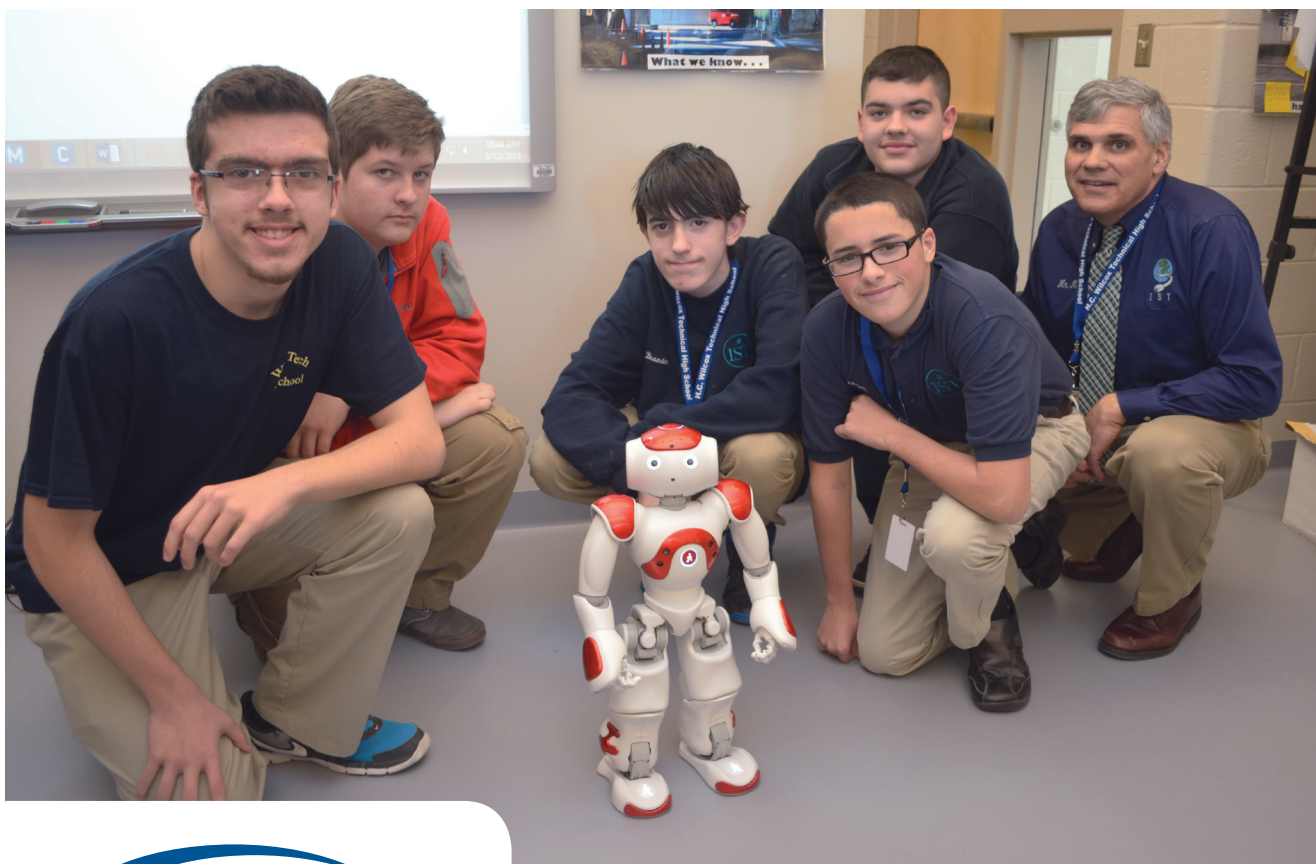


# TOMORROW'S FRAMEWORK



# ANNUAL REPORT



CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM  
STRATEGIC PLAN ANNUAL REPORT 2014-15

DR. NIVEA L. TORRES, SUPERINTENDENT OF SCHOOLS

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**CONNECTICUT TECHNICAL HIGH SCHOOL SYSTEM  
SUPERINTENDENT OF SCHOOLS**

Dr. Nivea L. Torres

# OUR VISION

## TO BE THE BEST TECHNICAL HIGH SCHOOL SYSTEM IN THE NATION.

# OUR MISSION

The mission of the Connecticut Technical High School System is to provide a world-class, unique and rigorous learning environment for high school students and adult learners that:

- Ensures both student academic success and career technical education mastery, as well as promotes enthusiasm for lifelong learning;
- Prepares students for post-secondary education, including apprenticeships and immediate productive employment;
- Engages regional, state, national and international employers and industries in a vibrant collaboration to respond to current, emerging and changing global workforce needs and expectations; and
- Pursues and participates in global partnerships that provide CTHSS students with international exposure and experience.





# 4 GOALS 3 YEARS

**Tomorrow's Framework** defines the important work that we will undertake over the next three years. These core goals are the driving force behind our commitment to make our vision a reality: To become the best career technical education system in America.

1. Enhanced Employer Engagement and Alignment with Industry Needs
2. Alignment between K-12, Post-secondary and Adult Programs
3. Flexibility, Responsiveness and Innovation
4. Professional Capital

## GOAL 1

### ENHANCED EMPLOYER ENGAGEMENT AND ALIGNMENT WITH INDUSTRY NEEDS

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.

#### 1.1 Partner with business and industry.

- A. Develop partnerships with business and industry for all career pathways.

##### 2014 – 15 INDICATORS OF SUCCESS

- Trade Technology Advisory Committee (TTAC) membership has increased by 18% and included Business and Industry representatives during the 2014 – 15 school year.

- B. Establish business/industry advisory committees for all career pathways.

##### 2014 – 15 INDICATORS OF SUCCESS

- The CTHSS has 206 active TTACs representing 33 Career Pathways. For 2015 – 2016, the system will transition to Career Technical Education Advisory Committees (CTEAC).

- C. Expand partnerships with business/industry to provide educational production work, work-based learning and job shadowing.

##### 2014 – 15 INDICATORS OF SUCCESS

- CTHSS Production Work has increased by 5% totaling \$880,000.

- D. Hire additional Dean of Students to oversee the work-based learning programs.

##### 2014 – 15 INDICATORS OF SUCCESS

- Two additional Deans of Students were hired for Ellis and Grasso to oversee the schools' work-based learning programs.

#### 1.2 Develop dynamic, career technical education programs.

- B. Prepare graduates for success in a 21st century dynamic work environment by implementing career guidance and career education as a graduation requirement for all CTHSS students.

