

INFORMATION TECHNOLOGY

ANALYZING EDUCATION, EMPLOYMENT & EARNING DATA

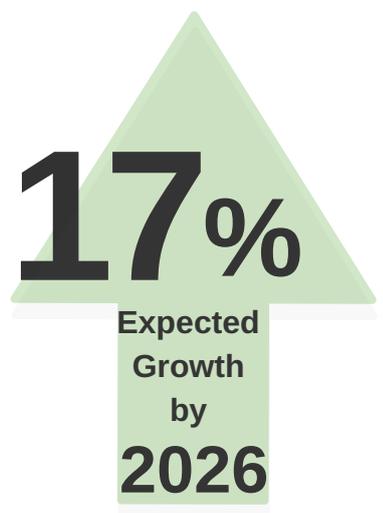


This analysis of the Information Technology cluster in the Commonwealth highlights important information for each of its career pathways—Information Support and Services; Network Systems; Programming and Software Development; and Web and Digital Communications.



What trends do we currently see? What trends may we anticipate?

- The Information Technology cluster is expected to have the third highest percentage of job growth in the Commonwealth among all clusters through 2026 (17%).
- All four career pathways in this cluster are projected to have employment growth of 12 percent or more by 2026. However, among all these pathways, the Programming and Software Development pathway will see the greatest increase in the overall number of jobs (18,376).
- The two occupations in this cluster that are expected to see more than 30 percent job growth by 2026 are Information Security Analysts (42% growth, 4,867 new positions, 1,426 annual job openings) and Software Developers, Applications (33% growth, 11,710 new positions, 3,786 annual job openings).
- All occupations in the Information Technology cluster require a Bachelor's degree or more.





EDUCATION

Figure 1 shows the predominant level of education and training in each pathway. Education data was determined by Trailblazers based on U.S. Bureau of Labor Statistics occupational education and training data. The percentages in the graph below reflect the number of occupations, not the number of workers. For example, the Network Systems pathway consists of five occupations: two of them require a bachelor's degree or more and training/certification/work experience (40%), and three require a bachelor's degree.

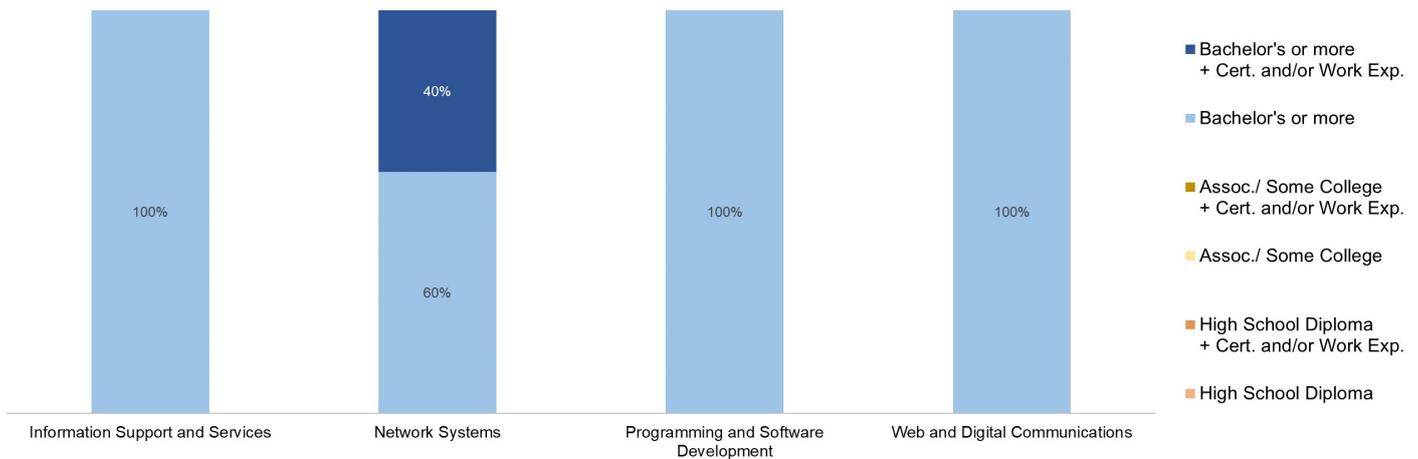


Figure 1: Predominant Education Level for Information Technology, 2016-2026



EMPLOYMENT

Figure 2 compares the estimated 2016 employment for each pathway to projected 2026 employment levels. Data are provided by the Virginia Employment Commission.

