# SOUTH CAROLINA
Career Technical Education (CTE) Profile

**N A P E**
National Alliance for
Partnerships in Equity
Education Foundation

## Career and Technical Education

CTE provides secondary and postsecondary students with academic and technical skills and knowledge to prepare for the current and future workforce. The federal legislation that funds CTE, the Carl D. Perkins Career and Technical Education Act, was most recently reauthorized in 2018 as the Strengthening Career and Technical Education Act for the 21st Century (Perkins V).

With the reauthorization of Perkins, CTE is well positioned to fulfill the provisions of next-generation education and workforce legislation (current and proposed) such as the Higher Education Act, Workforce Innovation and Opportunity Act (WIOA), and Cybersecurity Skills Integration Act, as well as important advances in industry such as apprenticeships, automation, and artificial intelligence, which aim to ensure the United States' global competitiveness.

To realize our business, economic, and human potential, we must close equity gaps by gender, race and ethnicity, and special population status (see p. 4) in high-skill, high-wage, in-demand programs and programs of study. This CTE Profile summarizes key data that can support this effort in South Carolina.

## High-Skill, High-Wage, In-Demand: 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 for South Carolina

From 2017 to 2027…

Computing jobs will grow by **17%**.[1]

Engineering jobs will grow by **11%**.[1]

Advanced manufacturing jobs will grow by **16%**.[1]

And…

**45%** of low-income working families have no postsecondary experience.[2]

**39%** of students who enter an associate's degree program graduate within 6 years.[1]

**73%** of students who enter a bachelor's degree program graduate within 6 years.[1]

### Good Jobs That Pay without a BA in South Carolina (2015)[3]

The Georgetown Center for Education and the Workforce explored the job market for workers with postsecondary credentials up to and through an associate's degree and focused on good jobs that provide family-sustaining wages.

| Top 5 Industries | No. of Jobs | Non-BA Workers | Median Earnings |
|---|---|---|---|
| Manufacturing | 95,000 | 44% | 56,000 |
| Health Services | 41,000 | 26% | 52,000 |
| Transportation and Utilities | 35,000 | 51% | 57,000 |
| Retail Trade | 31,000 | 20% | 52,000 |
| Construction | 30,000 | 31% | 52,000 |
| Top 5 Occupations | | | |
| Production | 54,000 | 36% | 52,000 |
| Management | 46,000 | 57% | 63,000 |
| Office and Administrative Support | 40,000 | 22% | 50,000 |
| Sales and Related | 35,000 | 28% | 55,000 |
| Installation, Maintenance, and Repair | 30,000 | 52% | 56,000 |

## Skills Equity Policies That Expand Access to Middle-Skill Jobs[4]

The National Skills Coalition has identified policies that can "expand equitable access to middle-skill training, credentials, and careers—particularly for those who have faced barriers to economic opportunity."[4]

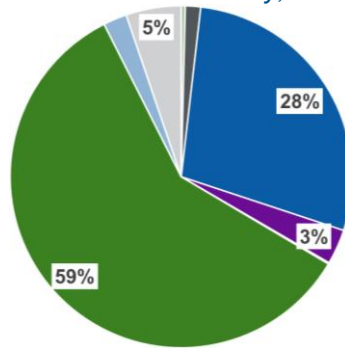| The policies are… | Are they in place in South Carolina? (√ = yes, X = no) |
| --- | --- |
| Integrated education and training | X |
| Stacked credentials | X |
| Job-based financial aid | X |
| Alignment of these elements in a single policy | X |

## Enrollment and Equity Gaps in South Carolina

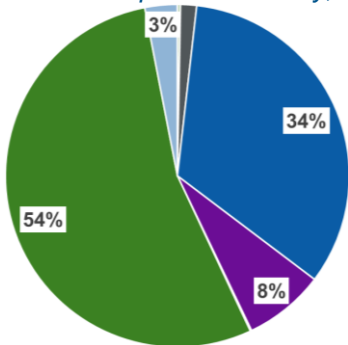### Overall and CTE Participant Enrollment by Race and Ethnicity
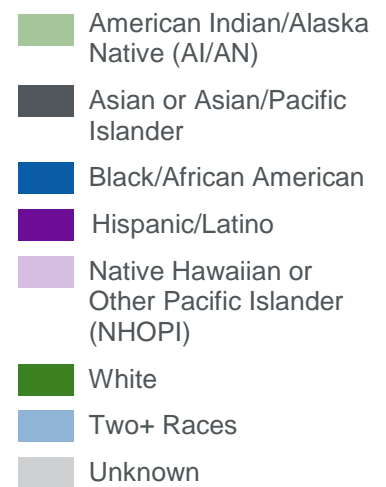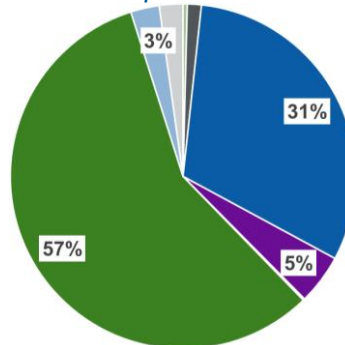
*Overall Secondary, FY17[5]*
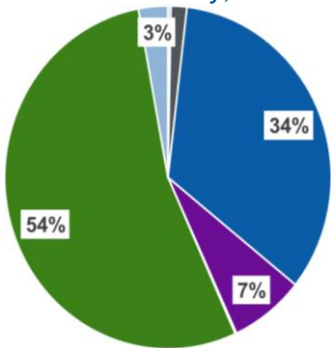