##### 2014 – 15 INDICATORS OF SUCCESS

- Career readiness skills matrix submitted from each school and reviewed for compliance and adherence to 67 employability skills matrix.
- Employability skills assessment pilot data analyzed to determine administration schedule for 2015 – 16 school year.

#### 1.3 Develop a clearly articulated career technical education program review process.

- A. Develop and consistently implement a process to identify new technologies responsive to labor market needs in accordance with CT General Statutes Section 10-951(b) and (c).

##### 2014 – 15 INDICATORS OF SUCCESS

- Assistant Superintendent of Schools was hired to review labor market and industry trends.

- B. Review CTE enrollment with consultants, school principals and advisory boards on an annual basis to make programmatic recommendations to the CTHSS Board.

##### 2014 – 15 INDICATORS OF SUCCESS

- Enrollment figures were analyzed during the spring of 2015 to determine programmatic changes to offerings at each school.

- C. Implement an Enrollment and Retention Success Plan.

##### 2014 – 15 INDICATORS OF SUCCESS

- Fully implemented the CTHSS Enrollment and Retention Success Plan. The plan is reviewed with each principal as part of the school's goals.

GOAL 1 CONTINUED

1.4 Respond to the changing needs of business/industry.

- A. In accordance with CT General Statutes Section 10-95h, review the Department of Labor projections and the Department of Economic Development strategic goals on an annual basis to determine state workforce needs.

2014 – 15 INDICATORS OF SUCCESS

- Report to Joint Standing Committees submitted November, 2014, in collaboration with the Department of Labor and Department of Economic Development.
- B. Increase the number of business/industry-recognized portable, stackable credentials that lead to employment and post-secondary education.

2014 – 15 INDICATORS OF SUCCESS

- The district now offers 93 unique portable, stackable credentials representing all career clusters.
- C. Respond to current workforce needs in Connecticut by expanding CTE programs in advanced manufacturing, welding, information systems technology, electro-mechanical and health technology.

2014 – 15 INDICATORS OF SUCCESS

- Expanded CTE programs in response to current workforce needs. A Health Technology program opened at Abbott, a Biotechnology program opened at Norwich, a BET program opened at Prince and an IST program opened at E.C. Goodwin.

1.5 Stay current with the emerging technology and STEM demands of college and work environments.

- A. Embed innovative and common technology across all academic and CTE program areas.

2014 – 15 INDICATORS OF SUCCESS

- Wright Tech has a full-time STEM coach on staff. Wright Tech will implement a co-teaching model for the career clusters that allows for interdisciplinary connections between career and academic teachers.

- C. Connect science, technology, engineering and math (STEM) to every content area through the curriculum review process.

2014 – 15 INDICATORS OF SUCCESS

- Wright Tech has a full-time STEM coach who works collaboratively with career technology and academic teachers to develop project-based activities to connect science, technology, engineering and math across all disciplines.



# GOAL 2

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

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.

2.1 Articulate the alignment of Connecticut's K – 8 education with CTHSS career technical education.

- A. Expand extended hours programming (summer TECHNO camps, after school programs etc.)

2014 – 15 INDICATORS OF SUCCESS

- Seven schools offered after school programs to students interested in CTE opportunities including Bullard-Havens, Eli Whitney, A. I. Prince, E. C. Goodwin, Vinal, Cheney and Grasso (Foundational Imperative #12).

- B. Expand partnerships with elementary and middle schools to create opportunities for students to pursue career technical education within the CTHSS.

2014 – 15 INDICATORS OF SUCCESS

- 175 seventh and eighth grade students participated in TECHNO camps in July 2014.
- Academy programs were offered to incoming ninth grade students at seven school locations in July 2014.
- 550 participants are scheduled for July 2015.

- C. Establish CTE programs for students who are not enrolled in the comprehensive four-year CTHSS program through a "Pre-Technology" after school program.

2014 – 15 INDICATORS OF SUCCESS

- An after school program was established at Eli Whitney in collaboration with CTHSS, the City of New Haven, and the Justice Education Center.
- Expansion to include Abbott\*, Bullard-Havens, Goodwin, Kaynor and Torrington.\*\*

\*Culinary only. \*\*Manufacturing only.

2.2 Establish a uniform 9 – 14 system.

- A. Create a system-wide articulation between the Connecticut Board of Regents and the CTHSS that capitalizes on shared facilities, equipment, curricula and programming.

2014 – 15 INDICATORS OF SUCCESS

- A College of Technology Agreement 9-16 in precision manufacturing was drafted for signature by the community colleges.
- A Memorandum of Understanding was drafted for shared facilities use.
- The CT Advanced Manufacturing Initiative was established in four Connecticut Technical High Schools.

2.3 Expand CTHSS adult CTE programs to align with the state's workforce needs.

- A. Reinstate the adult CTE education infrastructure to support advancements in statewide programming.

2014 – 15 INDICATORS OF SUCCESS

- Hired Apprenticeship Consultant and Assistant Superintendent for Adult Programs.

- B. Collaborate with the Department of Labor and Department of Economic Development to create new adult programs.

2014 – 15 INDICATORS OF SUCCESS

- New adult education programs have been added in manufacturing, weatherization and masonry at Prince. Carpentry, manufacturing and plumbing are now offered at Eli Whitney. Currently researching an additional apprenticeship site for Goodwin Tech (contingent on grant funding).

- D. Conduct a feasibility study for additional education centers across the state that would support enrollment demands and workforce development.



GOAL 2 CONTINUED



2014 – 15 INDICATORS OF SUCCESS

- Feasibility study to assess the need for additional education centers across the state was completed.

- E. Incorporate entrance aptitude battery assessments to measure prospective CTHSS learners' abilities and help predict future academic and CTE success.

2014 – 15 INDICATORS OF SUCCESS

- Continued conversation with oversight from the Office of Civil Rights during 2015-2016 school year.

2.5 Develop a post-graduate survey to track college and career alumni data.

- A. Partner with the Board of Regents to create a survey that tracks students' future career pathways.

2014 – 15 INDICATORS OF SUCCESS

- Accreditation data submitted to COE (Council of Occupational Education) for adult programs.
- Participated in Early College Experience Statewide Committee.
- Discussions with Board of Regents and ECE on systematic way to collect data.

2.6 Implement Blended Learning for advanced study beyond credit recovery and alternative education programs.

- A. Provide multiple e-learning opportunities for students to apply technology skills across all subject areas.

