

## CTE Task Force

Spring Branch Independent School District



# Final Report

December 17, 2018

## CAREER AND TECHNICAL EDUCATION TASK FORCE

### Executive Summary

#### Charge

The charge of the CTE Task Force was to create a vision for a world-class CTE program in Spring Branch ISD and to provide actionable recommendations towards achieving that vision. The Task Force was charged with providing the Board a formal update of its work in June and a final report in December of 2018 (see Appendix A for chartering document).

#### Timeline and Membership

The CTE Task Force began its work in March 2018 and completed its work in November 2018 (see Appendix B for meeting calendar). During that period, the 64 member body met twelve times to fulfill its charge to the Board. Members included students, parents, local business and industry leaders, community members, and SBISD faculty and staff (see Appendix A for list of members). Two SBISD Board members also attended meetings and participated as liaisons for the Task Force. In addition to the formal meetings, members spent a significant amount of time in stakeholder interviews, site visits, and other Task Force activities that were critical to successfully completing the charge.

#### Process, Major Work and Activities

##### *Phase 1*

Phase 1 of the Task Force focused on learning and gathering information. Members began by studying the Board's charge and gaining an understanding of the context of their work. Members reviewed the District's T-2-4 Goal, Core Values, and the Learner's Journey – the District's strategic plan. Members then spent time learning about CTE, SBISD's CTE program, the local labor market, and trends of the future. Following the design process, the Task Force conducted one-on-one empathy interviews to capture the experiences and aspirations of more than 150 stakeholders, including 90 students. This data was distilled and presented to the Board as Preliminary Findings at their June 25<sup>th</sup> Board meeting (see Board Update presentation in Appendix D). By capturing the voices of a significant number of stakeholders, the Task Force laid a foundation for the next phase of its work.

## *Phase 2*

Phase 2 began with the Task Force deciding to break into study teams in order to conduct its work more efficiently and effectively. The five teams were:

- Model(s) and Logistics
- Programming
- Instruction
- Connecting to the Real World
- Communication and Awareness

Members received a data resource notebook, which included a variety of quantitative data on the District's CTE program, as well as some state and national data (see section 2 of the Appendix). The Task Force then planned and conducted site visits in order to expand and enrich their ideas for CTE opportunities in SBISD. Members first visited all four comprehensive SBISD high schools and the Guthrie Center to see CTE courses first hand, and had opportunities to talk to teachers and students. Seven external CTE schools/programs in the State were then identified for visits based on having outstanding reputations and/or program models. After conducting site visits, the Task Force debriefed and began to ideate on what a world-class CTE program would look like in SBISD. The Task Force drafted its vision in the form of ten descriptive statements. As the visioning process neared completion, recommendations on how to achieve the vision were drafted. The final two meetings were spent refining the recommendations.

## **Vision and Recommendations**

The two deliverables from the Task Force to the Board are (1) a vision for a world-class CTE program and (2) actionable recommendations for how to achieve that vision.

As Task Force members considered a vision and recommendations for the future of CTE in SBISD, they took into account the voices of students and other SBISD stakeholders. They also drew upon their collective learning over the course of their study; including SBISD's T-2-4 goal, values, and strategic plan, the current labor market and trends of the future, qualitative and quantitative research, and enlightening site visits to outstanding programs across the state.

After significant discussion, the Task Force drafted and refined ten statements that, collectively, describe a vision for a world-class CTE program in Spring Branch ISD.



## Vision

In SBISD, we believe CTE is a critical part of achieving our T-2-4 goal. We are committed to offering our students a world-class CTE program. Our vision of a world-class CTE program for SBISD includes:

1. Equitable access to all CTE programs for all students
2. CTE pathways and courses that tap into students' interest and awakens their passion for learning and for their future
3. Strong pathways built around coherent sequences of courses that allow every student to graduate with a plan for their future, aligned with our T-2-4 goal
4. A culture of learning that includes rigorous programs taught by high quality teachers with industry experience using industry-relevant curriculum, resources and technology
5. CTE programs that are innovative, forward-thinking, and aligned with the future needs of business and industry
6. A strong foundation in the core academic courses for all students, with continued integration into all CTE courses
7. Strong, consistent commitment by all leaders, including campus leaders, central administration and Board members, that CTE is valuable for the future of all students and is, therefore, a critical part of accomplishing our T-2-4 goal
8. A high level of awareness by all K-12 students, as well as staff, parents, industry and the community of the opportunities available in our CTE program
9. A collaborative culture with industry and higher education that provides real-world connections, resources, and work experiences in order to achieve relevance to the workplace and to future industry needs
10. Opportunities for students to participate in and demonstrate leadership through CTE-related student organizations

## Recommendations

Following the creation of a vision, the CTE Task Force set out to create actionable recommendations to support the District in achieving that vision. Draft recommendations originated in each of the working teams and were then vetted and approved by the body of the Task Force.

Final recommendations are listed below in five topic areas:

- Model(s) and Logistics
- Programming
- Instruction
- Connecting to the Real World
- Communication and Awareness

### Model(s) and Logistics

- Provide new facilities and industry-standard equipment that provide real world experiences in support of a world class CTE program
- Maintain our current Guthrie Center “pull-out” model offering advanced level CTE courses to students across the district
- In addition to the “pull-out” model, consider opportunities where CTE and core academics are taught together, for specifically identified pathways, if students would benefit from taking core classes through the lens of that pathway
- Build CTE pathways by providing more introductory and principles courses on the home campuses that lead to the advanced CTE courses
- Provide sufficient transportation to and from all facilities so that students have access to all CTE programs offered at any campus
- Centralize the coordination of the full CTE program to ensure quality, consistency and equity across the district
- Increase partnerships with local industries to accommodate work-based experiences for all 12<sup>th</sup> grade students in their 3<sup>rd</sup> or 4<sup>th</sup> year of a CTE pathway, including practicums, internships, job shadowing, tours, etc.
- Designate staff whose responsibility is to serve as a community liaison to pursue, obtain and manage alumni and community outreach, business partnerships, work based experiences for students and job-shadowing for teachers

- Include CTE Math and Science courses in the list of advanced/weighted courses
- Identify and revise or eliminate current practices that create roadblocks for students to have equitable access to all CTE programs, including
  - Varied secondary bell schedules
  - Master scheduling
  - Course availability
  - Insufficient staffing
  - Financial assistance

### **Programming**

- Provide an innovative, forward-thinking program aligned with the future needs of business and industry and student interest
- Regularly evaluate programming based on the needs of business and industry, student interest, and student outcomes, and revise as appropriate in order to reach our T-2-4 goals
- Provide innovative delivery and scheduling of courses to allow students opportunities to take CTE and core courses including, but not limited to
  - mini courses
  - summer courses
  - on-line/distance courses
- Provide robust co-curricular student organizations for all CTE pathways that build leadership and connectedness
- Provide opportunities for students to participate in CTE-related competitions and identify district funds and/or business partner donations to support
- Prioritize in student 4-year planning and annual staff and student scheduling the importance of CTE pathway completion
- Collaborate with nearby districts, trade schools, charter and private schools, and colleges to provide opportunities for students to enroll in programs SBISD does not offer

### **Instruction**

- Develop and deliver integrated lessons and activities in the core academic and CTE courses
- Increase opportunities for CTE dual credit and articulated classes through local institutes of higher education

- Provide the opportunity and encourage all students to earn at least one industry relevant certification and/or college credit
- Include employability and interpersonal skills in the curriculum in all CTE courses
- Provide industry-related job shadowing and relevant state-of-the-art professional development for all CTE teachers
- Provide on-going pedagogical professional development for teachers coming from industry
- Collaborate with CTE pathway Advisory Board members in order for them to observe, evaluate and advise on curriculum, instruction, equipment and materials in order to maintain industry standards in each course
- Offer core academic credits through CTE classes, as appropriate
- Provide opportunities for student enterprise within the school related to CTE courses

### **Connections to the Real World**

- Create an Industry Advisory Board for each CTE pathway made up of local industry partners who will
  - Participate in long-range programming for CTE in the district
  - Advise the district in community workforce trends and needs including workplace culture, safety, expectations, entry-level skills
  - Advise the district in creating industry-standard facilities and identifying and maintaining industry-standard equipment and materials
  - Observe, evaluate and advise on curriculum and instruction in order to maintain industry standards in all classes
  - Provide job interviewing and resume writing recommendations for students
  - Help identify training needs within the program staff
  - Advise teachers on student certifications that align with current industry standards
  - Share trends in careers including early career path information, current local job opportunities and local salary expectations
  - Enhance the image of SBISD CTE programs by sharing positive stories with other businesses and community members
- Create a Higher Education Advisory Board made up of local community college and university personnel who will



- Help to maintain a college-going standard
  - Share expertise about pathways to higher education
  - Assist in the development and success of dual credit opportunities
  - Share information about scholarship opportunities and assist with helping students to apply and obtain scholarships
  - Enhance the image of SBISD CTE programs by sharing positive stories with other college and university staff and community members
- Provide job skill training for all students such as interviewing and resume writing
- Connect learning to the “real world” in order to build engagement and relevance for students
- Provide project based learning activities for students that relate to careers and provide opportunities for students to go out into local businesses as a part of their research for the projects
- Provide opportunities and funding for students to build skills through real-world entrepreneurial challenges
- Provide opportunities for student self assessment and career exploration

## Communication and Awareness

- Create a community and district-wide culture that values CTE as a valuable opportunity for all SBISD students
- Create a strong, on-going branding and marketing campaign that will establish an understanding of the importance of CTE programs for all students including information and testimonials told through any and every resource available
- Implement a PK-12 career development curriculum, early and often. This curriculum includes:
  - Awareness and exploration of possible careers for **elementary students**
  - Continued exploration of possible careers; awareness of individual interests, skills, attitudes, talents and abilities; and development of decision-making skills for **middle school students**
  - A required **8<sup>th</sup> grade** exploration class for high school elective credit for continued awareness of individual interests that relate to careers and development of a high school plan of study
  - Exposure to local community colleges and universities; identification of knowledge, technical skills, and individual qualities needed to succeed in the





modern workplace; knowledge of the realities of the workplace; and development of a post-secondary plan for **high school students**

- Designate college and career counseling staff at each campus whose responsibility is to support students with college and career awareness and planning

# Summary of CTE Task Force Recommendations

## PROGRAMMING

- Forward-Thinking Programs Aligned to Industry Needs and Student Interests
- Regular Evaluation Based on Student T-2-4 Outcomes
- Innovative Scheduling and Delivery of CTE Courses
- Opportunities for Student Leadership and Competitions
- Pathway Completion Prioritized in 4-Year Planning

## INSTRUCTION

- Opportunities for All Students to Earn Certifications and/or College Credits
- Opportunities for CTE Dual Credit
- Employability/Interpersonal Skills in All CTE Courses
- Professional Dev. for Teachers from Industry
- Integrated Lessons in Academic and CTE Courses
- Opportunities for Student Enterprises

## MODEL(S) & LOGISTICS

- ✓ World Class Facilities and Industry-Standard Equipment
- ✓ Career Center Model with Optional Academy or School-within-a-School
- ✓ Centralization/Coordination of CTE Program
- ✓ Business and Higher Ed Partnerships
- ✓ SBISD Liaisons for Industry and Community
- ✓ Equitable and Efficient Access for All Students

## CONNECTIONS TO THE REAL WORLD

- Industry Advisory Board to Advise on CTE Programming, Teaching, Curriculum, Facilities/Equipment, Certifications, and Career Opportunities
- Higher Ed Advisory Board to Advise on Pathways to Higher Ed, Dual Credit, Scholarships, and Postsecondary Focus
- Real World Learning via Job Skill Training, Project Based Learning, Student Self-Assessment, and Career Exploration

## COMMUNICATION AND AWARENESS

- Community-Wide Culture that Values CTE
- CTE Branding and Marketing Campaign
- PK-12 Career Development Curriculum
  - ES: Begin Career Awareness/Exploration
  - MS: Career Interest Profile; 8<sup>th</sup> Grade Exploration Course to Develop HS Plan
  - HS: Continue Exposure to Careers, Postsecondary Options, Workplace Realities
- College and Career Counseling Staff Designated at Each Campus

# APPENDICES

## Section 1

- A. Charge and Membership
- B. Meeting Schedule
- C. Preliminary Findings
- D. CTE Task Force Update Presentation to Board – June 2018
- E. Site Visits

## Section 2

CTE Data Notebook

## A. Charge and Membership

# Spring Branch ISD Career and Technical Education Task Force

## CHARTERING DOCUMENT

*Board Approved December 11, 2017 (amended Feb. 12, 2018)*

### Official Designation

SBISD Career and Technical Education (CTE) Task Force

### Purpose and Scope

The purpose of the Task Force is to create a vision of a world-class CTE program for SBISD and develop actionable recommendations for achieving that vision.

To best align our CTE vision with the District's T-2-4 goal, Core Values, and Learner's Journey, the Task Force will use the design thinking process to gain a clear understanding of the aspirations of our students and community, explore our own and other exemplary CTE programs, and develop a vision and recommendations for the path forward.

The initial guiding questions for this work are:

- How do we design our CTE program to maximize T-2-4 outcomes for students?
- What resources do we need to get there?

The Task Force will report its findings and recommendations to the Board of Trustees by December of 2018.

### Membership

The CTE Task Force will be comprised of a balanced representation of District stakeholders as well as local and state leaders. The composition will include:

• Board appointees	7
• Business and industry leaders	10
• Parents and community members	7
• Students	7
• Secondary campus staff (administrators, counselors, teachers)	*24
• Central administrative staff	6
• CTE leaders and Higher Education Partners	<u>4</u>
	66

(\* Includes 3 members from each of the 4 comprehensive high schools, 1 from WAIS, 1 from AOC, 3 from Guthrie Center, and 7 from middle schools)

Total membership is expected to include up to 66 members. The total number will be reduced where Board appointees overlap with other representative groups (i.e., a Board appointee is a business leader, parent, etc.). In addition, the Board President will name two Board Members to attend the CTE Task Force meetings.

The membership of the Task Force will be presented to the Board of Trustees at the Feb. 12, 2018 Workshop. Contingent upon approval, the Task Force will convene for their first meeting in March 2018.

### **Meetings and Procedures**

The CTE Task Force will begin in March 2018 and complete its work no later than December 2018. Supporting the work of the Task Force will be a Chairperson or Chairperson(s), approved by the Superintendent, and two District Leads. District Leads will include a central office administrator and a current high school principal. Leads will work with the Chair(s) to develop, send (via email) and publish a list of meeting dates, times and locations for all Task Force Meetings on the District website.

Updates and Communication: The Task Force will provide quarterly written updates to the Board. At the June Workshop, the Board will receive an update presentation and have an opportunity to provide feedback and direction. Meeting summary documents will be shared publicly on our District website.

Pay and Professional Development Credit: Task Force members will not receive pay, allowances or benefits for their service on the Task Force. For SBISD staff, meetings will count for non-contract professional development credit. Parents, students, community and business leaders that elect to serve will do so voluntarily.

General Task Force Member Expectations: In order to ensure an effective, representative Task Force, every member is expected to attend a minimum of 70% of the scheduled meetings. Members are expected to represent the needs of their represented schools and communities, but also the needs of the entire Spring Branch Independent School District and Every Child.

### **Products**

The CTE Task Force Chairperson(s) and Leads will present findings and recommendations to the Board of Trustees no later than December, 2018.

The members of the CTE Task Force will be informed of the times and locations of the Board Meetings where presentations will be given so that they may be in attendance.

**Spring Branch Independent School District**  
**Membership for CTE Task Force**

<b>Board Appointees</b>	
Patrick Richard	Spring Woods High School Parent and CPA
Mary Grace Landrum	Former SBISD Board Member
James Shaddix	Former Memorial High School Parent
Steve Rosencratz	Retired Founder of the Woods Project
Ann Tidwell	Community Member & Volunteer
Jake Emery	Wilchester Elementary Parent and Small Business Owner
<b>Business and Industry Leaders</b>	
Beau Pollock	CEO/President – TRIO Electric
Doug Abbott, CPA	Partner – Ernst & Young
TBD - Pending	Memorial Hermann Hospital
Todd Gagnon	General Manager – Omni Houston Westside Hotel
Shannon McNary	Director of Educational and Governmental Relations – CITGO
Tracy Janda	Manager of Corporate Community Relations – Centerpoint Energy
Aleco Babikian	CEO – ArcLabs Welding School
Rakesh Verma	President – Parijat Controlware, Inc.
Ken Arnold	Founder and CEO (retired) – Paragon
Bob Gower	CEO of Lyondell (retired) and owner of pharmaceutical company
<b>Parents and Community Members</b>	
Glen Shepard	Stratford High School Parent
Diane Swan	Former Parent – Community Member
Ed Valicek	Memorial High School Parent
Jane Richard	Spring Woods High School Parent
Melissa Gordon	Northbrook High School Parent
Laura Williamson	Academy of Choice and Guthrie Parent
Josephine Marshall	Westchester Academy for International Studies Parent
<b>Students</b>	
Miranda Essing	Spring Woods High School Student
Jaycee Campbell	Stratford High School Student
Cassidy Casiano	Northbrook High School Student
Jacob Evers	Memorial High School Student
Amy Blanco	Westchester Academy for International Studies Student
Amira Johnson	Academy of Choice Student
Jamauri Bagby	Guthrie Center (via Stratford HS) Student
<b>Campus Staff</b>	
Dawn Cole	Memorial High School Assistant Principal
Wright, Kate	Memorial High School Counselor
Tracy Purvis	Memorial High School Teacher
Terri Rogers	Northbrook High School Assistant Principal
Molly Cuevas	Northbrook High School Counselor

Clyde Turner	Northbrook High School Teacher
Jennifer Collier	Spring Woods High School Principal
LaWanda Jenkins	Spring Woods High School Counselor
Regina Garceau	Spring Woods High School Teacher
Pam Metcalfe	Stratford High School Assistant Principal
Jim Herrington	Stratford High School Counselor
Kristy Schaper	Stratford High School Teacher
Melanie Graham	Westchester Academy for International Studies Teacher
Richard Cook	Academy of Choice Teacher
Joe Kolenda	Guthrie Center Principal
Fuad Loutfi	Guthrie Center Teacher
Mel Manske	Guthrie Center Teacher
Kamran Zarea	Landrum Middle School Teacher
Celeste Menzer	Northbrook Middle School Counselor
Carol Bucek	Spring Branch Middle School Assistant Principal
Javier Torres	Spring Forest Middle School Teacher
Mary Lou Davalos	Spring Oaks Middle School Principal
Juliet Peterson	Spring Woods Middle School Teacher
Paige Krekeler	Memorial Middle School Teacher
<b>Central Administrative Staff</b>	
Donna Handlin	Student Support Facilitator
David Bender	Comptroller
David Sablatura	CTE Director
Natalie Fikac	Director of Guidance & Counseling
David Vesling	Director of Facilities and Maintenance
Stephen Johnston	Manager - Technology Services
<b>CTE and Higher Education Partners</b>	
Mike Webster	Assoc. Vice Chancellor for Workforce Instruction – HCC
Monelle Rougeau	CTE Regional Coordinator – Region 4 ESC
Susan Dixon	Account Liaison – Gulf Coast Workforce Board
Shelly Tornquist	Director of PK-12 Engineering Education Outreach – Texas A&M

**Board Members:** Chris Gonzalez  
Carter Breed

**Facilitator:** Roz Keck, N2 Learning

**Co-Chairs:** James Shaddix, Ann Tidwell

**Lead Staff:** Jennifer Collier – Principal, Spring Woods High School  
David Sablatura – Director, CTE



## B. Meeting Schedule

Spring Branch Independent School District

## CTE Task Force Meeting Schedule

Spring Dates	Meeting Time	Location
Mar. 6, Tues. KICKOFF	4:30 – 6:30 pm	SBISD Board Room
Mar. 20, Tues.	5:30 – 7:30 pm	SBISD Board Room
Apr. 17, Tues.	5:30 – 7:30 pm	SBISD Technology Training Center
Apr. 26, Thur.	5:30 – 7:30 pm	SBISD Board Room
May 17, Thur.	5:30 – 7:30 pm	SBISD Technology Training Center
June 5, Tues.	5:30 – 7:30 pm	SBISD Board Room
Fall Dates	Meeting Time	Location
Aug. 28, Tues.	5:30 – 7:30 pm	SBISD Board Room
Sept. 13, Thur.	5:30 – 7:30 pm	Guthrie Center
Sept. 25, Tues.	5:30 – 7:30 pm	SBISD Board Room
Oct. 9, Tues.	5:30 – 7:30 pm	Guthrie Center
Oct. 30, Tues.	5:30 – 7:30 pm	SBISD Board Room
Nov. 13, Tues.	5:30 – 7:30 pm	Guthrie Center

SBISD Technology Training Center

14330 Memorial Drive  
Houston, TX 77079

Guthrie Center

10660 Hammerly Blvd  
Houston, TX 77043

## C. Preliminary Findings

**SPRING BRANCH ISD  
CAREER AND TECHNICAL EDUCATION TASK FORCE**

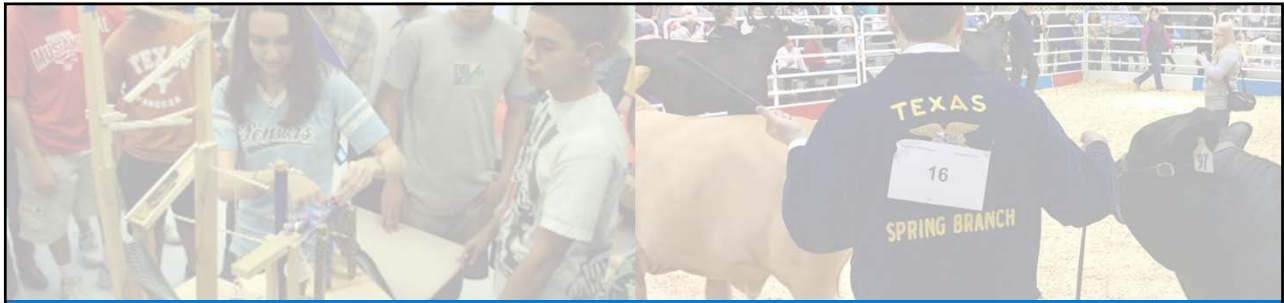
**Empathy Interview Findings**

Strengths	Opportunities for Design	Aspirations
<p><b>Instruction</b></p> <ul style="list-style-type: none"> <li>• Students are motivated by the hands-on activities</li> <li>• Real world experiences that prepare students for real life</li> <li>• Personalized and varied experiences</li> <li>• Classes are project-oriented – very good experience for students</li> <li>• Schools are moving towards more project oriented</li> <li>• Learning is not flat</li> <li>• Students find CTE classes engaging and motivating</li> </ul> <p><b>Relationships/Support</b></p> <ul style="list-style-type: none"> <li>• Students tend to build strong relationships with CTE teachers which engages students</li> <li>• Teachers who build relationships with students and have appropriate curriculum make CTE successful</li> <li>• Exposure to other students/friends across the system</li> <li>• Parents/families provide critical support</li> <li>• Counselors</li> </ul>	<p><b>Communication/Education/Awareness</b></p> <ul style="list-style-type: none"> <li>• Information is not communicated efficiently to students and parents.</li> <li>• Repeated exposure is needed</li> <li>• Confusion between pathways and endorsements</li> <li>• Stigma and perceptions of CTE and the Guthrie Center by students and parents</li> </ul> <p><b>Barriers</b></p> <ul style="list-style-type: none"> <li>• Barriers exist that prevent students from enrolling in CTE courses               <ul style="list-style-type: none"> <li>○ Scheduling</li> <li>○ Enough sections for all students</li> <li>○ transportation</li> <li>○ different bell schedules</li> <li>○ course weights</li> </ul> </li> </ul> <p><b>Instructional Needs</b></p> <ul style="list-style-type: none"> <li>• Instructional needs in all CTE courses               <ul style="list-style-type: none"> <li>○ real world experiences</li> <li>○ basics of math, grammar, soft skill, interpersonal skills</li> <li>○ programs to increase soft skills, employability skills, leadership, and teamwork</li> <li>○ acquisition of soft skills/grit</li> </ul> </li> </ul>	<p><b>Communication/Education/Awareness</b></p> <ul style="list-style-type: none"> <li>• Priority is placed on CTE, pathways, endorsements being clearly understood by               <ul style="list-style-type: none"> <li>○ Administrators–PK-12</li> <li>○ Counselors-PK-12</li> <li>○ Teachers-6-12</li> <li>○ Students-6-12</li> <li>○ Parents-6-12</li> </ul> </li> <li>• Information provided through a variety of sources including online information and social media</li> <li>• Sufficient guidance is provided so that all students and their parents have an understanding of their CTE options by the time they leave middle school</li> </ul> <p><b>Eliminating Barriers</b></p> <ul style="list-style-type: none"> <li>• Eliminate all barriers in order to allow all students to enroll in CTE courses of their choice               <ul style="list-style-type: none"> <li>○ Scheduling</li> <li>○ Enough sections for all students</li> <li>○ transportation</li> <li>○ consistent bell schedules</li> <li>○ flattened course weights</li> </ul> </li> <li>• Students are provided with more opportunities for enrollment               <ul style="list-style-type: none"> <li>○ Mini-courses</li> <li>○ Mini-terms</li> </ul> </li> </ul>