*Overall Postsecondary, FY14[6]*



*CTE Participant Secondary, FY17[7]*



*CTE Participant Postsecondary, FY17[7]*



Legend:
- American Indian/Alaska Native (AI/AN)
- Asian or Asian/Pacific Islander
- Black/African American
- Hispanic/Latino
- Native Hawaiian or Other Pacific Islander (NHOPI)
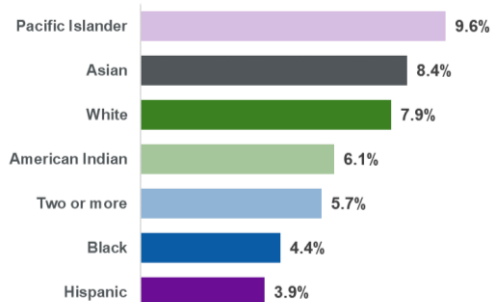- White
- Two+ Races
- Unknown

Percentages < 3% are not shown.

Participant = A student who has earned 1 or more credits in any CTE program area.

## Participation in Dual Enrollment by Student Group (FY16)[8]

The Community College Research Center reports that dual enrollment is positively related to many positive outcomes, including college enrollment and persistence, greater credit accumulation, and higher college GPA.[9]

*Percentage of students within a student group that participates in dual enrollment in South Carolina*



| | |
| --- | --- |
| Pacific Islander | 9.6% |
| Asian | 8.4% |
| White | 7.9% |
| American Indian | 6.1% |
| Two or more | 5.7% |
| Black | 4.4% |
| Hispanic | 3.9% |

*The Education Commission of the States reports that the "research makes clear that CTE dual enrollment improves outcomes for traditionally underserved students." CTE dual enrollment students, particularly low-income and male students, are more likely to earn a high school diploma, enroll in a bachelor's program, and enroll in college full time. Dual enrollment allows students to try out different career paths, which increases engagement and success.[10]*

## Nontraditional Performance Indicators (FY17)[7]

Under Perkins IV, states reported on the participation and completion of students in nontraditional programs of study, which are defined as leading to occupations in which less than 25% of a particular gender is employed.[4] In Perkins V, these data will be reported for CTE concentrators (i.e., secondary students who have completed two courses in a CTE program or program of study and postsecondary students who have earned at least 12 credits within a CTE program or program of study or completed such program if less than 12 credit hours total).

