Connecticut Technical High School System

Our students succeed here

TOMORROW'S FRAMEWORK

CTHSS STRATEGIC PLAN ANNUAL REPORT

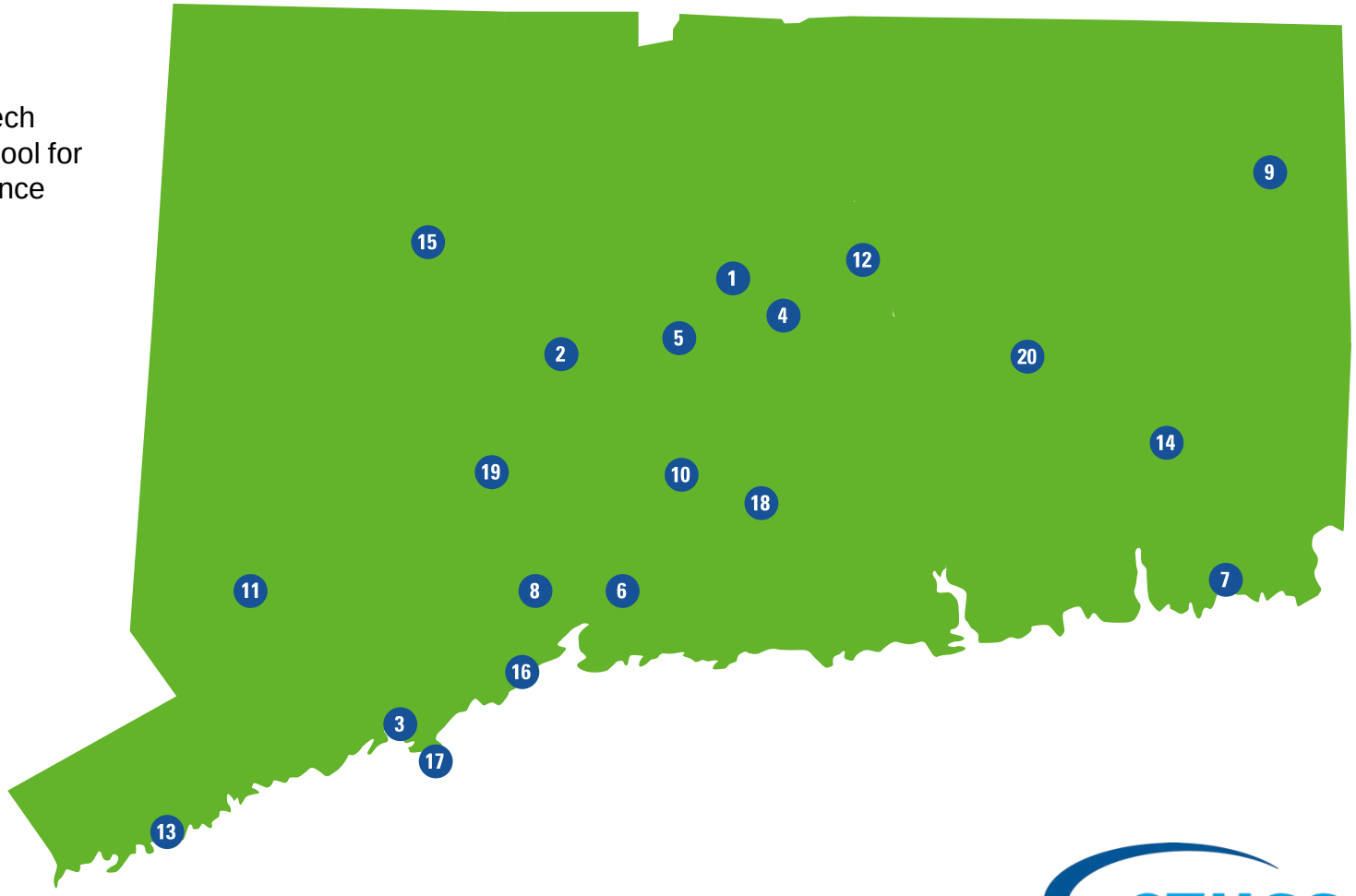
Dr. Nivea L. Torres, Superintendent of Schools