Strengths	Opportunities for Design	Aspirations
<p><b>Programs/offerings</b></p> <ul style="list-style-type: none"> <li>• GC has a great variety of CTE courses with qualified teachers</li> <li>• Dynamic teachers build programs and students' passions</li> </ul> <p><b>Benefits of CTE</b></p> <ul style="list-style-type: none"> <li>• Students look forward to their CTE courses</li> <li>• CTE classes keep students in school</li> <li>• Programs increase soft skills, leadership, and teamwork</li> </ul> <p><b>Logistics</b></p> <ul style="list-style-type: none"> <li>• Middle school field trip to GC to see choices</li> <li>• Career Pathway flyers</li> <li>• Task force</li> </ul>	<p><b>Organizational Issues</b></p> <ul style="list-style-type: none"> <li>• Need foundational CTE courses in MS as well as HS home campuses</li> <li>• Identifying self interests/aptitudes</li> <li>• Need time for exploration of careers for all levels of students PK-12</li> <li>• Stress is primarily on 4 year degree; need to stress T and 2 of T-2-4 (military, technical programs and associates degrees)</li> <li>• Students have limited knowledge about different careers</li> <li>• Counselor overload/training</li> <li>• Number of students in middle school and high school that are not connected to school through activities or special courses</li> <li>• Inconsistent practices between schools related to exposure to CTE courses</li> </ul>	<ul style="list-style-type: none"> <li>○ Summer feature courses</li> </ul> <p><b>Instructional Aspirations</b></p> <ul style="list-style-type: none"> <li>• All CTE courses provide opportunities for students to connect learning to the real world through internships, projects based learning, connection to area industries and competitions <ul style="list-style-type: none"> <li>○ Funding provided for these activities</li> </ul> </li> <li>• There are connections between instruction and individual strengths to employment needs and career opportunities</li> <li>• All graduates have employable skills and plans based on experiences in schools</li> <li>• All students in CTE classes will have a professional, in their career field, teacher</li> </ul> <p><b>Organizational Aspirations</b></p> <ul style="list-style-type: none"> <li>• All high skill, high tech programs housed centrally with all entry-level classes at home campuses.</li> <li>• Students who are not connected to school are targeted and connected through CTE programs</li> <li>• Additional opportunities are provided for students to earn industry certifications that lead to employment with employers who have vested interest</li> <li>• More opportunities are offered earlier for students with foundational/introductory CTE courses offered in middle school</li> </ul>

# D. CTE Task Force Update Presentation to Board

June 2018



## CTE Task Force Update

Board of Trustees – Spring Branch Independent School District



## CTE Task Force



Spring Branch Independent School District  
Inspiring minds. Shaping lives.

### Phase 1

- Timeline and process
- What did we do?
- What did we accomplish?
- Preliminary findings

### Phase 2

- Next steps

### Questions

## CTE Task Force



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### Timeline and Deliverables

#### Phase 1

6 meetings

March 6 – June 7

Interim Board Update – June 25

#### Phase 2

6 Meetings

August 28 – November 13

Final Board Report and  
Recommendations – December

### Membership

#### 64 Members

- Students
- Parents
- Business/Industry
- Community Members
- Teachers, Counselors, Administrators

#### Board Liaisons

- Carter Breed
- Chris Gonzalez

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## CTE Task Force - What Did We Do?



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### Studied the Board Charge

The purpose of the Task Force is to **create a vision of a world-class CTE program** for SBISD and **develop actionable recommendations** for achieving that vision.

To best align our CTE vision with the District's T-2-4 goal, Core Values, and Learner's Journey, the Task Force will use the **design thinking** process to gain a clear **understanding of the aspirations** of our students and community, **explore our own and other exemplary CTE programs**, and **develop a vision and recommendations for the path forward**.

The initial guiding questions for this work are:

- How do we design our CTE program to **maximize T-2-4 outcomes** for students?
- What **resources do we need** to get there?

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## CTE Task Force - What Did We Do?



Spring Branch Independent School District  
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### Took CTE 101

- Defined CTE – Perkins Act
- Discussed graduation plans and endorsements
- Introduced Career Clusters
- Looked at CTE pathways, courses
- Examined CTE from District, campus, and Guthrie Center viewpoints
- Reviewed current CTE programs offered
- Provided high level data on student enrollment by program

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## CTE Task Force - What Did We Do?



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Workforce Solutions



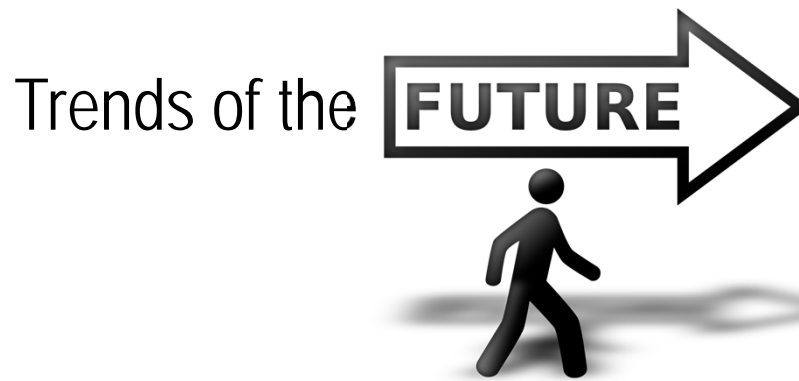
A Look at the Labor Market:  
Current Trends and  
In-Demand Occupations

6

## CTE Task Force - What Did We Do?



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**a new generation,  
with a new world view,  
become the majority.**

Millennials become the majority of the workforce, and generation Z comes of age. Both bring with them a unique set of perspectives and values that push on and transform institutions and ways of being.

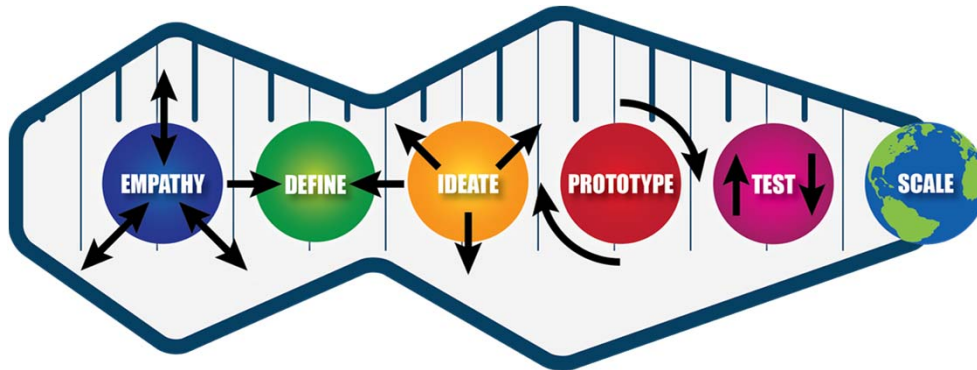
8

## CTE Task Force - What Did We Do?



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Understanding a person's **thoughts**, **emotions**, and **motivations**, are vital in determining how to design for him or her.



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## CTE Task Force - What Did We Do?



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### Qualitative Research: Empathy Interviews

Whose interests, experiences, and aspirations should be captured?

- Students are main stakeholders
- Important to also capture voices of parents, community members, business leaders, staff members, graduates, post-secondary leaders

Students = 91  
Business/Community = 13  
Parents = 21  
School Staff = 21  
Post Secondary = 5  
Graduates = 4

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Interview #2

SPRING BRANCH ISD - CTE TASK FORCE  
CAMPUS (circle all that apply): MHS NHS SIS SWHS WAIS AOC Guthrie

INTERVIEWER: Jim Harrington  
GRADE LEVEL: 11

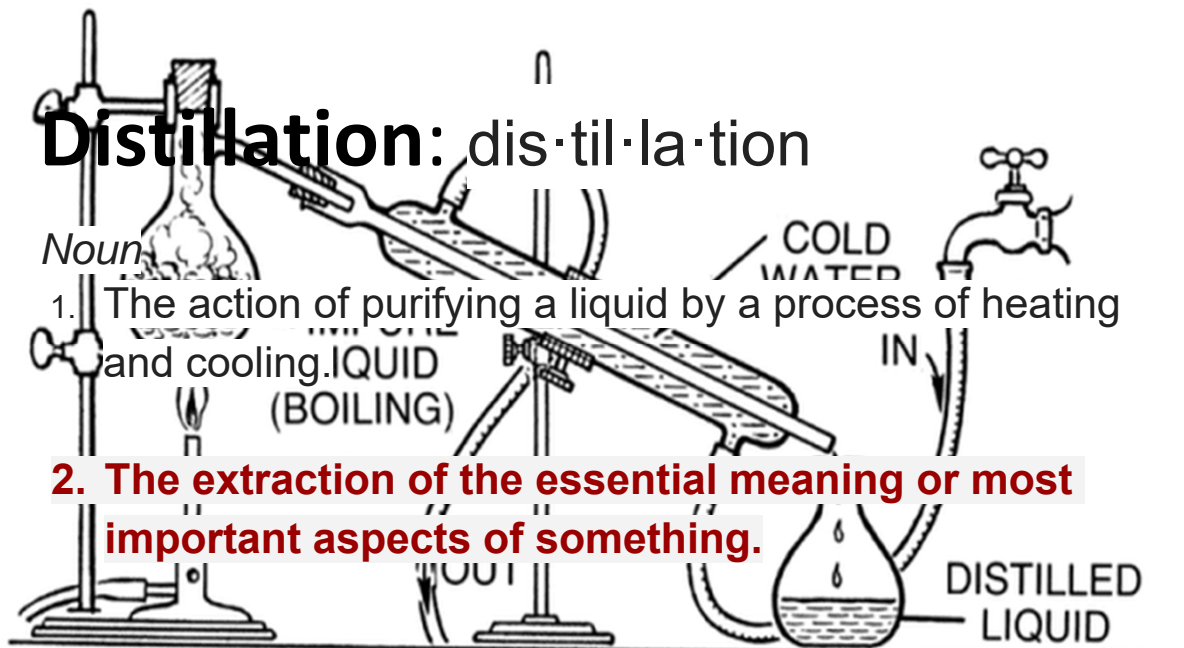
Need to have pamphlet or newspaper w/ courses so students can find out about courses  
STUDENT: Specific Description of Interviewee (from empathy interview list) Guthrie Center Student

Current experience with school in general...	Experiences with CTE...	Future aspirations, hopes and fears...
<p>→ <u>Favorite classes</u></p> <ul style="list-style-type: none"> <li>- Electronics</li> <li>- Architecture Design II</li> <li>- Chemistry</li> </ul> <p>Electronics - likes fixing things - using hands</p> <p>→ <u>Boring class</u></p> <p>→ <u>PE</u> - Slept both semesters and made good grades</p> <p>→ <u>Geometry</u> - hates this class</p> <p>→ Who understands you Teachers - Counselor, Parents</p> <p>→ Loves Electronics Apprenticeship Program - TDEI</p> <p>→ Day @ school</p> <p>Hated - worked in Skyward &amp; there were 2 zeros for quizzes taken in math</p> <p>→ <u>Worked</u> - Electronics - TDEI</p>	<p>asked what CTE stands for. Hea no idea</p> <p>→ Does not know anything about CTE</p> <p>→ Asked for Electives:</p> <ul style="list-style-type: none"> <li>Architecture Design II</li> <li>Electronics Program</li> </ul> <p>Both at Guthrie</p> <p>→ How did you learn about courses?</p> <p>Learned about elective for Mr. Harrington - counselor and also going through course catalog</p> <p>→ Not meaningful CTE classes</p> <p>Sometimes Architecture Design II. Can be boring - teacher will talk and when will sit down - she</p>	<p>→ Do you feel valued as a person?</p> <p>Electronics teacher always complimenting student - tells him he is doing a good job</p> <p>Happy atmosphere - teacher doesn't criticize student</p> <p>Usually student does not take constructive criticism</p> <p>In this class, student the teacher will approach student &amp; will say "this commend" "I would approach it this way"</p> <p>→ In 20 years:</p> <ul style="list-style-type: none"> <li>- hopefully be alive</li> <li>- family will do whatever is best to keep student alive</li> </ul> <p>Hopes to get an Electrical</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">IT class @ school for see an Guthrie lunch to be longer.</p>

# Distillation: dis·til·la·tion

Noun

1. The action of purifying a liquid by a process of heating and cooling. LIQUID (BOILING)
2. The extraction of the essential meaning or most important aspects of something.



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Students

Surprises	Insight	Ideas
Family heavily stressed and responsibilities in responses	Need to offer pathways to job experiences and actual money making opportunities. Internships	Family engagement activities
CTE programs highlight of day (keeps them in school)	Create more spaces for student enrollment and fewer barriers.	Strong marketing and community education of CTE offerings. More visibility
Students desire project/problem based activities	Teachers make or break student experience and desire	Focus on strong middle school foundation for CTE and keeping kids in school.
Too many barriers to enrolling in CTE courses/		Integrate Entrepreneurship into CTE offerings.
Growth		

High schools  
(aged) 11-12  
wide  
students

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## CTE Task Force - What Did We Accomplish?



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- Developed a clear understanding of our charge
- Learned from a high level about our SBISD CTE program
- Learned about the greater Houston economy and explored careers
- Studied cultural, technological, environmental, and economic trends of the future
- Learned about the Empathy Phase in the design process
- Captured the voices of multiple stakeholders in our community in an unbiased manner
- Distilled that information and attempted to draw our own insights
- Created a list of CTE program strengths, opportunities, and aspirations from stakeholder input – PRELIMINARY FINDINGS

## CTE Task Force - Preliminary Findings



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## CTE Task Force - Preliminary Findings



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### Strengths of Our CTE Program

#### Instruction

- Students typically find CTE classes engaging and motivating
- Students motivated by hands-on activities and real world experiences

#### Relationships/Support

- Students build strong relationships with CTE teachers which engages students
- Exposure to other students/friends across the system
- Parent/family support

#### Programs/Offerings

- GC has a great variety of CTE courses with qualified teachers
- Dynamic teachers build programs and students' passions

#### Benefits of CTE

- CTE classes keep students in school
- Programs increase soft skills, leadership, and teamwork

#### Logistics

- MS field trip to GC to see choices is effective
- Career Pathway flyers beneficial
- Creation of Task force



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## CTE Task Force - Preliminary Findings



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### Opportunities for Future Design of our CTE Program

#### Communication/Education/Awareness

- Information not communicated efficiently
- Pathways and endorsement confusion exists
- Stigma and perceptions of CTE and the Guthrie Center exist

#### Barriers

- Barriers prevent access to CTE courses

#### Instructional needs

- Need more real world experiences, academic basics, soft skills, grit

#### Organizational Issues

- Need foundational CTE courses in MS as well as HS home campuses
- Support identification of self interests/aptitudes
- Need time for exploration of careers for all levels of students PK-12
- Current focus primarily on 4 year degree; need to stress T and 2 of T-2-4
- Need to address counselor overload and training
- Some MS and HS students not connected to school through activities or special courses
- CTE practices inconsistent between schools

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## CTE Task Force - Preliminary Findings



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### Aspirations for Our CTE Program

#### Communication/Education/Awareness

- Place priority on clear understanding of CTE, pathways, endorsements
- Provide information through a variety of sources
- Ensure all students and parents understand their CTE options by time they leave middle school

#### Eliminating Barriers

- Eliminate barriers to allow all students into CTE courses of their choice
  - ✓ Scheduling
  - ✓ Enough sections for all students
  - ✓ Transportation
  - ✓ Consistent bell schedules
  - ✓ Flattened course weights
- Provide students with more opportunities for enrollment – mini-courses, mini-terms, summer feature courses

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## CTE Task Force - Preliminary Findings



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### Aspirations for Our CTE Program (cont.)

#### Instructional Aspirations

- All CTE courses should connect learning to real world through internships, project-based learning, connection to area industries and competitions
  - ✓ Provide funding for these activities
- Connect instruction and individual strengths to employment needs and career opportunities
- All graduates should have employable skills and plans based on experiences in schools

#### Organizational Aspirations

- Consider housing all high skill, high tech programs centrally with all entry-level classes at home campuses
- Target students who are not connected to school and connected them through CTE programs
- Provide additional opportunities for students to earn industry certifications that lead to employment with invested businesses
- Offer more opportunities earlier – foundational/introductory CTE courses offered in middle school

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## CTE Task Force – What's Next?



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### PHASE 2: What's Next in Our Work?

- Define world-class CTE program
- Conduct learning visits
- Conduct research, review quantitative data
- Begin development of recommendations

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## CTE Task Force – What's Next?

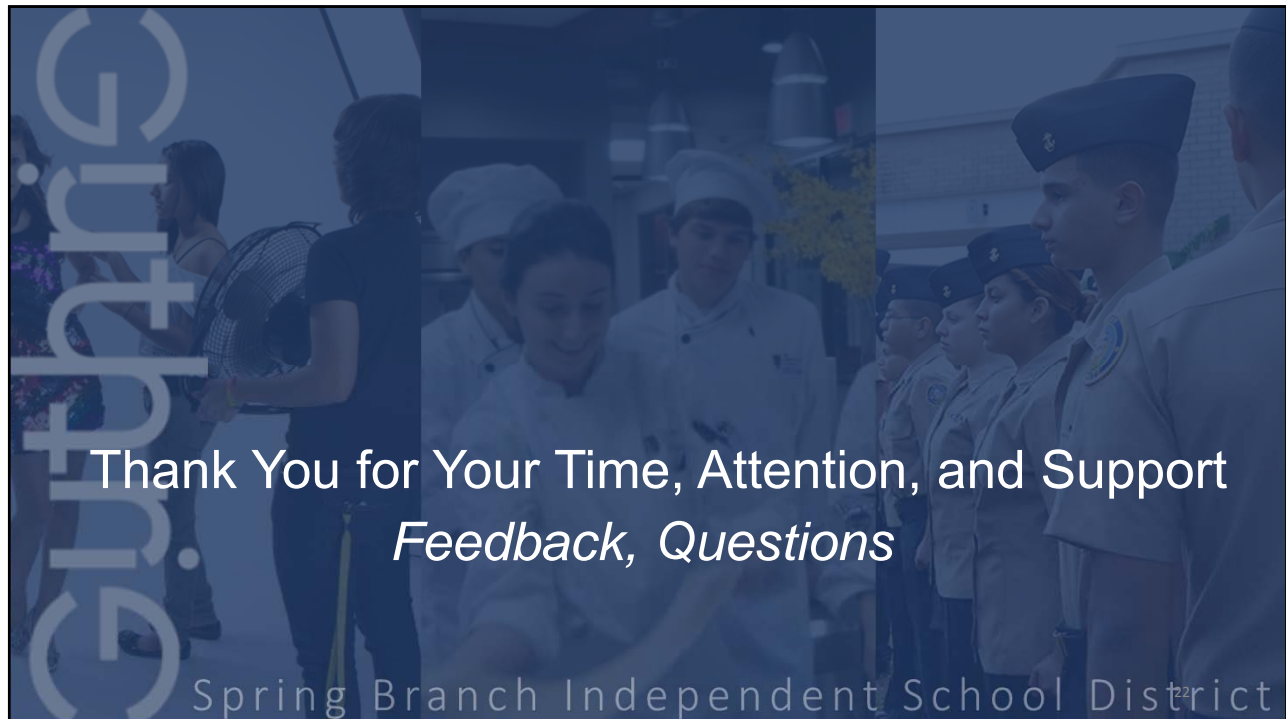


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### Some Questions to Be Addressed in Phase 2

- What model(s) for CTE delivery will best serve SBISD students in the future?
- What should future business/CTE partnerships look like?
- How will our CTE programming expand and/or change to address the needs of future economic demands?
- How do we define the T in T-2-4? Which certifications should count?
- How can graduation/career planning better support T-2-4 outcomes related to CTE?
- How can CTE opportunities be better understood, communicated, marketed?
- How should the CTE program be organized to maximize outcomes?
- Other questions will arise as we continue to learn...

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## E. Site Visits

## SBISD CTE Task Force Learning Visits Protocol

### What is a Learning Visit?

Learning visits give participants a chance to explore various learning models that they may use to inform their practice. Often on observations, we can fall into the posture of a **consumer**—"I like this, I don't like this." We ask that participants take a different lens to these visits, and that is one of a **designer**. ***Since systems achieve exactly what they are designed to achieve, designers on learning visits are constantly reflecting on how the design elements of a program contribute to the goals of the program.***

### Learning Visit Objectives

Members of the SBISD CTE Task Force will engage in learning visits to:

- Gather and capture data specific to the major topic groups. (Circle your topic group)  

<b>Communication</b>	<b>Connecting to Real World</b>	<b>Models for CTE/Logistics</b>
<b>Programming</b>	<b>Instruction</b>	
- Explore and seek inspiration for CTE Task Force recommendations and reimagining learning spaces and learner engagement
- Answer the question--How will we, as members of the CTE Task Force, translate our learning into holistic recommendations back home?

### The Learning Visit Experience

Learning visits are designed to **push and provoke thinking**. Through observations, discussions and/or journaling, participants should be oriented to these key questions:

- What outcomes is this learning environment trying to achieve (both implicitly and explicitly)?
- How is the learning environment *designed* to achieve them (how does it shape the role of students, adults, space, technology, community, curriculum, resources?)
- What elements of the program might contribute to the world-class CTE program we are aiming to design?

### Participants' Commitments

To maximize the **investment of time** and **build our district's partnerships** in the city and state, we ask that participants:

- Arrive on time to the visit site and dress professionally.
- Be all in the experience—be fully invested—be fully committed to the learning visit.
- Push for deep and meaningful observation. Widen perspective, dialogue with team members, and ask questions to prevent superficial generalizations. **What elements might contribute to the world-class CTE program we are aiming to design?**
- It is helpful for participants take notes and codify your thoughts and experiences on your learning visits. Sometimes journals, or notetaking are helpful.
- Upon returning, be prepared to share out lessons learned and experiences with others back home.

**SPRING BRANCH ISD  
CAREER AND TECHNICAL EDUCATION TASK FORCE**

**SITE VISIT MAJOR TOPICS AND QUESTIONS**

**MISSION/VISION**

- What was your overall mission and vision when this school was created?
- Has your mission and vision changed, and if so, how?
- Is the school designed to meet those goals, and if so, how?

**1. Communication/Awareness**

- What methods do you use to make sure that staff, students, parents and businesses understand what CTE is and are aware of what is offered in the district?
- How do you avoid the stigma about CTE or perception that CTE is not for all students?
- What types of activities do you offer for elementary and middle school students to help them be aware of possible careers and CTE?
- Do you actively search out students who are not involved in other school activities to get connected through CTE? If so, how?
- What kind of graduate and career planning do you offer?

