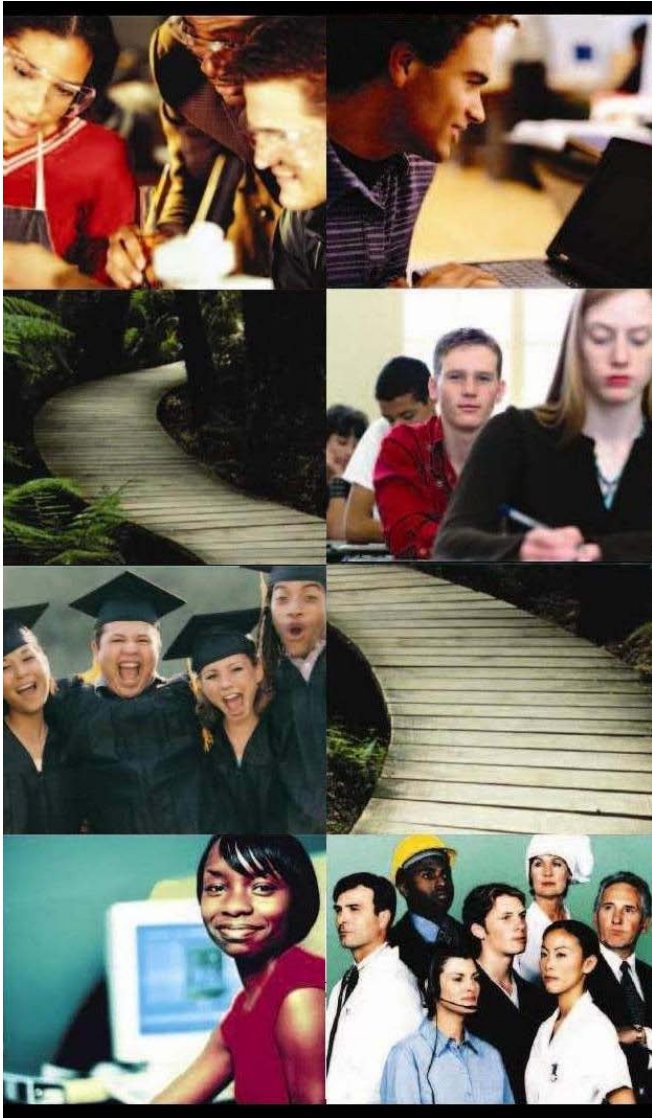


# Career and Technology Education Status Report



Presentation to the Maryland State  
Board of Education

April 26, 2011

Katharine M. Oliver  
Assistant State Superintendent  
Division of Career and College Readiness

# CTE is a Critical Component of Education Reform and Workforce/Economic Development



**MARYLAND'S REFORM PLAN  
RACE TO THE TOP**





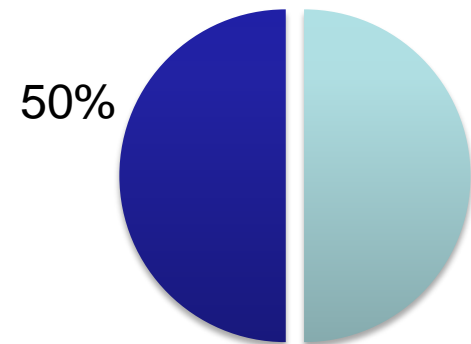
## 21<sup>st</sup> Century CTE

- Today's CTE prepares students for both college and careers through rigorous *programs of study*.
- The focus has moved from preparing students with trade specific skills to preparing them with academic and technical knowledge to be successful in a wide range of career opportunities (and advanced education and training).
- Increased accountability supports CTE program improvement with an emphasis on academic and technical skill attainment (industry certification) – *College and Career Readiness*

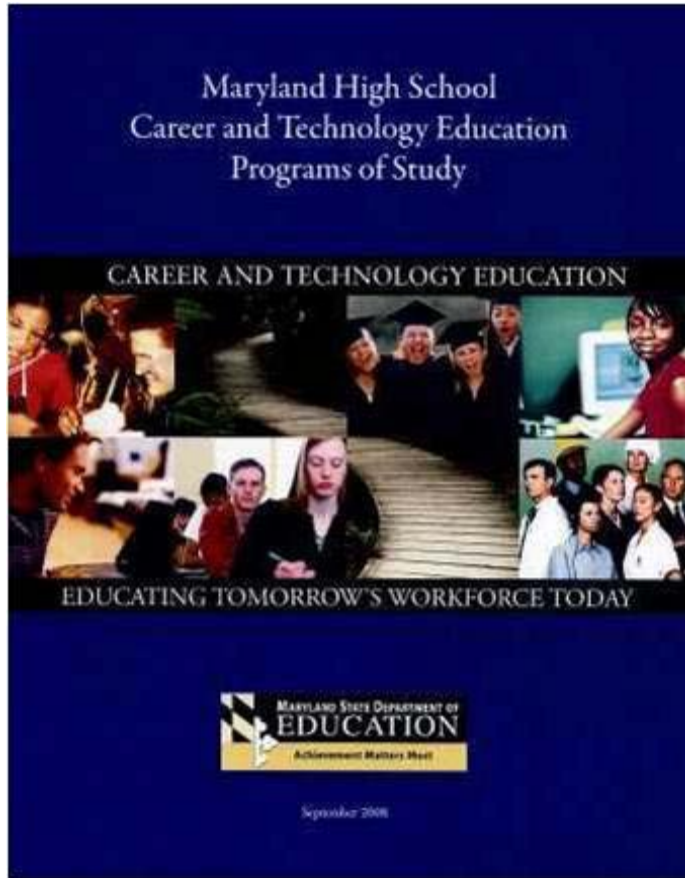
# Maryland Secondary CTE: Enrollment

- CTE Programs of Study typically include a sequence of four (4) courses, between grades 10-12
- Nearly half (50%) of all grade 10-12 high school students enroll in a CTE course (111,366)
- Students may elect a range of courses (career areas), or may complete the full sequence for a *CTE Program of Study*

Percent of High School CTE Enrollment (10-12)