November 16, 2015

CTHSS
CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM

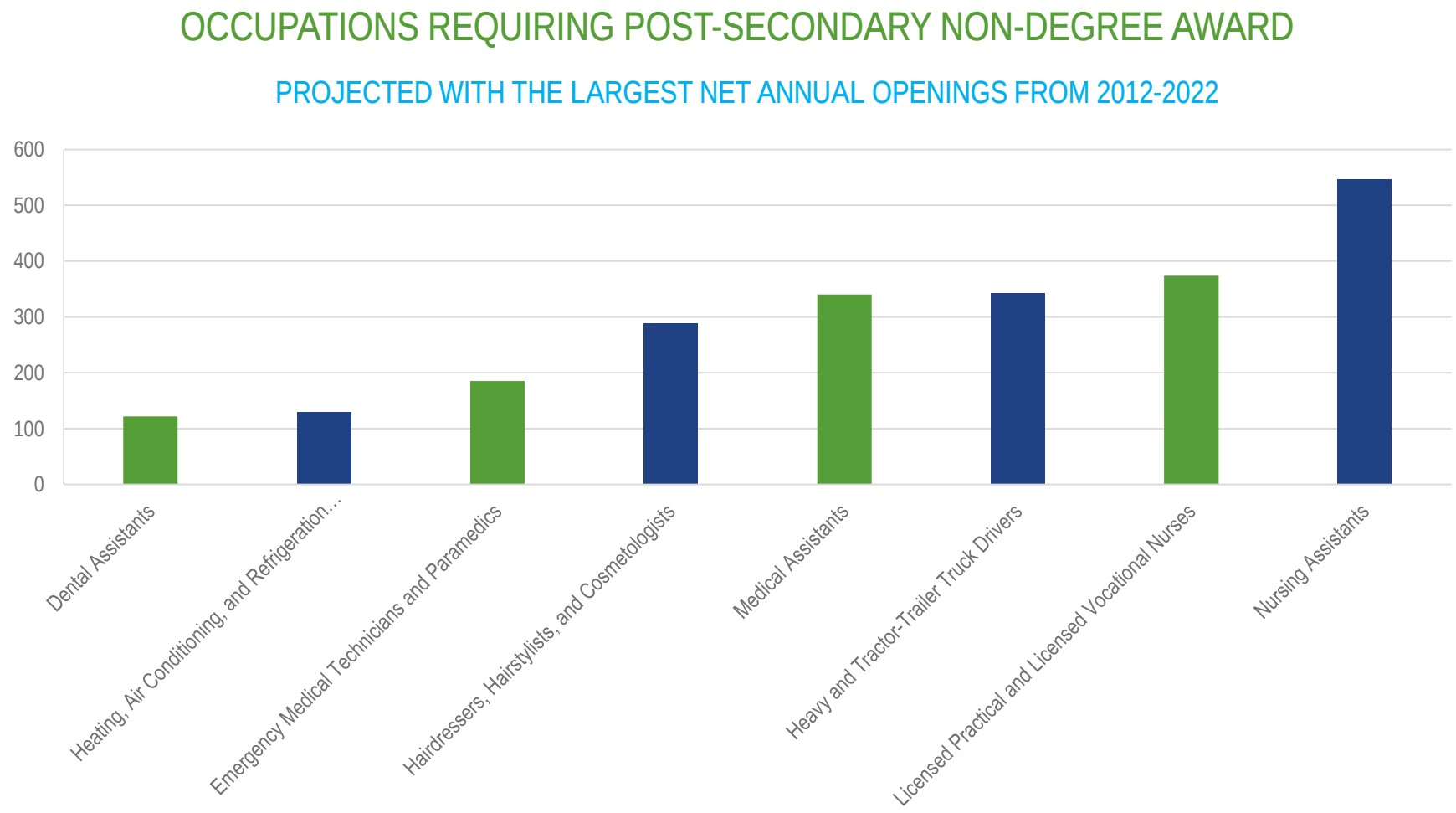
Schools and Locations

1. Prince Tech
2. Bristol TEC
3. Bullard-Havens Tech
4. CT Aero Tech School for Aviation Maintenance Technicians
5. Goodwin Tech
6. Whitney Tech
7. Grasso Tech
8. O'Brien Tech
9. Ellis Tech
10. Wilcox Tech
11. Abbott Tech
12. Cheney Tech
13. Wright Tech
14. Norwich Tech
15. Wolcott Tech
16. Platt Tech
17. Stratford School for Aviation Maintenance Technicians
18. Vinal Tech
19. Kaynor Tech
20. Windham Tech



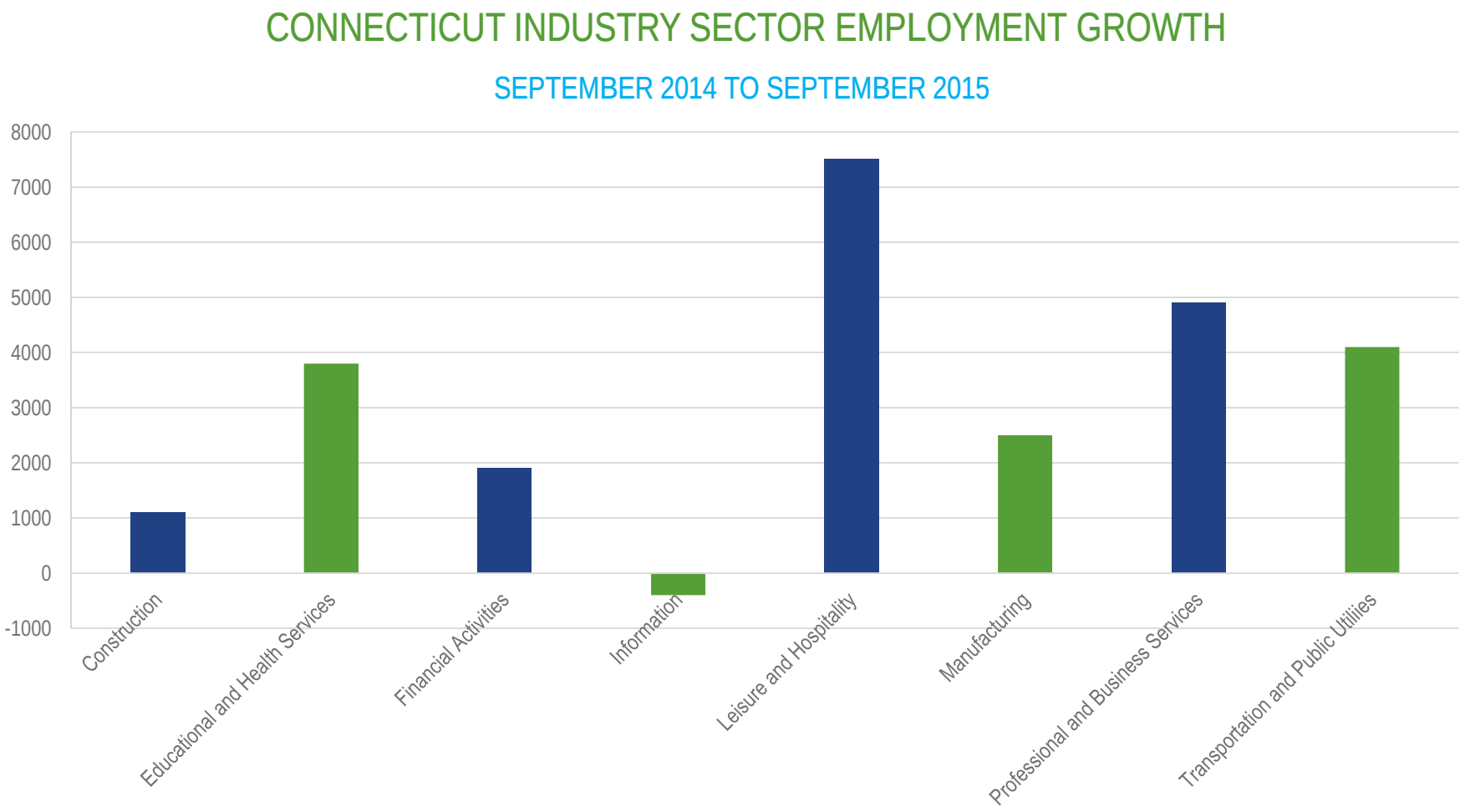
CTHSS
CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM

Projected Annual Job Openings



* Data from CTDOL 2012-2022 Statewide Occupations and Industry Data File http://www1.ctdol.state.ct.us/lmi/projections.asp

Change in Jobs



* Data from CTDOL Annual VOTECH Report

CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM

CAREER CLUSTERS

ARCHITECTURE AND CONSTRUCTION
- Sustainable Architecture
- Carpentry
- Electrical
- Facilities Management
- Heating, Ventilation and Air Conditioning (HVAC)
- Masonry
- Plumbing and Heating
- Plumbing, Heating and Cooling

MARKETING, SALES AND SERVICE
- Marketing, Management and Entrepreneurship

AGRICULTURE, FOOD AND NATURAL RESOURCES
- Bioscience and Environmental Technology

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM)
- Pre-Electrical Engineering and Applied Electronics Technology

HUMAN SERVICES
- Early Care and Education
- Hairdressing and Cosmetology

ARTS, AUDIO/VIDEO TECHNOLOGY AND COMMUNICATIONS
- Digital Media
- Sound Production Technology

INFORMATION TECHNOLOGY
- Electronics Technology
- Graphics Technology
- Information Systems Technology