**2. Connecting Learning to Real World**

- What are the most effective ways you have found to connect businesses with your CTE programs and what are your goals with those connections?
- What are the most **meaningful** connections and activities and what do they look like?
- What are the most **unique** partnerships you have with businesses that you believe benefit students?
- Do you believe those connections help you to connect students' learning to the real world, and if so, how?

**3. CTE Delivery Models and Logistics**

- What grade levels are served at your campus?
- Is this campus their primary campus or are they only here for CTE courses?
  - Where do they take their core academic courses?
- Where are the foundational CTE courses offered?
- What do you believe are the greatest benefits/disadvantages to your model?
- Is there a model for CTE at your feeder middle schools and, if so, what is it?

- How would you describe your campus schedule?
  - Do you coordinate with other schools in your district, and if so, how?
  - Are all of the high schools in your district on the same schedule?
- What does a student's daily schedule look like?
- Are students allowed to travel back to their home campuses throughout the day to participate in UIL activities?
- Do you provide transportation for students to and from school, and from your campus to other campuses? If so, how?
- How do your CTE course weights compare to other course weights?

#### **4. Programming**

- Does your programming offer courses for ALL students - those who plan to go to technical school, obtain an associates degree as well as those who will earn a 4-year degree?
  - Do you believe your campus focuses more heavily on one or the other?
  - If you believe you have a good balance, how do you maintain that balance?
- In addition to the regular school calendar, do you offer other methods/times for students to earn CTE credits, and if so, how?
- Do you have more students who want to take a course than your sections will allow, and if so, how do you work with those students?
- What kinds of connections do you have with your local higher education institutions, and explain how they work to benefit students?

#### **5. Instruction**

- Do you use specific learning models such as Project Based Learning, flipped learning or other collaborative learning models that require team work? If so, what have you found works best for student learning?
- Do your CTE teachers support the following, and if so, how?
  - basic math, grammar, and communication skills
  - workplace, interpersonal and employability skills
  - leadership skills and opportunities
- Do you place a priority on the following, and if so, how and which one do you believe are the most beneficial?
  - certifications
  - CTE related student organizations students
  - CTE related competitions

# Spring Branch ISD

## CTE Task Force Visits

September 2018

### Visits to SBISD High Schools

DATE	District/School	Tour Times	Info	Member Attending <u>and</u> Group # (sign up)
Sept. 11 (Tue)	<b>Spring Woods High School</b>	9:00 am - 11:00 am	Arrive at site 15 minutes early	Doug Abbott - Group 3 Carol Bucek- Group 2 Mary Grace Landrum - Group 4 Javier Torres - Group 2 Bob Gower - Group 1
Sept. 11 (Tue)	<b>Stratford High School</b>	9:00 am - 11:00 am	Arrive at site 15 minutes early	Terri L. Rogers - Group 5 Shannon McNary - Group 2
Sept. 12 (Wed)	<b>Northbrook High School</b>	9:00 am - 11:00 am	Arrive at site 15 minutes early	David Bender - Group 4 Mike Webster - Group 3 Chris Gonzalez - Group 4 Steve Rosencranz - Group 2 Stephen Johnston - Group 3 Kristy Schaper - Group 2 Ed Valicek - Group 2 Diane Swan - Group 1
Sept. 12 (Wed)	<b>Memorial High School</b>	1:15 pm 3:15 pm	Arrive at site 15 minutes early	Mike Webster - Group 3 Susan Dixon - Group 3 Doug Abbott - Group 3 Richard Cook - Group 4 Pam Metcalfe - Group 4 Tracy Janda - Group 2 Molly Cuevas - Group 2 Kristy Schaper- Group 2 Clyde Turner - Group 2 Celeste Menzer- Group 1

## Visits to Guthrie Center

DATE	District/School	Tour Times	Info	Member Attending <u>and</u> Group # (sign up)
Sept. 13 (Thur)	<b>Guthrie Center</b>	8:00 am - 9:15 am	Arrive at site 15 minutes early	Doug Abbott - Group 3 Susan Dixon - Group 3 Monelle Rougeau - Group 3 J.Carter Breed - Group 2 Mary Grace - Group 4 Chris Gonzalez - Group 4 Amira Johnson - Group 5 Kristin Craft - Group 5 Carol Bucek - Group 2 Steve Rosencranz - Group 2 Shannon McNary - Group 2
		11:00 am - 12:15 pm	Arrive at site 15 minutes early	Terri L. Rogers - Group 5 Richard Cook - Group 4 Pam Metcalfe - Group 4 Bob Gower - Group 1 Lance Stallworth Glen Shepard Luna Nguyen

## Visits to Districts Outside of SBISD

DATE	District/School	Site Arrival & Departu re	Travel Info	Member Attending <u>and</u> Group # (sign up)
Sept. 14 (Fri)	<b>Eagle Mountain- Saginaw ISD</b> Hollenstein Career and Technology Center 5501 Marine Creek Parkway Fort Worth, TX 76179	10:00 am - 3:30 pm	Will leave SBISD Schaper Center 6:00 am and return at approx. 7:30 pm	Melissa Manske - Group 4 Mike Webster - Group 3 Monelle Rougeau - Group 3 Melanie Graham - Group 5 Clyde Turner- Group 2 Patricia Kassir – District David Sablatura - District

Sept. 17 (Mon)	<b>Alief ISD Center for Advanced Careers</b> 12160 Richmond Ave Houston, TX 77082	10:00 am - 2:00 pm	Will travel individually, meet 15 minutes early at the site	Terri L. Rogers - Group 5 Pam Metcalfe - Group 4 Jim Herrington - Group 4 Juliet Peterson - Group 1 Bob Gower - Group 1 Amira Johnson - Group 5 Doug Abbott - Group 3 Ed Valicek - Group 2 Tracy Janda - Group 2 Molly Cuevas - Group 2 Fuad Loutfi - Group 4 David Sablatura - District
Sept. 19 (Wed)	<b>Pasadena ISD Kirk Lewis Career and Technical High School</b> 1348 Genoa Red Bluff Rd. Houston, TX 77034	10:00 am - 2:00 pm	Will travel individually, meet 15 minutes early at the site	Pam Metcalfe - Group 4 Jim Herrington - Group 4 Melanie Graham- Group 5 Stephen Johnston - Group 3 Natalie Fikac - Group 1 Paige Krekeler - Group 3 Steve Rosencranz - Group 2 Shannon McNary - Group 2 Carter Breed - Group 2 Doug Abbott- Group 3 Pete Prelli - Guthrie Center Patricia Kassir - District Angie Gillikin – District
Sept. 19 (Wed)	<b>Dallas ISD Wilmer-Hutchins Energy &amp; Construction Technology Early College High School</b> 5520 Langdon Road Dallas, TX 75241	11:00 am - 1:00 pm	Will leave SBISD Schaper Center 6:30 am and return at approx. 6:00 pm	Regina Garceau Group 5 Monelle Rougeau - Group 3 Chris Gonzalez - Group 4 Javier Torres- Group 2 Clyde Turner-Group 2 James Shaddix – Co-Chair David Sablatura - District
Sept. 20 (Thur)	<b>Arlington ISD Dan Dipert Career and Technical Center</b> 2101 Browning Dr. Arlington, TX 76010	10:00 am - 3:30 pm	Will leave SBISD Schaper Center 6:00 am and return at approx. 7:30 pm	Monelle Rougeau - Group 3 Kristin Craft - Group 5 Terri L. Rogers - Group 5 Ed Valicek - Group 2 Mary Layton - Guthrie Center James Shaddix – Co-Chair David Sablatura – District
Sept. 21 (Fri)	<b>Pearland ISD Robert Turner High School</b> 4717 Bailey Rd. Pearland, TX 77584	10:00 am - 2:00 pm	Will travel individually, meet 15 minutes early at the site	Richard Cook - Group 4 Mary Grace Landrum - Group 4 Donna Handlin - Group 3 Kate Wright - Group 5 Susan Dixon - Group 3



				Natalie Fikac - Group 1 Kamran Zarea- Group 2 Celeste Menzer- Group 1 Clyde Turner - Group 2 Kristy Schaper- Group 2 J Carter Breed- Group 2 Tracy Janda - Group 2 Chris Olson - Guthrie Center Doug Abbott-Group 3 Ann Tidwell--Group 5 (Co-Chair) Angie Gillikin – District David Sablatura – District
Oct. 1 (Mon)	<b>Grand Prairie ISD Dubiski Career High School</b> 2990 State Hwy 161 Grand Prairie, TX 75051	10:00 am - 3:30 pm	Will leave SBISD Schaper Center 6:00 am and return at approx. 7:30 pm	Regina Garceau - Group 5 Rebecca Brown - District Mary Grace Landrum - Group 4 Monelle Rougeau - Group 3 Carol Bucek - Group 2 Andrea Hodge - Group 1 Kristy Schaper-Group 2 Lance Stallworth - District Edgar Anguilo - Guthrie Center Javier Torres - Group 2 David Sablatura - District

# **APPENDIX**

## **Section 2:**

### **CTE Data Notebook**

Spring Branch ISD

# CTE Data Notebook

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# **NATIONAL**

## **CTE Information**

## **A. Understanding CTE**

# A GUIDE TO UNDERSTANDING

## CAREER AND TECHNICAL EDUCATION

CAREER AND TECHNICAL EDUCATION  
FOUNDATION



**CAREER AND TECHNICAL  
EDUCATION FOUNDATION**

1410 King Street, Alexandria, Virginia 22314  
Phone: 800-826-9972 • Fax: 703-683-9360

**[www.ctefoundation.org](http://www.ctefoundation.org)**

## CTSO, MEA, ACTE, ABCDEFG—what does it all mean?

With so many organizations, entities and groups, it is a daunting task learning who is who and what is what in the world of career and technical education (CTE). That is why the CTE Foundation (see below for definition) has developed this handy resource. While initially geared toward the business community, this reference is also great for new CTE instructors, news media professionals, policymakers and others who are tasked with understanding the CTE world. As a living document, it is the intent to continually update this reference to keep it relevant!

## What Is CTE?

There are literally hundreds of definitions of CTE. The Association for Career and Technical Education (ACTE) has taken all those definitions and developed a paper titled “What Is Career and Technical Education?”<sup>1</sup> Here are some of the key points from that document that will help to put a definition around CTE.

- CTE prepares both youths and adults for a wide range of careers and further educational opportunities. These careers may require varying levels of education—including industry-recognized credentials, postsecondary certificates, and two- and four-year degrees.
- The most recent Report to Congress on the Carl D. Perkins Career and Technical Education Act (Perkins) revealed that approximately 14 million students participated in secondary and postsecondary CTE programs during the 2007-2008 school year.
- According to the U.S. Department of Education’s Office of Vocational and Adult Education (OVAE), almost all high school students take at least one CTE course, and one in four students take three or more courses in a single program area. One-third of college students are involved in CTE programs, and as many as 40 million adults engage in short-term postsecondary occupational training.
- CTE is at the forefront of preparing students to be “college- and career-ready.” CTE equips students with:
  - *Core academic skills* and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities
  - *Employability skills* (such as critical thinking and responsibility) that are essential in any career area
  - *Job-specific, technical skills* related to a specific career pathway

## CTE Structure

How CTE is delivered varies by state and even by district. To get started, within CTE, occupations and career specialties are often grouped into “career clusters.” There are 16 of these at the national level and they are based on a set of common knowledge and skills. Not all states use all of the clusters and some have additional ones. The current national career clusters are:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Technology, and Communications
- Business Management and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

Further specialization is achieved through comprehensive Programs of Study, which align academic and technical content in a coordinated, non-duplicative sequence of secondary and postsecondary courses, and lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

At the local level, CTE is delivered at the middle school, high school, adult and postsecondary levels. It may be located in:

- *Comprehensive high school*—school that has both academic and CTE courses; some comprehensive

- high schools are designed as CTE magnet schools
- *CTE center/technical school*—a separate school or center within a district or among districts where students are bussed for their CTE courses
- *Community/technical colleges*—for postsecondary instruction
- *Four-year colleges/universities*—for postsecondary instruction and teacher preparation
- *Adult education/employment centers*—for training for the adult population to assist in entering the workplace or upgrading skills
- *Correctional facilities*—to provide skills/knowledge to inmates

As an additional resource on how CTE is specifically structured in each state, ACTE has created, and continues to maintain, individual state profiles. These profiles are designed to provide clarity and context to the complex and diverse CTE systems that exist today. For more information, please visit [www.acteonline.org/stateprofiles.aspx](http://www.acteonline.org/stateprofiles.aspx).

## CTE Funding

Career and technical education programs are funded primarily by state and local resources, as is the case with most education programs. At the federal level, the Perkins Act also provides funding to states and local school districts and postsecondary institutions for program improvement and innovation.

### Carl D. Perkins Career and Technical Education Act

The Perkins Act was most recently reauthorized in August 2006. The purpose of Perkins is to provide individuals with the academic and technical skills needed to succeed in a knowledge- and skills-based economy. Perkins supports CTE that prepares its students both for postsecondary education and the careers of their choice. Federal resources help ensure that CTE programs are academically rigorous and up to date with the needs of business and industry. The federal contribution to CTE, about \$1 billion annually, supports innovation and expands access to quality programs. Federal funds provide the principal source for innovation and program improvement, and help to drive state support through a “maintenance-of-effort” provision in the federal law.

Perkins Basic State Grant funds are provided to states that, in turn, allocate funds by formula to secondary school districts and postsecondary institutions. States have control over the split of funds between secondary and postsecondary levels. After this decision is made,

states must distribute at least 85 percent of the Basic State Grant funds to local programs using either the needs-based formula included in the law or an alternate formula that targets resources to disadvantaged schools and students. States may reserve up to 10 percent for leadership activities and five percent (or \$250,000, whichever is greater) for administrative activities.

### State and Local Funding

State and local funding supports the CTE infrastructure and pays teachers’ salaries and other operating expenses.

### Workforce Investment Act (WIA)

Congress passed the Workforce Investment Act (WIA) in 1998 as P.L. 105-220.<sup>2</sup> It replaced the Job Training Partnership Act (JTPA) in an effort to streamline and strengthen the country’s job-training system. Taking full effect on July 1, 2000, WIA intended to create a locally integrated “One-Stop” delivery system of multiple employment services, job training and education programs, designed to be universally accessible to job seekers and meet local industry demands in communities across the country.

WIA mandated the participation of partner agencies that provide such services, including the Perkins program. Implementation of WIA has worked well in some local areas, but, overall, there has been a downward trend in the provision of employment services, particularly in the number of job seekers being referred to training programs. According to U.S. Department of Labor data analyzed by the Center for Law and Social Policy, there has been an approximate 66 percent drop in the number of people receiving training in the early years of WIA’s implementation and the last years of JTPA. Among the reasons cited for this change includes local funds being diverted from service delivery for infrastructure development in the new One-Stop system. Additional frustrations at the local level have included limited business engagement in the system and complicated negotiations among partner agencies regarding funding and service delivery.

WIA was originally scheduled for reauthorization in 2003, but numerous delays have occurred, and a new law has not been finalized.

## Key Terms

**21st Century Skills/Employability Skills/Soft Skills**—Skills, other than technical knowledge, needed to succeed in the workplace. Some examples include critical thinking, teamwork, problem solving and goal setting.

2 [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=105\\_cong\\_public\\_laws&docid=f:publ220.105.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=105_cong_public_laws&docid=f:publ220.105.pdf)



**Academic Integration**—The blending of academic and CTE curriculum. An example would be the Math-in-CTE program from the National Research Center for Career and Technical Education.

**Apprenticeship**—A system of training whereby workers learn their skilled trade on the job in a structured and supervised environment. The U.S. Department of Labor administers the Registered Apprenticeship Program, which aims to connect job seekers with employers. Regional offices support this activity.

**Articulation Agreement**—A formal link between at least two educational entities (i.e., high school and community college) designed to make a smooth student transition between entities.

**Career Clusters**—Groupings of occupations and broad industries. There are 16 identified national career clusters.

**Career Academies**—Small learning communities that are focused on a career pathway and integrate rigorous academics.

**Career Pathway**—According to the National Career Pathways Network, a career pathway “is a coherent, articulated sequence of rigorous academic and career and technical courses, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry-recognized certificate, and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business and employers. Career Pathways are available to all students, including adult learners.”

**Certification**—A process individuals go through to illustrate their mastery of subject matter. The certification process involves individuals passing an examination and possessing certain requirements (i.e., education level or years of experience).

**CTE Concentrator**—As defined by OVAE, a secondary CTE concentrator is a secondary student who has earned three or more credits in a single CTE program area, or two credits in a single CTE program area, but only in those program areas where two credit sequences at the secondary level are recognized by the state and/or its local eligible recipients.

A postsecondary CTE concentrator is a postsecondary / adult student who completes at least 12 academic or CTE credits within a single program area sequence that is composed of 12 or more academic and technical credits and terminates in the award of an industry-recognized credential, a certificate, or a degree; or completes a short-

term CTE program sequence of less than 12 credit units that terminates in an industry-recognized credential, a certificate, or a degree.

**Dual Credit**—A program or class through which participants earn credit in more than one area. For example, a culinary class that counts as a math class or a high school class that is eligible for college credit.

**Externship**—A program through which teachers / instructors spend time in the business environment. This helps teachers / instructors understand the work-force needs of the business community and what changes need to occur in the classroom to reflect these needs.

**Industry Advisory Council (IAC)**—It is required by the Perkins Act that CTE programs have industry advisory councils that meet at least once a year. Ideally, IACs help ensure that the CTE curriculum is up to date and that what is being taught in the classroom adequately prepares students for the workplace.

**Industry-recognized Credentials**—Those certifications, licenses or certificates that industry groups recognize as being valuable within the industry and illustrate an individual’s understanding and/or mastery of subject knowledge.

**Internship**—An opportunity through which students receive hands-on knowledge and training while working for an entity.

**Programs of Study (POS)**—Federally defined in the Perkins Act of 2006 as options for students (and their parents as appropriate) when planning for and completing future coursework, for career and technical content areas that:

- (i) incorporate secondary education and postsecondary education elements;
- (ii) include coherent and rigorous content aligned with challenging academic standards and relevant career and technical content in a coordinated, nonduplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;
- (iii) may include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
- (iv) lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

**State Director**—The person(s) at the state level who is responsible for secondary, postsecondary and adult CTE.

**Work-based Learning**—Programs and opportunities that allow students to see and understand how classroom instruction connects to the world of work.

**Workforce Investment Board (WIB)**—WIBs are regional entities created to implement WIA. The WIB's main role is to direct federal, state and local funding to workforce development programs. WIBs oversee the One-Stop Career Centers, where job seekers can get employment information, find out about career development training opportunities and connect to various programs in their area. Services vary by state and WIB.

## Affiliated Organizations

Throughout this document, you will learn about a lot of associations dedicated to the students and educators involved in CTE. There are, however, a number of other organizations, companies and entities that are within the CTE community but don't fall into those categories.

## Government Agencies

**Bureau of Labor Statistics**<sup>3</sup>—The government entity under the U.S. Department of Labor that is responsible for measuring labor market activity.

**Employment and Training Administration (ETA)**<sup>4</sup>—The agency within the U.S. Department of Labor that administers federal government job training and worker dislocation programs, federal grants to states for public employment service programs, and unemployment insurance benefits. These services are primarily provided through state and local workforce development systems.

**Office of Vocational and Adult Education (OVAE)**<sup>5</sup>—OVAE administers and coordinates programs that are related to adult education and literacy, CTE, and community colleges. OVAE's CTE initiatives are designed to administer state formula and discretionary grant programs under the Perkins Act; provide assistance to states to improve program quality, implementation and accountability; and establish national initiatives that help states implement rigorous CTE programs.

**National Research Center for Career and Technical Education (NRCCTE)**<sup>6</sup>—NRCCTE is the primary agent for generating scientifically based knowledge,

dissemination, professional development, and technical assistance to improve CTE in the United States. The work of NRCCTE is funded by OVAE.

## Industry Groups

**Automotive Industry Planning Council (AIPC)**—AIPC is a national advisory group of industry leaders, career and technical educators and educational policy-makers whose mission is to promote communication, cooperation and excellence in automotive service training programs. One of the methods they use to accomplish this is the Automotive Awards of Excellence.

**National Automotive Technicians Education Foundation (NATEF)**<sup>7</sup>—NATEF was founded to evaluate technician training programs against standards developed by the automotive industry and recommend qualifying programs for NATEF accreditation.

**National Center for Construction Education and Research (NCCER)**<sup>8</sup>—NCCER was "created to develop industry-driven standardized craft training programs with portable credentials and help address the critical workforce shortage facing the construction industry."

**National Council for Agricultural Education**<sup>9</sup>—The Council provides leadership and coordination to shape the future of school-based agricultural education. Its board of directors is made up of representatives from organizations and associations focused on agriculture education and CTE.

## Curriculum/Testing Providers

**ACT**<sup>10</sup>—"ACT is an independent, not-for-profit organization that provides a broad array of assessment, research, information, and program management solutions in the areas of education and workforce development.

**MBA Research & Curriculum Center (MBAResearch)**<sup>11</sup>—MBAResearch is organized as a consortium of 37 state education departments and other organizations to support educators in the preparation of students for careers in business and marketing. It develops programs, strategies and curricula.

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3 [www.bls.gov](http://www.bls.gov)

4 [www.doleta.gov](http://www.doleta.gov)

5 [www2.ed.gov/about/offices/list/ovae/index.html](http://www2.ed.gov/about/offices/list/ovae/index.html)

6 [www.nrccte.org](http://www.nrccte.org)

7 [www.natef.org](http://www.natef.org)

8 [www.nccer.org](http://www.nccer.org)

9 [www.teamaged.org/council/index.php/aboutus](http://www.teamaged.org/council/index.php/aboutus)

10 [www.act.org](http://www.act.org)

11 [www.mark-ed.org/2.0/Joomla/index.php](http://www.mark-ed.org/2.0/Joomla/index.php)

**NOCTI**<sup>12</sup>—NOCTI is a provider of occupational competency assessment products and services to secondary and postsecondary educational institutions in the United States and around the world. A nonprofit corporation, NOCTI is governed by a consortium of states consisting of representatives from each of the 50 states and U.S. territories.

**Project Lead The Way (PLTW)**<sup>13</sup>—PLTW provides rigorous and innovative science, technology, engineering and mathematics education curricular programs used in middle and high schools. More specifically, PLTW has programs and curriculum in engineering and biomedical sciences.

**Southern Regional Education Board (SREB)**<sup>14</sup>—SREB is a nonprofit, nonpartisan organization that works with 16 member states to improve public pre-K-12 and higher education. Founded by the region's governors and legislators in 1948, SREB was America's first interstate compact for education.

In 1987, SREB established High Schools That Work (HSTW). HSTW uses research-proven strategies to help states transform their public high schools into places where all students learn at high levels. Member schools implement 10 key practices for changing what is expected of students, what they are taught and how they are taught.

## Other

**CTE Foundation**<sup>15</sup>—The CTE Foundation was established to promote quality CTE through support of the programs and services of the Association for Career and Technical Education.

**National Technical Honor Society (NTHS)**<sup>16</sup>—NTHS is a chapter-based organization focused on honoring student achievement and leadership, promoting educational excellence, awarding scholarships, and enhancing career opportunities for its membership.

**University Council for Workforce and Human Resource Education (UCWHRE)**<sup>17</sup>—UCWHRE is a nonprofit organization representing the nation's leading

universities. It provides leadership for teaching, research and service initiatives in CTE and human resource development. It has an institutional-based membership structure.

## Career and Technical Student Organizations (CTSO)

More than 1.5 million students belong to and participate in CTSOs, which are designed to provide leadership development, motivation and recognition for students. The U.S. Department of Education recognizes the following CTSOs:

**Business Professionals of America (BPA)**<sup>18</sup>—BPA has a history as a student organization that contributes to the preparation of a world-class workforce through the advancement of leadership, citizenship, academic, and technological skills for students at the secondary and postsecondary levels. Through co-curricular programs and services, members of BPA compete in demonstrations of their business technology skills, develop their professional and leadership skills, network with one another and professionals across the nation and get involved in the betterment of their community through good works projects.