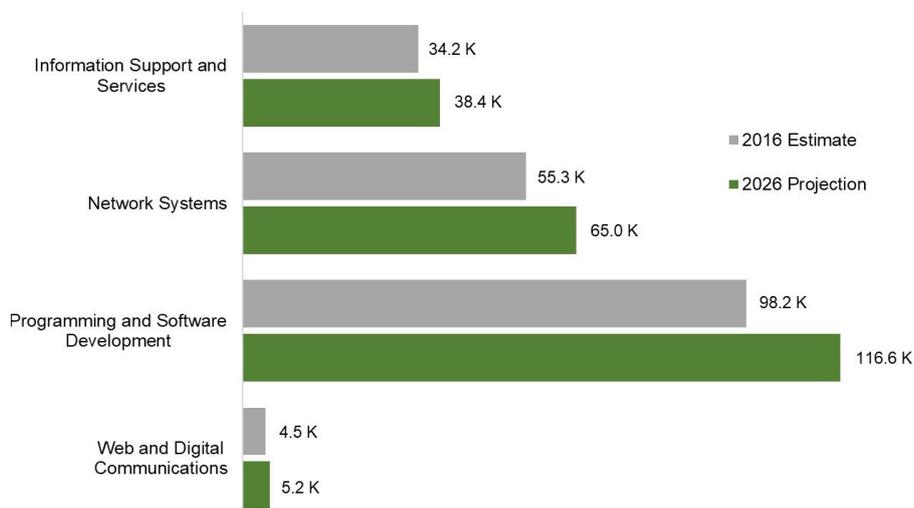


Figure 2: Employment in Virginia for the Information Technology Cluster, 2016-2026

EARNING AND GROWTH

Figure 3 presents the size and median wages of the occupations in each pathway with the highest projected percentage of growth. Wage data are provided by the U.S. Bureau of Labor Statistics Occupational Employment Statistics program.

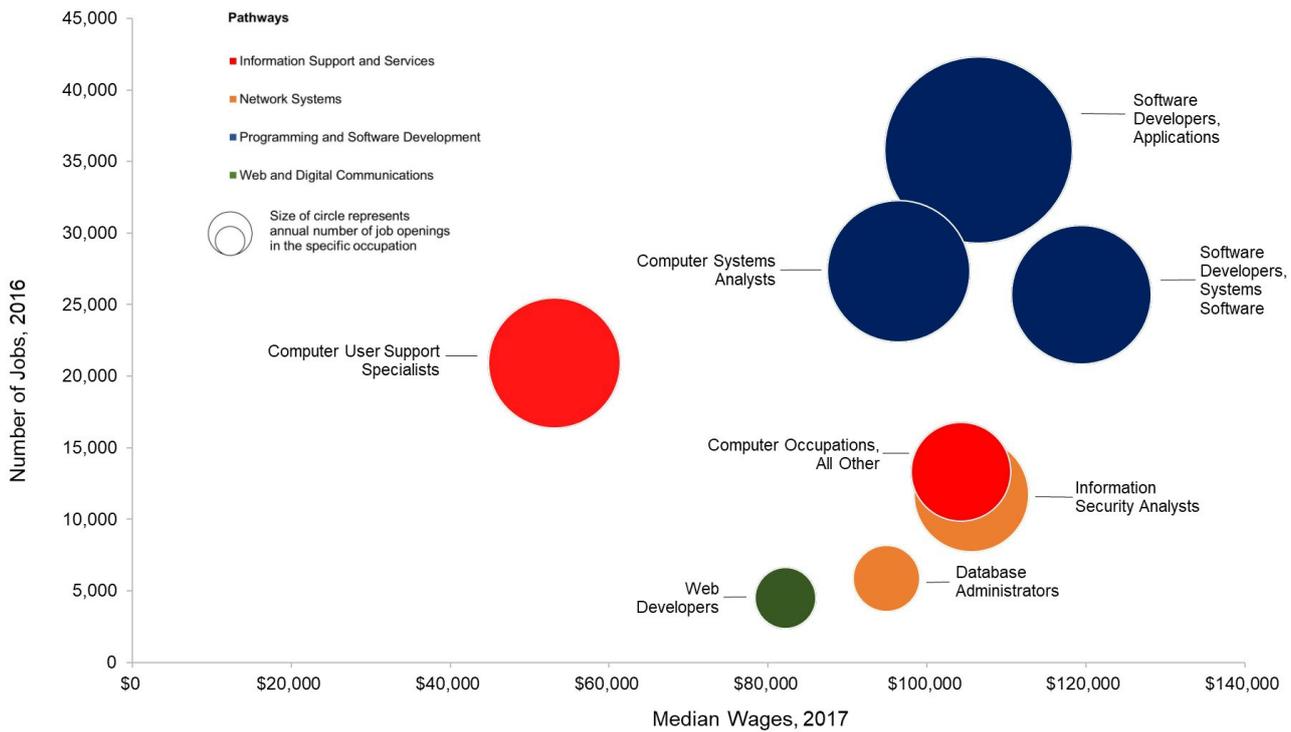


Figure 3: Earning and Growth for Selected Occupations in Virginia, 2016-2026

Employment Growth by LWIA

The following Labor Workforce Investment Areas (LWIAs) will experience higher occupational growth rates in the Information Technology Cluster.

- Southwest Virginia
- Northern Virginia
- Bay Consortium



Nontraditional Occupations

Nontraditional Occupations for Females

- Computer Occupations, All Others
- Information Security Analysts
- Network and Computer Systems Administrators
- Computer Network Architects
- Computer Programmers