HEALTH SCIENCE
- Health Technology
- Biotechnology

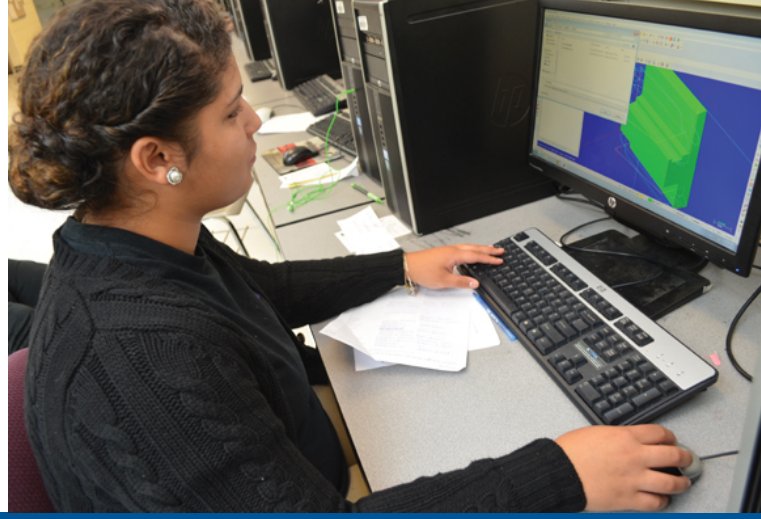
MANUFACTURING
- Automated Manufacturing Technology
- Mechanical Design and Engineering Technology
- Mechatronics
- Precision Machining Technology
- Welding and Metal Fabrication

HOSPITALITY AND TOURISM
- Culinary Arts
- Tourism, Hospitality and Guest Services Management

TRANSPORTATION, DISTRIBUTION AND LOGISTICS
- Automotive Collision, Repair and Refinishing
- Automotive Technology
- Diesel and Heavy-Duty Equipment Repair

ENHANCED EMPLOYER ENGAGEMENT AND ALIGNMENT WITH INDUSTRY NEEDS

GOAL 1:



Partner with business and industry to develop career technical education programs that provide CTHSS students with the skills and work habits to be successful in a dynamic 21st-century work environment.

GOAL 1: Accomplishments

Trade Technology Advisory Committee

- Membership has increased by 18% and included Business and Industry representatives during the 2014-15 school year.
- The CTHSS has 206 active TTACs representing 33 Career Pathways.
- CTHSS production work has increased by 5% totaling $880,000.
- Expanded Career and Technical Education programs in response to current workforce needs.

Skills Connect Employability Skills Assessment to be administered to all twelfth-grade students to determine workplace readiness.

Eastern Connecticut Manufacturing Pipeline Initiative

"Coming together is a beginning; keeping together is progress; working together is success."

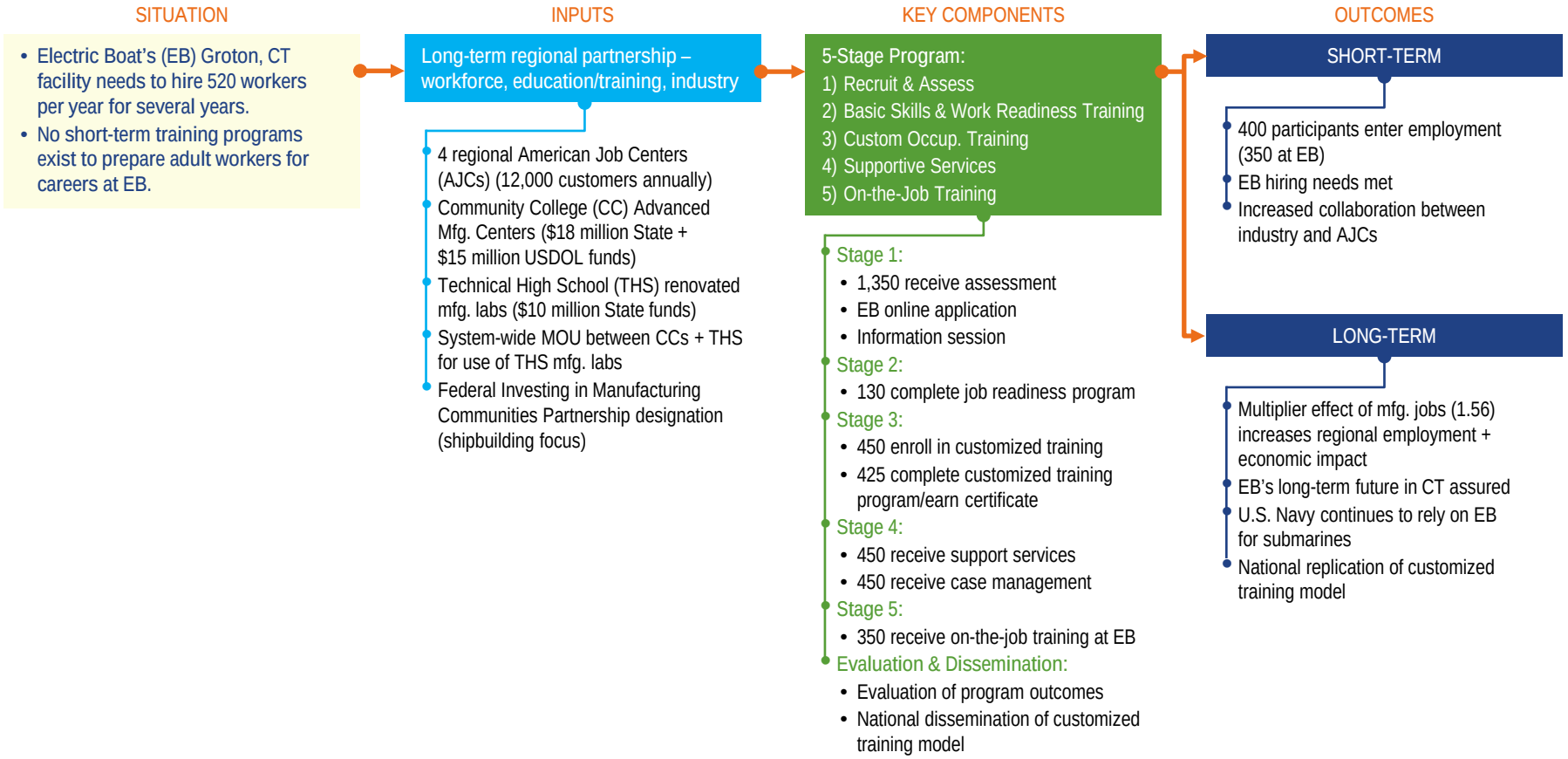
– Henry Ford

Workforce Innovation Fund

EASTERN CT MANUFACTURING PIPELINE INITIATIVE

SEPTEMBER 2014 TO SEPTEMBER 2015

FIGURE 1. EASTERN CT MANUFACTURING PIPELINE INITIATIVELOGIC MODEL



ALIGNMENT BETWEEN K-12, POST-SECONDARY AND ADULT PROGRAMS

GOAL 2:

Create an alignment between K-12, post-secondary and Adult programs to provide a continuum of educational services resulting in readiness for career and college.

GOAL 2.4: Refine the District's Admissions Policy

In May of 2015, the CTHSS entered into a *voluntary agreement* with the Office of Civil Rights (OCR) to monitor the system's admissions and applications processes.

Systemic actions taken to create a more equitable admissions process:

- Posting a detailed description of the application process on our website.
- Beginning the application process timeline earlier and holding student planning meetings before the end of the student's 8th grade school year whenever possible.
- Reinforcing with CTHSS staff the necessary steps to ensure that each incoming class of students is representative of the surrounding community.
- Developing jointly with SDE a comparison document which explains key differences between the CTHSS and a traditional high school.

GOAL 2.1C

Establish Career and Technical Education (CTE) programs for students who are not enrolled in the comprehensive four-year CTHSS program through a “Pre-Technology” after-school program.