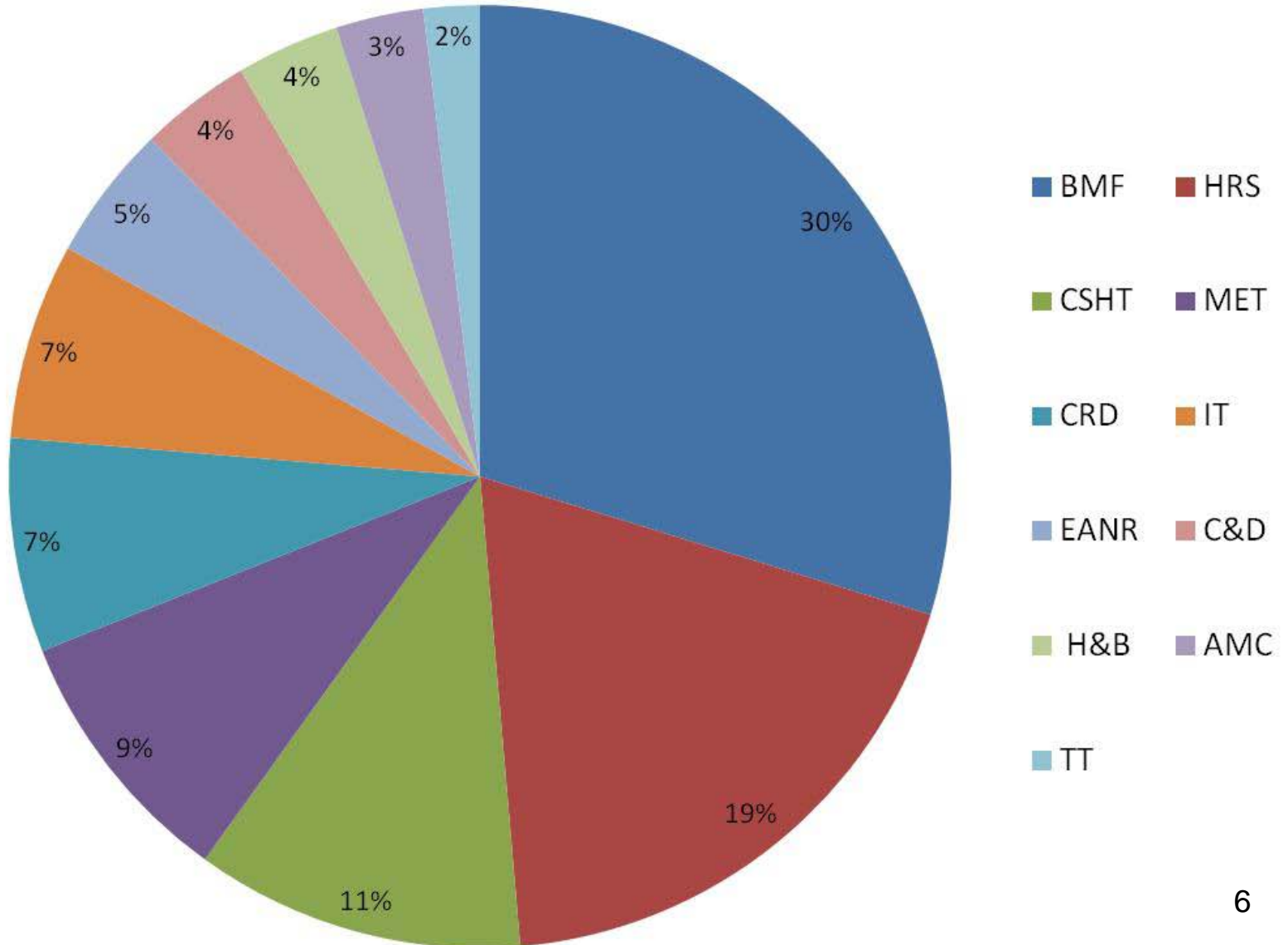


# Maryland Secondary CTE 48 CTE Programs of Study

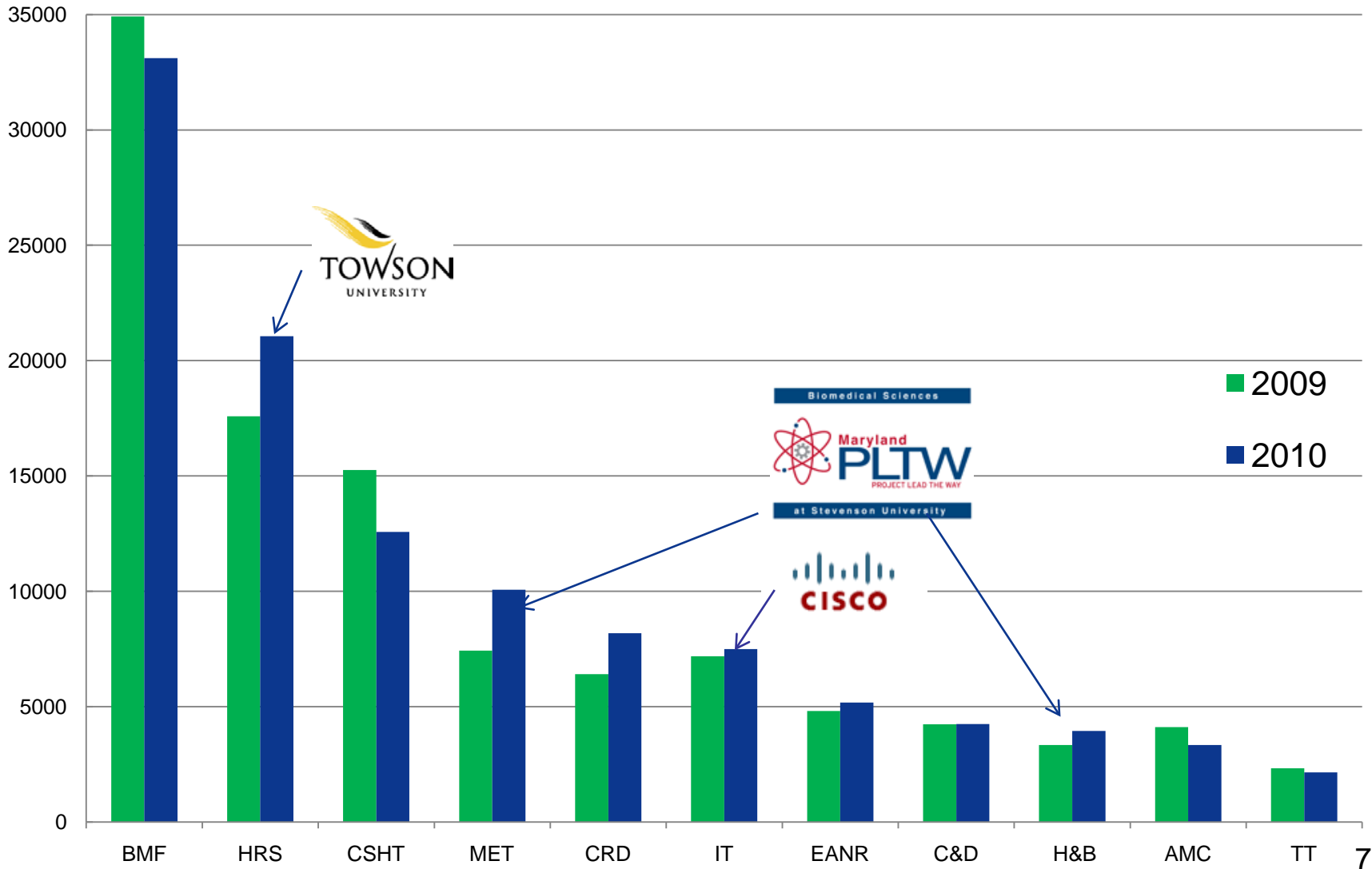


- Arts, Media, & Communication (AMC)
- Business, Management & Finance (BMF)
- Construction & Development (C&D)
- Consumer Services, Hospitality, & Tourism (CSHT)
- Environmental, Agricultural, & Natural Resources Systems (EANR)
- Health & Biosciences (H&B)
- Human Resource Services (HRS)
- Information Technology (IT)
- Manufacturing, Engineering & Technology (MET)
- Transportation Technologies (TT)

