

# VIRGINIA

## Career Technical Education (CTE) Profile

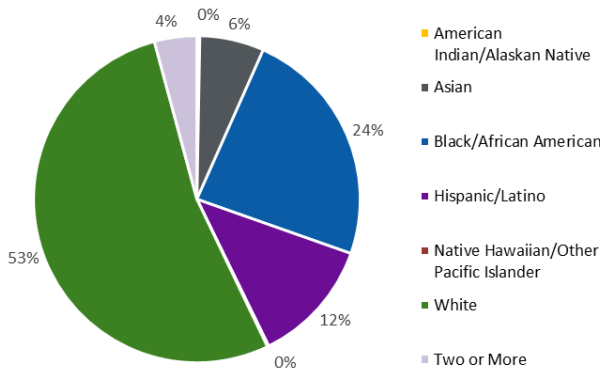


**NAPE**  
National Alliance for  
Partnerships in Equity  
Education Foundation

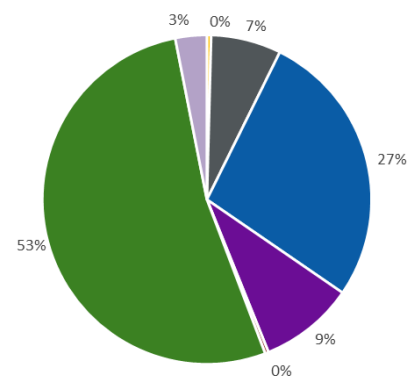
### Career and Technical Education

Secondary CTE is delivered through comprehensive high schools, area technical high schools and career centers, regional career and technical centers, and STEM academies and health sciences academies. Postsecondary CTE is delivered through the state's community college system.<sup>1</sup>

Secondary CTE Participators, FY 2015<sup>2</sup>



Postsecondary CTE Participators, FY 2015<sup>2</sup>

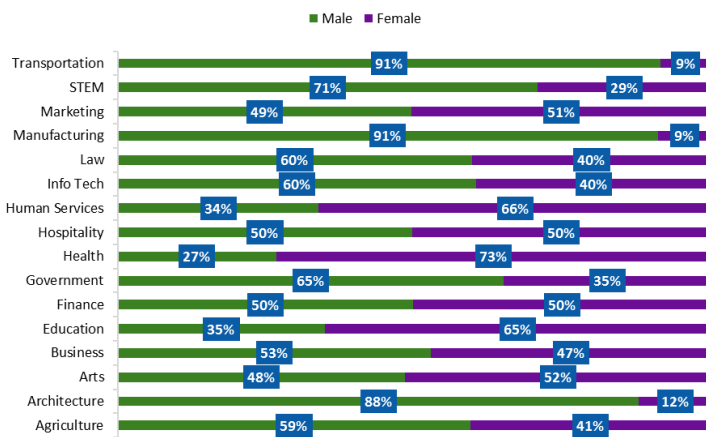


In FY 2015, **37%** of secondary and **54%** of postsecondary students enrolled in CTE were economically disadvantaged.<sup>2</sup>

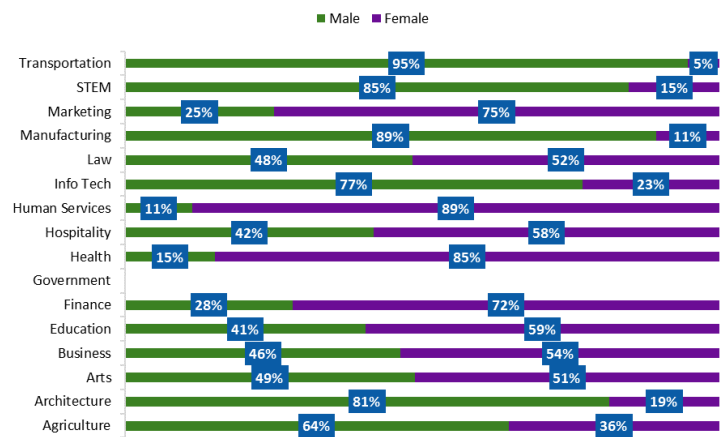
### Career Clusters

Seven of the 16 career clusters in CTE lead to high-skill, high-wage, and high-demand STEM-related careers. These clusters include Agriculture, Architecture, Health, Information Technology, Manufacturing, STEM, and Transportation, Distribution, and Logistics and contain programs that prepare students for nontraditional careers.

