This analysis of the Manufacturing cluster in the Commonwealth highlights important information for each of its career pathways—Maintenance, Installation & Repair; Manufacturing Production Process Development; Production; and Quality Assurance.

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

- From 2016 to 2026, the Manufacturing cluster is expected to experience 1 percent job growth in Virginia, the lowest among all career clusters. Despite this flat growth rate, the Manufacturing cluster is expected to add approximately 3,200 new jobs over that period.
- Dental Laboratory Technicians are projected to have the highest growth rate among all occupations in this cluster (28%). On the other hand, 49 out of the 109 occupations in the cluster are expected to decline through 2026.
- Despite the cluster's slow growth across the Commonwealth, occupations associated with Manufacturing are projected to expand in Northern Virginia and Hampton Roads—8 percent and 5 percent, respectively.
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 Transportation Operations pathway consists of seven occupations: Six of them require a bachelor's degree or more and work experience (86%), and one requires a bachelor's degree or more (14%).

Figure 1: Predominant Education Level for Manufacturing, 2016-2026

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 Manufacturing Cluster, 2016-2026
Figure 3 presents the size and median wages of fastest-growing occupations in selected pathways. Wage data are provided by the U.S. Bureau of Labor Statistics Occupational Employment Statistics program.

In the Manufacturing cluster, the following Local Workforce Investment Areas (LWIAs) will experience higher occupational growth rates than the state average:

- Northern Virginia
- Hampton Roads
- Crater Areas
- Bay Consortium
- Piedmont Workforce Network

Nontraditional Occupations for Females

- Computer, Automated Tellers, and Office Machine Repairers
- Industrial Machinery Mechanics
- Maintenance and Repair Workers, General
- Machinists
- Tool and Die Makers