# 2010 CTE Enrollment Reflects Many Career Interests

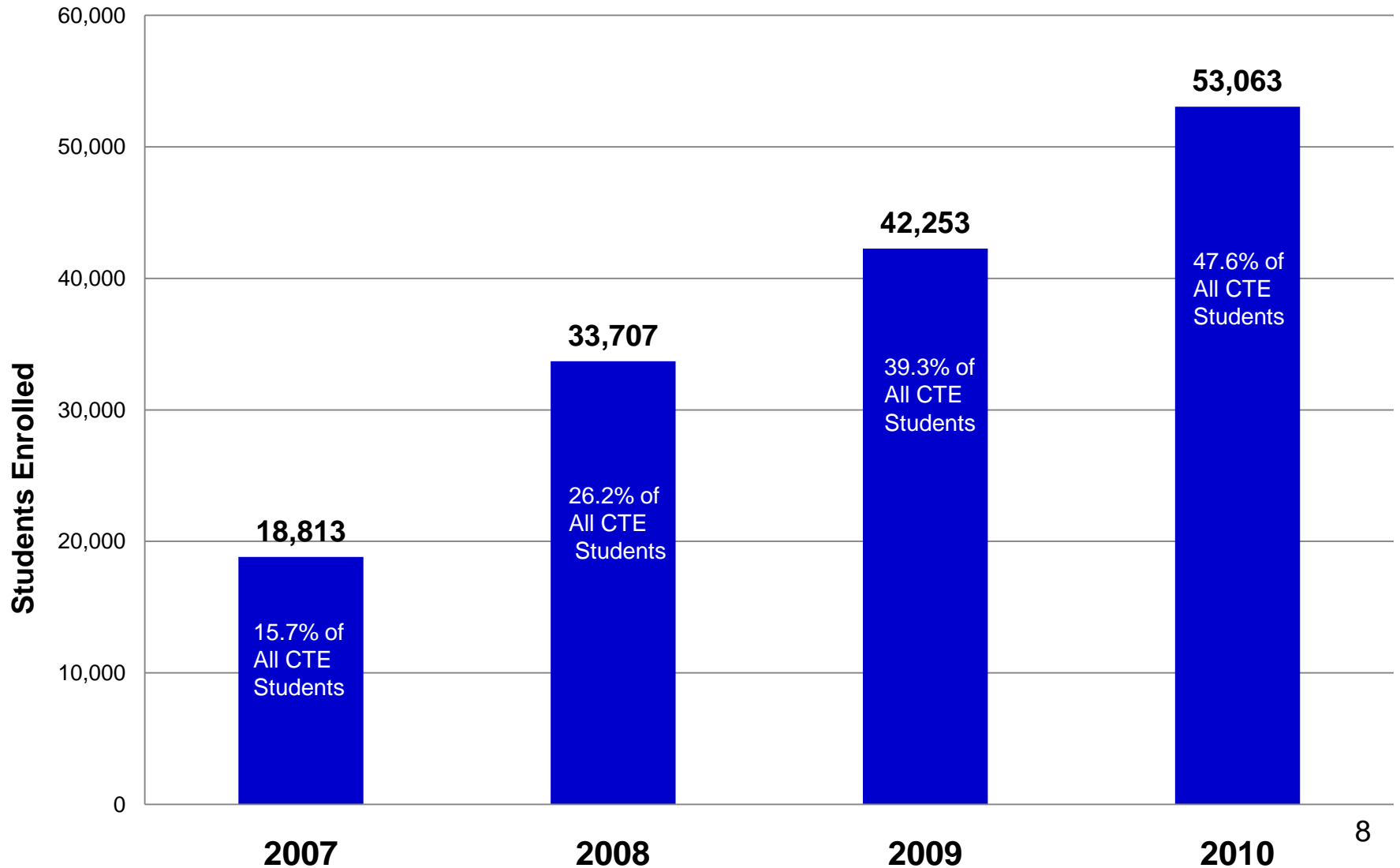


# 2010 CTE Enrollment Changes by Career Cluster (overall increase is 8%)



# State Designed CTE Programs of Study (POS)

## Increasing Enrollment in State POS: 2007-2010

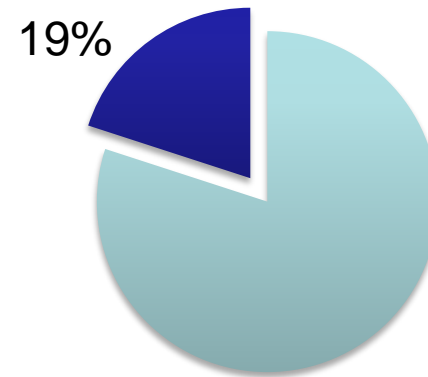




# Maryland Secondary CTE: Graduates

- 19% of the class of 2010 completed a *CTE Program of Study* (11,356)
- 51% of these CTE graduates also completed the coursework for entrance to USM, this is considered a “Dual Completer” (5,834)

Percent of High School CTE  
Graduates






# CTE in Maryland: Getting Results

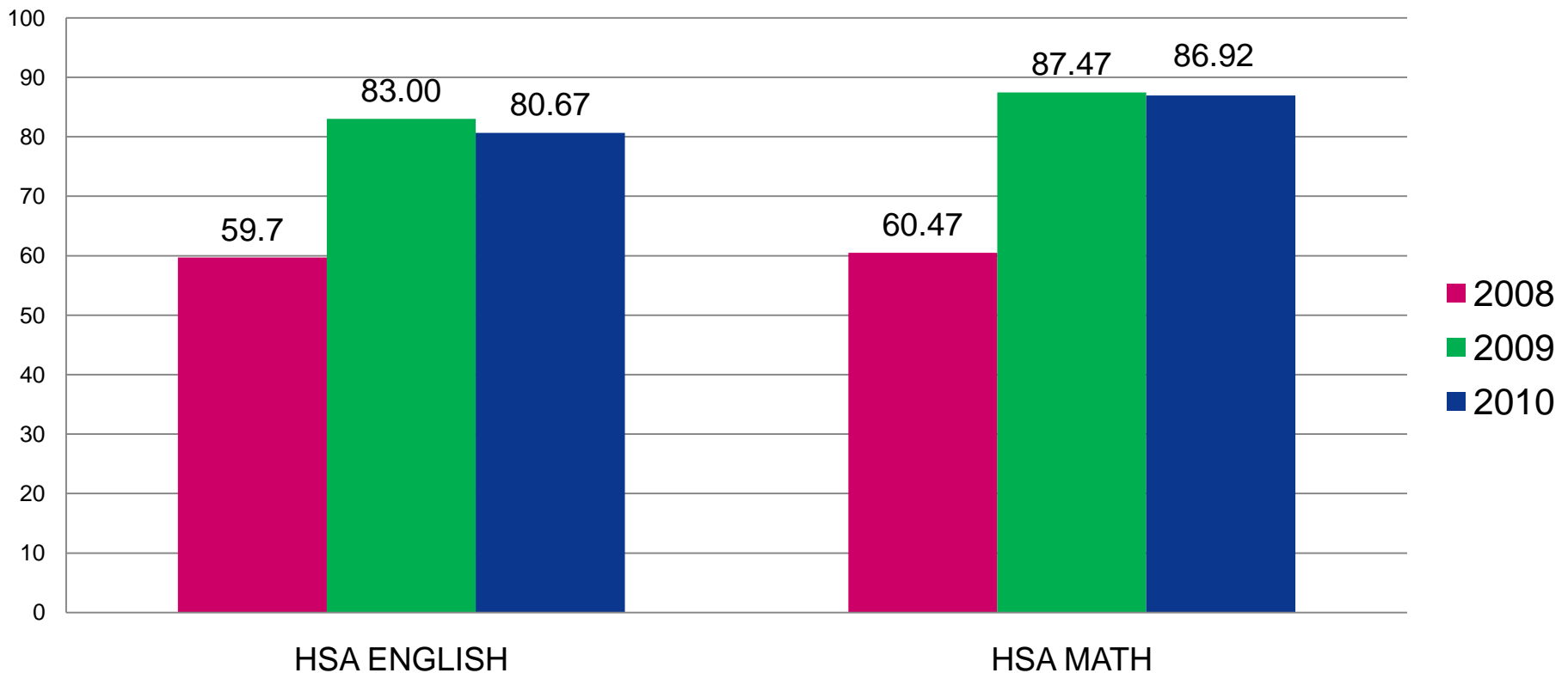
- Federal Accountability Measures: *Carl D. Perkins Career and Technical Education Act of 2006*
- Maryland Accountability Measures
- Maryland Longitudinal Data System Requirements