**DECA**<sup>19</sup>—DECA, a national association of marketing education students, provides teachers and members with educational and leadership development activities to merge with the education classroom instructional program.

**Future Business Leaders of America—Phi Beta Lambda (FBLA-BPL)**<sup>20</sup>—FBLA-PBL is a dynamic organization of young people preparing for success as leaders in our businesses, government and communities.

**Future Educators Association (FEA)**<sup>21</sup>—FEA is an organization that provides students interested in education-related careers with activities and materials that help them explore the teaching profession. FEA helps students develop the skills and strong leadership traits

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12 [www.nocti.org](http://www.nocti.org)

13 [www.pltw.org/index.html](http://www.pltw.org/index.html)

14 [www.sreb.org](http://www.sreb.org)

15 [www.ctefoundation.org](http://www.ctefoundation.org)

16 [www.nths.org](http://www.nths.org)

17 [www.hre.uiuc.edu/ucwhre](http://www.hre.uiuc.edu/ucwhre)

18 [www.bpanet.org](http://www.bpanet.org)

19 [www.deca.org](http://www.deca.org)

20 [www.fbla-pbl.org](http://www.fbla-pbl.org)

21 [www.futureeducators.org](http://www.futureeducators.org)

that are found in high-quality educators and significantly contributes to the development of the next generation of great educators.

**Family, Career and Community Leaders of America (FCCLA)**<sup>22</sup>—FCCLA makes a difference in families, careers and communities by addressing important personal, work and societal issues through family and consumer sciences education. Involvement in FCCLA offers members the opportunity to expand their leadership potential and develop skills for life—planning, goal setting, problem solving, decision-making and interpersonal communication—necessary in the home and workplace.

**Health Occupations Students of America (HOSA)**<sup>23</sup>—HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care to all people.

**National FFA**<sup>24</sup>—FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth, and career success through agricultural education.

**National Postsecondary Agricultural Student Organization (PAS)**<sup>25</sup>—PAS is an organization associated with agriculture/agribusiness and natural resources offerings in approved postsecondary institutions offering baccalaureate degrees, associate degrees, diplomas and/or certificates.

**National Young Farmer Educational Association (NYFEA)**<sup>26</sup>—NYFEA is the official adult student organization for agricultural education with the goal of being America's association for educating agricultural leaders. The association features leadership training, agricultural career education and community service opportunities.

**SkillsUSA**<sup>27</sup>—SkillsUSA is a national organization serving high school and college students and professional members who are enrolled in technical, skilled and service occupations, including health occupations.

**Technology Student Association (TSA)**<sup>28</sup>—TSA is the only student organization devoted exclusively to the

needs of technology education students who are presently enrolled in, or have completed, technology education courses.

**National Coordinating Council for Career and Technical Student Organizations (NCC-CTSO)**—NCC-CTSO is a council composed of representatives from each CTSO, ACTE, the U.S. Department of Education and the National Association of State Directors of Career Technical Education Consortium.

## Professional Associations for CTE Instructors

The opportunities for career and technical educators to participate in a professional association are almost innumerable. In addition to union organizations like the National Education Association and the American Federation of Teachers, there are additional professional associations for every trade or area taught within CTE. Here is a list, although not comprehensive, of many of those associations.

**American Association for Agricultural Educators (AAAE)**<sup>29</sup>—AAAE is dedicated to studying, applying and promoting the teaching and learning processes in agriculture. It is an individual membership organization.

**American Association of Family and Consumer Sciences (AAFCS)**<sup>30</sup>—AAFCS is a professional individual membership association for individuals with a baccalaureate degree or higher, professional-level certification, or professional-level licensure in family and consumer sciences.

**Association for Career and Technical Education (ACTE)**<sup>31</sup>—ACTE is an individual membership organization dedicated to the advancement of education that prepares youth and adults for successful careers. ACTE is committed to enhancing the job performance and satisfaction of its members; to increasing public awareness and appreciation for career and technical programs; and to assuring growth in local, state and federal funding for these programs by communicating and working with

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22 [www.fcclainc.org](http://www.fcclainc.org)

23 [www.hosa.org](http://www.hosa.org)

24 [www.ffa.org](http://www.ffa.org)

25 [www.nationalpas.org](http://www.nationalpas.org)

26 [www.nyfea.org](http://www.nyfea.org)

27 [www.skillsusa.org](http://www.skillsusa.org)

28 [www.tsaweb.org](http://www.tsaweb.org)

29 [www.aaaeonline.org](http://www.aaaeonline.org)

30 [www.aafcs.org](http://www.aafcs.org)

31 [www.acteonline.org](http://www.acteonline.org)



legislators and government leaders. ACTE is supported by a network of state affiliated associations.<sup>32</sup>

**Association for Career and Technical Education Research (ACTER)**<sup>33</sup>—ACTER is the premier professional organization for researchers, faculty, graduate students, administrators, policymakers and all others with global interests in workforce education research, education, issues and policy. It is an individual membership organization.

**Association for Skilled and Technical Sciences (ASTS)**<sup>34</sup>—ASTS is an individual membership organization for all instructors, administrators, teacher educators, industry representatives and others interested in the skilled trades. It was created when the National Association for Trade and Industry Educators (NATIE) and the National Association of State Supervisors for Trade and Industrial Education (NASSTIE) merged in 2006.

**Association for sTEm Teacher Education**<sup>35</sup>—Formerly the National Association of Industrial and Technical Teacher Educators, the Association for sTEm Teacher Education advances and promotes excellence in science, technology, engineering and mathematics teacher education emphasizing the technology and engineering areas of teacher education. The association accomplishes this goal by providing opportunities for professional improvement for its members, promoting cooperation among science, technology, engineering and mathematics teacher education groups, and serving as authority on and advocate for engineering and technology teacher education. It is an individual membership organization.

**Career and Technical Education Equity Council (CTEEC)**<sup>36</sup>—The purposes of CTEEC are to promote and support CTE, to support equitable and full participation of all students and employees in technical education, to encourage professional growth and development of its members, and to support the goals/objectives of the Administration Division of ACTE. It is an individual membership organization that first requires ACTE membership.

**Council of Health Occupations Teachers (COHOT)**—COHOT is a national individual membership organization for all secondary and postsecondary classroom

health occupations teachers. The purpose of COHOT is to provide relevant, updated teaching techniques and curricula for its members.

**Epsilon Pi Tau**<sup>37</sup>—As an academic and professional honors group for technology programs in higher education, workforce development programs, and professionals in practice, Epsilon Pi Tau provides honor and distinction to members, institutions, programs and individuals throughout the world.

**Health Occupations Supervisor and Teacher Educator Council (HOSTEC)**—HOSTEC strives to improve cooperation among those engaged in preparing and improving teachers and other workers in career, technical, technology and health occupations education. HOSTEC is active in legislative advocacy for CTE programs. The Council edits and publishes the *Journal of Health Occupations Education* and sponsors and assists with the National Curriculum and Research conference held every other year. It is an individual membership association that also requires ACTE membership.

**International Vocational Education and Training Association (IVETA)**<sup>38</sup>—IVETA is an organization and network of vocational educators, vocational skills training organizations, business and industrial firms, and other individuals and groups interested or involved in vocational education and training worldwide. IVETA is dedicated to the advancement and improvement of high-quality vocational education and training wherever it exists and wherever it is needed. It is an individual membership organization.

**Marketing Education Association (MEA)**<sup>39</sup>—The purposes of MEA are to foster the growth and development of marketing education; encourage and support the professional development of marketing educators; encourage understanding of and support for marketing education; and maintain an efficient and effective association. It is an individual membership association.

**National Association of Agricultural Educators (NAAE)**<sup>40</sup>—NAAE is a federation of state agricultural educators associations. Currently NAAE is focusing on three areas: advocacy for agricultural education; professional development for agricultural educators; and recruitment and retention of current agriculture educators.

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32 [www.acteonline.org/content.aspx?id=200](http://www.acteonline.org/content.aspx?id=200)

33 [www.public.iastate.edu/~laanan/actermain/home.shtml](http://www.public.iastate.edu/~laanan/actermain/home.shtml)

34 [www.astsonline.org](http://www.astsonline.org)

35 [www.astemte.org](http://www.astemte.org)

36 [www.cteec.org](http://www.cteec.org)

37 [www.epsilonpitau.org](http://www.epsilonpitau.org)

38 [www.iveta.org/members/index.php](http://www.iveta.org/members/index.php)

39 [www.nationalmea.org](http://www.nationalmea.org)

40 [www.naae.org](http://www.naae.org)

**National Association of Secondary School Principals (NASSP)**<sup>41</sup>—NASSP is an individual membership organization of principals, assistant principals and aspiring school leaders at the middle and secondary school levels.

**National Association of State Administrators of Family and Consumer Sciences (NASAFACS)**<sup>42</sup>—The vision of NASAFACS is to empower individuals and families across the life span to manage the challenges of living and working in a diverse global society. Its unique focus is on family, work and their interrelationship. It is an individual membership organization that is an affiliate of ACTE.

**National Association of State Directors of Career Technical Education Consortium (NASDCTEc)**<sup>43</sup>—NASDCTEc represents the state and territory heads of secondary, postsecondary and adult CTE across the nation. NASDCTEc, through leadership, advocacy and partnerships, aims to support an innovative CTE system that prepares individuals to succeed in education and their careers, and poises the United States to flourish in a global, dynamic economy. In cooperation with the National Career Technical Foundation (NCTEF), NASDCTEc provides leadership and support for the National Career Clusters™ Framework.

**National Association of Supervisors of Agricultural Education (NASAE)**<sup>44</sup>—NASAE is a professional organization established to provide members with information essential for planning and conducting quality agricultural education programs. It is an individual membership organization.

**National Association of Supervisors of Business Education (NASBE)**<sup>45</sup>—NASBE is an organization of business education supervisors who are direct employees of a state, region or local education agency, and has as its purpose furthering the cause of business education and the welfare of the field and professional members. It is an individual membership organization.

**National Association of Teacher Educators of Family and Consumer Sciences (NATEFACS)**<sup>46</sup>—NATEFACS is a national organization of teacher educators whose purpose is to improve and strengthen teacher education

in family and consumer sciences. It is an individual membership organization.

**National Association of Teachers of Family and Consumer Sciences (NATFACS)**<sup>47</sup>—NATFACS is an individual membership organization that provides for group expression and group action dealing with problems of national importance to family and consumer sciences.

**National Business Education Association (NBEA)**<sup>48</sup>—NBEA is devoted exclusively to serving individuals and groups engaged in instruction, administration, research, and dissemination of information for and about business. NBEA is devoted to the recognition that business education competencies are essential for all individuals in today's fast-changing society. It is an individual membership organization.

**National Career Academy Coalition (NCAC)**<sup>49</sup>—NCAC provides technical assistance, training and support to career academies. NCAC also evaluates career academies based on the National Standards of Practice.

**National Career Pathways Network (NCPN)**<sup>50</sup>—NCPN is an individual membership organization for educators and employers involved in the advancement of career pathways and related education reform initiatives.

**National Consortium on Health Science Education (NCHSE)**<sup>51</sup>—NCHSE is a membership organization composed of those who support the mission, purpose and goals of the consortium. Representation on the current board of directors is a contingency of local education agencies, state education agencies, postsecondary education representatives, professional associations, health care partners, publishing companies and others who create health science education curriculum and products.

**National Council of Local Administrators (NCLA)**<sup>52</sup>—The purpose of NCLA is to provide leadership and advocacy in the promotion and development of CTE in the secondary and postsecondary school systems of the United States and its territories. NCLA is an individual membership organization that requires ACTE membership.

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41 [www.nassp.org](http://www.nassp.org)

42 [www.doe.in.gov/octe/facs/NASAFACS/NASAFACS.html](http://www.doe.in.gov/octe/facs/NASAFACS/NASAFACS.html)

43 [www.careertech.org](http://www.careertech.org)

44 [www.teamaged.org/nasae](http://www.teamaged.org/nasae)

45 [www.nasbe.us](http://www.nasbe.us)

46 [www.natefacs.org](http://www.natefacs.org)

47 [www.natfacs.org](http://www.natfacs.org)

48 [www.nbea.org](http://www.nbea.org)

49 [www.ncacinc.com](http://www.ncacinc.com)

50 [www.cord.org/ncpn-index.cfm](http://www.cord.org/ncpn-index.cfm)

51 [www.healthscienceconsortium.org](http://www.healthscienceconsortium.org)

52 [www.ncla-cte.org](http://www.ncla-cte.org)

# Additional CTE Facts/Talking Points

## CTE Increases Student Achievement:

- A ratio of one CTE class for every two academic classes minimizes the risk of students dropping out of high school. (Plank et al, "Dropping Out of High School and the Place of Career and Technical Education," 2005.)
- 81 percent of dropouts said that "more real-world learning" may have influenced them to stay in school. (Bridgeland et al, "The Silent Epidemic," 2005.)
- The more students participate in CTSO activities, the higher their academic motivation, academic engagement, grades, career self-efficacy and college aspirations. (Alfeld et al, "Looking Inside the Black Box: The Value Added by Career and Technical Student Organizations to Students' High School Experience," 2007.)
- Students who complete a rigorous academic core coupled with a career concentration have test scores that equal or exceed "college prep" students. These dual-concentrators are more likely to pursue post-secondary education, have a higher grade point average in college and are less likely to drop out in the first year. (SREB, "Facts About High School Career/Technical Studies.")
- CTE students are significantly more likely than their non-CTE counterparts to report that they developed problem-solving, project completion, research, math, college application, work-related, communication, time-management and critical-thinking skills during high school. (Lekes et al, "Career and Technical Education Pathway Programs, Academic Performance, and the Transition to College and Career," 2007.)

## CTE Meets Individual and Community Economic Needs:

- According to the Bureau of Labor Statistics, of the 20 fastest-growing occupations, 10 require an associate degree or less. Furthermore, of the 20 occupations with the largest numbers of new jobs projected for 2018, 13 require on-the-job training or an associate degree.
- More than 80 percent of respondents in the 2005 National Association of Manufacturer's Skills Gap Report indicated that they are experiencing a shortage of qualified workers overall—with 13 percent reporting severe shortages and 68 percent indicating moderate shortages. CTE plays a vital role in helping American business close this gap by building a competitive workforce for the 21st century.
- A person with a CTE-related associate degree or credential will earn an average of between \$5,000 and \$15,000 more a year than a person with a humanities or social sciences associate degree—and those with credentials in high-demand fields such as health care can average almost \$20,000 more a year. (Jacobson et al, "Pathways to Boosting the Earnings of Low-Income Students by Increasing Their Educational Attainment," 2009.)
- According to the state of Washington, for every dollar spent on secondary CTE students, federal and state governments will receive seven dollars back in Social Security, Medicare, and federal and state taxes. (Washington State Workforce Training and Education Coordinating Board, Workforce Training Results-2006, January 2007.)

## Resources:

[www2.ed.gov/about/offices/list/ovae/pi/cte/vso.html](http://www2.ed.gov/about/offices/list/ovae/pi/cte/vso.html)  
[www.okcareertech.org/whoweare/dictionary.pdf](http://www.okcareertech.org/whoweare/dictionary.pdf)  
[www.acteonline.org/cte\\_info.aspx](http://www.acteonline.org/cte_info.aspx)

## **B. National CTE Survey**



## The Value and Promise of Career Technical Education: Results from a National Survey of Parents and Students

Career Technical Education (CTE) has come a long way in the last decade. CTE programs not only teach students real-world knowledge and skills, but increasingly provide opportunities for dual enrollment, industry-recognized credentials and meaningful work-based learning experiences. Yet despite the many benefits of CTE – including a graduation rate for CTE students that is 93 percent, compared to a national average of 82 percent<sup>1</sup> – there are still challenges with limited awareness and outdated perceptions of CTE. Enrollment in CTE programs has remained stagnant over the last decade while demand soars for skilled employees in today's global economy. If we are to prepare all learners for success in the careers of their choice, more parents and students need to understand all that CTE has to offer them.

Advance CTE, with support from the Siemens Foundation, commissioned focus groups and a national survey to explore the attitudes of parents and students currently involved in CTE, as well as prospective<sup>2</sup> CTE parents and students, to better understand the promise and opportunity of CTE.

### KEY FINDINGS

- **CTE Delivers for Parents and Students:** CTE students and their parents are more satisfied with their education experience as compared to those not involved with CTE by nearly every measure, from general satisfaction with school experience, to the quality of their classes and opportunities for career exploration.
- **College and Career Success Are Both Important Goals for Parents and Students:** A top aspiration for parents and students is finding a career about which they or their child is passionate. At the same time, college remains a post-high school goal for nearly all parents and students.
- **Prospective Parents and Students Are Attracted to the “Real World” Benefits of CTE:** There are many elements of CTE programs that stand out to parents and students, particularly the fact that CTE provides real-world skills within the education system, something parents and students want more of from their education, as well as clear pathways into college and careers.
- **CTE Has an Awareness Challenge:** “Career Technical Education” has just moderate name recognition among parents, students and the general public, and understanding of how CTE is structured and delivered remains limited.
- **CTE Needs Champions and Messengers:** The “who” is equally if not more important than the “what” when it comes to communication. School counselors, teachers and CTE students are among the most trusted sources of information about CTE for prospective parents and students alike.

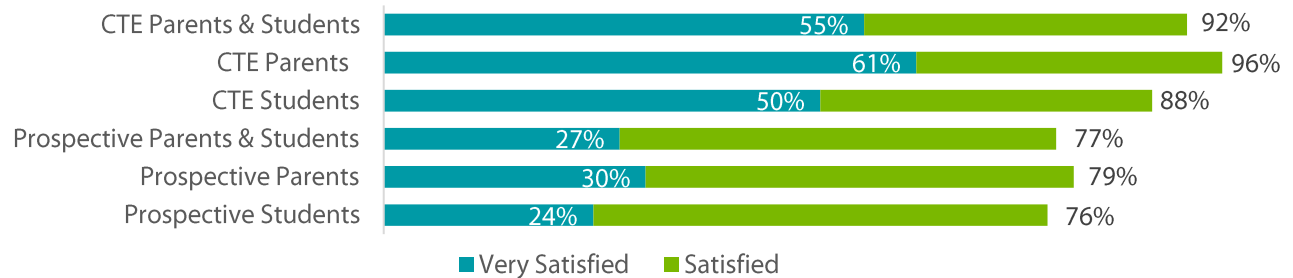
### CTE Delivers for Parents and Students

Perhaps the most significant finding is that parents and students engaged in CTE have significantly more satisfaction around the quality of their education and the opportunities they have for college and career readiness. ***Fifty-five percent of CTE parents and students are “very satisfied” with their overall school experience compared to just 27 percent of prospective parents and students.***

<sup>1</sup> [https://cte.careertech.org/sites/default/files/CTE\\_and\\_Student\\_Achievement\\_2017.pdf](https://cte.careertech.org/sites/default/files/CTE_and_Student_Achievement_2017.pdf)

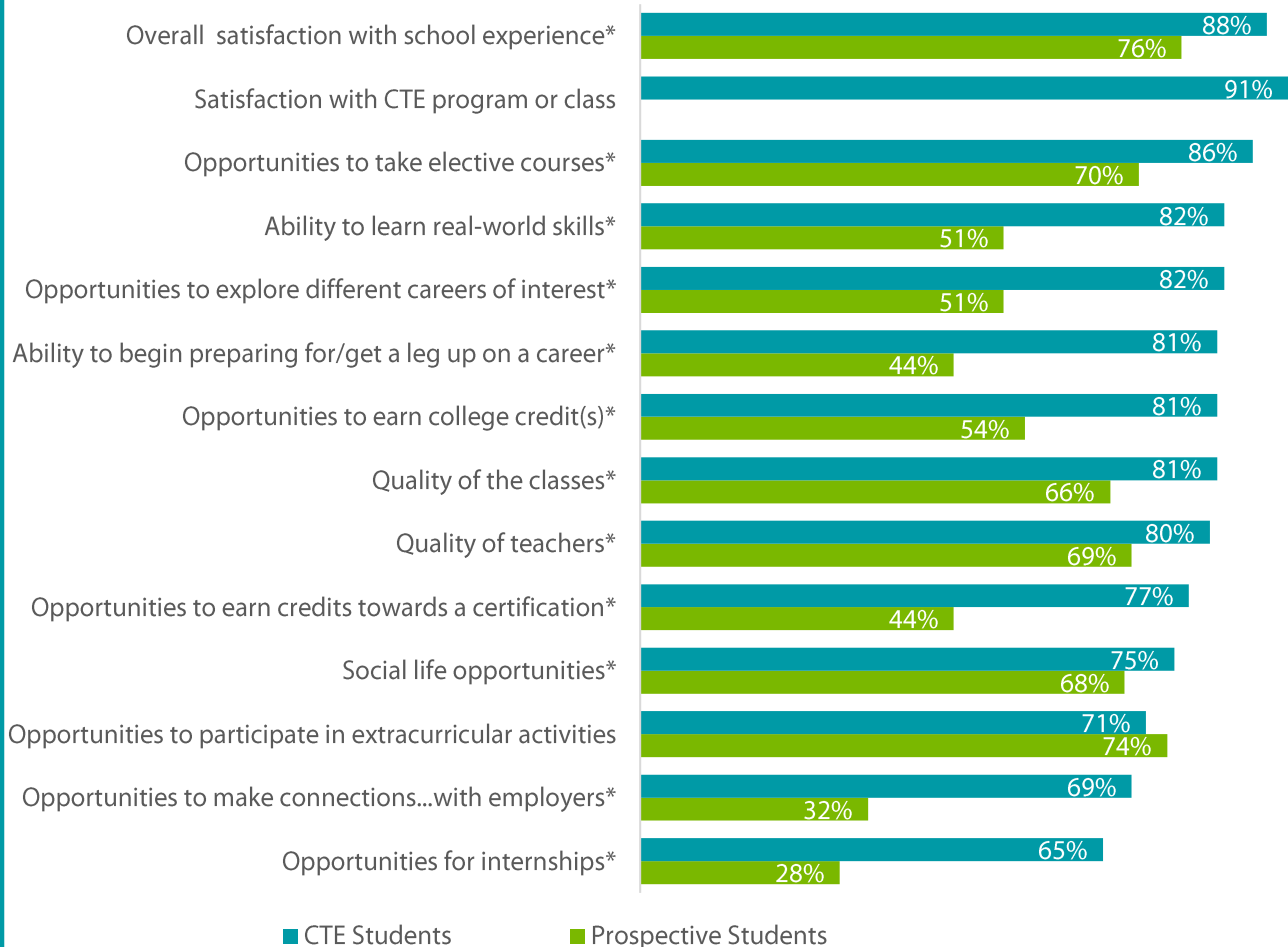
<sup>2</sup> Prospective parents and students (6<sup>th</sup> through 11<sup>th</sup> grade) are those not currently involved in CTE, but demonstrating some degree of interest after hearing a brief description of CTE.