2014 – 15 INDICATORS OF SUCCESS

- Mastery-based model for Mathematics has been implemented in three schools that provides students an opportunity to extend their learning over the entire year in an effort to remediate, accelerate or enrich their learning.

- B. Give students access to online learning and the ability to earn high school and/or college credit online.

2014 – 15 INDICATORS OF SUCCESS

- 1:1 device model implemented at J. M. Wright and Kaynor.
- 1:1 devices implemented for all CTHSS incoming ninth graders.
- Online Spanish courses at Vinal (24 seniors, 53 juniors, 23 sophomores) and Norwich (35 sophomores).

2.7 Bolster existing partnerships with institutions of higher education.

- A. Develop 9 – 14 career pathways to provide CTHSS students with industry-recognized, stackable, portable and accredited post-secondary degrees and certificates.

2014 – 15 INDICATORS OF SUCCESS

- The district now offers 93 portable, stackable credentials representing all career clusters.

- B. Create dual enrollment opportunities for CTHSS students in 2- or 4-year higher education institutions such as the Early College Experience Program.

2014 – 15 INDICATORS OF SUCCESS

- 165 students from O'Brien, Wilcox, Norwich, Oliver Wolcott, Platt, Kaynor and Windham enrolled in UCONN Early College Experience courses for credit including American studies, College Writing, Physics and Economics.
- CTHSS Adult Education Programs Partner with Charter Oak State College Which Lead to College Credit and Advanced Degrees
  - Medical Assistant Students are awarded 9 college credits
  - Dental Assistant Students are awarded 23 college credits
  - Surgical Tech students are awarded 24 college credits

# GOAL 3

FLEXIBILITY, RESPONSIVENESS AND INNOVATION

Transform the CTHSS with innovative program designs that are responsive to Connecticut's workforce needs, thus positioning the system as a leading force in career technical education.

3.1 Position the CTHSS as a leading force in career technical education.

- A. Partner with career networks and national organizations that promote a vision for the United States as a global competitor.

2014 – 15 INDICATORS OF SUCCESS

- All CTHSS students are members of SkillsUSA and compete in state and national competitions. New District affiliations include:
  - National Association of State Directors of Career Technical Education
  - National Career Pathways Network
  - Association of Career and Technical Education
  - Eastern State Apprenticeships Council

- B. Increase district leadership participation in national conferences and organizations.

2014 – 15 INDICATORS OF SUCCESS

- Leadership teams consisting of administrators and program consultants participated at the ACTE conference and presented at the NCPN conference in 2014.
- The CTHSS has participated in a number of statewide fairs, conferences and expos (e.g. Business Expo, CT Learn/ Works Conference and Manufacturing Summit).

3.2 Present the CTHSS as the pipeline for workforce development in the state.

- A. Establish a public relations and marketing campaign highlighting CTHSS accomplishments and core mission.

2014 – 15 INDICATORS OF SUCCESS

- Public relations and marketing campaign is in full swing utilizing multi-media formats for increased exposure.

- B. Use social media as a platform to establish communication with business/industry as a forum to expand partnerships with job services.

2014 – 15 INDICATORS OF SUCCESS

- Utilized social media for recruitment and building new partnerships with business, community and college leaders.
- New 21 system-wide websites launching summer 2015.

3.3 Develop curricula that focuses on student learning goals through a blended learning model.

- A. Transition to a digital, one-to-one environment for student academic success.

2014 – 15 INDICATORS OF SUCCESS

- J.M. Wright and Kaynor Tech have transitioned to 1:1 blended learning model.
- All ninth-graders will have Chromebooks.

- B. Remove barriers of cycles and grade levels so students can create personalized learning environments by piloting a new mathematics competency-based model.

2014 – 15 INDICATORS OF SUCCESS

- Implemented Mastery-based Learning Model for Mathematics that extended learning over the entire year in an effort to remediate, accelerate and enrich learning.

3.4 Revise CTE program model.

- B. Create student success portfolios that indicate the vast number of employment opportunities within each career cluster and highlight project-based learning experiences.

2014 – 15 INDICATORS OF SUCCESS

- A new lesson plan format for career technologies was developed and piloted during the 2014 – 2015 school year with the goal of highlighting competencies and skills that must be taught from 9 – 12; culminating with a senior portfolio.



GOAL 3 CONTINUED

3.5 Prepare students for emerging employment opportunities in “green careers”.

- B. Recognize construction trades as building and sustainable construction technologies to better align with the current energy efficiency partnerships and investments for improving the environment.

2014 – 15 INDICATORS OF SUCCESS

- 300 students participated in Project Learning Tree at Abbott, Platt, Goodwin, Norwich and Grasso.
- E-House construction is in progress, or completed, at twelve schools.

GOAL 4

PROFESSIONAL CAPITAL

Invest in the development of faculty and staff to support the system’s core mission.

4.1 Provide ongoing professional learning opportunities for new teachers and administrators as part of the induction process.

- A. Foster professional learning communities at the school and district level.

2014 – 15 INDICATORS OF SUCCESS

- Fall and Spring Orientation held for 92 new teachers.
- New Leaders academy was established.
- CTHSS Evaluation and Support training provided to all new teachers and administrators.
- Monthly Principals’ and Assistant Principals’ Leadership Council meetings.
- Professional Development and Evaluation Committee established to monitor the district’s evaluation and support plan.
- Coresmart Coaches program was implemented to support school-based professional learning in instructional practices.

- C. Create personalized learning environments for teachers and staff using online management systems.

2014 – 15 INDICATORS OF SUCCESS

- Provided personalized online learning management systems that include:
  - Teachscape Reflect
  - ProTraxx
  - Safe Schools
  - Mandated Trainings i.e. DCF

4.2 Create a CTHSS Human Resources Division that addresses the system’s unique staffing needs.

- A. Hire a Human Resources Manager that oversees the system’s 2,300-plus workforce.

2014 – 15 INDICATORS OF SUCCESS

- Ongoing collaborations with SDE Bureau of Human Resources designed to create a streamlined process for hiring and recruiting.

4.3 Implement a Teacher Evaluation and Support Program to increase educator effectiveness and student achievement.

- A. Implement *learning focused conversations* (Lipton, Wellman 2013) as a model for collaboration and collegiality that leads to professional growth.

2014 – 15 INDICATORS OF SUCCESS

- Provided professional development during Administrators’ Summer Retreat 2014 for all administrators in *Learning Focused Supervision* reflective practices.
- Introductory training provided to all new administrators.
- Coaching and advanced training was conducted for six administrators at three school locations.
- Full-day training for all administrators, Spring 2015.