Many high-skill, high-wage, in-demand jobs provide family-sustaining wages, yet there are still major disparities by gender and race/ethnicity.
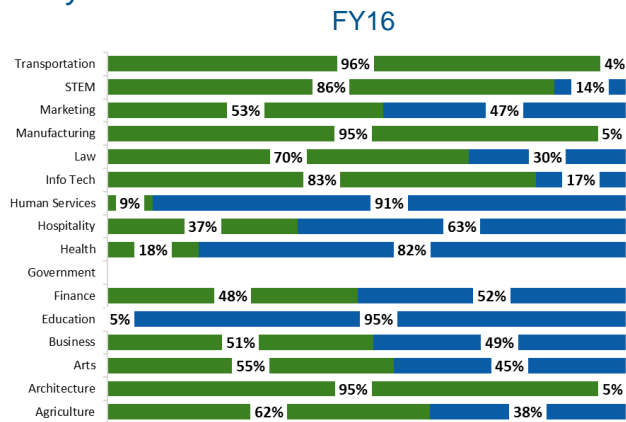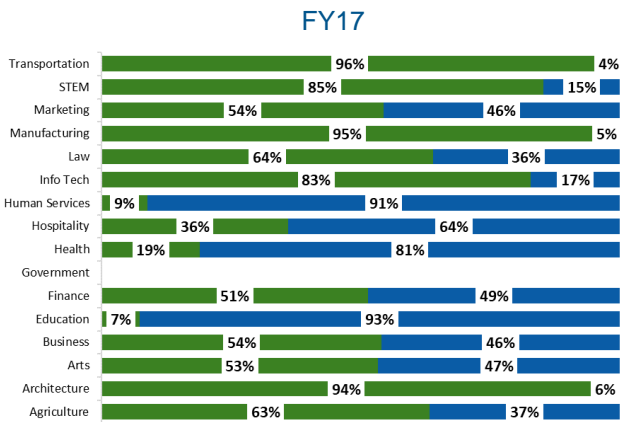
| Secondary (%) | Target | Male | Female | AI/AN | Asian | Black | Hispanic | NHOPI | White | Two+ |
|---|---|---|---|---|---|---|---|---|---|---|
| Participation | 15 | 5 | **17** | **26** | 14 | **15** | 13 | **33** | **15** | 14 |
| Completion | 77 | 15 | **98** | 67 | **83** | 72 | **79** | 0 | **79** | 50 |
| Postsecondary (%) | Target | Male | Female | AI/AN | Asian | Black | Hispanic | NHOPI | White | Two+ |
| Participation | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| Completion | NR | NR | NR | NR | NR | NR | NR | NR | NR | NR |

Notes: Percentages for male and female have been recalculated, see Note 7 below for explanation. NR = Not reported.
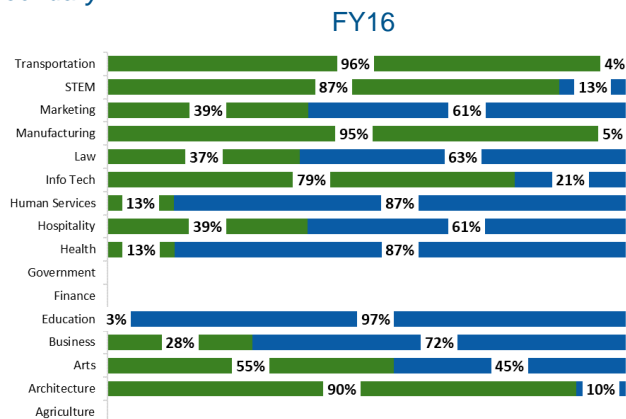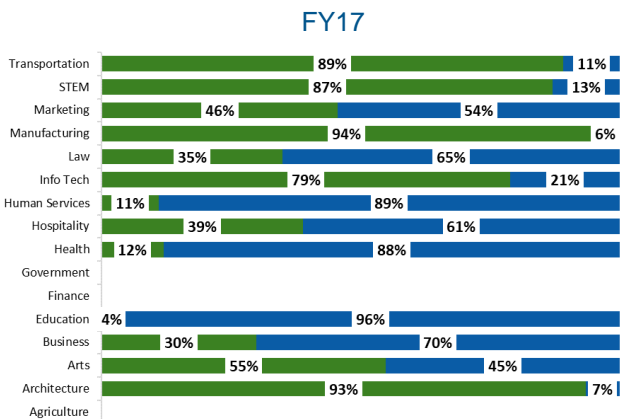
## Concentrator Enrollment[7]

Of the 16 career clusters in CTE, 7 lead to high-skill, high-wage, in-demand STEM-related careers (Agriculture, Architecture, Health, Information Technology, Manufacturing, STEM, and Transportation, Distribution, and Logistics) and include programs that prepare students for nontraditional careers. Six of these clusters have a preponderance of programs that lead to nontraditional careers for women, and Health Sciences has many programs that lead to nontraditional careers for men. ( ▮ = male, ▮ = female)

### Secondary

**FY17**

| Cluster | Male | Female |
|---|---|---|
| Transportation | 96% | 4% |
| STEM | 85% | 15% |
| Marketing | 54% | 46% |
| Manufacturing | 95% | 5% |
| Law | 64% | 36% |
| Info Tech | 83% | 17% |
| Human Services | 9% | 91% |
| Hospitality | 36% | 64% |
| Health | 19% | 81% |
| Government | | |
| Finance | 51% | 49% |
| Education | 7% | 93% |
| Business | 54% | 46% |
| Arts | 53% | 47% |
| Architecture | 94% | 6% |
| Agriculture | 63% | 37% |