### How Satisfied Are You With Your/Your child's Overall School Experience?



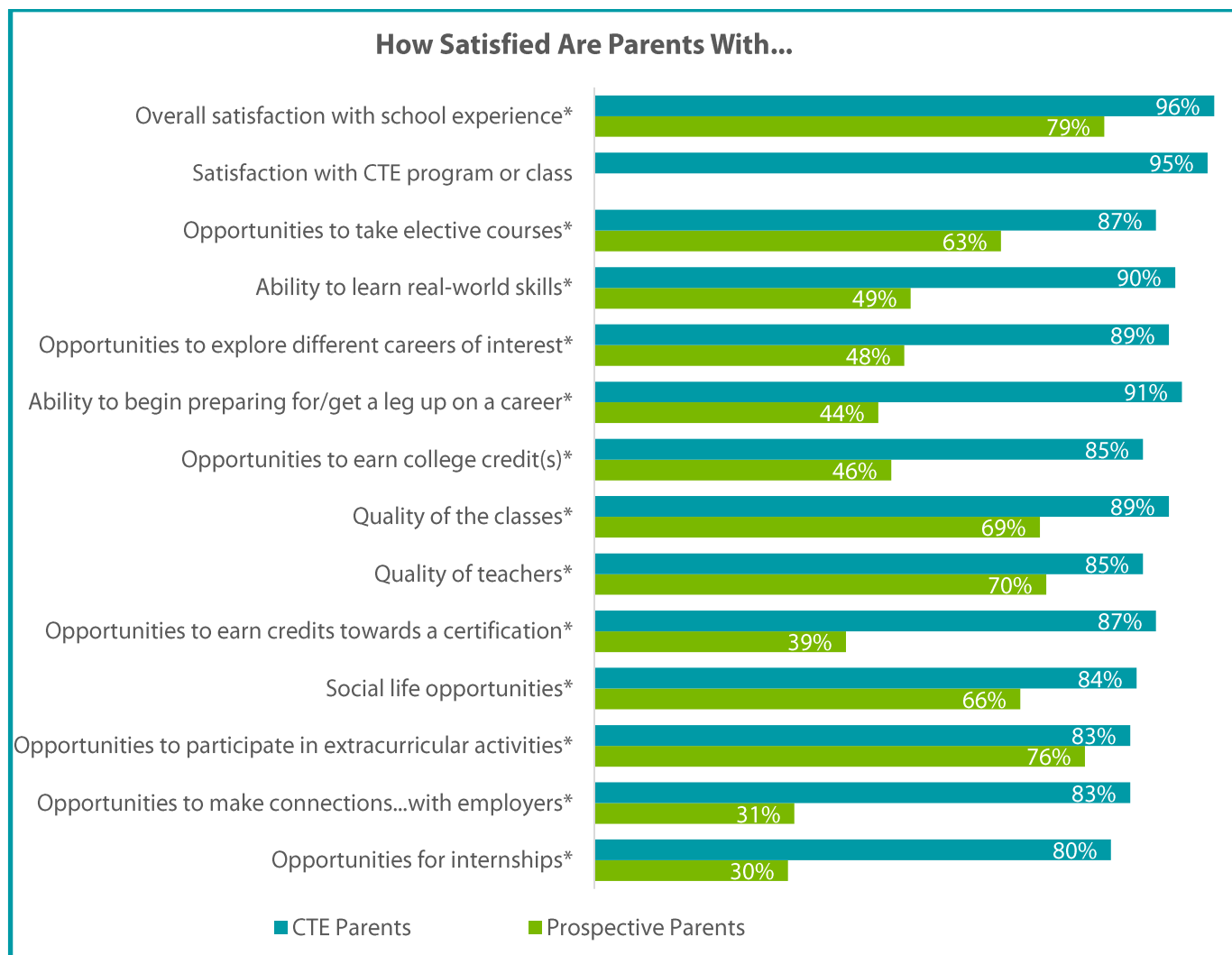
The difference in school satisfaction between CTE parents and students and prospects is even more striking when looking at individual elements of their school experience. This holds particularly true for those aspects related to career readiness and CTE such as opportunities to explore careers, gain real-world skills and network with employers.

### How Satisfied Are Students With...



\*Statistically Significant Difference

In fact, parents and students engaged in CTE have higher levels of satisfaction across nearly all aspects of their educational experience compared to parents and students not engaged in CTE. **About nine in 10 parents of CTE students were satisfied with their children's opportunities to explore different careers and learn real-world skills, compared to just five in 10 parents of non-CTE students.**



\*Statistically Significant Difference

### College and Career Success Are Both Important Goals for Parents and Students

"College" and "careers" are often presented as separate paths – or even pitted against one another – but parents and students see these as complementary and desire both. Findings show that communication about both college and career readiness aligns with parents and students' aspirations and values.

For example, eight in 10 parents and students (involved with CTE or not) say getting a college degree is important, and as many agree it's important to have a job that pays well. A standout finding is that nine in 10 parents and students say "finding a career that I/my child feels passionate about is important to me." Fulfillment and passion outweigh earnings as the ultimate goal, with college viewed as a means to achieving that goal.

Agree Strongly/ Agree Somewhat	All	Current CTE Parents	Prospective Parents	Current CTE Students	Prospective Students
<i>Finding a career that I feel/my child feels passionate about is important to me</i>	93%	94%	93%	92%	94%
<i>The more job experience I gain/my child gains increases chances of success</i>	88%	92%	85%	90%	89%
<i>It's important to me that I have/my child has a job that pays well</i>	87%	87%	82%	90%	91%
<i>Today's job market is much more competitive</i>	86%	91%	88%	86%	79%
<i>I wish I/my child could get more real world knowledge and skills during high school</i>	86%	90%	89%	83%	84%
<i>Getting a college degree is important</i>	85%	88%	84%	84%	85%
<i>I have/My child already has a specific career path in mind</i>	63%	82%	49%	76%	62%

Importantly, CTE parents and students have a clearer sense of urgency around the competitiveness of the job market: 86 percent of CTE agree today's job market is much more competitive compared to 79% of their peers. And, students involved in CTE are slightly more likely have a career path in mind (76 percent) than non-CTE students (62 percent).

Finally, not only is college viewed as important, a four-year degree or higher is the post-high school plan for most students, involved in CTE or not. Nearly eight out of 10 CTE students plan to attend college, including 62 percent who plan to attain a bachelor's degree or higher, which are incredibly consistent with prospective students' attainment goals. At the same time, CTE students are more likely to have a post-high school plan than non-CTE students, with **only two percent of CTE students responding that they "don't know" what they will do after high school, compared to eight percent of non-CTE students.**

### Prospective Parents and Students Are Attracted to the "Real World" Benefits of CTE

Prospective parents and students want to hear about the tangible outcomes from CTE programs. The opportunity to gain "real world" skills and benefits is a theme that is particularly compelling for all audiences surveyed. They appreciate information about learning real-world skills through internships and hands-on projects inside and outside the classroom, as well as how CTE can offer pathways into college and careers through college credits, internships, mentorships and networking opportunities. These are the types of experiences that fill a gap in education and make CTE appealing, given 86 percent of parents and students wish they had more chances to learn real-world knowledge and skills in high school.

In fact, when asked to select three elements from a list of facts about CTE programs that were the most important to them personally, "CTE allows students to come out of high school with a real world skill" was selected by 43 percent of prospective parents and students.

#### Key Words and Phrases to Use with Parents and Students

- "Real world skills"
- "Hands-on experiences"
- "Explore career options and what you are passionate about"
- "Fulfilling, rewarding careers"
- "Career" and "career-focused"
- "Extra advantage for both college and careers"
- "Leadership" and "confidence"
- "Enhanced high school experience"



Similarly, the notion that “CTE classes allow students to earn college credits while still in high school” was selected by 44 percent of prospective parents and students, fairly consistently across all demographics, with a slight bump among high income parents (48 percent), compared to just eight percent of high-income parents who considered the opportunity to earn certifications important.

Rounding out the top choices of prospective parents and students was “CTE programs have partnership with employers in their community...who may provide training, mentorship, opportunities for internships, networking and even entry-level jobs.” Thirty-four percent of prospective parents and students chose this as one of the three most important elements of CTE.

**One potentially surprising finding throughout the survey was the consistency of responses across race/ethnicity, education level, income level and geographic distribution.** For example, the fact that CTE allows students to gain real-world skills was equally popular across these subgroups and was selected as one of the three most important elements by every single sub-population surveyed. For a few groups – such as parents and students who are Black, Hispanic, and/or parents who live in urban settings – the fact that the graduation rate was higher among CTE students rose to the top as a key element of CTE.

### CTE Has an Awareness Challenge

The term “Career Technical Education” has been in use for almost two decades, but in many ways is still catching on as an option for parents and students. Just under half (47 percent) of prospective parents and students report having ever heard the term “Career Technical Education.” A slightly higher percentage of prospective parents and students are familiar with “career centers” (54 percent). On the flip side, 68 percent of prospective parents and students had heard the term “vocational education.”

When asked what they think of CTE based on a short description, 89 percent of prospective parents and students cite a favorable impression, signaling support and interest in CTE. However, when prompted a number of basic, logistical questions around how CTE programs work are raised – such as *When are classes available and for whom? Where are they offered? How do they fit with other required courses? Do they cost money for students?* This suggests clear, informative and proactive communications is critical.

### CTE Needs Champions and Messengers

Given the dual challenges of outdated perceptions and low awareness, having compelling and trusted messengers to share information about CTE is paramount.

In particular, prospective parents and students want to understand how CTE works and what it looks like within their schools and communities. Given that, messaging can only go so far. Parents and students trust and want to hear from those closest to CTE programs – counselors, educators and CTE students – about their experiences with CTE and the overall benefits it may have for them and their students.

As far as how they get information, parents and students prefer a mix of in person and online contact. Forty-eight percent of prospective parents and students say they

Who Trust for Information on CTE?	Prospective Parents	Prospective Students
Guidance Counselor	82%	84%
Teacher(s)	79%	83%
CTE students or alumni	77%	77%
College partners	75%	73%
Principal	71%	72%
Employer partners	69%	67%
Superintendent	59%	58%
State Department of Education	59%	59%

want to get information on CTE directly from counselors, 44 percent through an open house at a local CTE school or program, 46 percent through their school or district's website, 40 percent at a school-based career fair and 40 percent through a direct mailing. Only 21 percent said they would use social media to get information on CTE and 23 percent would find a direct email from a school or principal useful.

### Quality Must Still Be the Top Priority

There is no question that the results of this survey are exciting for CTE advocates and leaders, with interest high across the board for all that CTE has to offer students. CTE can be a solution for more students to find success. Yet, it is critical to remember that no message or talking point can overcome a program that is not meeting up to its promise to prepare learners for success in college and careers.

At the heart of a successful CTE communications strategy is to have only the highest quality programs in place – and inspire involved parents, students, partners and educators to advocate for them. It is only through a shared commitment to quality, paired with effective communications, that will ensure more students have the opportunity to realize the true value and promise of Career Technical Education.

### Methodology

This survey was administered among two main audiences (1) national online survey of 971 US adults (over age 18) with oversamples of: 252 current CTE parents (9-12<sup>th</sup> graders) and 506 parents of prospective students (6-11<sup>th</sup> graders), and (2) online survey among 776 students including 252 current CTE students (9-12<sup>th</sup> graders or recent graduates) and 514 prospective students (6-11<sup>th</sup> graders). Prospective parents and students were those who expressed interest (somewhat to extremely interested) in CTE during screening. The online survey was fielded March 2–15, 2017.

For this online survey, Edge Research engaged with a reputable, large opt-in panel in which survey exposure is monitored and limited. A non-probability sample to recruit participants was obtained from the online panel provider. Quota sampling was employed to ensure that US adult sample was representative of the U.S. Census on gender, age, race, ethnicity, and region. While the findings are representative, they are not generalizable to all adult Americans.

### Acknowledgements

***The Value and Promise of Career Technical Education*** would not have been possible without the support of the Siemens Foundation. We would also like to thank Edge Research and the Fratelli Group for their input and insights.

### About Advance CTE

Advance CTE: State Leaders Connecting Learning to Work is the longest-standing national non-profit that represents State Directors and state leaders responsible for secondary, postsecondary and adult Career Technical Education (CTE) across all 50 states and U.S. territories. Established in 1920, Advance CTE supports visionary state leadership, cultivates best practices and speaks with a collective voice on national policy to promote academic and technical excellence that ensures a career-ready workforce. For more resources related to ***The Value and Promise of Career Technical Education***, see <https://careertech.org/recruitmentstrategies>

# **STATE**

## **CTE Information**

## **C. Texas CTE Fact Sheet**



### Career and Technical Education in Texas

- At the secondary level, CTE is delivered through comprehensive high schools; magnet schools, which offer specialized curriculum that fully integrates core academic instruction with specific career training; career academies within comprehensive high schools, which are small, personalized learning communities that contextualize academic instruction with specific career training; and stand-alone career academies, which are career academies that function independent of a comprehensive high school.
- Postsecondary CTE is delivered through 57 community, state and technical colleges, with 79 campuses delivering CTE, including 10 Texas State Technical College campuses.
- Learn more at [CTAT.org](http://CTAT.org).

In school year 2014-2015, Texas served **1,210,587** high school students and **245,653** postsecondary students.

In Fiscal Year 2015, Texas received **\$91,909,431** in Perkins funding—about \$100,000 less than in 2014 and \$9.2 million less than in 2010.

### Exemplary CTE Programs in Texas

- The [Greater Waco Advanced Manufacturing Academy \(GWAMA\)](#) in Texas prepares 11th- and 12th-graders with academic, workplace and technical skills in the fields of welding, precision metal manufacturing, and robotics and electronics. Students attend the academy in the afternoon and participate in activities such as safety training, soft skills development, SkillsUSA, internships and mentorships. GWAMA was developed in conjunction with the Waco Business League, Greater Waco Chamber of Commerce, Texas State Technical College and area businesses, including Caterpillar, Time Manufacturing and Central Texas Iron Works, among many others. *(Information from the GWAMA website)*
- The [Texas Success Center](#) is at the center of the state's efforts to improve postsecondary student attainment, with a particular focus on using research and promising practices to support Texas community colleges. The Center was established at the Texas Association of Community Colleges through its 501(c)3 affiliate, the Texas Community College Education Initiative. Recently the Center launched the Texas Pathways Project, a statewide initiative to support community colleges in building and implementing structured academic and career pathways for all students. The Texas Pathways Project is evidence-based and modeled on the American Association of Community Colleges' pathways project. The project goal is to increase postsecondary credential attainment for young Texans to 60 percent by 2030. *(Information from the Center website)*

In school year 2014-2015:

- **97** percent of Texas CTE high school students graduated
- **93** percent met performance goals for mathematics
- **96** percent met performance goals for reading/language arts
- **90** percent of Texas CTE postsecondary students met performance goals for technical skills

## **D. Texas CTE Profile**

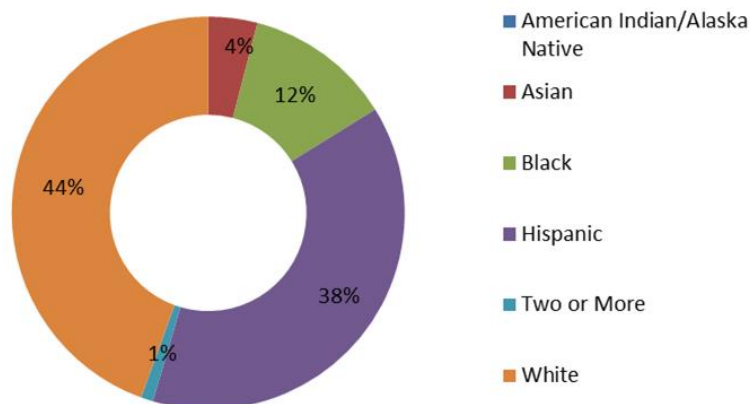
# TEXAS

## Career Technical Education (CTE) Profile



**NAPE**  
National Alliance for  
Partnerships in Equity  
Education Foundation

### General Population (2014)<sup>1</sup>



### Fast Facts

Texas is expected to become a majority-minority state in 2019.<sup>2</sup>

38% of working families are low income.<sup>3</sup>

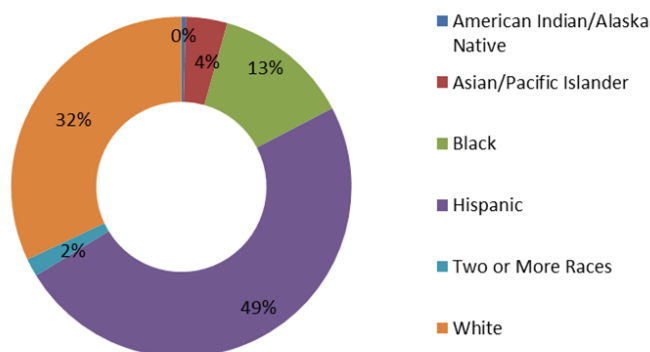
49% of minority working families are low income.<sup>3</sup>

35% of low-income working families are headed by a woman.<sup>4</sup>

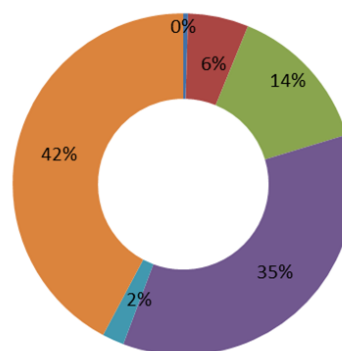
Median Hourly Wages <sup>5</sup>	Male	Female
White	\$24	\$19
Black	\$17	\$16
Latino	\$14	\$12
Asian	\$25	\$20
Native American	\$20	\$17

### General Student Population

*Secondary Enrollment, FY 2014<sup>6</sup>*



*4-Year Postsecondary Enrollment, Fall 2013<sup>7</sup>*



### Career and Technical Education

At the secondary level, CTE is delivered through comprehensive high schools, magnet schools, career academies within comprehensive high schools, and stand-alone career academies, which are career academies that function independently of a comprehensive high school. At the postsecondary level, CTE is delivered through 57 community, state, and technical colleges on 79 campuses, including 4 Texas State Technical College campuses.<sup>8</sup>

#### State CTE Contact

*Diane Salazar*, State Director for Career and Technical Education Curriculum Division, TX Education Agency  
1701 N. Congress Ave., Austin, TX 78701, (512) 463-9581, [diane.salazar@tea.texas.gov](mailto:diane.salazar@tea.texas.gov)

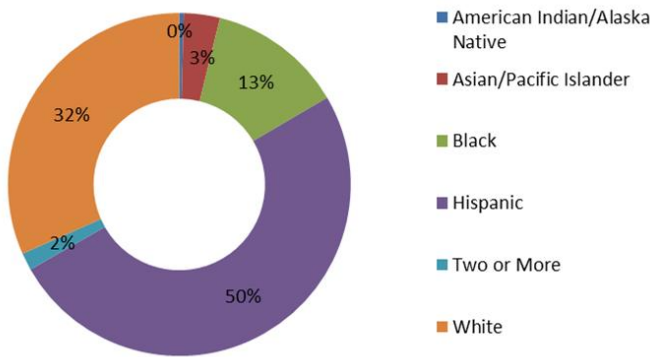
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**National Alliance for Partnerships in Equity**

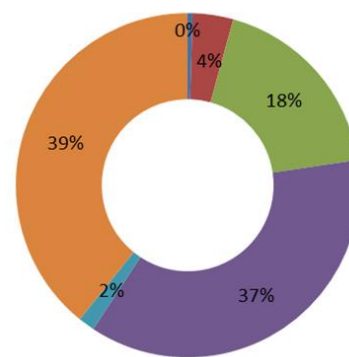
91 Newport Pike, Suite 302, Gap, PA 17527 | 717.407.5118 | [www.napequity.org](http://www.napequity.org)

In FY 2014, 54% of secondary and 44% of postsecondary students enrolled in CTE were economically disadvantaged.<sup>9</sup>

*Secondary CTE Enrollment, FY 2014<sup>9</sup>*



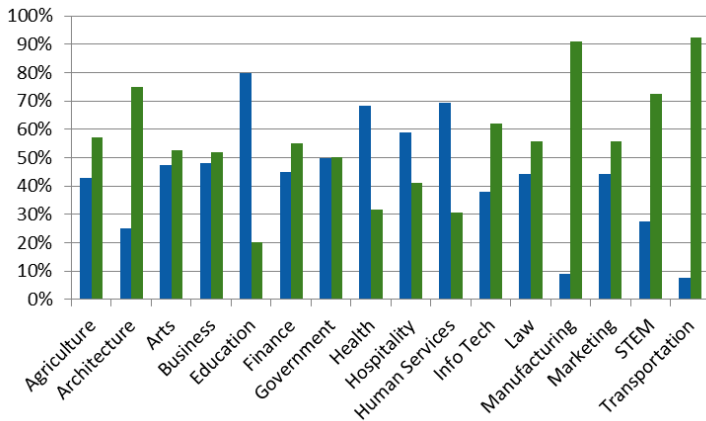
*Postsecondary CTE Enrollment, FY 2014<sup>9</sup>*



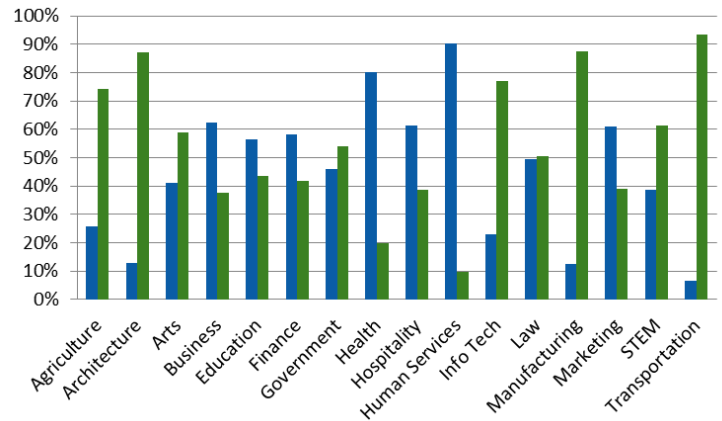
## Career Clusters

Seven of the 16 career clusters in CTE lead to many high-skill, high-wage, and high-demand STEM related careers. These include: Agriculture, Architecture, Health, Information Technology, Manufacturing, STEM, and Transportation, Distribution, and Logistics. These career clusters contain programs that prepare students for nontraditional careers.