- B. Provide ongoing professional learning around the CTHSS teacher evaluation and support program for new teachers and administrators.

2014 – 15 INDICATORS OF SUCCESS

- Orientation to teacher evaluation and support plan during new teacher orientation.
- Three-day professional development/training for new administrators on the CTHSS evaluation and support plan.
- Professional development scheduled at individual buildings.
- Professional development and evaluation committee meetings scheduled throughout the year to monitor professional development activities.
- Focus groups were coordinated for timely feedback to determine the level of implementation.

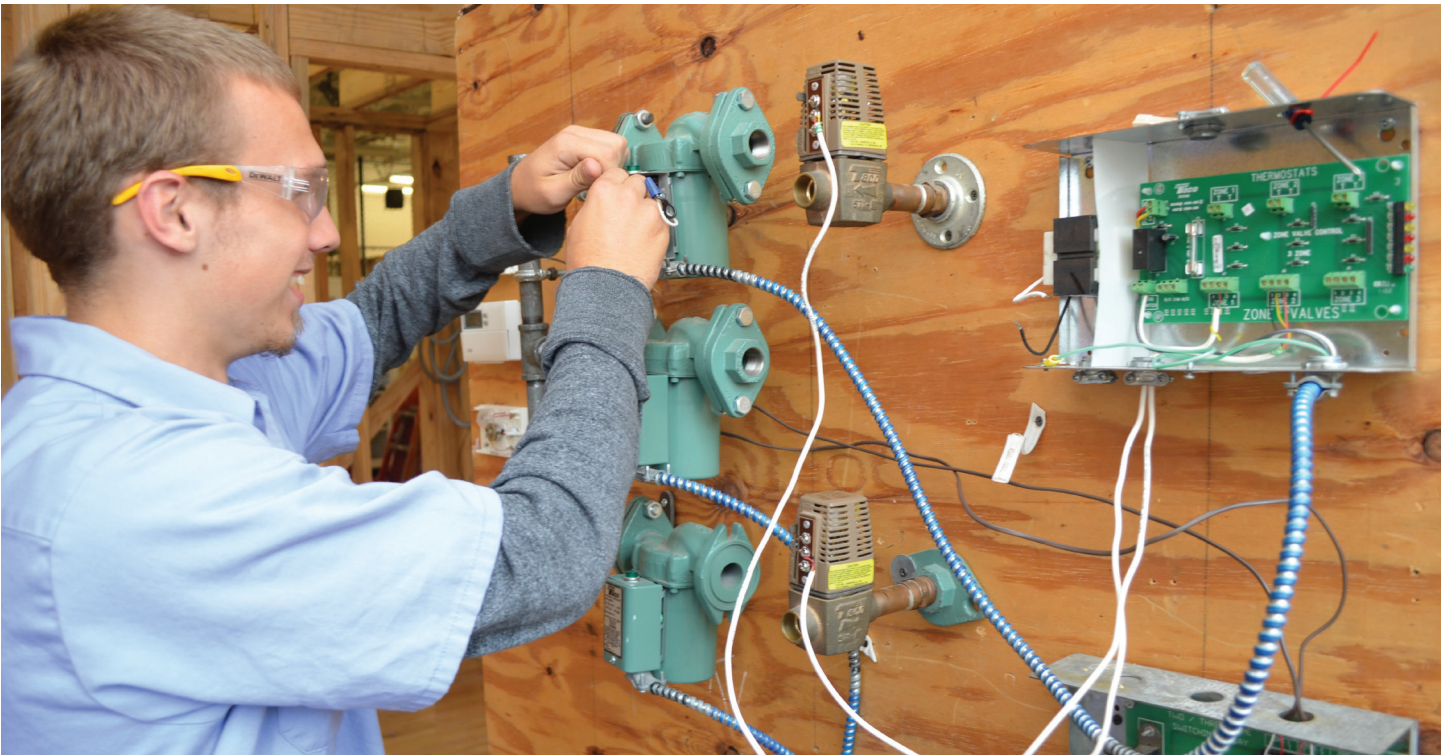
- C. Implement the CTHSS improvement and remediation plan to strengthen teacher practice.

2014 – 15 INDICATORS OF SUCCESS

- Full implementation of CTHSS’s teacher evaluation and support program with a remediation and dispute resolution process vetted by the Superintendent of Schools, SVFT and AFSA.







# 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*

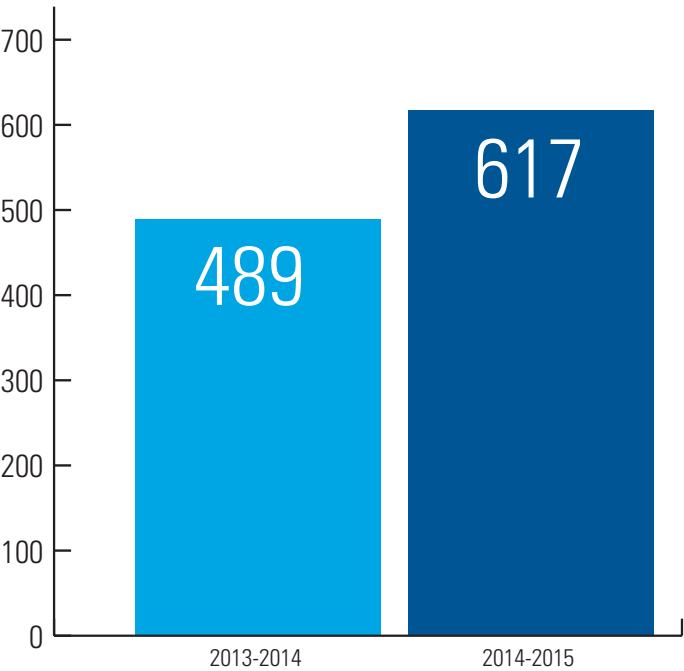
**INDICATOR OF ACHIEVEMENT:** Number of students participating in a Work-based Learning (WBL) program.

The number of students participating in Work-based Learning has **increased 26%** from 2013-14 to 2014-15. The data by school below is from September through May of each school year and includes students participating in internships as well as standard Work-based Learning programs.