Bullard-Havens

2015-16
Carpentry
Culinary Arts
Manufacturing
Masonry

E.C. Goodwin

2015-16
Carpentry
Culinary Arts
Manufacturing

A.I. Prince

Adults Evenings
2012-13
2nd Semester
Information Systems
Manufacturing
Weatherization

2013-14
1st Semester
Manufacturing
Masonry
Weatherization

Adults Evenings
2013-14 *(cont.)*
2nd Semester
Carpentry
Graphics
Manufacturing
Masonry
Weatherization

2014-15
Manufacturing
Masonry
Weatherization

Adults After-school
2015-16
Manufacturing
Masonry
Weatherization

High School After-school
2015-16
Under Development

GOAL 2.1C

Establish Career and Technical Education (CTE) programs for students who are not enrolled in the comprehensive four-year CTHSS program through a “Pre-Technology” after-school program.

Eli Whitney
2014-15
Carpentry
Manufacturing
Plumbing

2015-16
Carpentry
Culinary Arts
Manufacturing
Plumbing

Wolcott
High School After-school
2015-16
Manufacturing

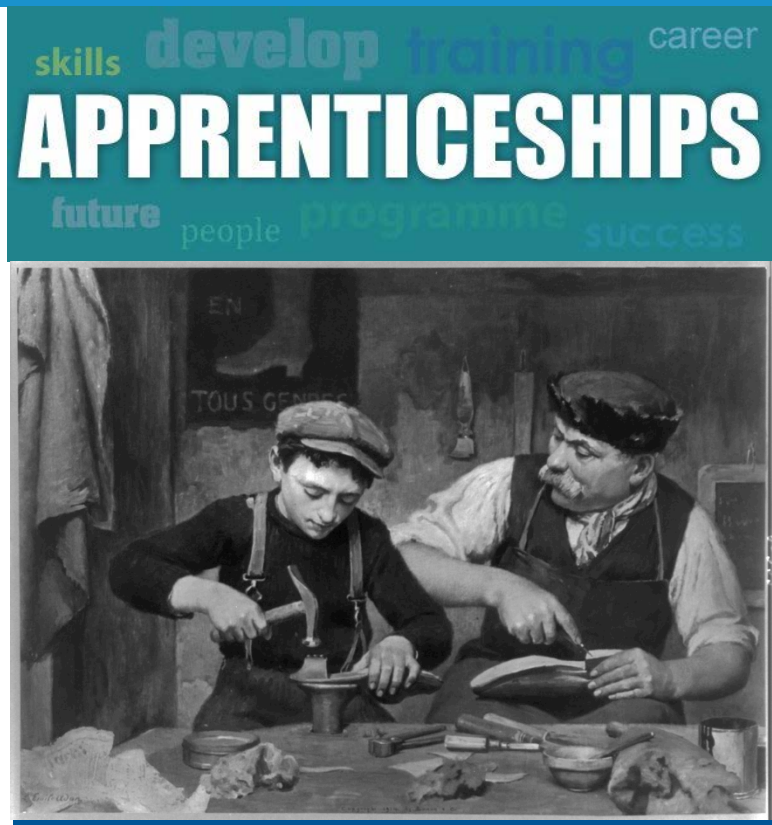
Funded by Torrington BOE & Torrington Chamber of Commerce
CTHSS providing in-kind: security, equipment & supplies

W.F. Kaynor
High School After-school
2015-16
Under Development

State of Apprenticeship in Connecticut and the CTHSS

A total of 5,307* apprentices in Connecticut, of which:

- 1,786 apprentices are in the Electrical career path.
- 1,152 apprentices are in the Heating/Cooling and Sheet Metal career path.
- 723 apprentices are in the Plumbing/Pipefitting career path.
- 158 apprentices are in the Manufacturing career path.
- The remaining 1,488 apprentices are divided among the Carpentry, Masonry, and Laborer career areas.



The CTHSS offers Apprenticeship Related Instruction Training at six convenient locations across the state.

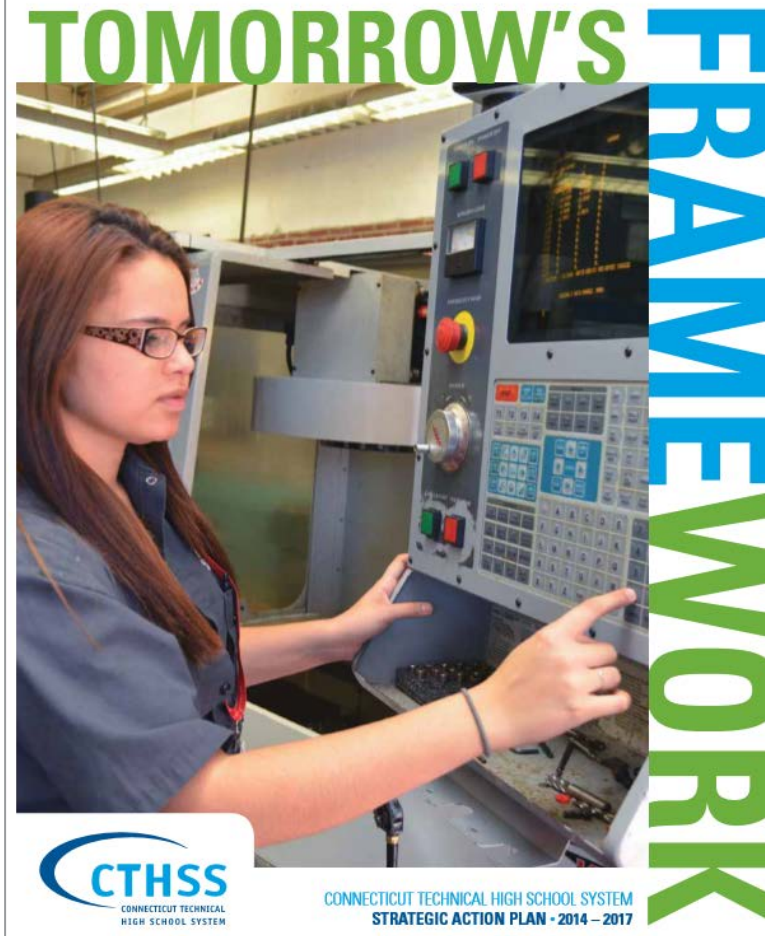
*As of 10-24-15

Goal 2.3: Expand CTHSS adult CTE programs

Aligning with the state's workforce needs:

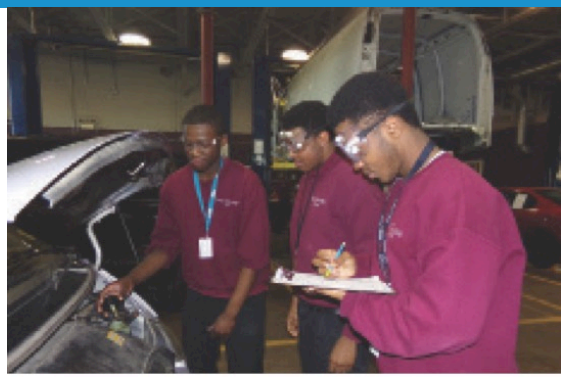
- Over 2,200 apprenticeship students enrolled for the 2014-15 school year,
- Enrollment numbers for the 2015-16 school year are looking to surpass last year's numbers.
  - 27% of the Connecticut apprentices come from the CTHSS 9-12 program.
  - 42% of Connecticut apprentices come from the CTHSS Evening Apprenticeship-related Instruction Program.
  - That's a total of 69% of apprentices in Connecticut coming from the CTHSS!

