Systems Administrator
5. SharePoint Administrator

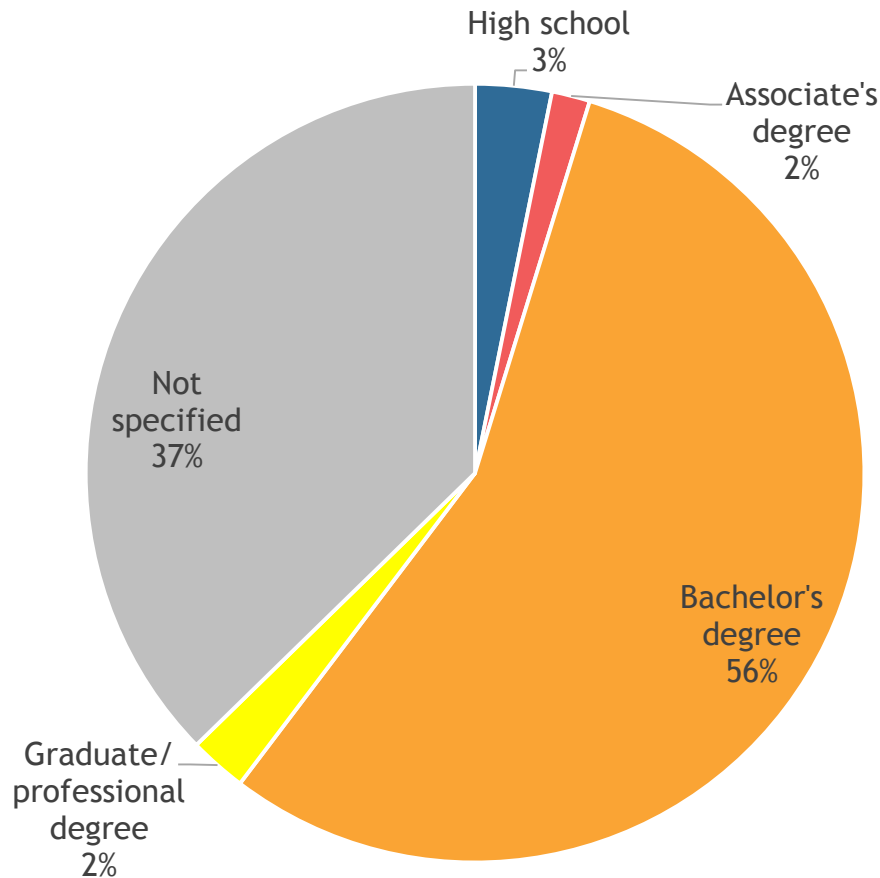
Skills

1. System Admin
2. Linux
3. VMware
4. UNIX
5. Hardware and Software Installation
6. Windows Server
7. SQL
8. Technical Support
9. Domain Name System (DNS)
10. Red Hat Linux



10. Computer Systems Analysts, \$101,010

Education Requirements



Source: Burning Glass Labor Insight and Bureau of Labor Statistics 2015 Occupational Employment Statistics