# Secondary CTE Accountability Measures

1. Academic Attainment:  
Reading/Language Arts & Mathematics
2. Technical Skill Attainment 
3. Secondary School Completion
4. Student Graduation Rate
5. Secondary Placement
6. Non-Traditional Participation & Completion

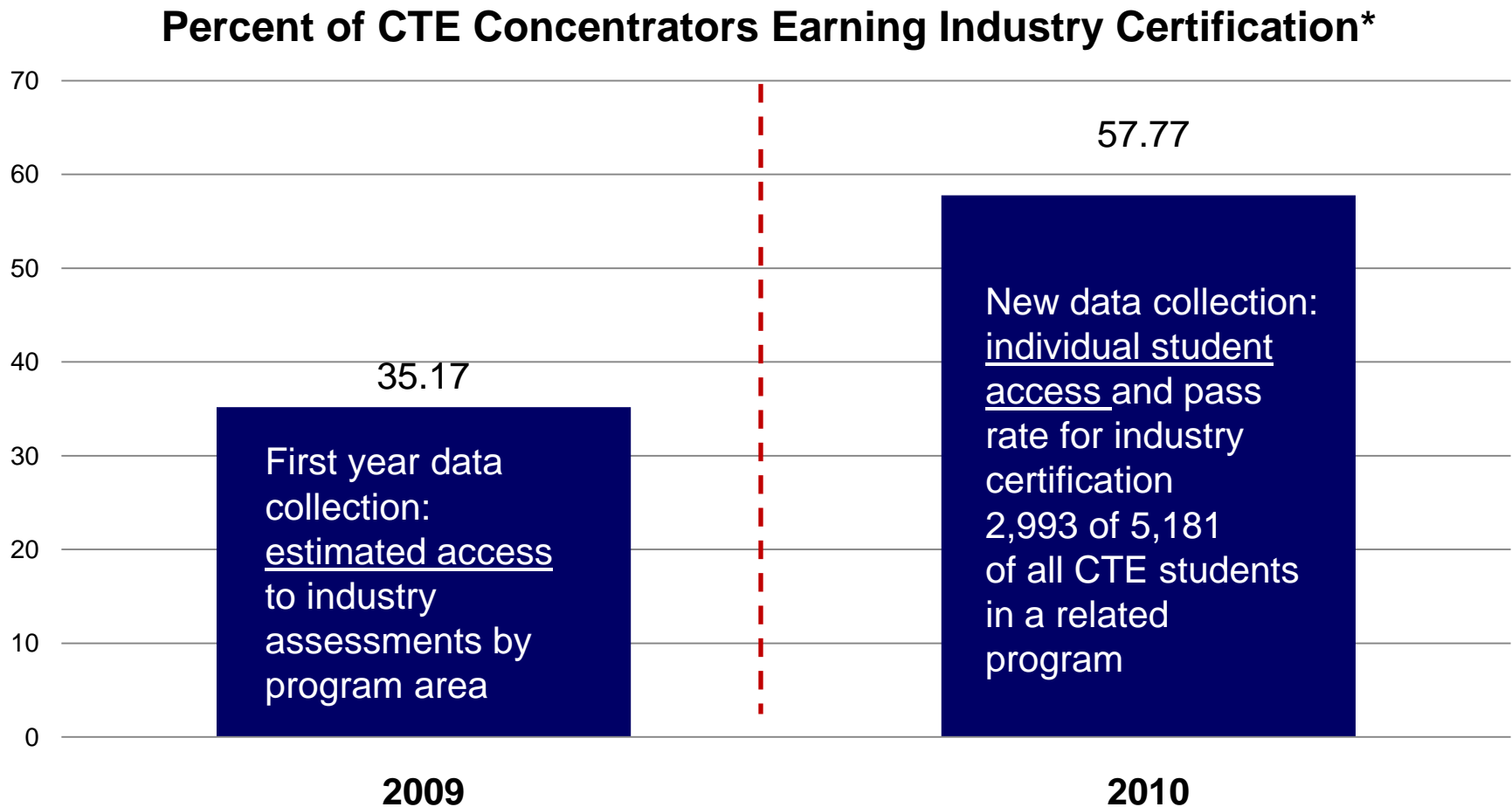
# Getting Results: HSA Proficiency Gains in CTE\*

**Percent of CTE Concentrators Passing English and Mathematics Assessments (Grade 12 Status)**



\* Federal reporting requirements do not allow inclusion of students meeting standards through alternative assessments and/or Bridge process)

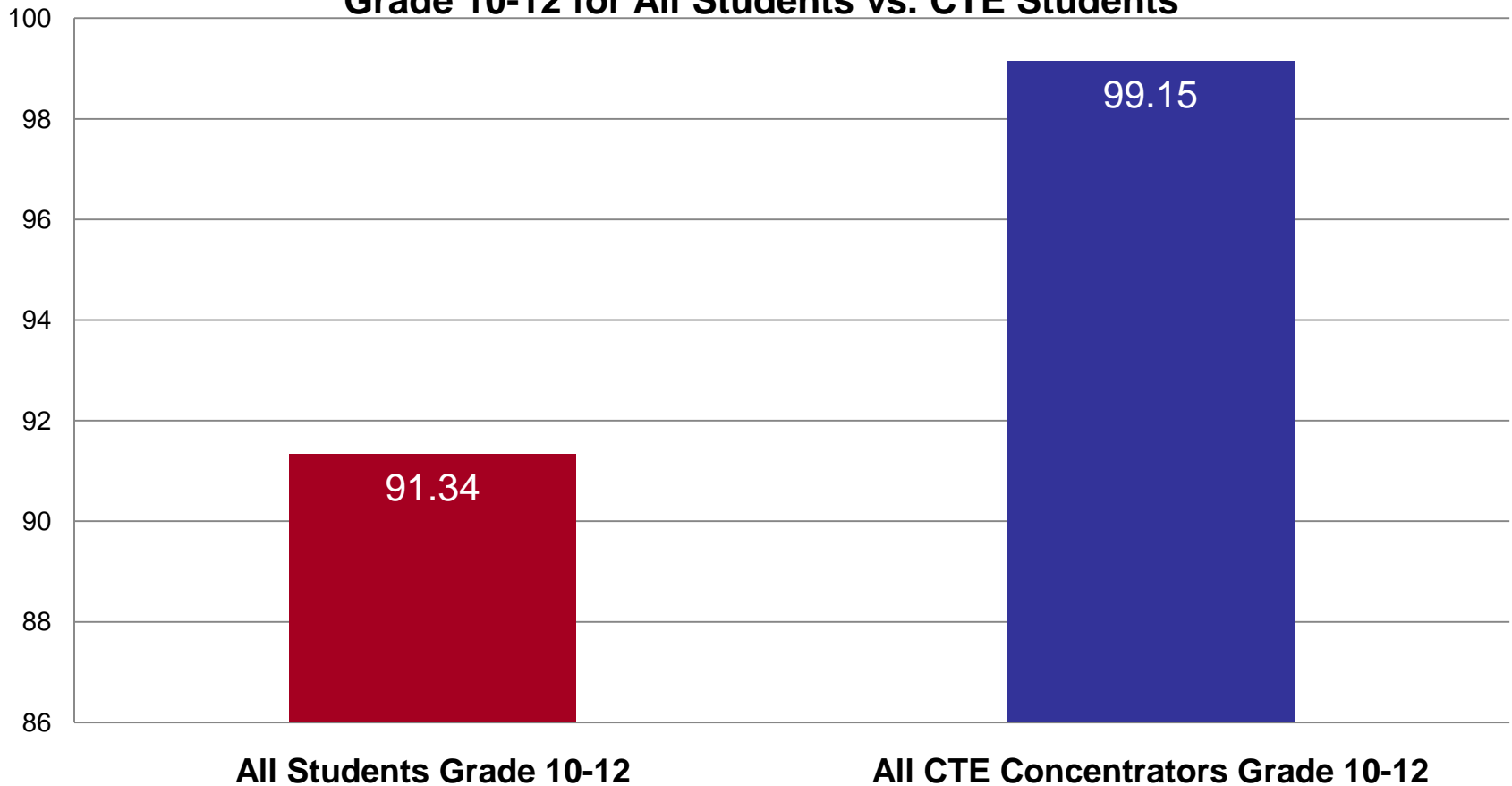
# Getting Results: Students Achieving Industry Standards