The CTHSS offers Apprenticeship-related Instruction Training at six convenient locations across the state!



Educational Compact between the CTHSS and the BOR

- Share space, equipment, material, and instructors.
- Allow technical high school students to earn college credit from the regional community-technical college.
- Developed a memorandum of agreement through the Connecticut Advanced Manufacturing Initiative (CAMI) utilizing the CTHSS precision machining labs to expand programming at the Community College Advanced Manufacturing Centers and Manufacturing programs.



Fall 2015

Naugatuck Valley Community College (NVCC)

- Abbott Tech – Satellite site for NVCC's Advanced Manufacturing certificate program
- Kaynor Tech – NVCC incumbent worker training; QA & CNC basics

Quinebaug Valley Community College (QVCC)

- Ellis Tech – QVCC's Advanced Manufacturing certificate program

Housatonic Community College (HCC)

- Platt Tech – HCC's incumbent worker training; CNC programming

Middlesex Community College (MXCC)

- Wilcox Tech – MXCC's Manufacturing certificate program

Manchester Community College (MCC)

- Cheney Tech – MCC's Manufacturing certificate program; manual & CNC machining

Manufacturing Programs

1. Prince Tech
2. Bristol TEC
3. Goodwin Tech
4. Whitney Tech
5. Grasso Tech
6. O'Brien Tech
7. Ellis Tech
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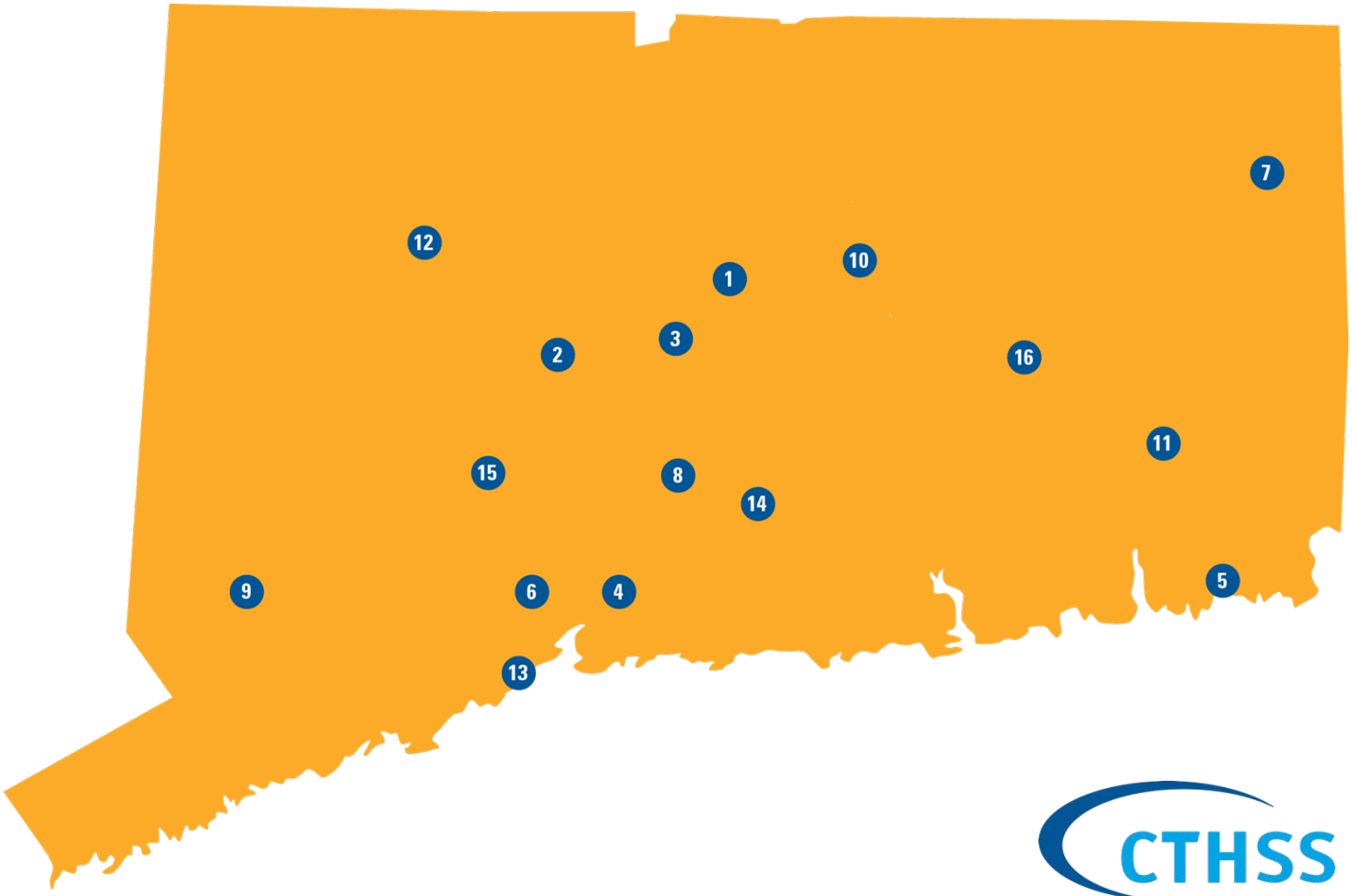

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Manufacturing Partnerships with Community Colleges

