

# KENTUCKY

## Career Technical Education (CTE) Profile

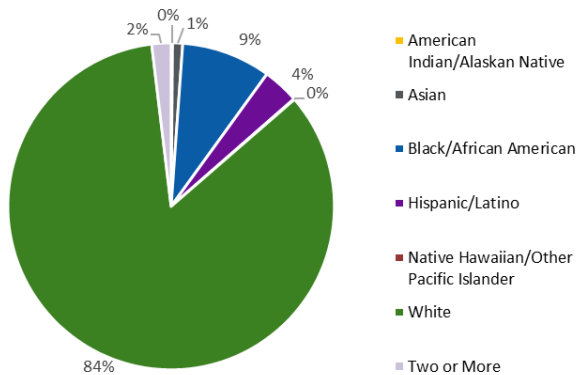


**NAPE**  
National Alliance for  
Partnerships in Equity  
Education Foundation

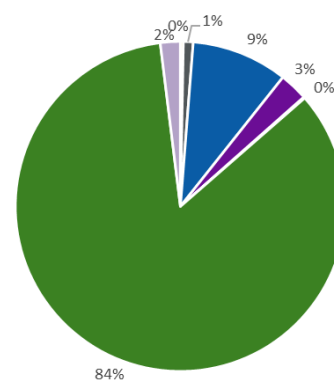
### Career and Technical Education

At the secondary level, CTE is delivered through comprehensive high schools and area technology centers (including a virtual area technology center). At the postsecondary level, CTE is offered through the Kentucky Community and Technical College System and several universities that offer associate's degrees.<sup>1</sup>

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



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

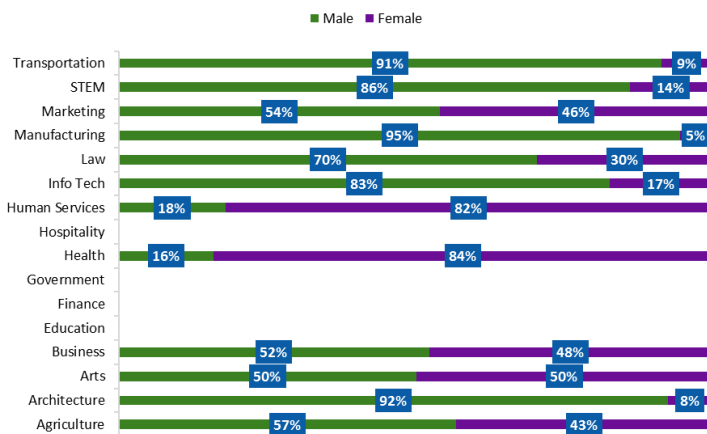


In FY 2015, **51%** of secondary and **61%** of postsecondary students enrolled in CTE were economically disadvantaged.<sup>2</sup>

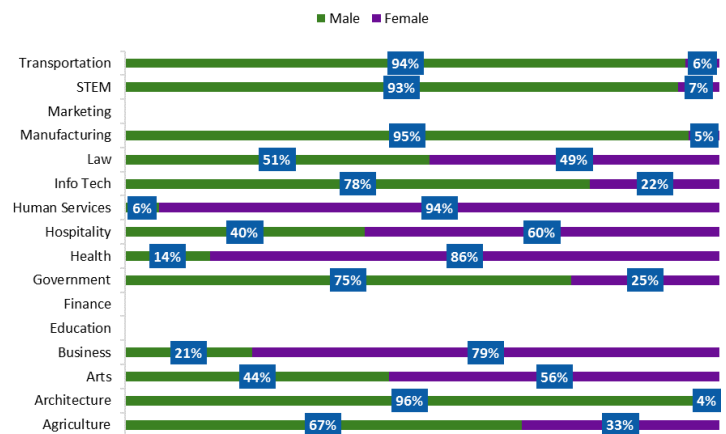
### Career Clusters

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...

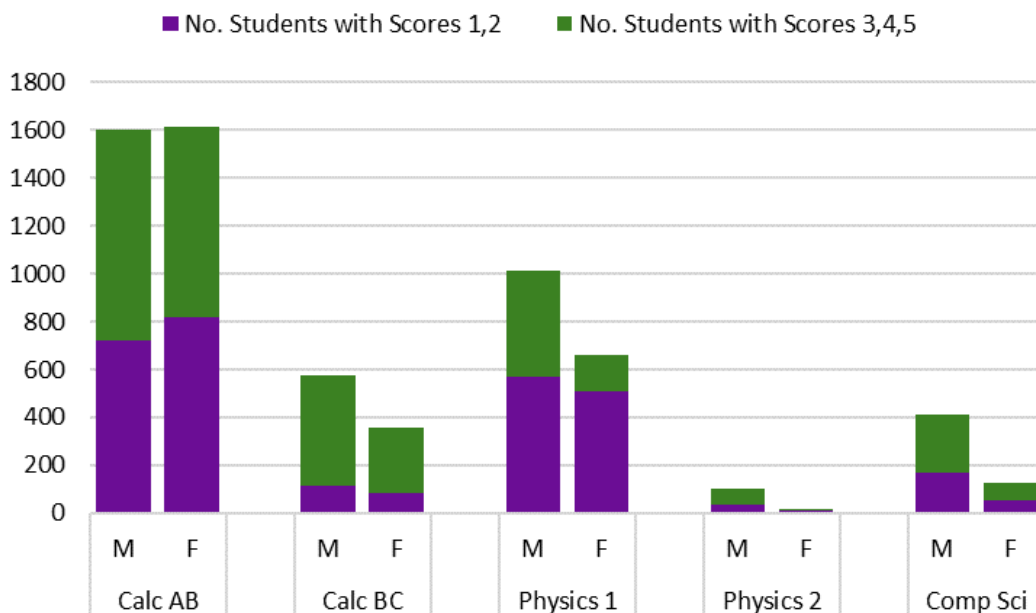
- Computing jobs will grow by **22%**.<sup>4</sup>
- Engineering jobs will grow by **10%**.<sup>4</sup>
- Advanced manufacturing jobs will grow by **14%**.<sup>4</sup>
- Of all job openings, **53%** will require training at the middle skill-level.<sup>5</sup>

Yet...

- **25%** of students who enter an associate's degree program graduate.<sup>4</sup>
- **49%** of students who enter a bachelor's degree program graduate.<sup>4</sup>
- **48%** 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 Kentucky, in 2016, college-bound female students earned an average math SAT score of **576**, compared to **627** for male students.<sup>8</sup>

### State CTE Contact

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### 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>