\* Comparison of results may not be made due to changes in data collection process 13

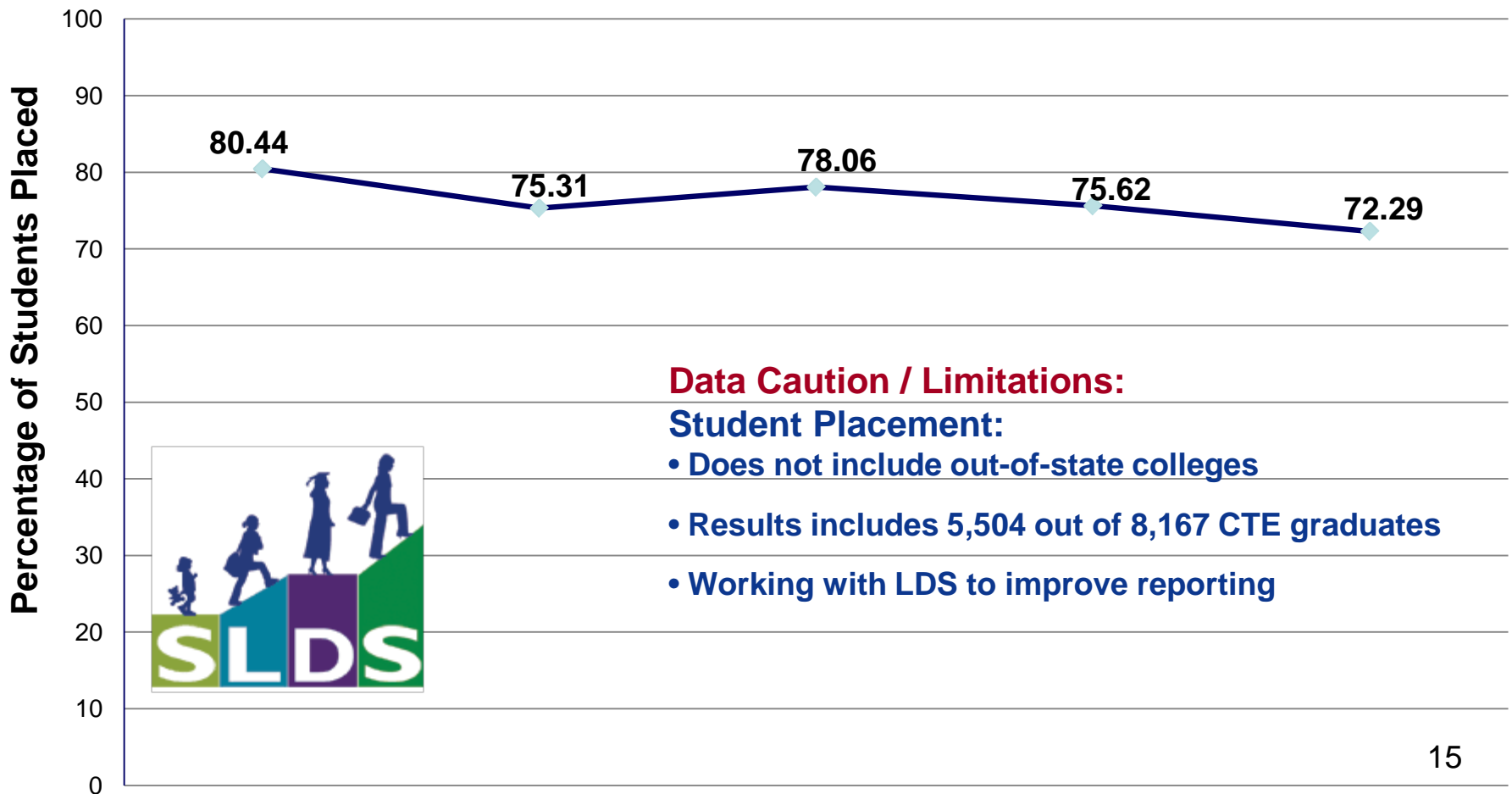
# Getting Results: CTE Graduation Rate

**Comparison of 2010 Graduation Rates  
Grade 10-12 for All Students vs. CTE Students**



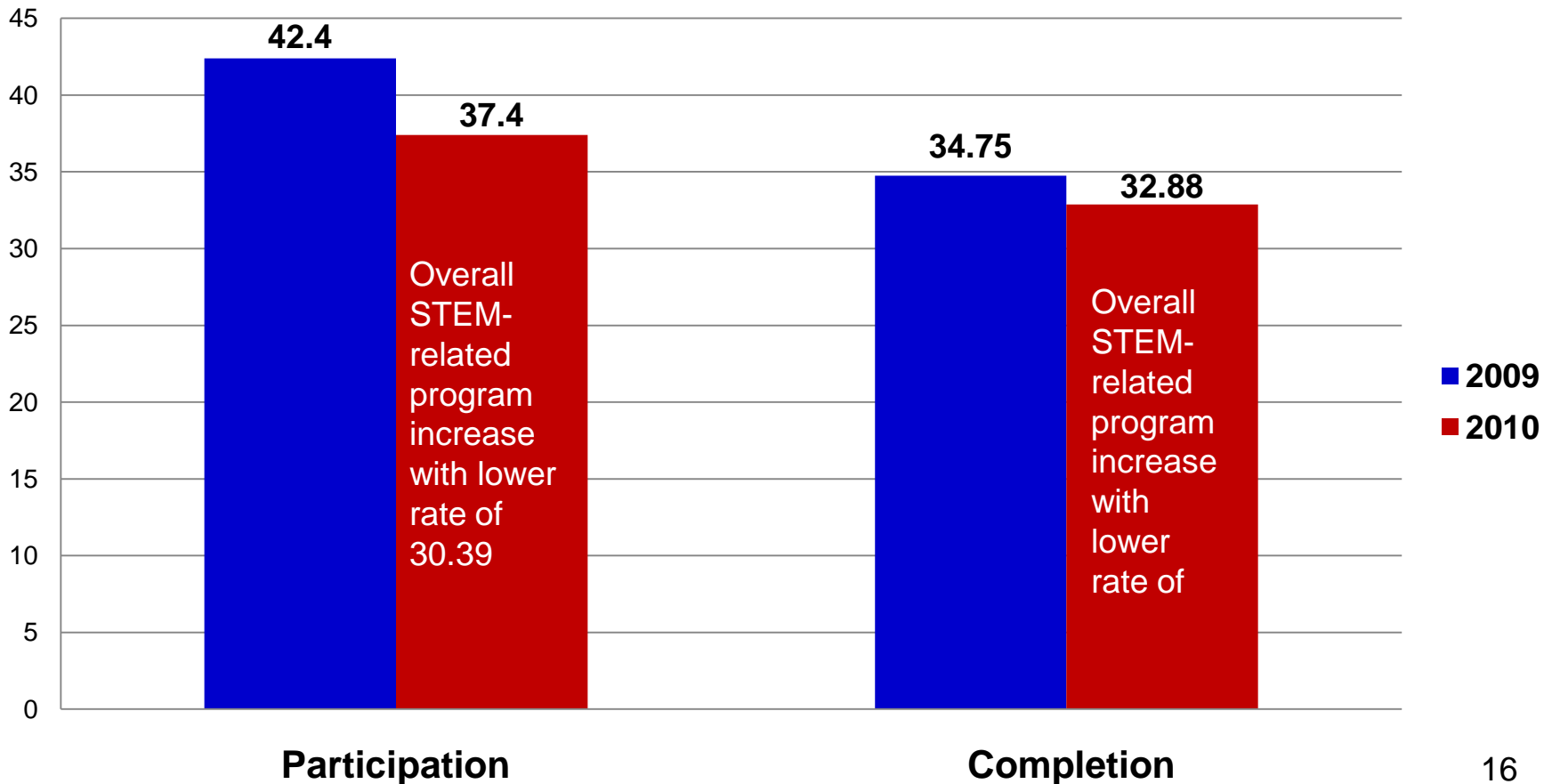
# Getting Results: CTE Placement Rate

Percentage of CTE Students Employed, Enrolled in Postsecondary Education in Maryland or in the Military, two quarters after Graduation, 2006-2010



# Non-Traditional Gender Participation and Completion (federal requirement)

## Comparison of Enrollment and Completion of the Under-Represented Gender in Non-Traditional Programs



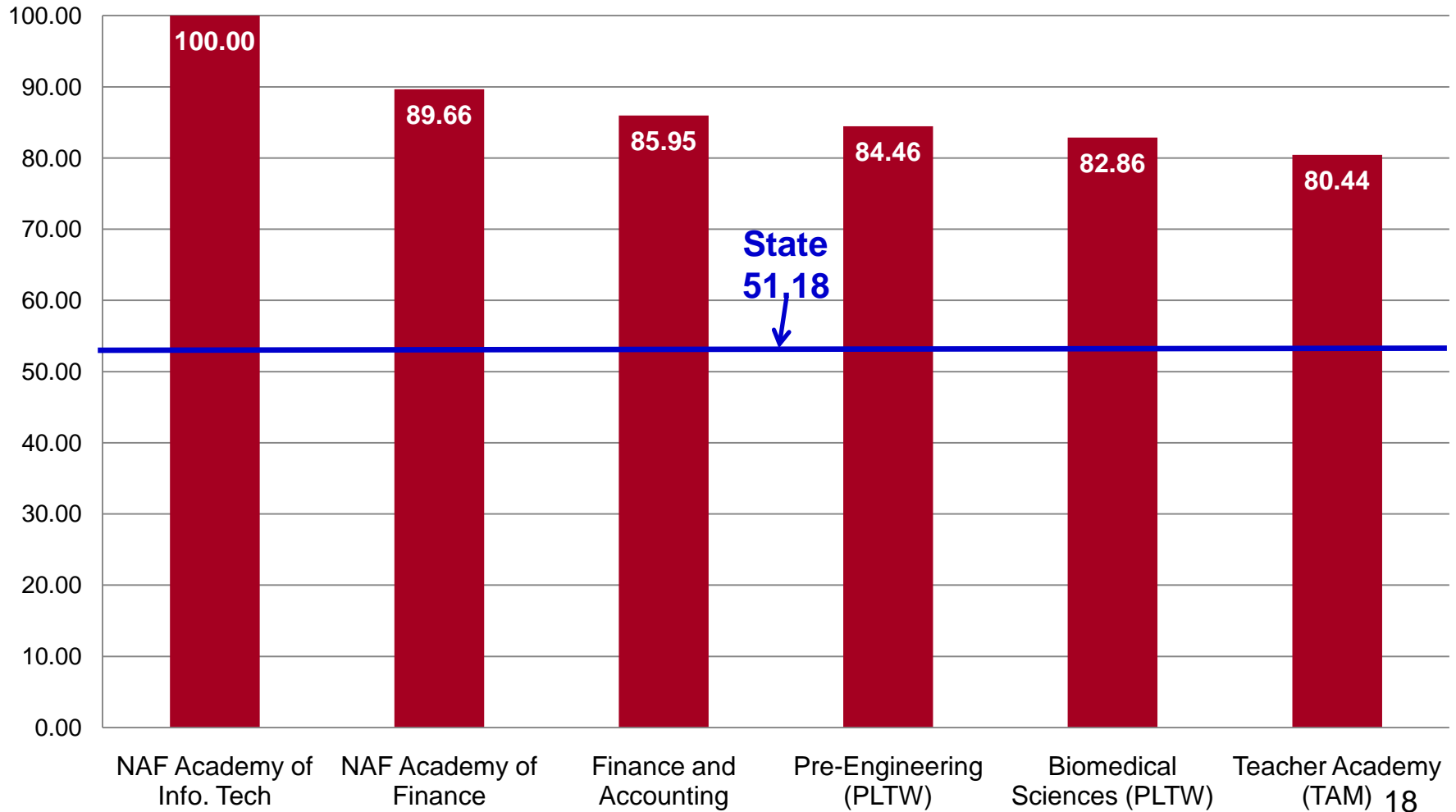


# CTE State Results

- MSDE Achievement Matters Most— *Managing For Results*
  - *Participation and performance of all high school student subgroups in challenging instructional programs -- Dual Completion (CTE/USM)*
- Education Week – *Quality Counts*
  - *#1 in **Transitions & Alignment**, aligning preK-12 standards with early learning & college and career expectations. Score/Grade: 96.4%/A*
- Workforce and Economic Development— *Skills2Compete*
  - *Increasing the number and percent of CTE students earning industry certification related to their technical program of study*