Secondary Enrollment, FY 2015<sup>3</sup>



Postsecondary Enrollment, FY 2015<sup>3</sup>



## Middle-Skill and STEM Jobs

The pipeline to middle-skill and STEM jobs loses young people at every level of the education system. Thus, the supply of sufficiently trained workers will not meet the demand of key industries.

### Fast Facts

From 2014 to 2024...

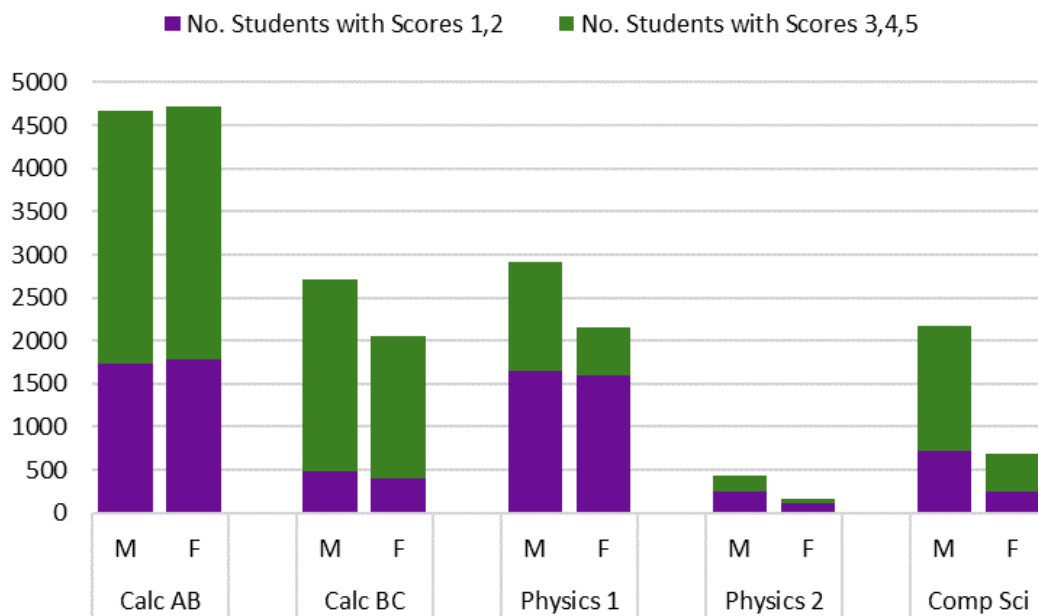
- Computing jobs will grow by **24%**.<sup>4</sup>
- Engineering jobs will grow by **11%**.<sup>4</sup>
- Advanced manufacturing jobs will grow by **11%**.<sup>4</sup>
- Of all job openings, **45%** will require training at the middle skill-level.<sup>5</sup>

Yet...

- **29%** of students who enter an associate's degree program graduate.<sup>4</sup>
- **66%** of students who enter a bachelor's degree program graduate.<sup>4</sup>
- **39%** of workers are trained to the middle-skill level.<sup>5</sup>

### 2016 AP Test Taking and Passing<sup>6</sup>

Students pursuing careers in STEM, particularly computer science and engineering, must become academically prepared early in their educational trajectory.<sup>7</sup>



For Virginia, in 2016, college-bound female students earned an average math SAT score of **502**, compared to **534** for male students.<sup>8</sup>

### State CTE Contact

*Lolita B. Hall*, Director, Office of CTE, Virginia Dept. of Education, 101 N. 14th Street, P.O. Box 2120, Richmond, VA 23219, (804) 225-2051, LB.Hall@doe.virginia.gov

### Data Sources (retrieved April 2017)

<sup>1</sup> <https://www.acteonline.org/stateprofiles/>

<sup>2</sup> <https://perkins.ed.gov/pims/DataExplorer/CTEParticipant>

<sup>3</sup> <https://perkins.ed.gov/pims/DataExplorer/CTEConcentrator> (race not available for clusters)

<sup>4</sup> <http://vitalsigns.changetheequation.org/>

<sup>5</sup> <http://www.nationalskillscoalition.org/state-policy/fact-sheets>

<sup>6</sup> <https://research.collegeboard.org/programs/ap/data/participation/ap-2016>

<sup>7</sup> <http://ieeexplore.ieee.org/document/1264690/>

<sup>8</sup> <https://reports.collegeboard.org/sat-suite-program-results/class-of-2016-results/state-reports>