Work-based Learning	2013-14	2014-15
Abbott	9	20
Bristol	57	47
Bullard-Havens	27	30
Cheney	46	62
Ellis	8	19
Goodwin	17	32
Grasso	40	27
Kaynor	25	36
Norwich	18	24
O'Brien	13	11
Platt	45	47
Prince	8	13
Vinal	69	67
Whitney	4	13
Wilcox	32	56
Windham	46	71
Wolcott	25	42
<b>TOTAL</b>	<b>489</b>	<b>617*</b>

\*165 students participating in the Pre-Apprenticeship Program

**CTHSS WORK-BASED LEARNING ENROLLMENT**  
(SECONDARY AND ADULTS)



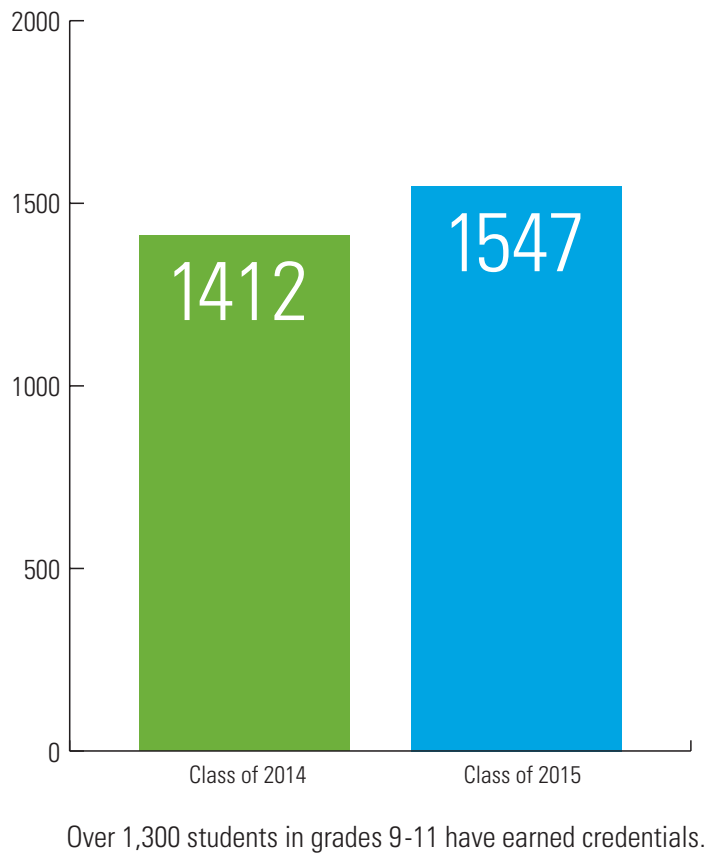
# JOB Ready

Possesses specific knowledge necessary to begin an entry-level position

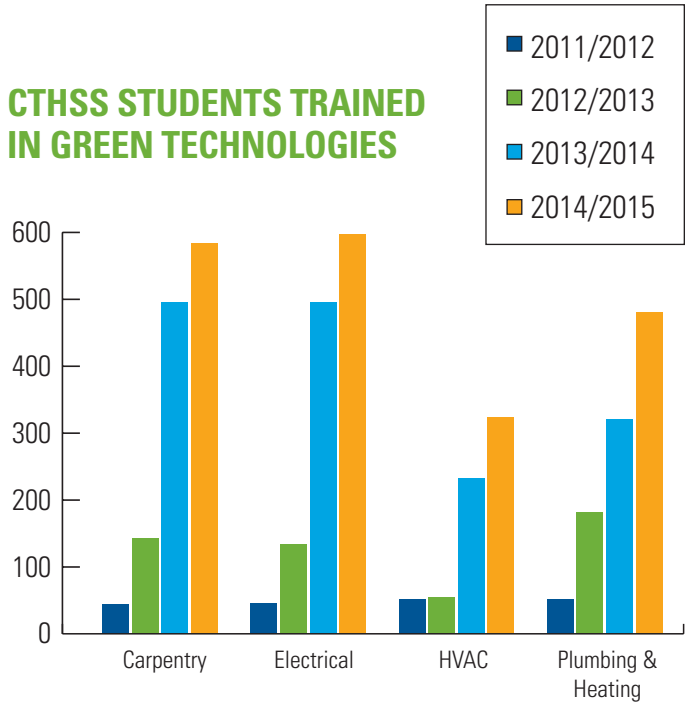
**INDICATOR OF ACHIEVEMENT:** Number of students who have obtained industry-recognized portable, stackable credentials.

**GOAL 1.4:** INCREASE THE NUMBER OF BUSINESS/INDUSTRY-RECOGNIZED PORTABLE, STACKABLE CREDENTIALS THAT LEAD TO EMPLOYMENT AND POST-SECONDARY EDUCATION.

## STUDENTS EARNING 1 OR MORE CREDENTIAL(S) IN GRADES 9-12 AND ADULTS BY GRADUATING CLASS



## CTHSS STUDENTS TRAINED IN GREEN TECHNOLOGIES



# CAREER Ready

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

**INDICATOR OF ACHIEVEMENT:** Number of students completing dual enrollment courses at community colleges or state universities.

**GOAL 2.7:** CREATE DUAL ENROLLMENT OPPORTUNITIES FOR CTHSS STUDENTS IN 2- AND 4- YEAR HIGHER EDUCATION INSTITUTIONS.

## UConn Early College Experience (ECE) Course Offerings

These dual enrollment courses provide CTHSS students the opportunity to earn college credit in their high school classes.

ECE Participation	2013-2014	2014-2015	Projected 2015-16	Increase Since 2014-15
Number of schools	0	7	11	57%
Number of Students	0	165	TBD	TBD