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2. Bristol TEC
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8. Wilcox Tech
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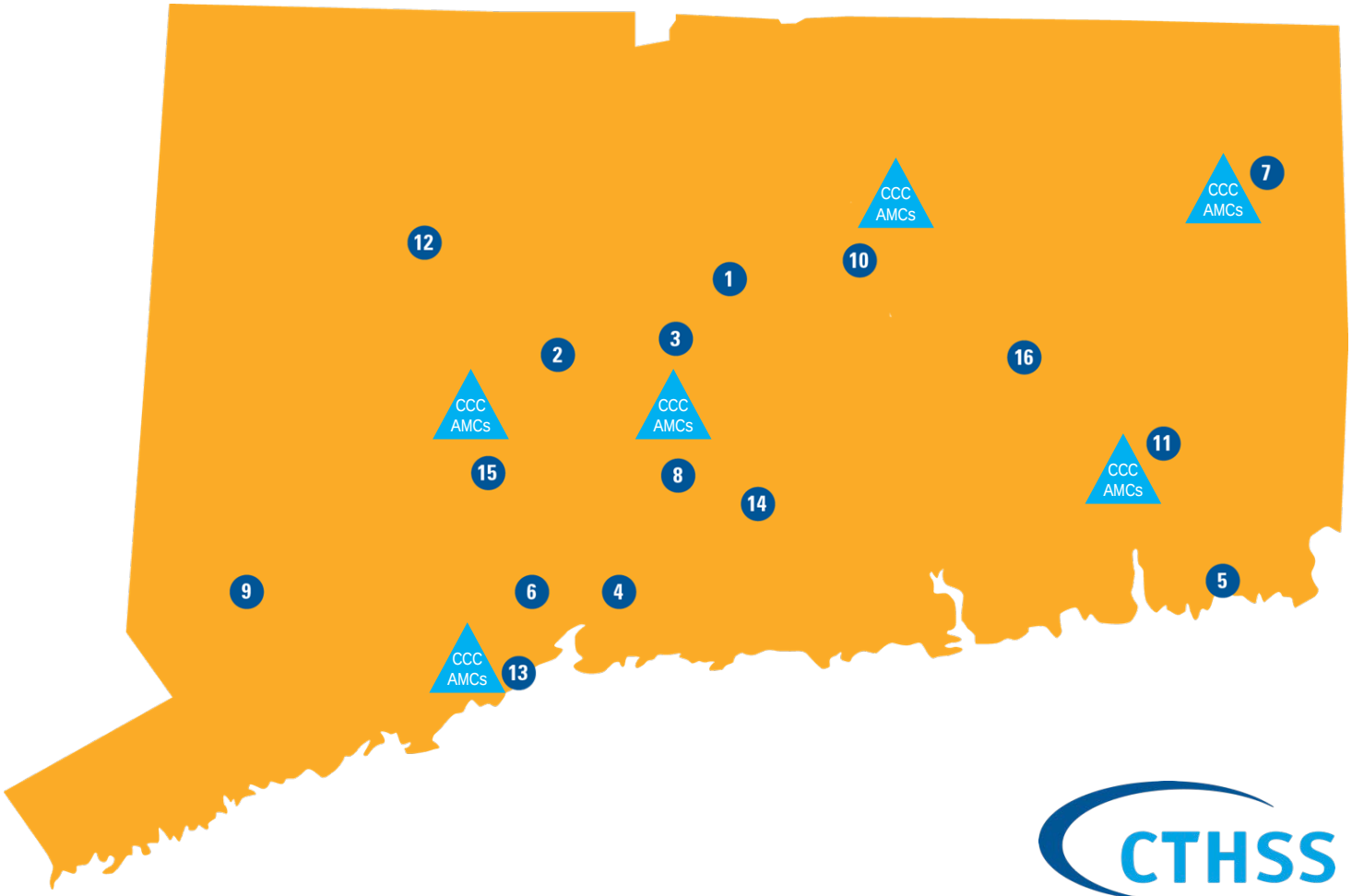

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CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM

FLEXIBILITY, RESPONSIVENESS AND INNOVATION

GOAL 3:

Transform the CTHSS with Innovative Program Designs that are responding to Connecticut's workforce needs, thus positioning the system as a leading force in career technical education.

GOAL 3: Accomplishments

CTHSS is represented at state and national organizations to increase awareness and recognition including:

- SkillsUSA

Summer 2015: We had 16 events in the top 10 and 14 in the top 20.
According to the national statistics the students were already considered to be in the top 2% in the nation before entering the national event.

- Two students earned a gold medal, Brett Hawran & Jacob Hawran from Prince, placed 1st in Audio Radio Production.
- One student earned a silver medal, Adrian Zygadlo from Platt, placed 2nd in Technical Computer Application.
- National Association of State Directors of Career Technical Education.
- National Career Pathways Network.
- Association of Career and Technical Education.
- Eastern State Apprenticeships Council.

GOAL 3: Accomplishments

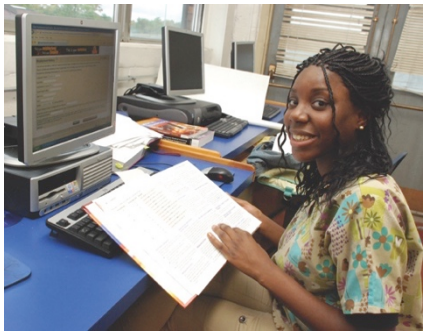
- The Connecticut Technical High School System, in partnership with Energize Connecticut, has developed the nation's first green construction learning laboratories for CTE high school students.
- The E-House initiative is administered by Connecticut Light & Power and The United Illuminating Company.
- E-House construction is in progress or complete at 12 schools.

Career/Technical Education Program Expansion Plan

NEW TRADES

2014-15

- HEALTH TECH
  Henry Abbott Technical High School
- INFORMATION SYSTEMS
  E.C. Goodwin Technical High School



2015-16

- BIO-ENVIRONMENTAL
  A.I. Prince Technical High School
- BIO-TECHNOLOGY
  Norwich Technical High School
- INFORMATION SYSTEMS
  W.F. Kaynor Technical High School and Eli Whitney Technical High School
- MANUFACTURING
  Bullard-Havens Technical High School
- MECHATRONICS
  E.C. Goodwin Technical High School
- WELDING
  Ella T. Grasso Technical High School

2016-17

- HEALTH TECH
  Bullard-Havens Technical High School and A.I. Prince Technical High School

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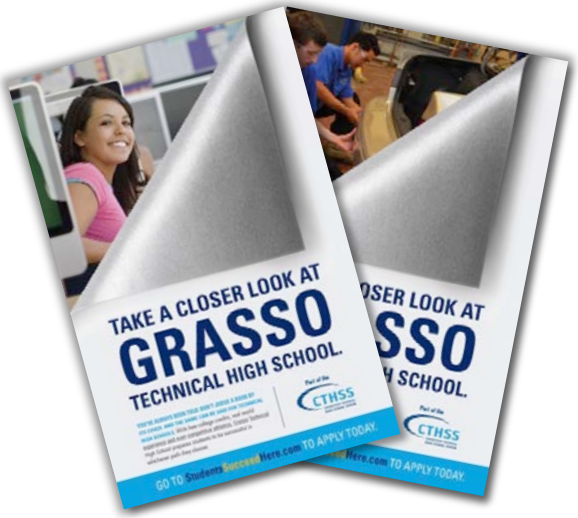
CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM

GOAL 3.2: District-wide Cohesive Marketing and Recruitment Efforts



GOAL 3.2: The pipeline for workforce development in CT

Life *Ready*

"Life-ready students are prepared to pursue successful careers and lead fulfilling lives as productive citizens… They are proficient with a wide range of additional skills needed to keep learning and adapt through their lives."

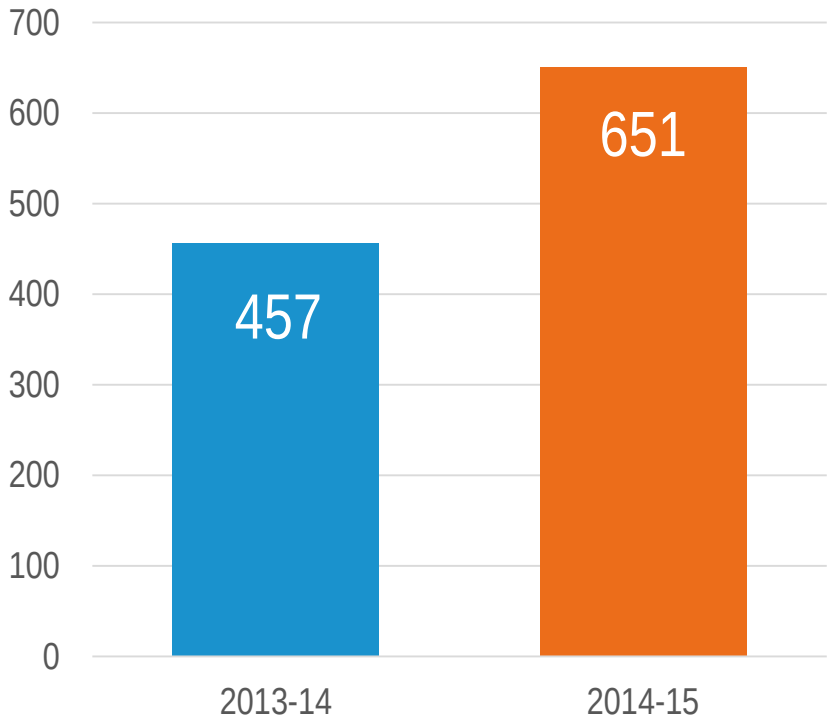
– Conley, 2014

Work *Ready*

Meets basic expectations regarding workplace behavior and demeanor.