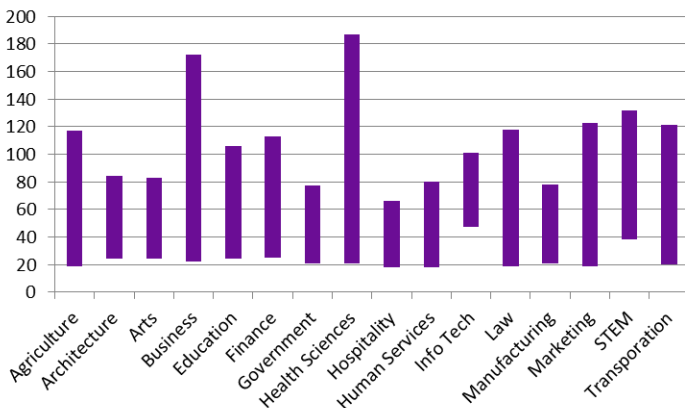
*Secondary Enrollment, FY 2014<sup>9</sup>*  
(blue = female, green = male)



*Postsecondary Enrollment, FY 2014<sup>9</sup>*  
(blue = female, green = male)



*Median Salary Range (national, \$000)<sup>10</sup>*



## Fact Sheet Sources

- <sup>1</sup> <http://www.census.gov/quickfacts/table/RHI225214/01>
- <sup>2</sup> <https://cdn.americanprogress.org/wp-content/uploads/2015/02/SOC-report1.pdf>
- <sup>3</sup> <http://www.workingpoorfamilies.org/indicators/>
- <sup>4</sup> [http://www.workingpoorfamilies.org/wp-content/uploads/2014/02/WFPF\\_Low-Income-Working-Mothers-Report\\_021214.pdf](http://www.workingpoorfamilies.org/wp-content/uploads/2014/02/WFPF_Low-Income-Working-Mothers-Report_021214.pdf)
- <sup>5</sup> <http://nationalequityatlas.org/data-summaries>
- <sup>6</sup> <http://nces.ed.gov/ccd/elsi/tableGenerator.aspx>
- <sup>7</sup> [http://nces.ed.gov/programs/digest/d14/tables/dt14\\_306.60.asp](http://nces.ed.gov/programs/digest/d14/tables/dt14_306.60.asp)
- <sup>8</sup> <https://www.acteonline.org/stateprofiles/>
- <sup>9</sup> <https://perkins.ed.gov/pims/DataExplorer> (race not available for clusters)
- <sup>10</sup> <http://www.bls.gov/careeroutlook/2015/article/career-clusters.htm>

# **DISTRICT**

## **CTE Information**

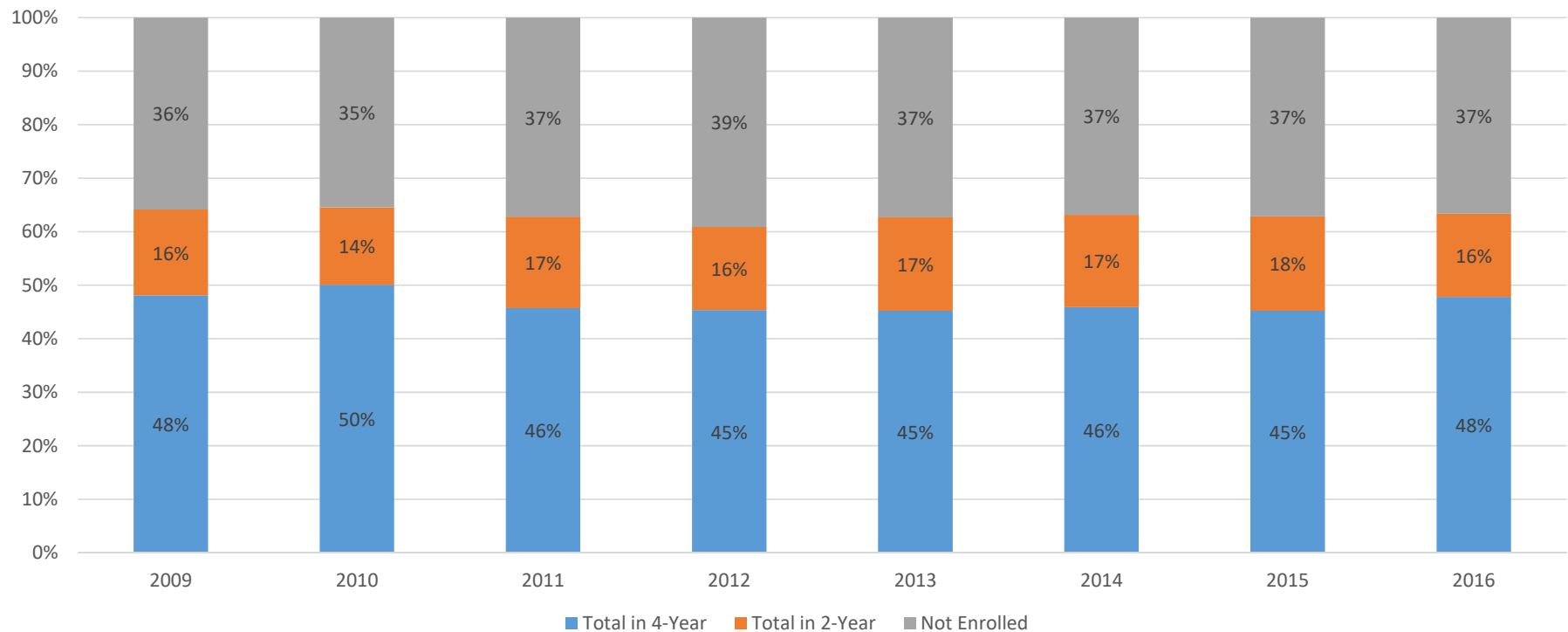
## **E. T-2-4 Data**

# Higher Education Enrollment Data

## T-2-4 Data



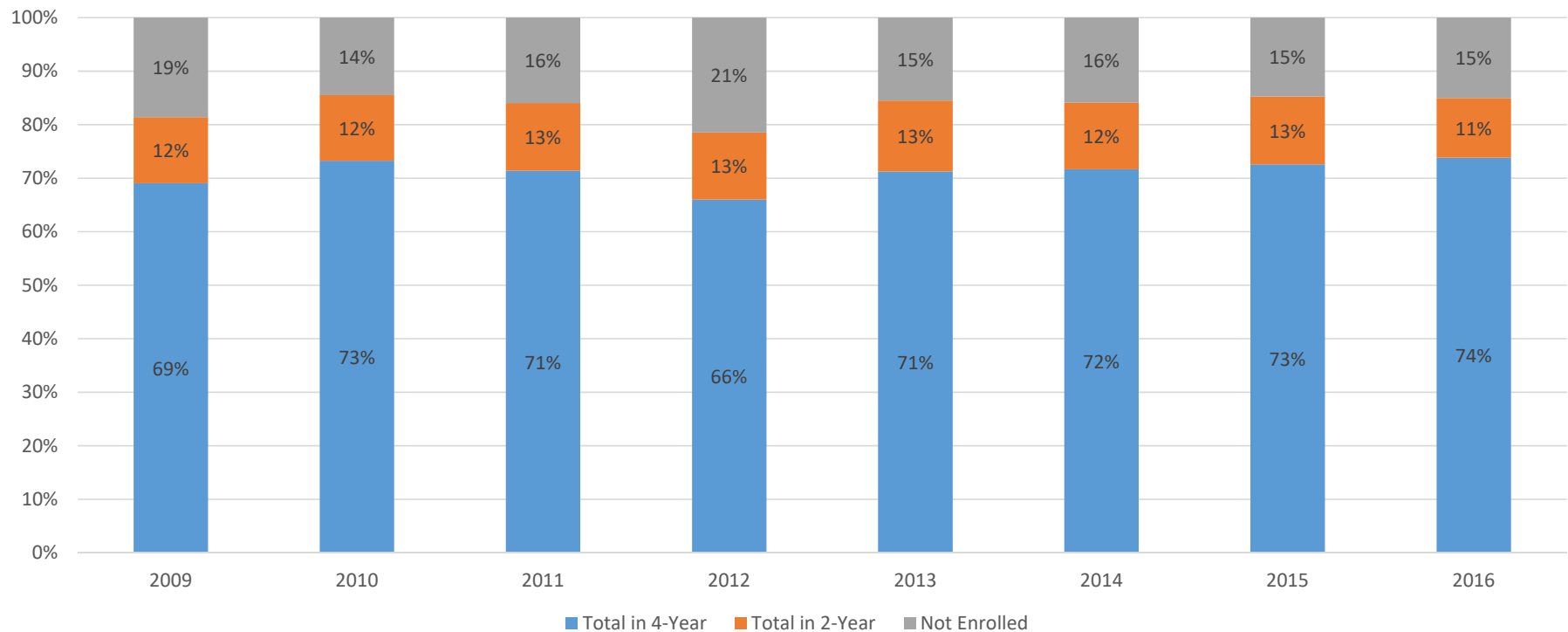
### Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: SBISD August 2017 (1 year out of high school)





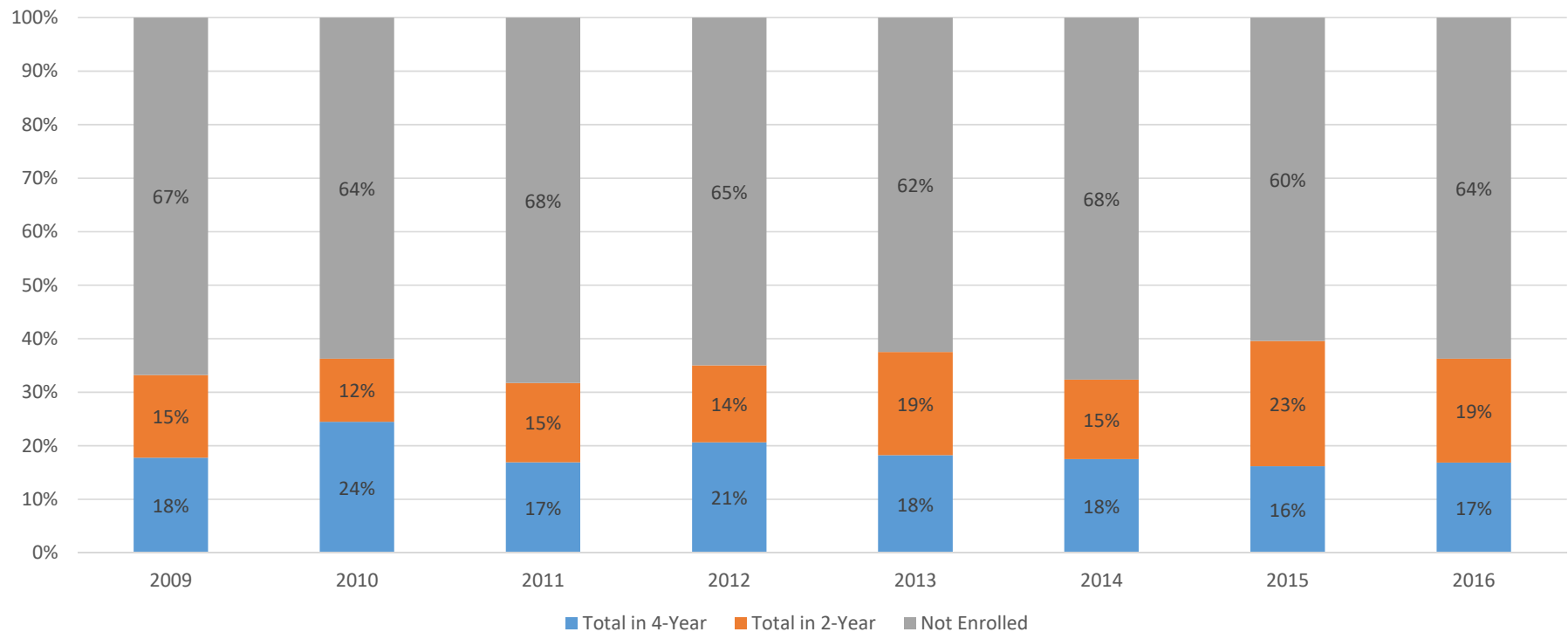
## T-2-4 Data

Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: MHS August 2017  
(1 year out of high school)



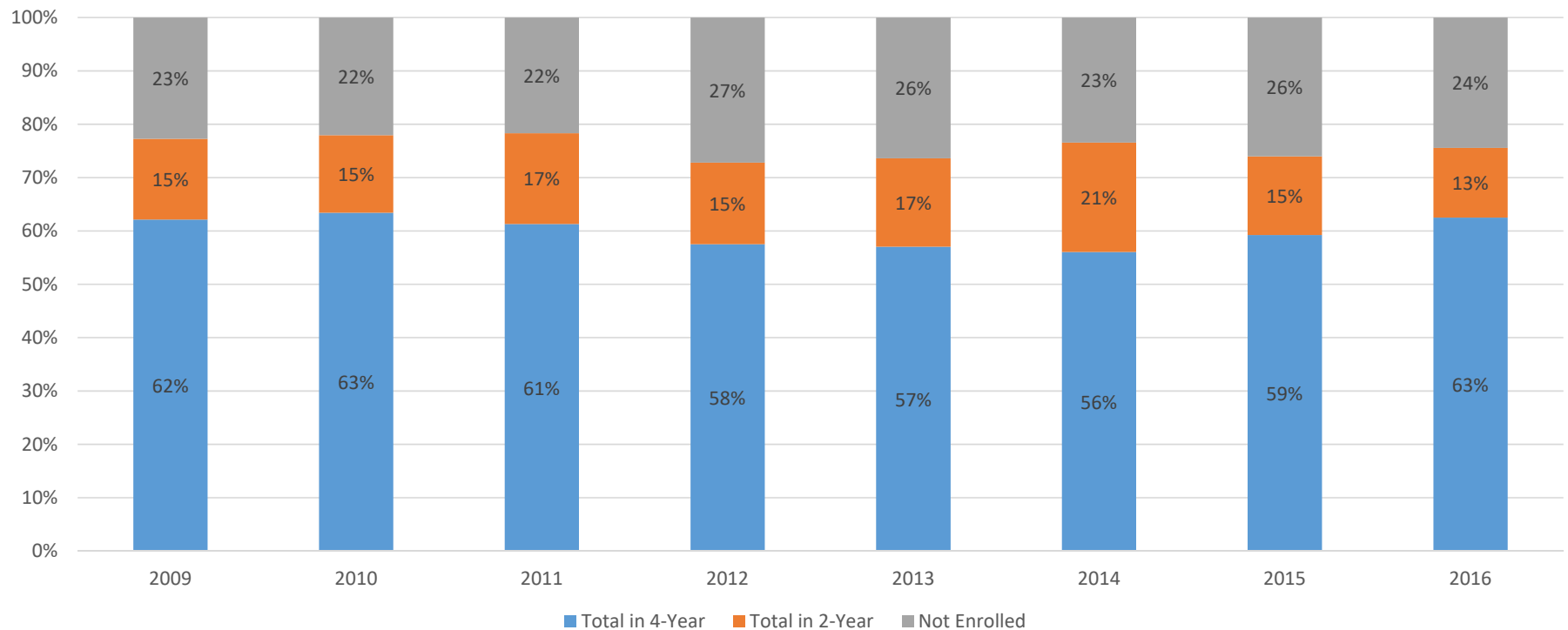
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Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: NHS August 2017  
(1 year out of high school)



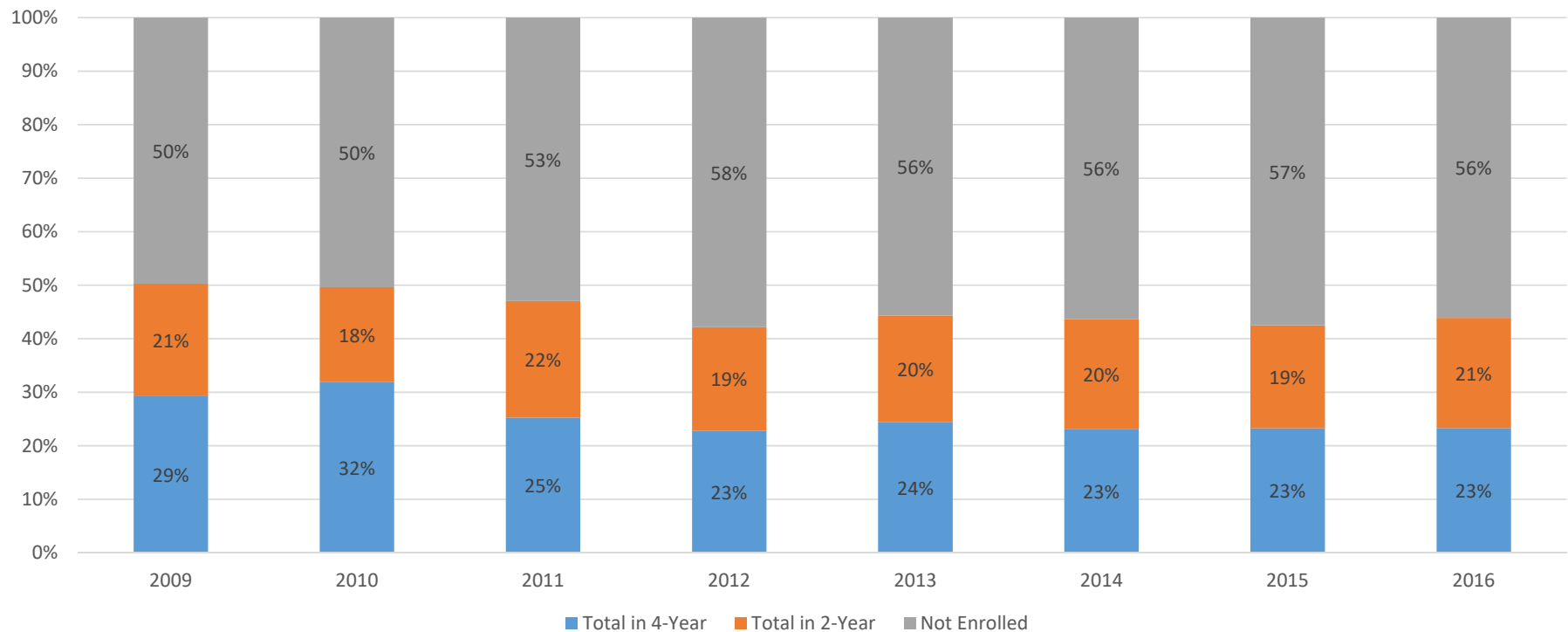
### T-2-4 Data

Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: SHS August 2017  
(1 year out of high school)



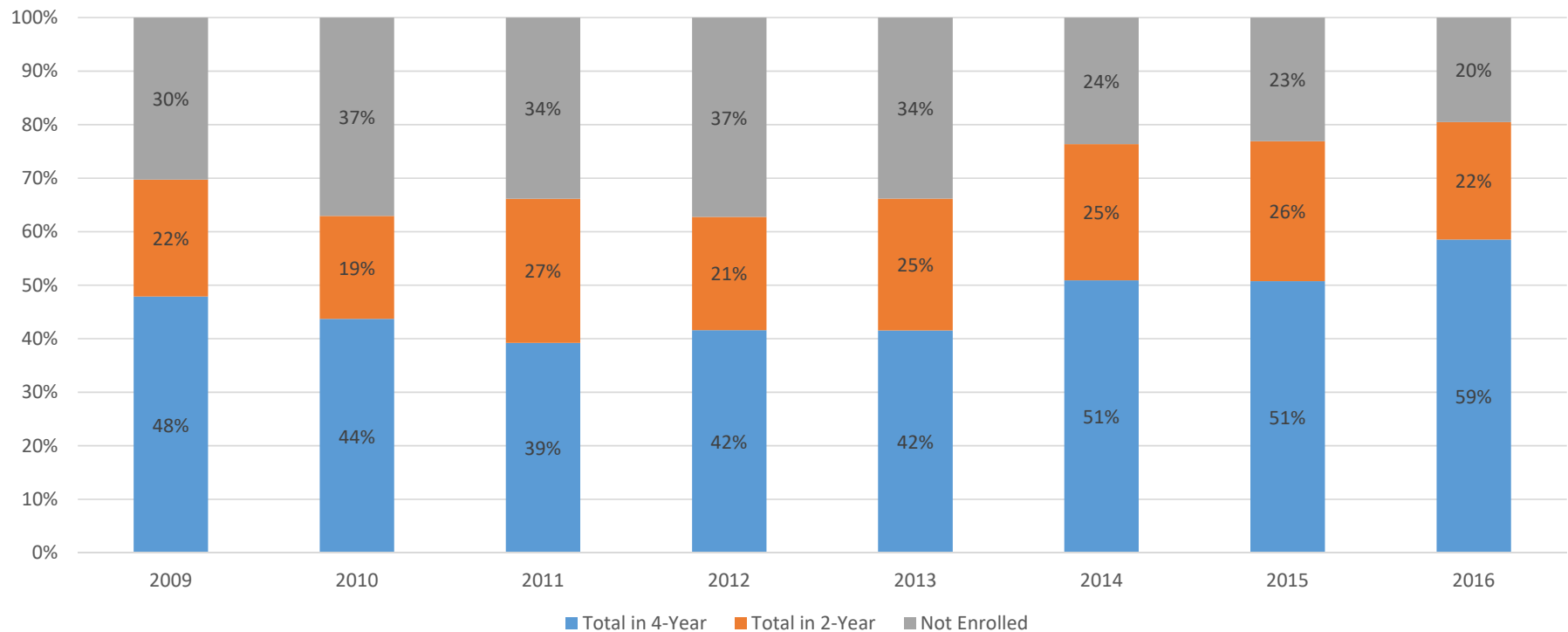
## T-2-4 Data

Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: SWHS August 2017  
(1 year out of high school)



## T-2-4 Data

Percentage of Students Enrolled in College the Fall Immediately Following Graduation by Institution Level: WAIS August 2017  
(1 year out of high school)



# Higher Education Completion Data

(SBISD graduates 2009 to 2011)

## GLOSSARY OF TERMS

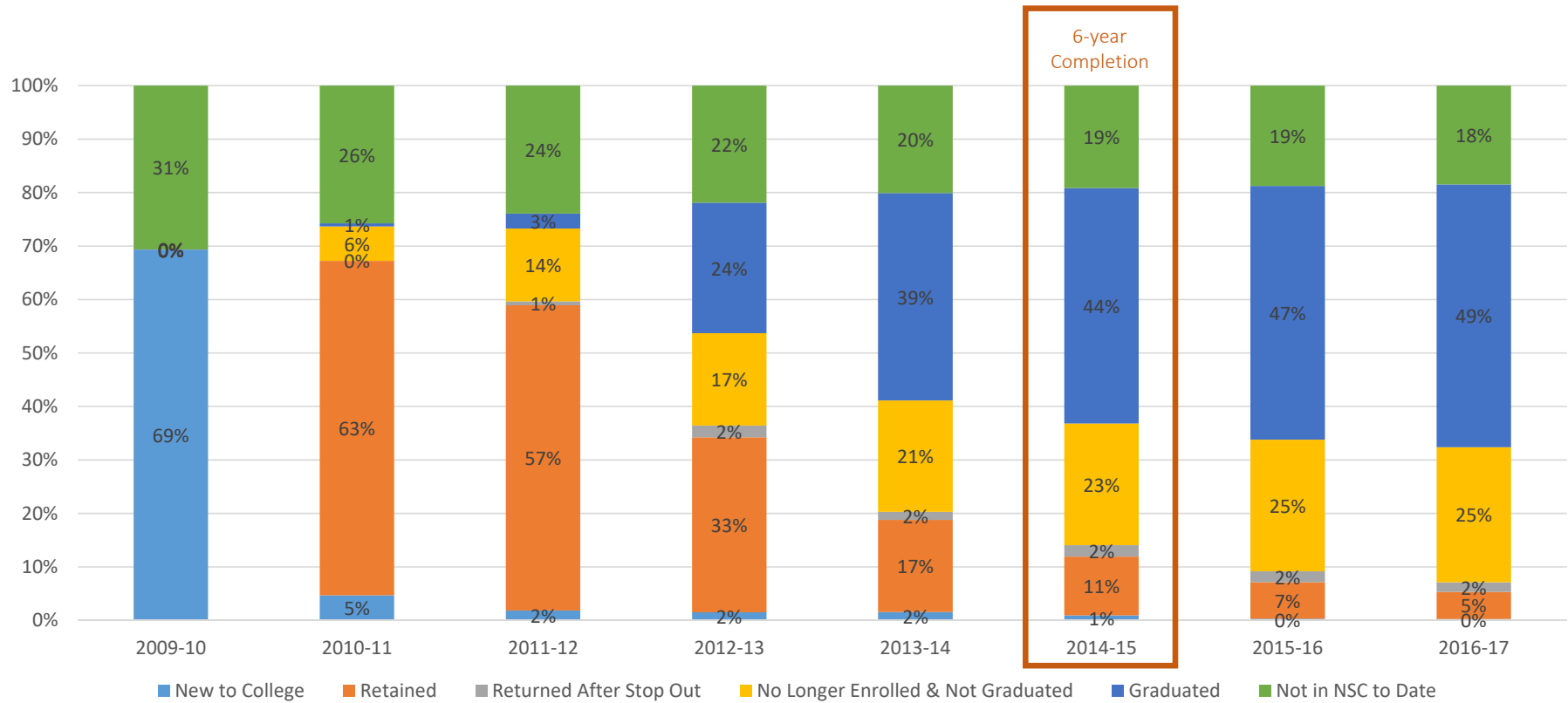
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- **Graduated:** student who graduated from a 2- or 4-year college. If a child graduated from both a 2-year and 4-year college within the window, they count only once.
- **Returned After Stop Out:** student who stopped attending college for at least a semester and returned
- **New to College:** student who enrolled for the first time
- **No Longer Enrolled & Not Graduated:** student who was enrolled in a 2-year or 4-year degree program but no longer attends and did not graduate
- **Retained:** student who remains in a 2-year or 4-year degree program after enrolling
- **Not in NSC to Date:** student who has never enrolled in a 2-year or 4-year degree program