## UConn Early College Experience (ECE) Courses

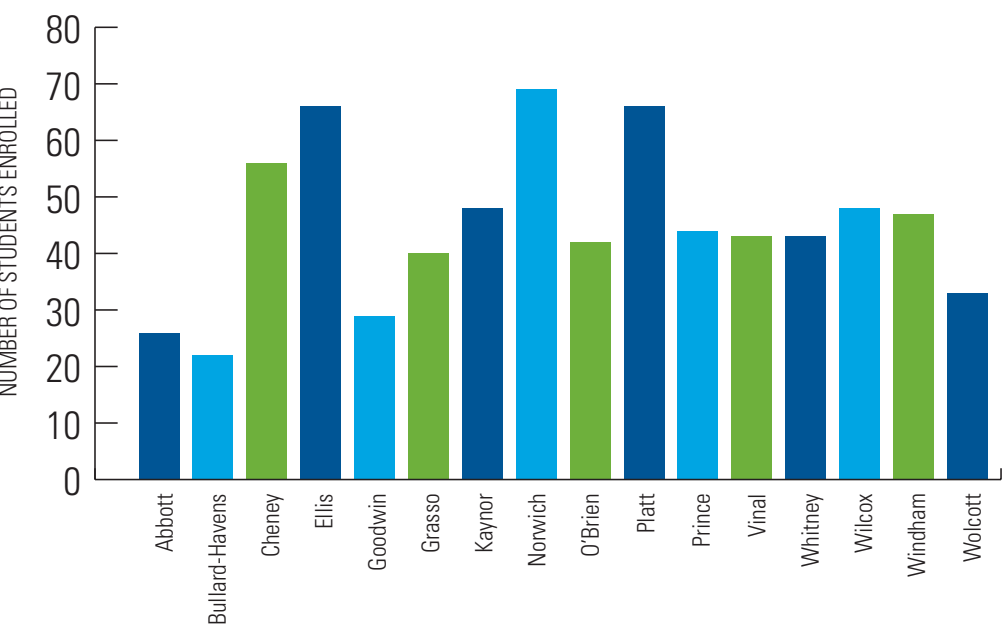
### Offered in 2014-15

- ECE American Studies
- ECE General Physics
- ECE Principles of Macroeconomics
- ECE Seminar in Academic Writing
- ECE Seminar in Writing through Literature

### Offered by 2015-16

- ECE Basic Writing
- ECE Essentials of Economics
- ECE Medical Terminology
- ECE Music Appreciation
- ECE Music Theory
- ECE U.S. History to 1887
- ECE U.S. History since 1877
- ECE Modern Western Traditions

## College Career Pathways Participation by Student Enrollment by School as of May 2014-2015





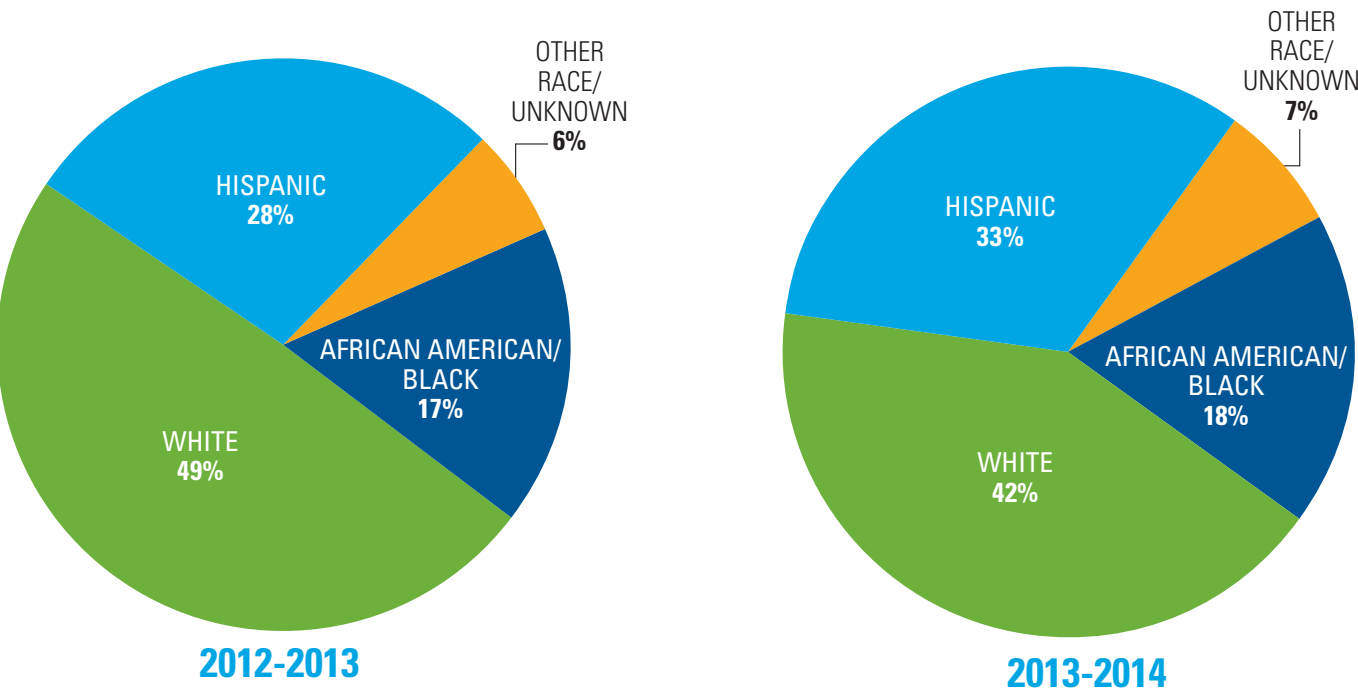


# COLLEGE *Ready*

*Is prepared to succeed in general education courses at the post-secondary level*