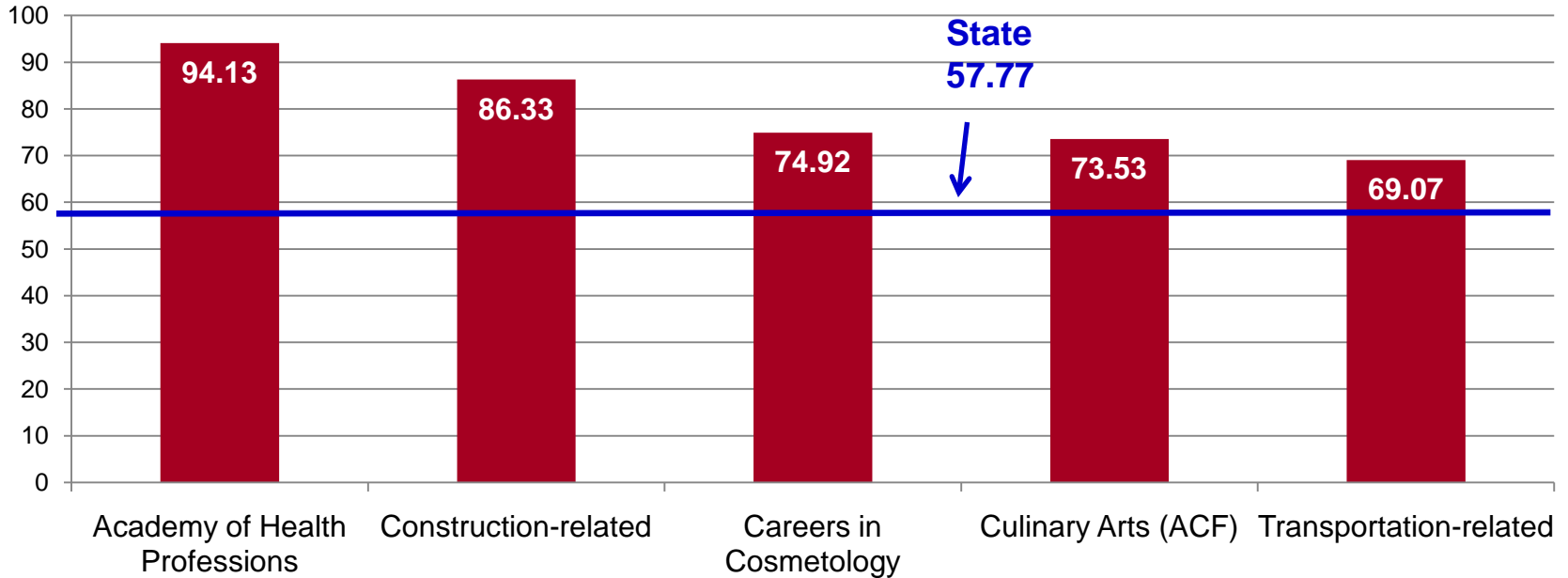
# CTE State Results: College & Career Ready

**Percent of CTE Completers who also met  
University of Maryland System Entrance Requirements, 2010**



# CTE Results: Advanced Technical Skills

Percent of Students Earning Industry Certification (12th grade status)



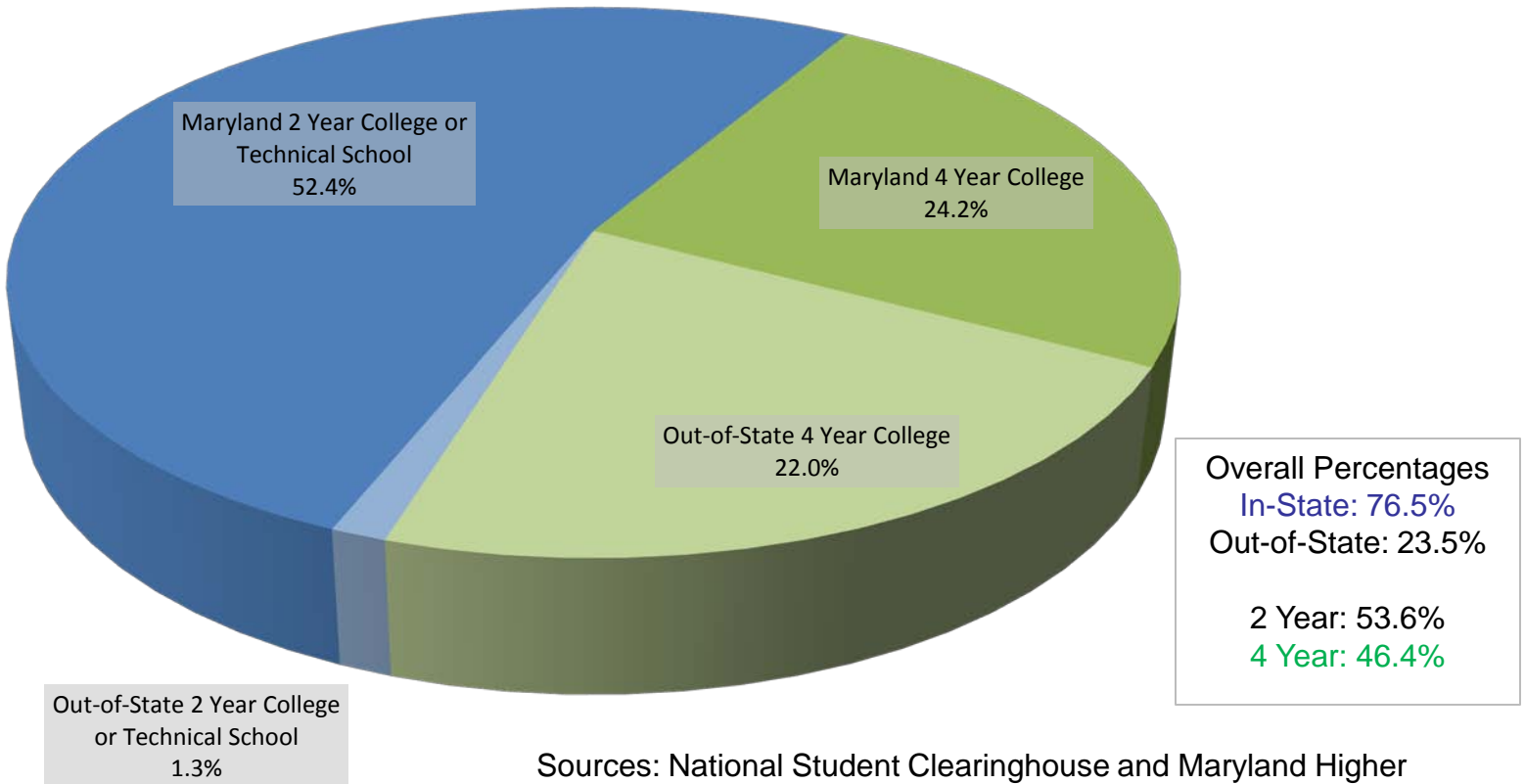
# *Continuing the Progress*

- Complete development of 48 CTE Programs of Study
- Increase student access to industry certifications and early college credit related to the CTE program of study
- Providing accurate and timely performance data for the continuous improvement of Maryland's system of CTE



