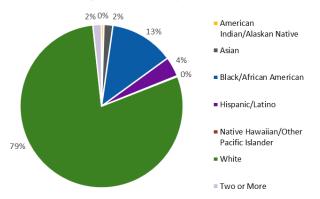
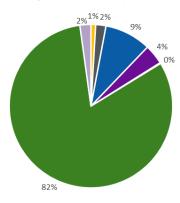
# Career and Technical Education

At the secondary level, CTE is delivered through comprehensive high schools and area career-technical centers. At the postsecondary level, CTE is delivered through the state's community colleges, one state technical college, and 4-year institutions 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, **41%** of secondary and **38%** of postsecondary students enrolled in CTE were economically disadvantaged.<sup>2</sup>

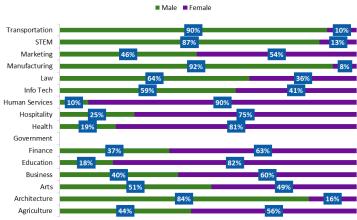
## **Career Clusters**

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...

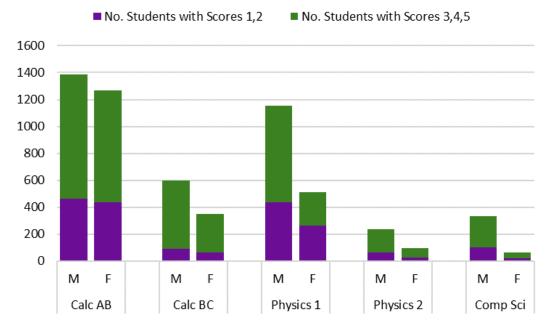
- Computing jobs will grow by 13%.<sup>4</sup>
- Engineering jobs will grow by 13%.<sup>4</sup>
- Advanced manufacturing jobs will grow by 15%.<sup>4</sup>
- Of all job openings, 48% will require training at the middle skill-level.<sup>5</sup>

#### Yet...

- 27% of students who enter an associate's degree program graduate.<sup>4</sup>
- 57% of students who enter a bachelor's degree program graduate.<sup>4</sup>
- 46% 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 Missouri, in 2016, college-bound female students earned an average math SAT score of **589**, compared to **628** 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