## T-2-4 Data



### Percent of Class 2009 Postsecondary Enrollment and Progress (8 years out of high school)

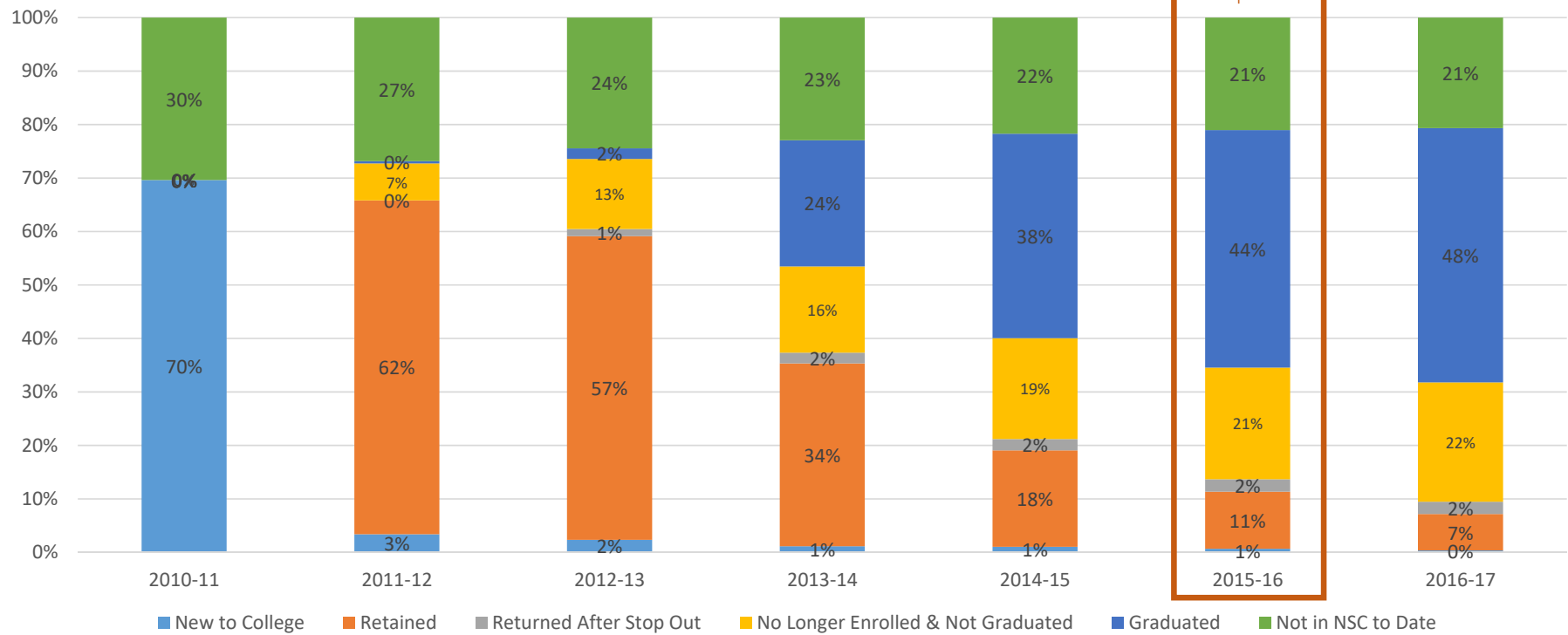




## T-2-4 Data



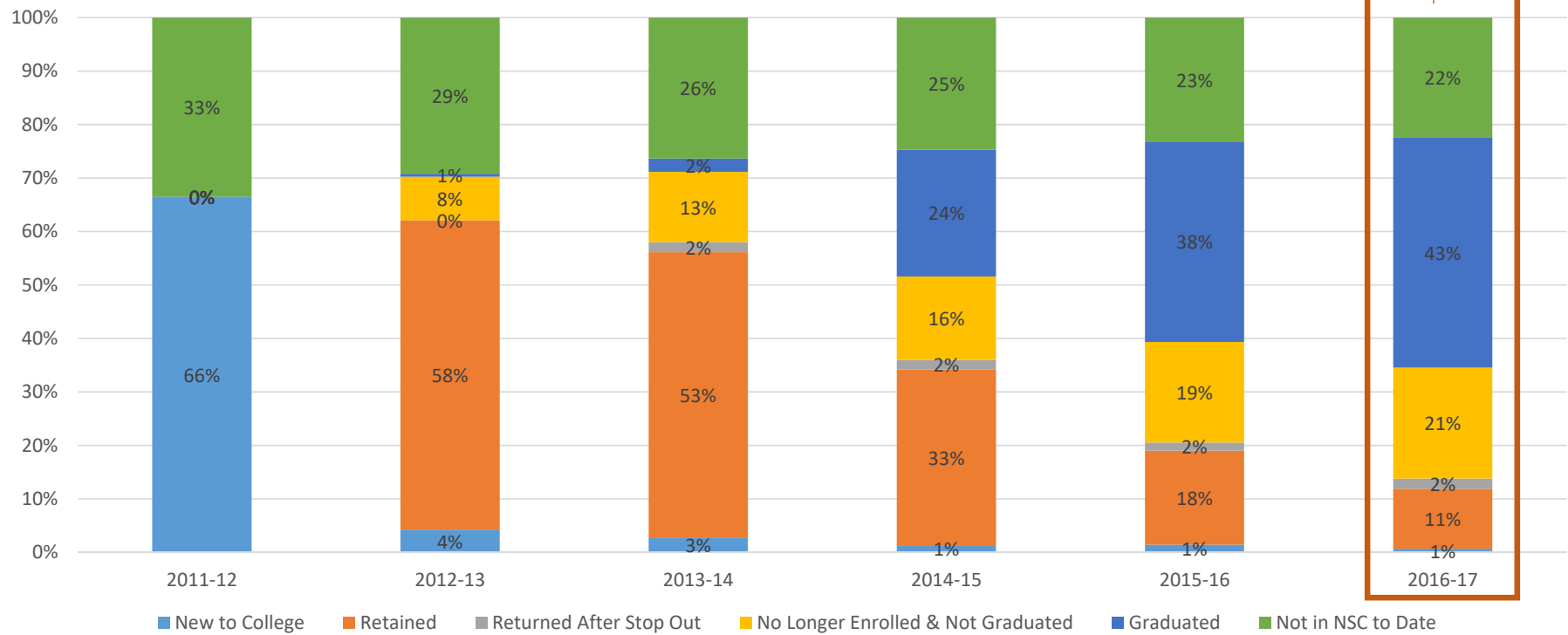
### Percent of Class 2010 Postsecondary Enrollment and Progress (7 years out of high school)



## T-2-4 Data



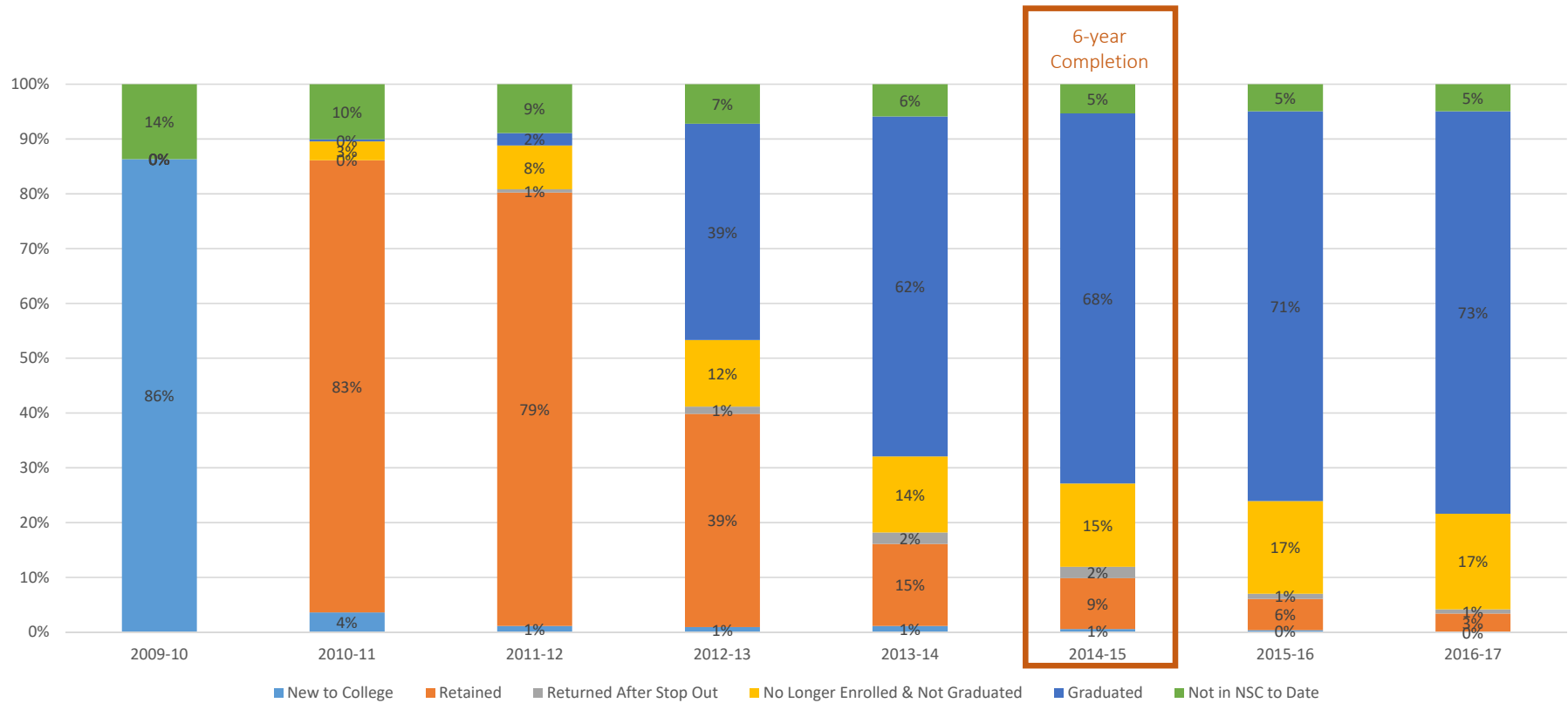
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## T-2-4 Data



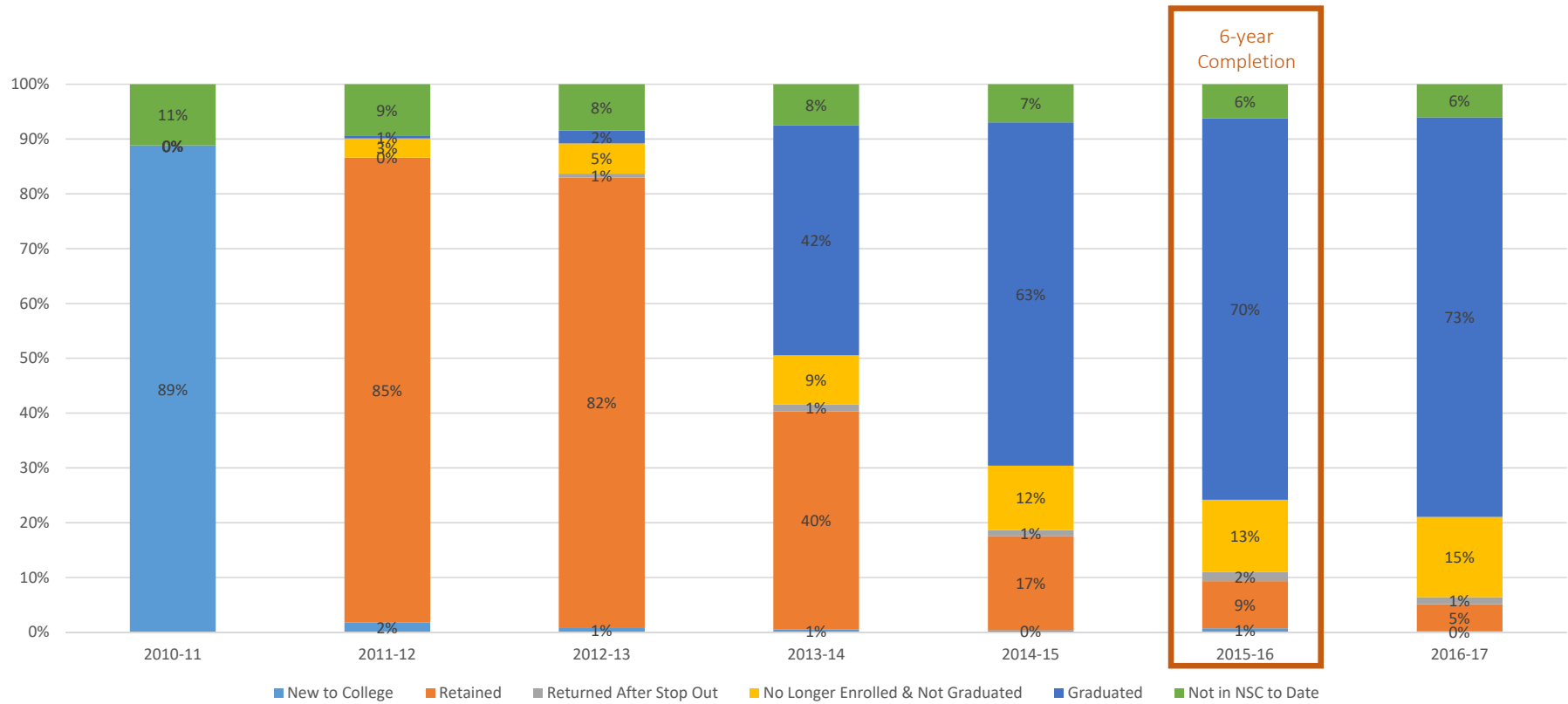
### Percent of Class 2009 Postsecondary Enrollment and Progress (8 years out of high school)



## T-2-4 Data



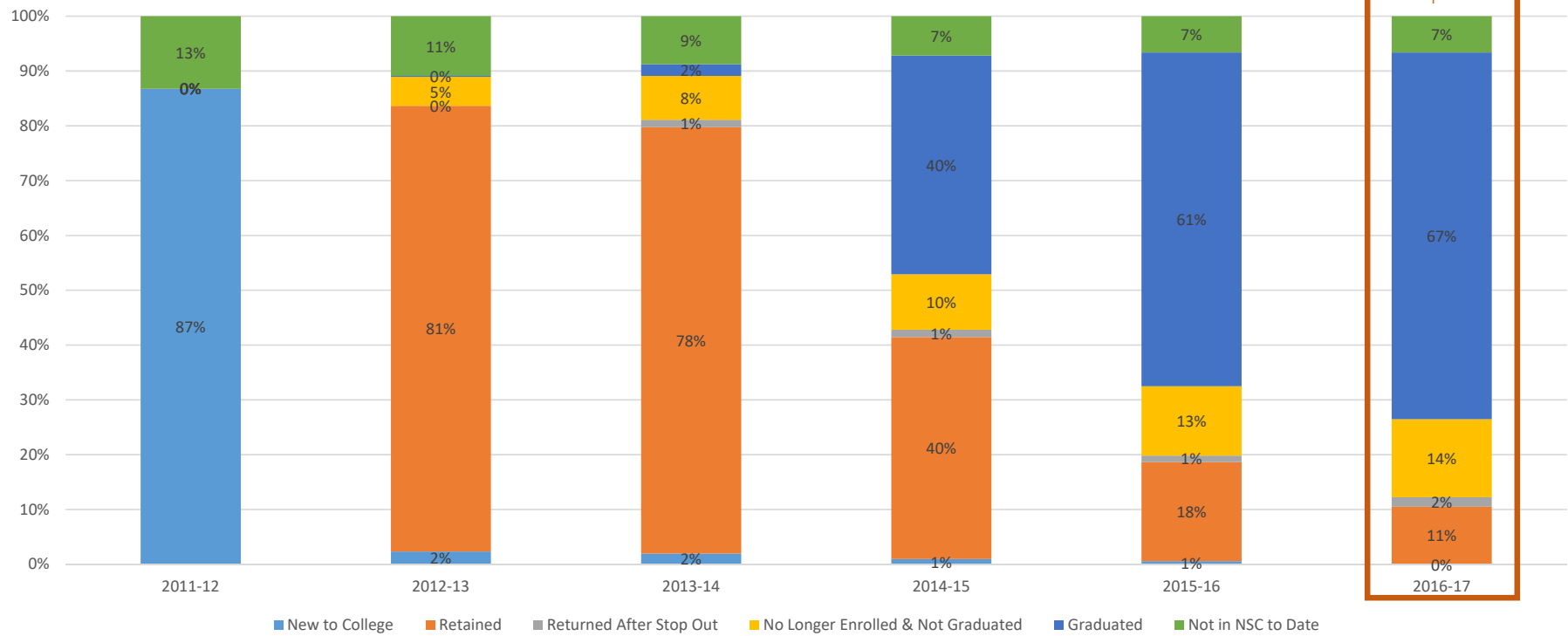
### Percent of Class 2010 Postsecondary Enrollment and Progress (7 years out of high school)



## T-2-4 Data



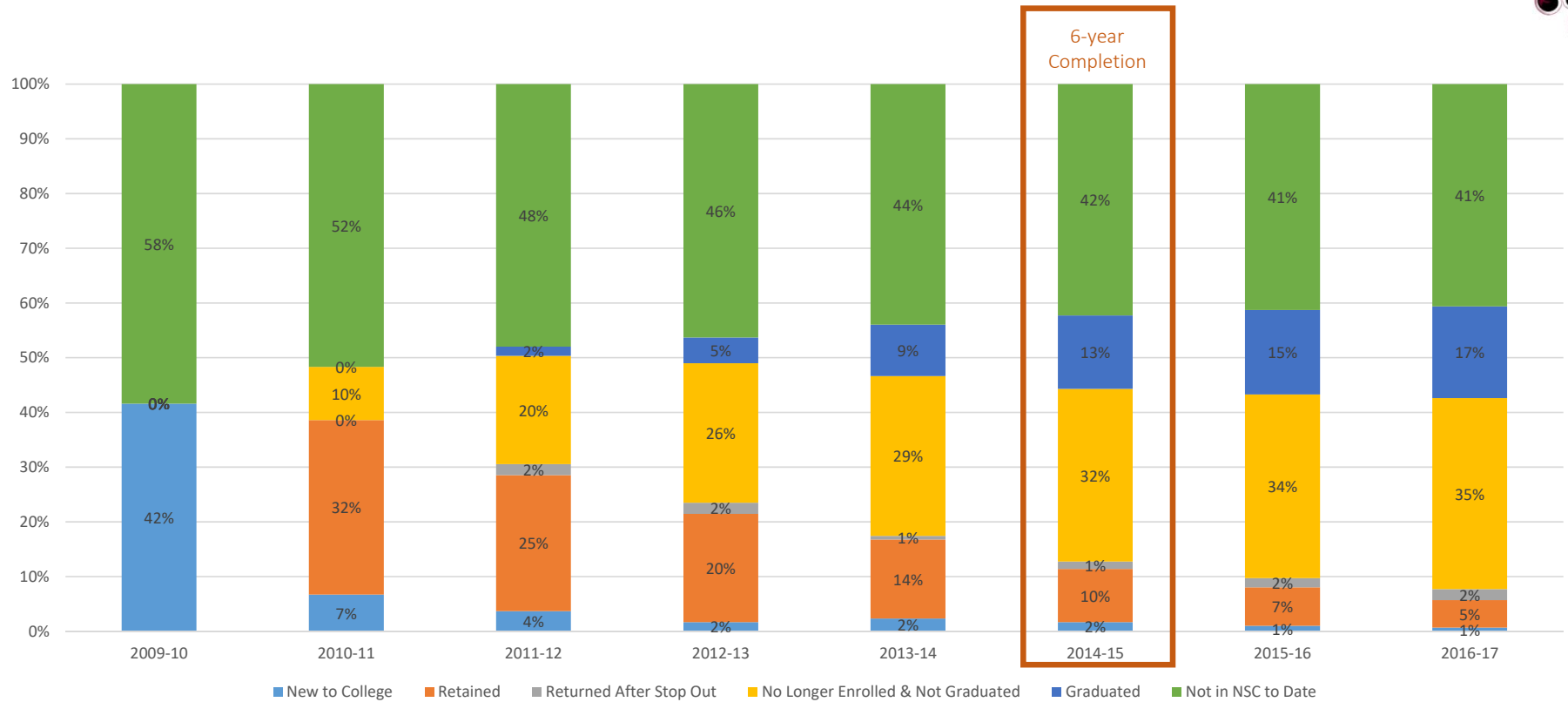
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## T-2-4 Data



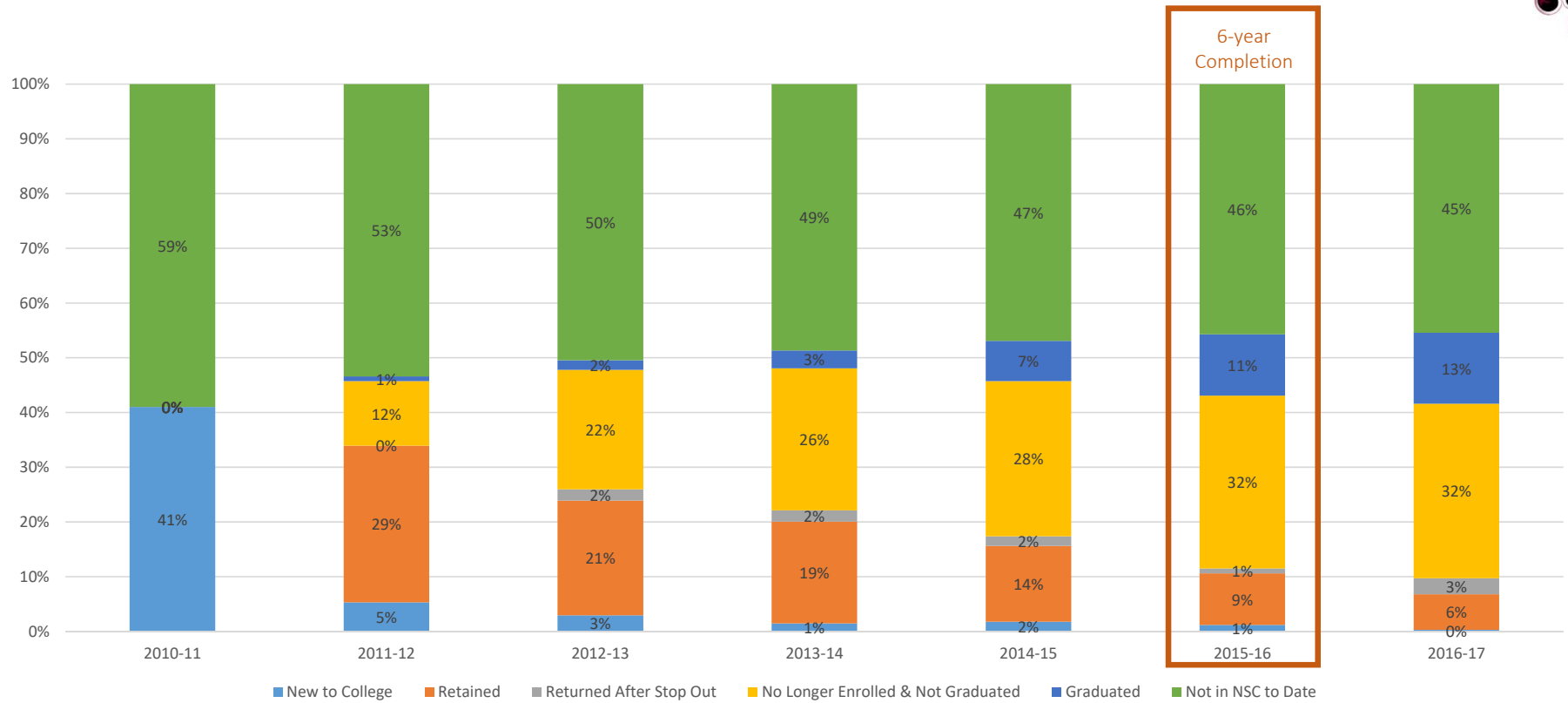
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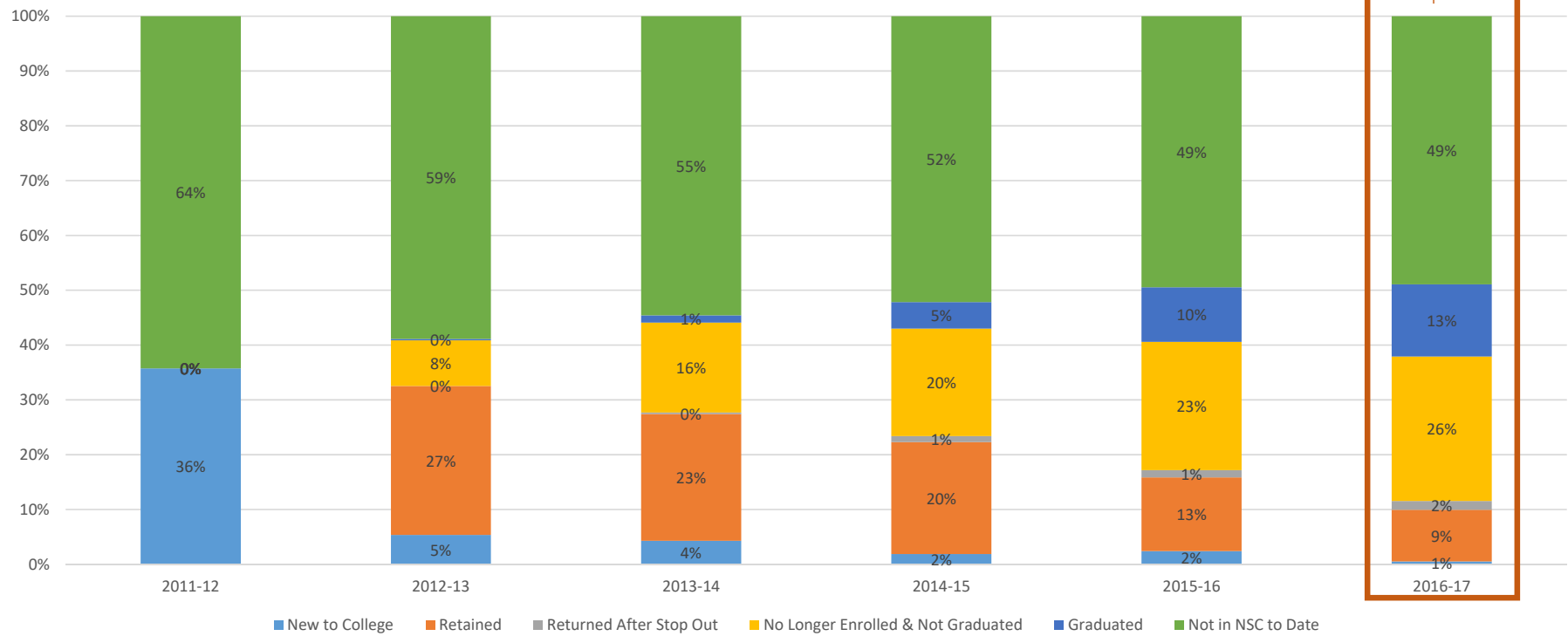
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## T-2-4 Data