Indicator of Achievement:
Number of students participating in a Work-based Learning (WBL) program.

CTHSS WORK-BASED LEARNING ENROLLMENT (SECONDARY AND ADULTS)

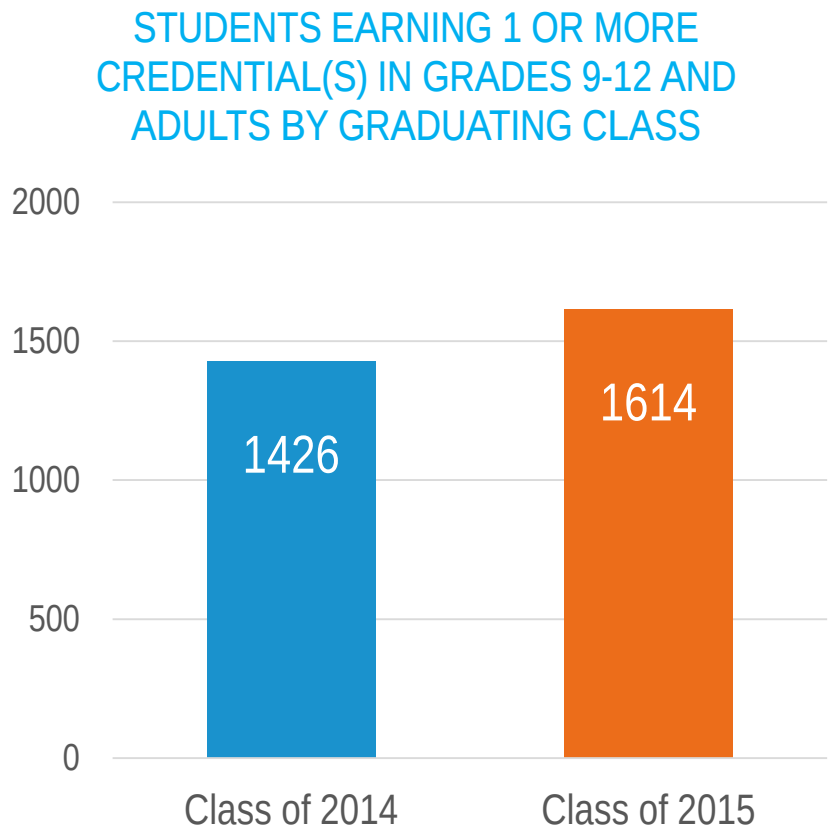


Job *Ready*

Possesses specific knowledge necessary to begin an entry-level position.

Indicator of Achievement:

Number of students who have obtained industry-recognized portable, stackable credentials.



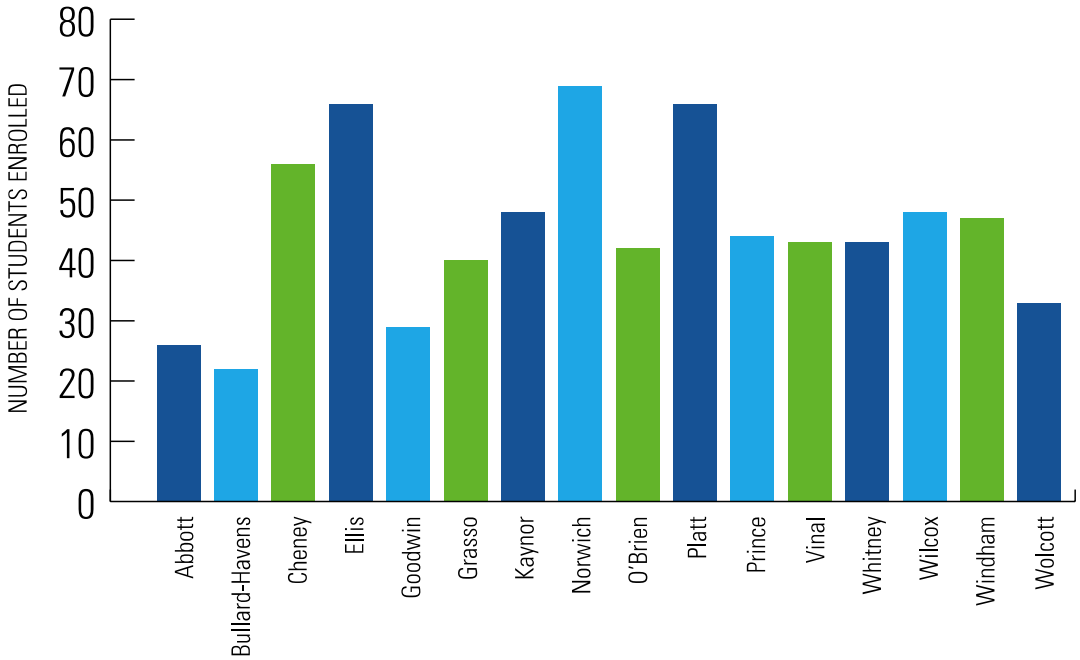
Additionally, over 1,300 students in grades 9-11 have earned credentials.

Career *Ready*

Possesses knowledge and learning skills necessary to succeed in a certificate program.

Indicator of Achievement:
Number of graduates completing dual enrollment courses at community colleges or state universities.