**FY16**

| Cluster | Male | Female |
|---|---|---|
| Transportation | 96% | 4% |
| STEM | 86% | 14% |
| Marketing | 53% | 47% |
| Manufacturing | 95% | 5% |
| Law | 70% | 30% |
| Info Tech | 83% | 17% |
| Human Services | 9% | 91% |
| Hospitality | 37% | 63% |
| Health | 18% | 82% |
| Government | | |
| Finance | 48% | 52% |
| Education | 5% | 95% |
| Business | 51% | 49% |
| Arts | 55% | 45% |
| Architecture | 95% | 5% |
| Agriculture | 62% | 38% |

### Postsecondary

**FY17**

| Cluster | Male | Female |
|---|---|---|
| Transportation | 89% | 11% |
| STEM | 87% | 13% |
| Marketing | 46% | 54% |
| Manufacturing | 94% | 6% |
| Law | 35% | 65% |
| Info Tech | 79% | 21% |
| Human Services | 11% | 89% |
| Hospitality | 39% | 61% |
| Health | 12% | 88% |
| Government | | |
| Finance | | |
| Education | 4% | 96% |
| Business | 30% | 70% |
| Arts | 55% | 45% |
| Architecture | 93% | 7% |
| Agriculture | | |

**FY16**

| Cluster | Male | Female |
|---|---|---|
| Transportation | 96% | 4% |
| STEM | 87% | 13% |
| Marketing | 39% | 61% |
| Manufacturing | 95% | 5% |
| Law | 37% | 63% |
| Info Tech | 79% | 21% |
| Human Services | 13% | 87% |
| Hospitality | 39% | 61% |
| Health | 13% | 87% |
| Government | | |
| Finance | | |
| Education | 3% | 97% |
| Business | 28% | 72% |
| Arts | 55% | 45% |
| Architecture | 90% | 10% |
| Agriculture | | |

# Perkins V

Perkins V requires alignment of secondary and postsecondary education with business and industry needs and focuses on high-quality programs leading to high-skill, high-wage, in-demand careers in the region and state. States are required to engage a broad group of stakeholders to develop state and local plans to implement Perkins V. This process entails periodic equity gap analyses at the state and local levels to identify and address disproportionality and equity gaps for students based on gender, race and ethnicity, and special populations (defined below). Funds must be devoted to addressing and closing those gaps to ensure equitable access, inclusion, and outcomes.

## The Equity Provisions in Perkins V…

- Increase targeted resources for special populations
- Require reporting of core indicators by gender, race, and special population status
- Require use of funds for career exploration and awareness
- Provide funding flexibility to states to close equity gaps
- Require use of funds to meet the needs of special populations
- Require states and locals to conduct an equity participation and performance gap analysis

## Special Populations

| Perkins IV | Perkins V |
|---|---|
| Individuals with disabilities | Individuals with disabilities |
| Individuals from economically disadvantaged families, including foster children | Individuals from economically disadvantaged families, including low-income youth and adults |
| | Youth who are in, or have aged out of, the foster care system |
| Individuals preparing for nontraditional fields | Individuals preparing for nontraditional fields |
| Single parents, including single pregnant women | Single parents, including single pregnant women |
| Displaced homemakers | Out-of-workforce individuals |
| Individuals with limited English proficiency | English learners |
| | Homeless individuals |
| | Youth with a parent who is a member of the armed forces and is on active duty |

# State CTE Contact

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# Notes

Please refer to the following sources for the data reported in this fact sheet:

1. Education Commission of the States at http://vitalsigns.ecs.org/; 2. Working Poor Families Project at http://www.workingpoorfamilies.org/indicators/#; 3. Georgetown Center on Education and the Workforce at https://goodjobsdata.org/, most recent data are for 2015; 4. National Skills Coalition at https://www.nationalskillscoalition.org/resources/publications/file/Scan-Summary-Final.pdf; 5. National Center for Education Statistics, ELSI Table Generator, at https://nces.ed.gov/ccd/elsi/tableGenerator.aspx; 6. National Center for Education Statistics at https://nces.ed.gov/Datalab/TablesLibrary/TableDetails/12282?dataSource=IPEDS&ipedsSubject=3&ipedsYear=127&subjectId=3&topicId=6&rst=true, most recent data are for FY14; 7. Perkins Data Explorer at https://cte.ed.gov/; the performance indicators for females and male were recalculated to reflect the percentage of females in programs nontraditional for females and the percentage of males in programs nontraditional for males, which provides a better comparison to the aggregated performance measure based on program enrollment. 8. Community College Research Center at https://ccrc.tc.columbia.edu/easyblog/access-dual-enrollment-advanced-placement-race-gender.html ; 9. Community College Research Center at https://ccrc.tc.columbia.edu/media/k2/attachments/dual-enrollment-research-overview.pdf; 10. The Education Commission of the States at https://www.ecs.org/clearinghouse/01/11/50/11150.pdf.