# 65% of CTE Concentrators Enroll in College After Graduation (15,307 out of 23,375)

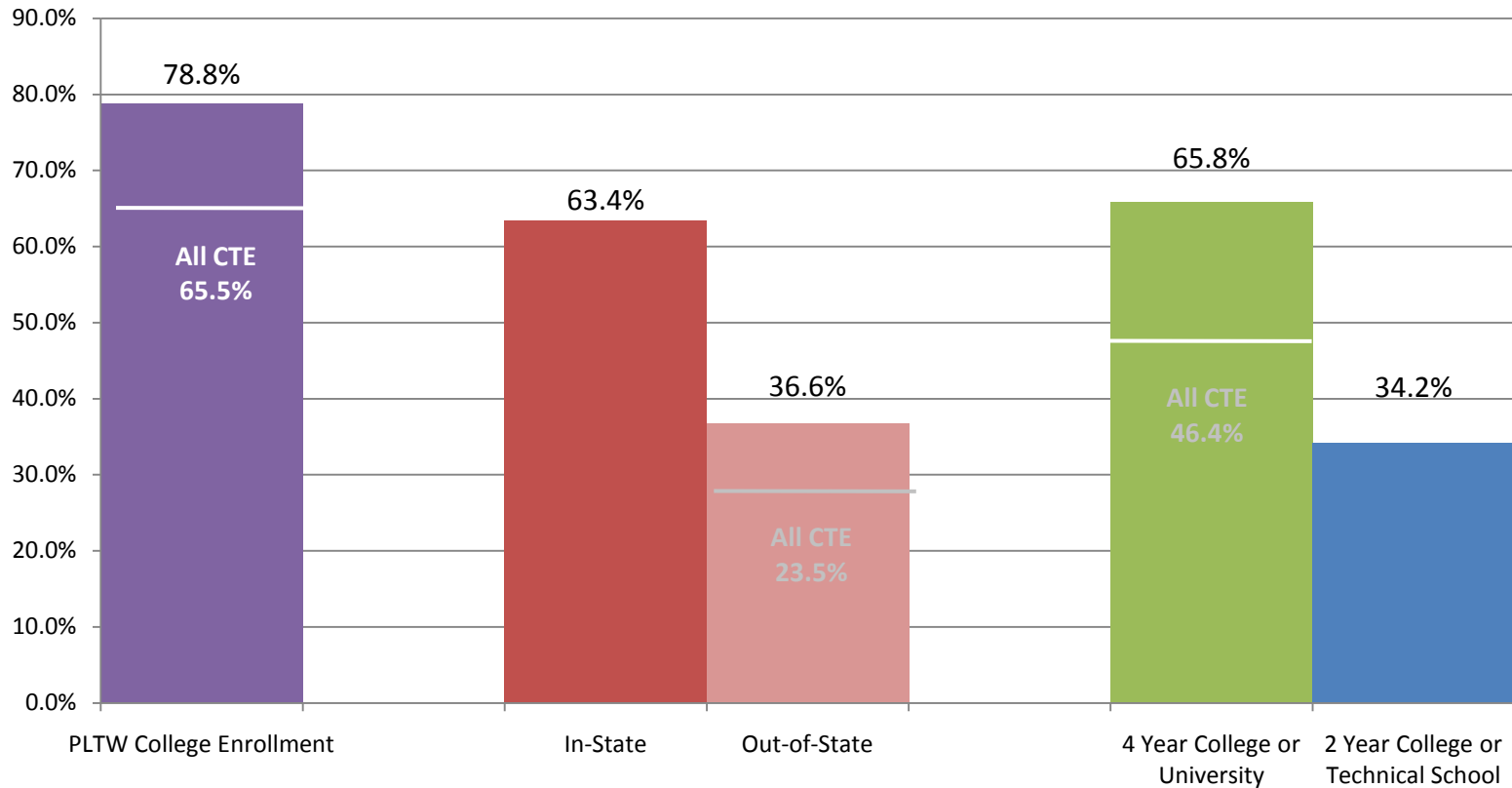
## CTE Comparison of In-State/ Out-of-State and 4-Yr. and 2-Yr. College Attendance



Sources: National Student Clearinghouse and Maryland Higher Education Commission Record Exchange for CTE Students

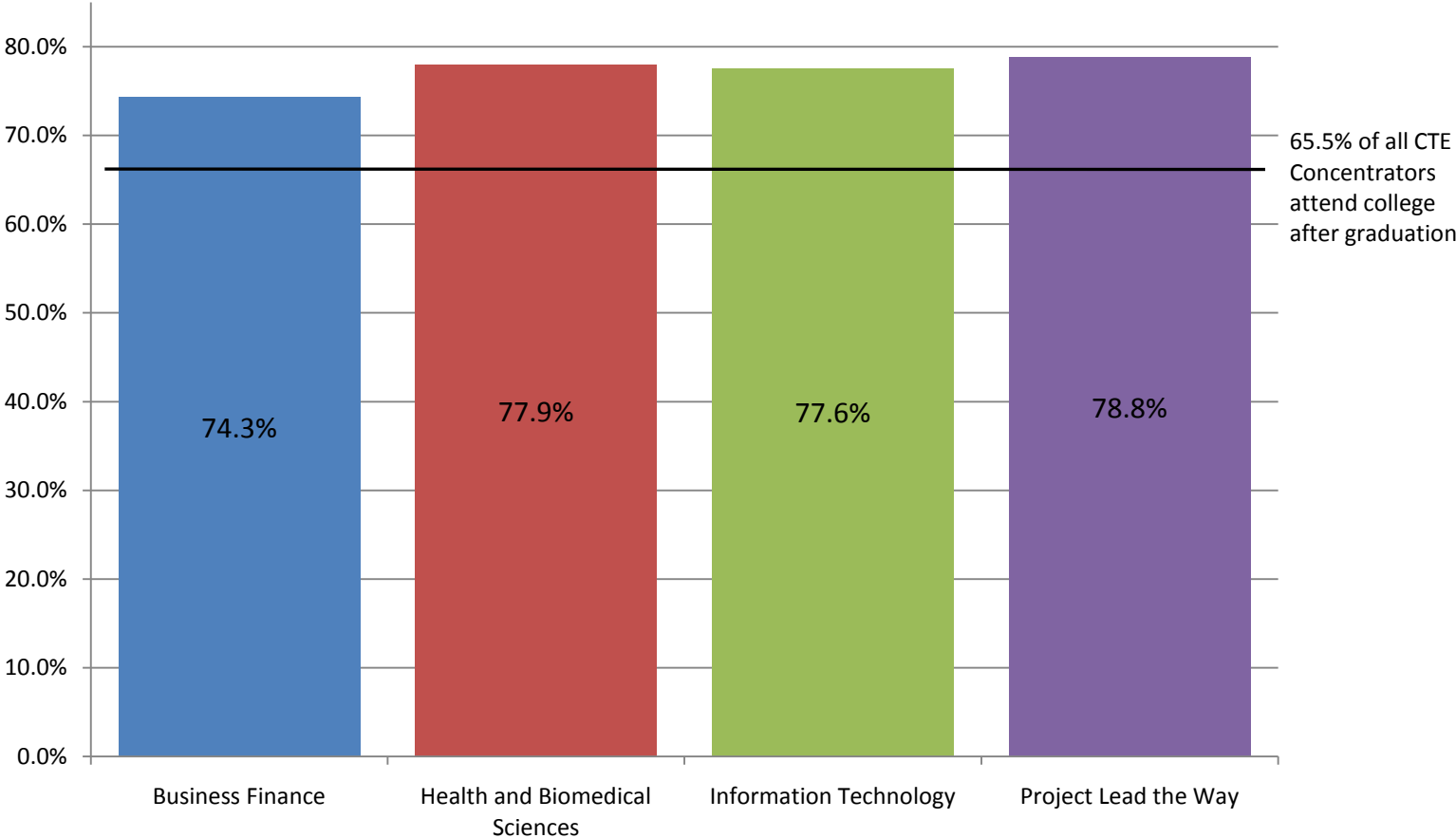
# CTE Pre-Engineering (PLTW) Students Are More Likely to Enroll in College

## Project Lead The Way College Enrollment with Location and Type



# CTE Programs Prepare Students for College and Careers

## CTE Student Enrollment in College by Program Area



# CTE Programs Prepare Students for College and Careers

## Percentage of CTE Students Earning Industry Certification and/or Enrolling in College