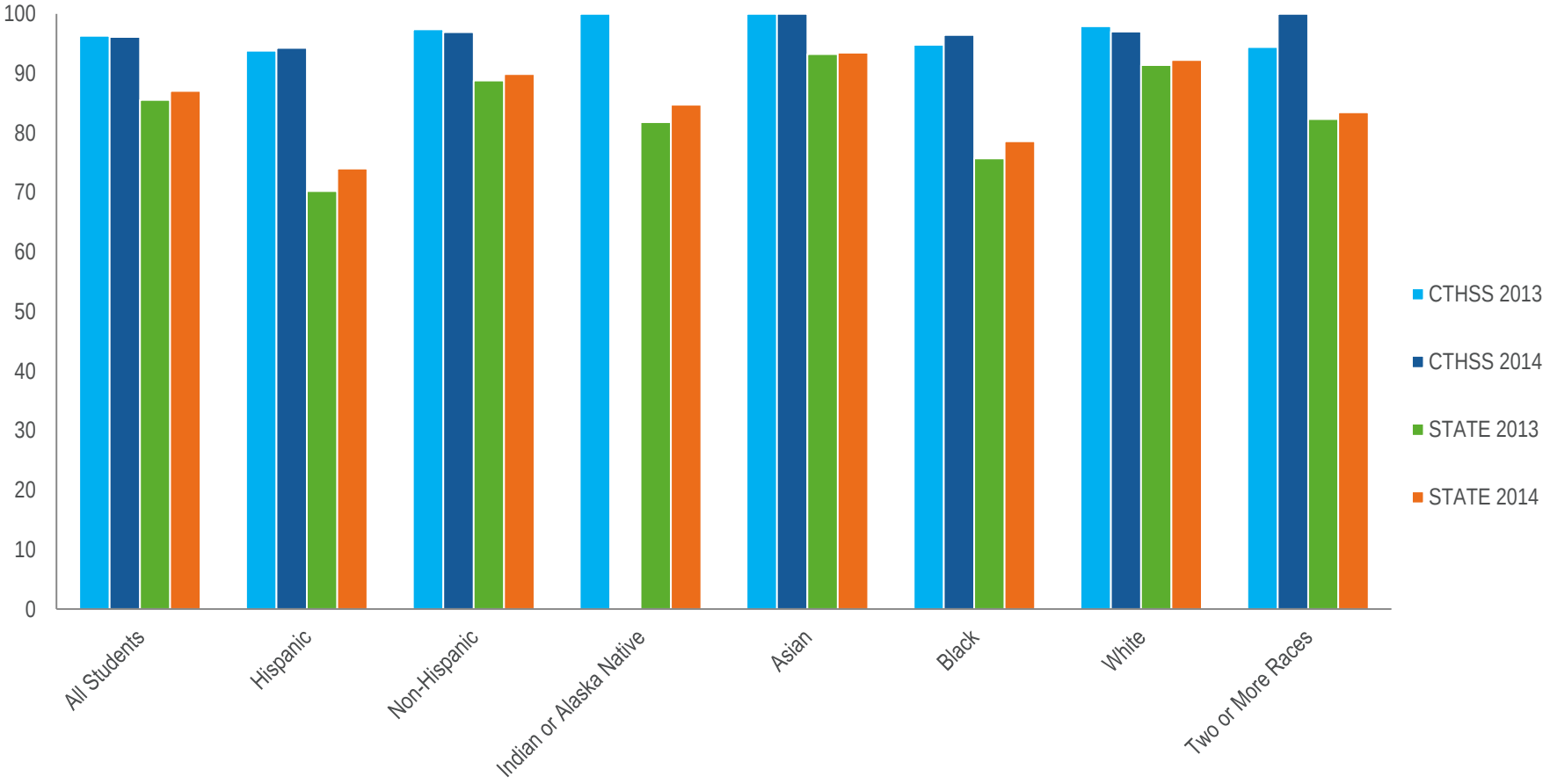
COLLEGE CAREER PATHWAYS PARTICIPATION BY STUDENT ENROLLMENT BY SCHOOL AS OF MAY 2014-2015



College *Ready*

FOUR-YEAR GRADUATION RATES

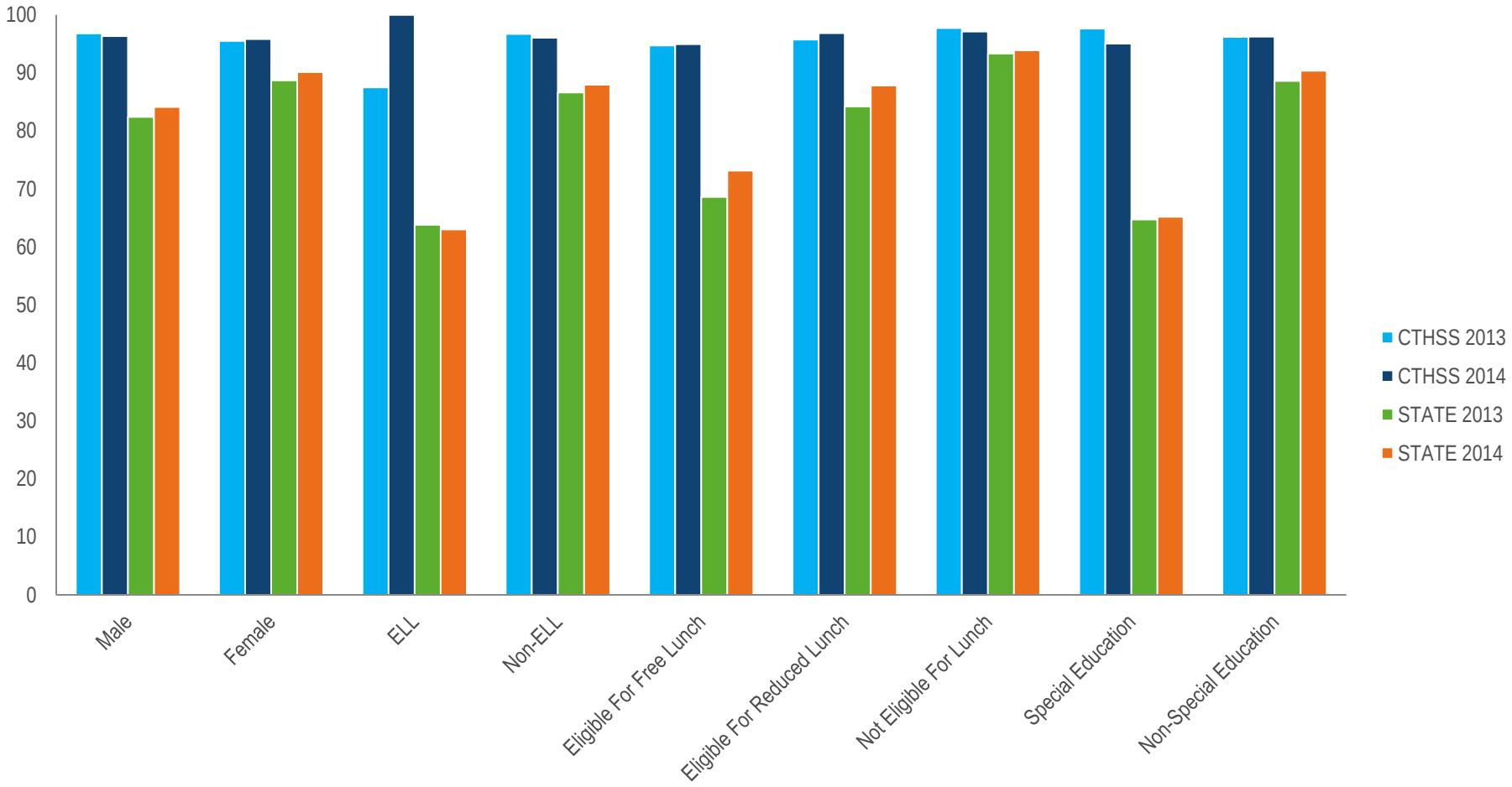
CTHSS COMPARED TO STATE AVERAGES – RACE/ETHNICITY



College *Ready*

FOUR-YEAR GRADUATION RATES

CTHSS COMPARED TO STATE AVERAGES – ADDITIONAL DEMOGRAPHICS

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