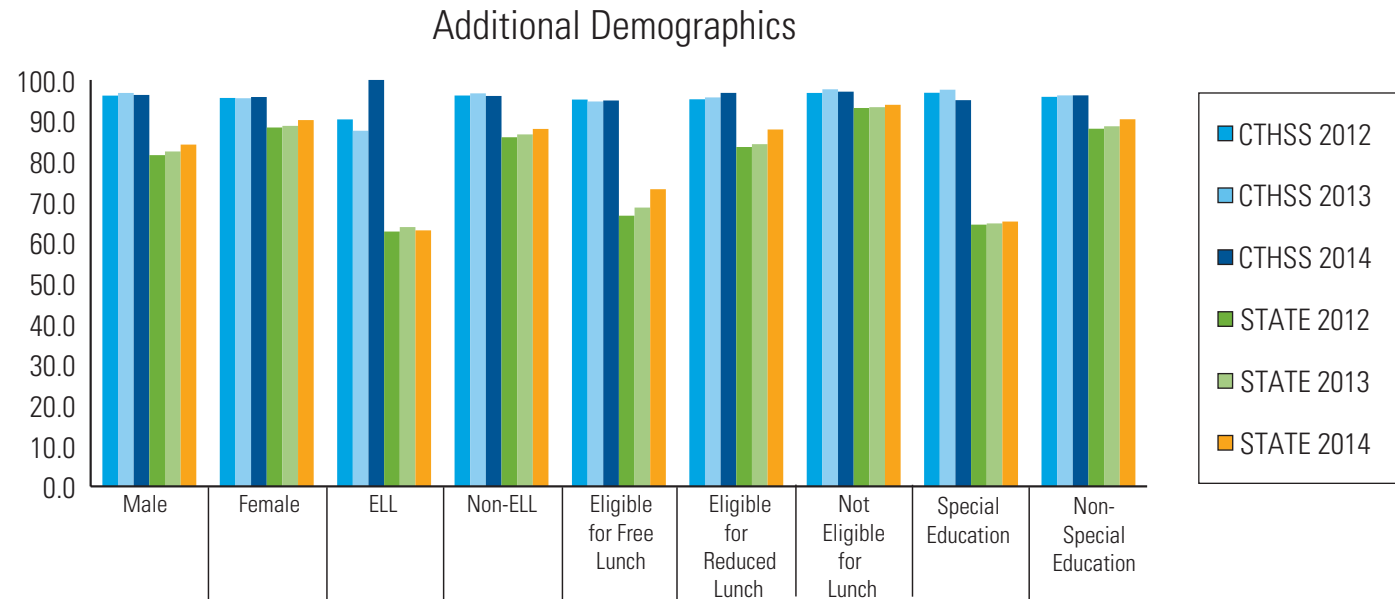
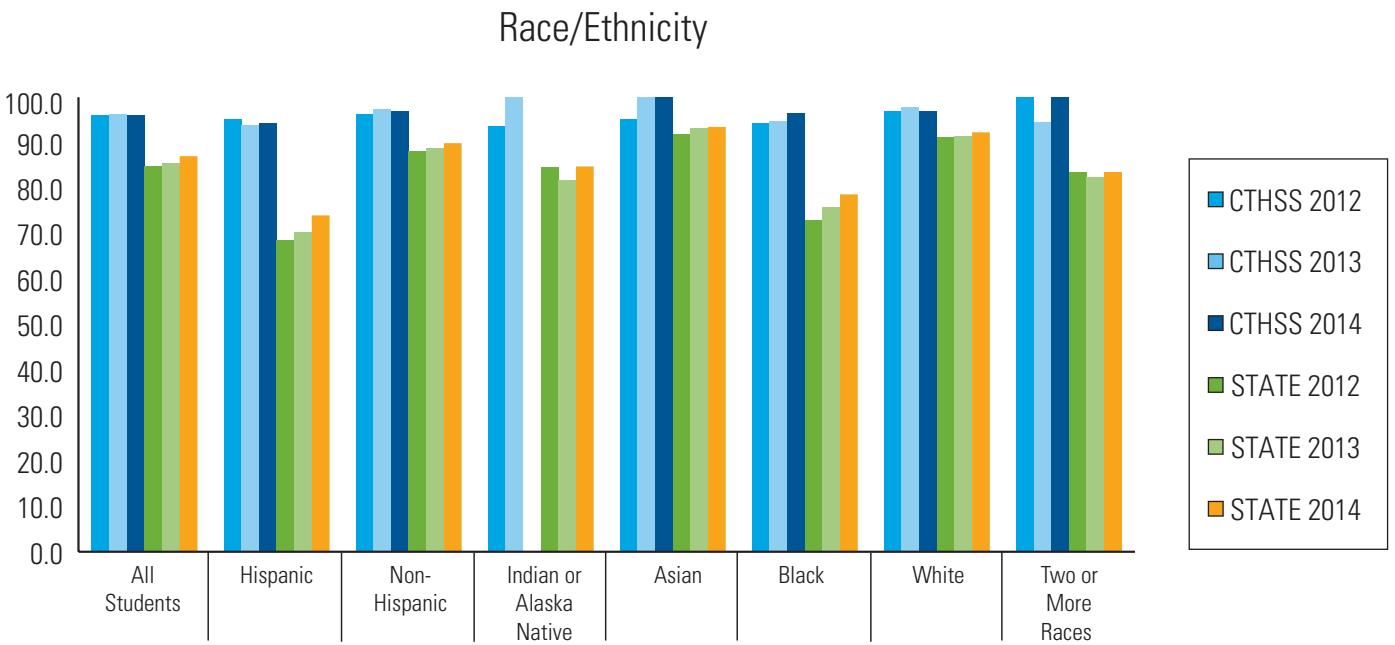
**INDICATOR OF ACHIEVEMENT:** Number of students attending post-secondary schools who have met the SAT College Readiness Benchmark of 1550 (critical reading, mathematics and writing).

## CTHSS STUDENTS WHO TOOK THE SATS ONE OR MORE TIMES



## FOUR-YEAR GRADUATION RATES – CTHSS COMPARED TO STATE AVERAGES

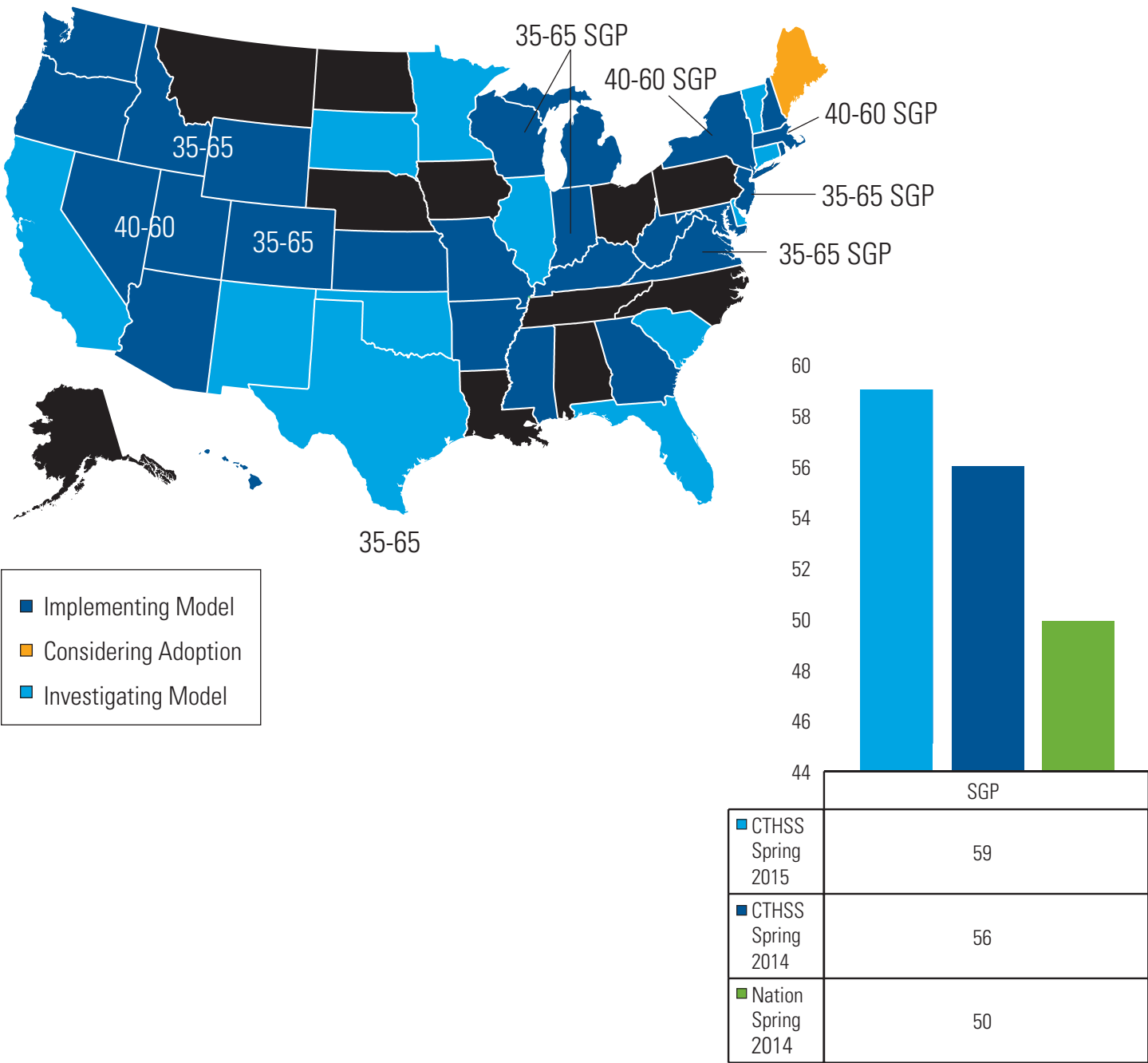
The Connecticut Technical High School System had a **four-year graduation rate of 96.1 for 2014** graduates compared to the state average of 87.0. The CTHSS graduation rates also exceeded state graduation rates in every demographic category.