Titles

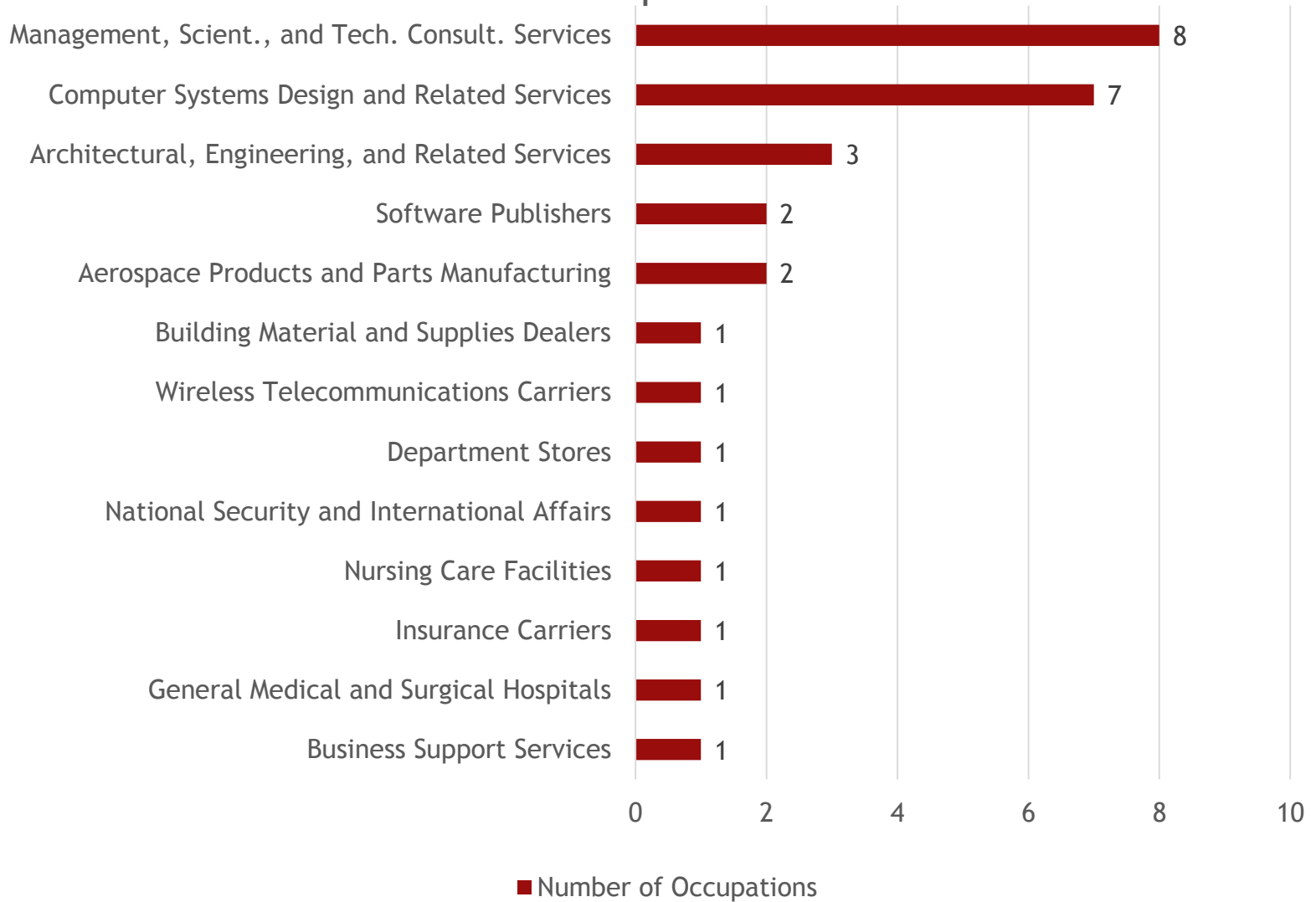
1. Systems Analyst
2. Business Systems Analyst
3. Systems Integrator
4. Technical Analyst
5. Technical Consultant

Skills

- | | |
|---------------------|---------------------|
| 1. Systems Analysis | 6. Software Devel. |
| 2. Project Mgmt | 7. Inform. Systems |
| 3. SQL | 8. JAVA |
| 4. Business Process | 9. Customer Service |
| 5. Oracle | 10. Budgeting |



Industry Groups Represented in the Top Ten Occupations



Employers with Greatest Number of Job Postings

Employer	Industry Group	2014	2015	Largest Employers ¹
General Dynamics	3369 - Other Transportation Equipment Manufacturing	1	1	*
Accenture	5416 - Management, Scientific, and Technical Consulting Services	6	2	
Leidos	5415 - Computer Systems Design and Related Services; 5417 - Scientific Research and Development Services	2	3	*
Booz Allen Hamilton	5416 - Management, Scientific, and Technical Consulting Services	3	4	*
Capital One	5222 - Nondepository Credit Intermediation	4	5	*
Deloitte	5416 - Management, Scientific, and Technical Consulting Services	12	6	*
Oracle	5112 - Software Publishers	36	7	
Mantech Intl Corp	5415 - Computer Systems Design and Related Services	14	8	
Northrop Grumman	3364 - Aerospace Product and Parts Manufacturing	8	9	*
Harris Teeter	4451 - Grocery Stores	11	10	

¹ Included in the Washington Business Journal's Book of List Largest Employers

Summary of Initial Findings

- Employment data indicates that Metropolitan Washington's economy is beginning to expand at a greater rate than the rest of the nation.
- Job postings growth began to outpace the nation in late 2014; job growth began to outpace the nation in late 2015. Job postings may be a leading indicator
- For the 10 occupations in greatest demand:
 - Half are computer occupations
 - The other half, except for sales reps, were in the top 15 most common occupations in metropolitan Washington in 2015
 - Except for Retail Salespersons, the annual average wages were higher than metropolitan Washington's average
 - 50% or more of the job postings for each occupation required a Bachelors Degree or more, except for: Sales Reps, Nurses, and Retail
 - Skills varied from strong interpersonal to highly technical



Forthcoming Research

- **Demand Overview** - High level analysis of demand
- **Advanced Industry Clusters** - Utilize job postings data to identify the occupations, skills, certifications, and general education requirements included in job postings from the 7 industry clusters identified and highlighted by *The Roadmap for the Washington Region's Economic Future*

Thank you!



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Nicole McCall

Transportation Planner

(202) 962-3341

nmccall@mwcog.org

mwcog.org

777 North Capitol Street NE, Suite 300

Washington, DC 20002



Metropolitan Washington
Council of Governments