## READING GROWTH AT CTHSS IS AHEAD OF THE NATION AS MEASURED BY THE STAR ASSESSMENT

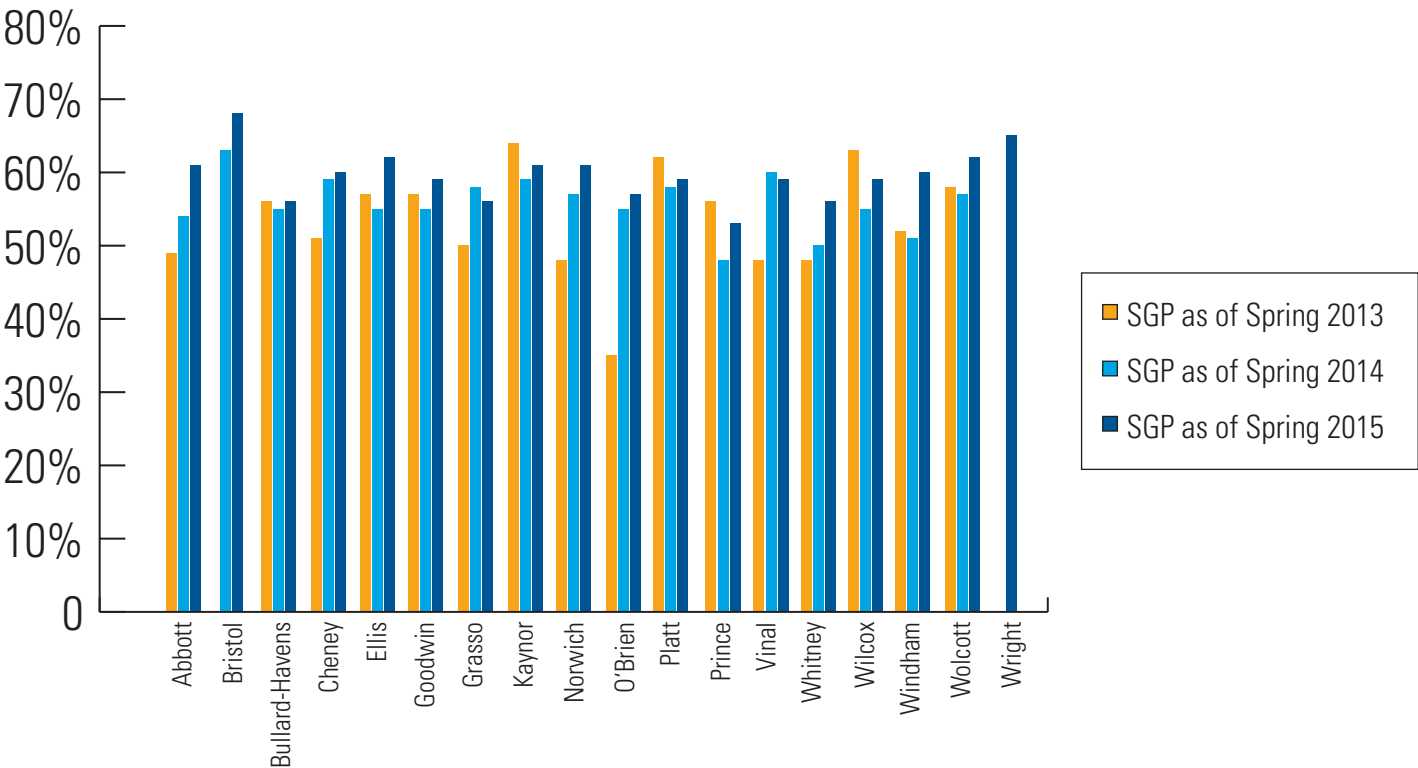
### “Typical” Growth Defined by States

Some states that have adopted student growth percentiles have defined “typical” growth. From this map, you can see the states that define typical as between 40 to 60 or 35 to 65 SGP, as of August 25, 2014.



## STAR READING GROWTH (SGP) RESULTS 2013-2015

Fifteen of the eighteen schools gained an average increase of 4 percentage points in their SGP from 2014-2015. Twelve of the participating sixteen schools gained an average increase of 8 percentage points in their SGP from 2013-2015.





The CTHSS is a viable educational model that is committed to developing responsible citizens, problem-solvers, team players and skilled young men and women who will thrive and grow here in the state of Connecticut.

**At the end of the first strategic action plan year, we continue to demonstrate our commitment to the students, parents and the State of Connecticut.**



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