### Percent of Class 2011 Postsecondary Enrollment and Progress (6 years out of high school)

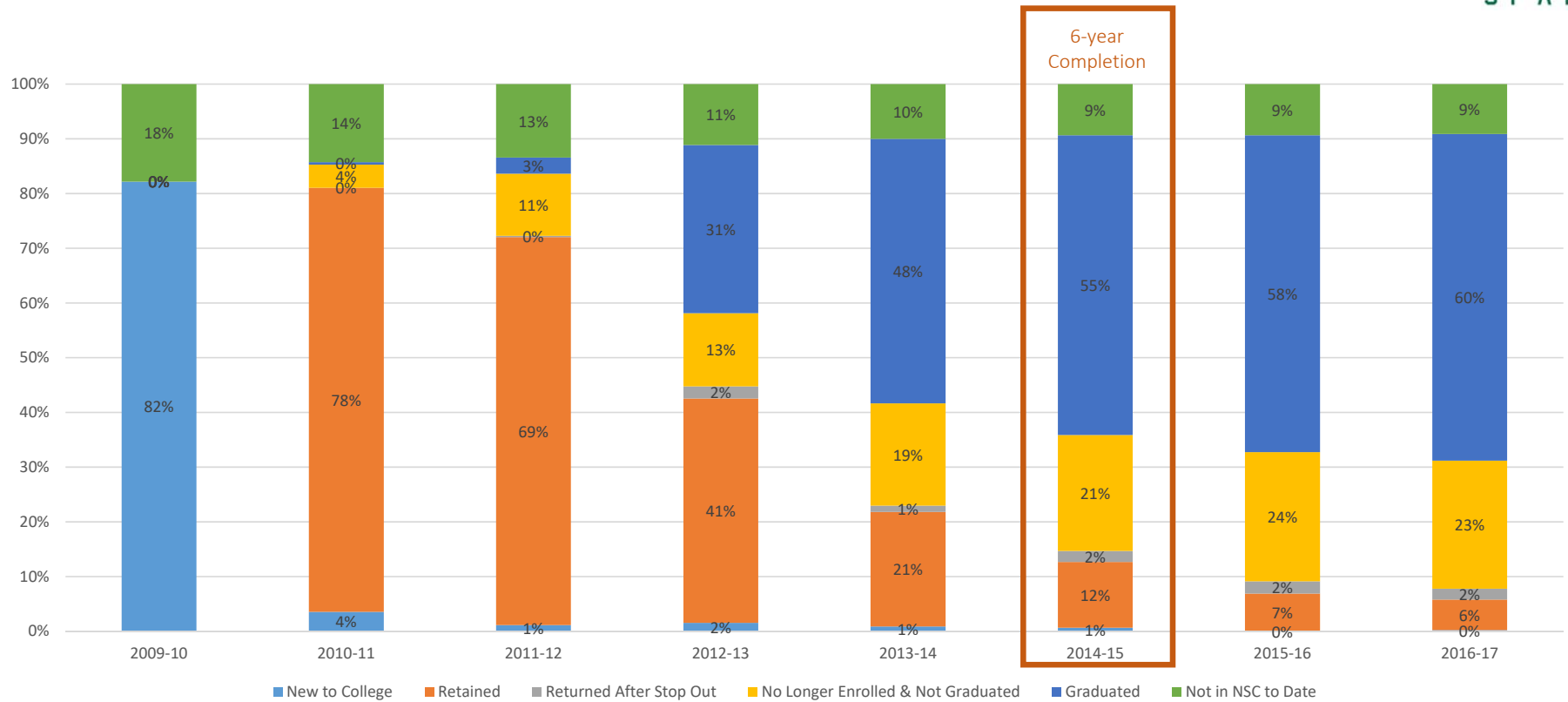




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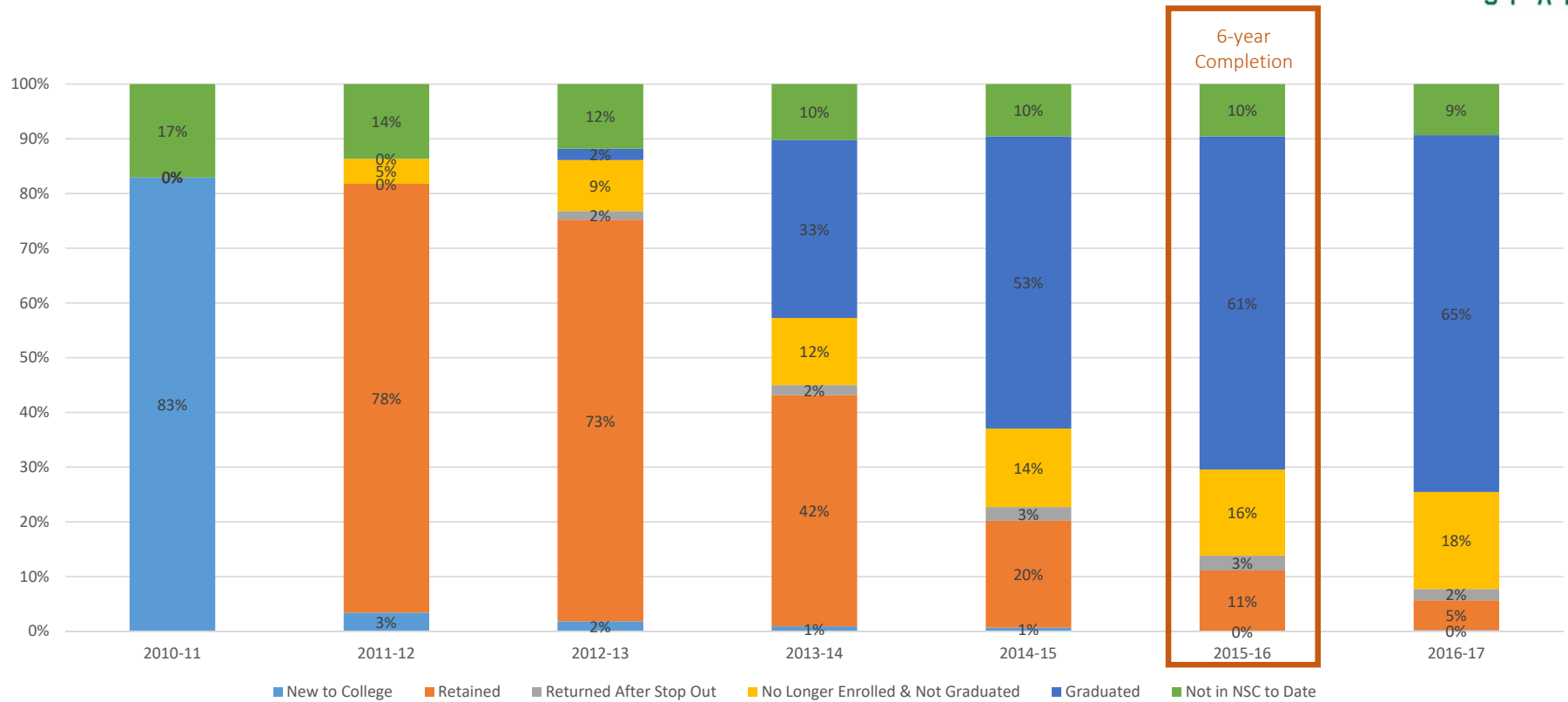
### Percent of Class 2009 Postsecondary Enrollment and Progress (8 years out of high school)



## T-2-4 Data

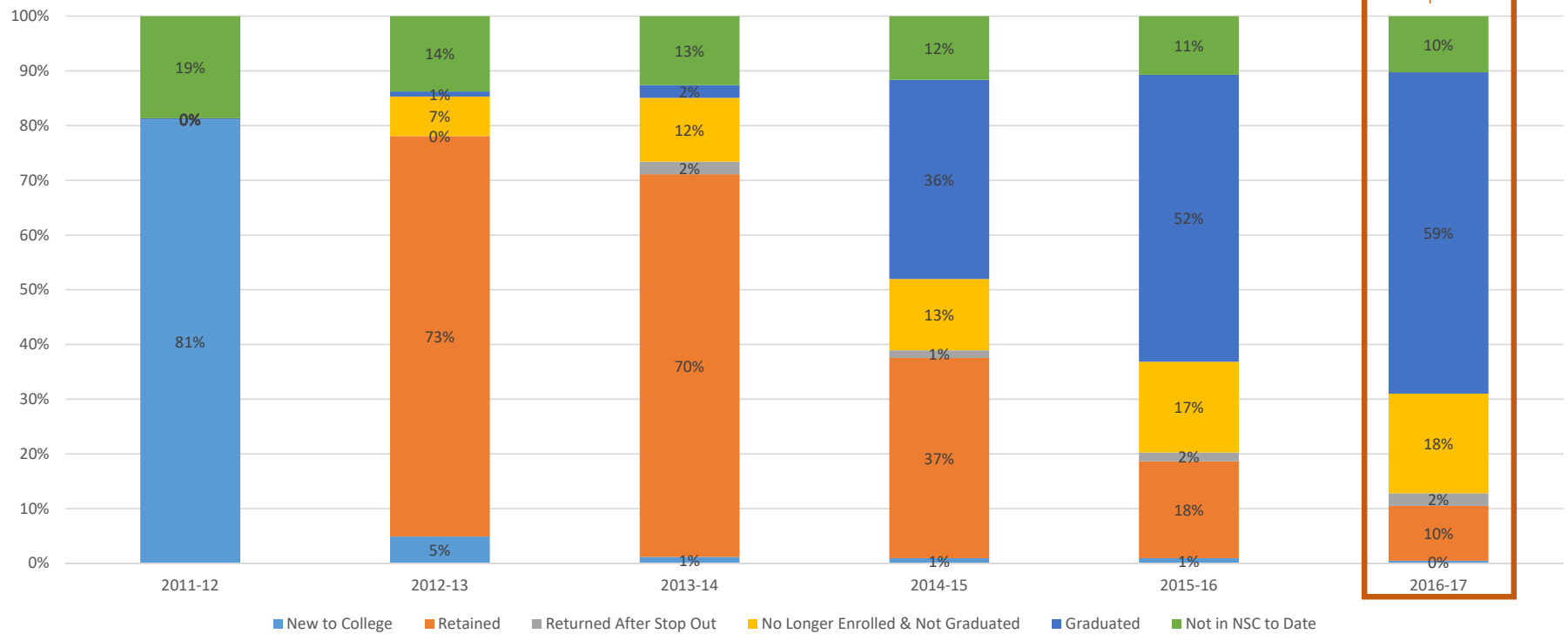


### Percent of Class 2010 Postsecondary Enrollment and Progress (7 years out of high school)



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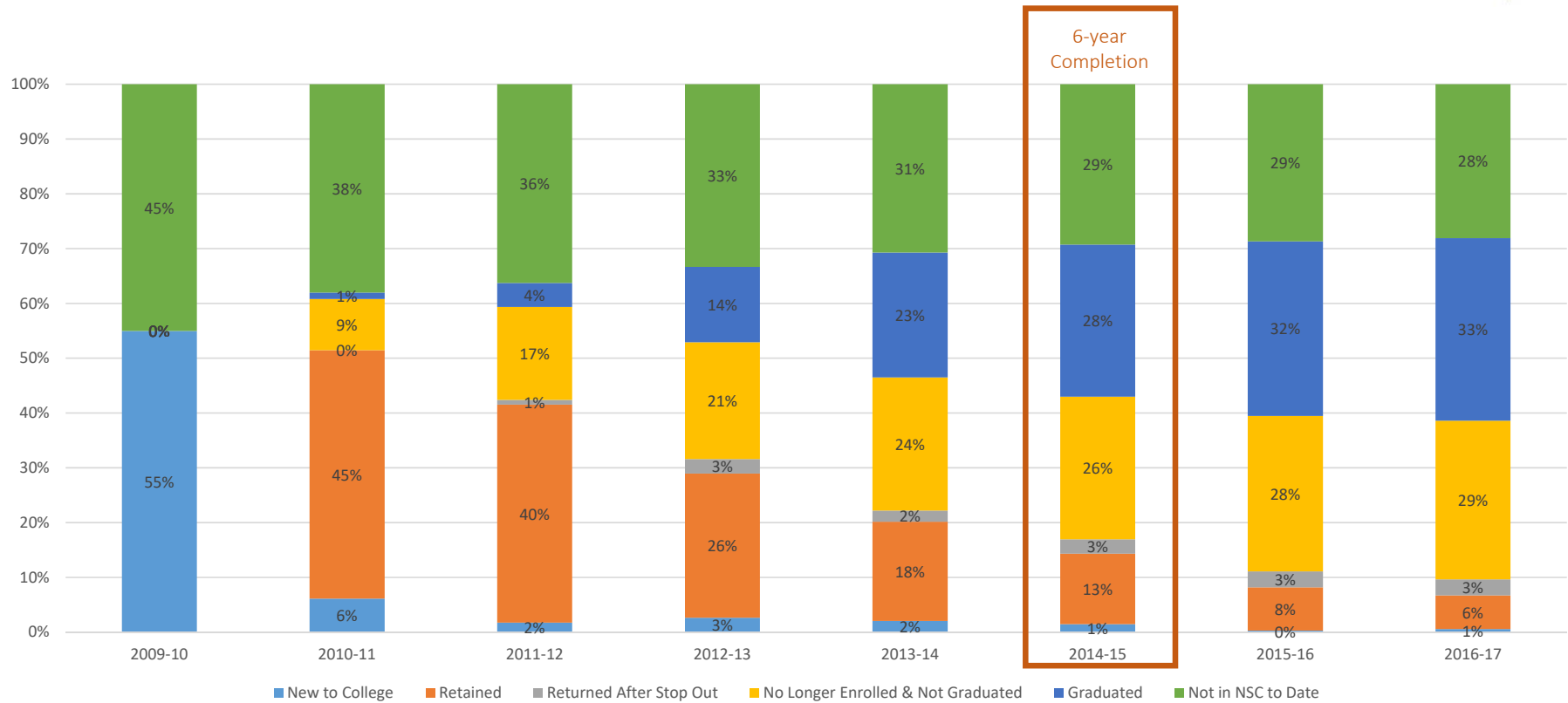
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## T-2-4 Data



### Percent of Class 2009 Postsecondary Enrollment and Progress (8 years out of high school)



## T-2-4 Data



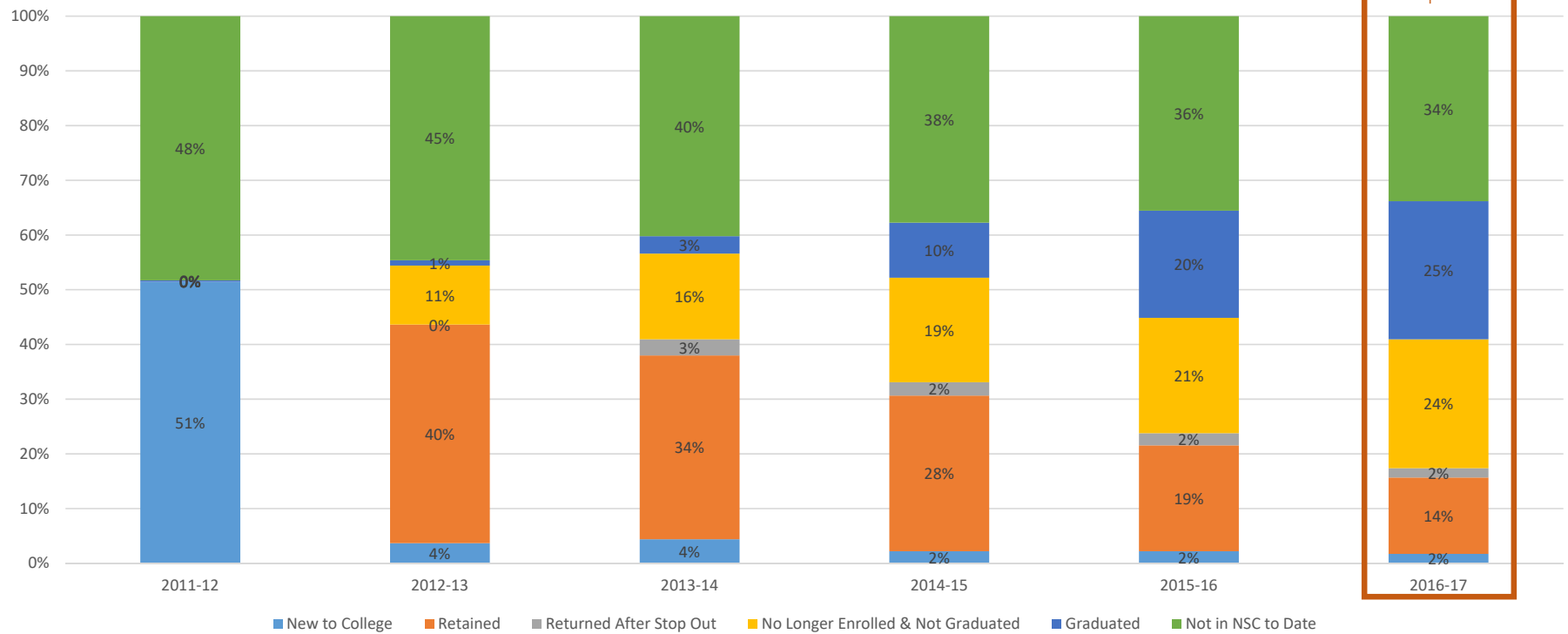
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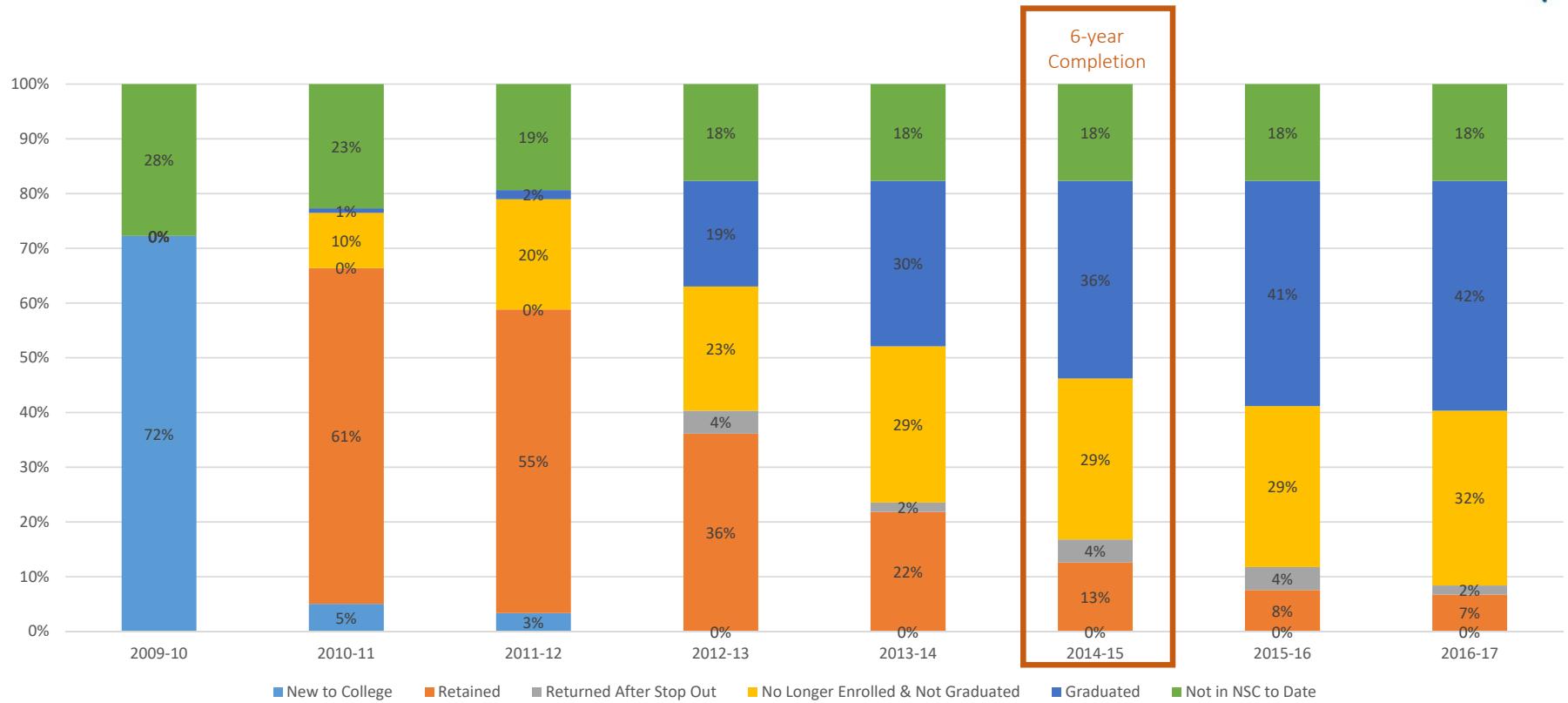
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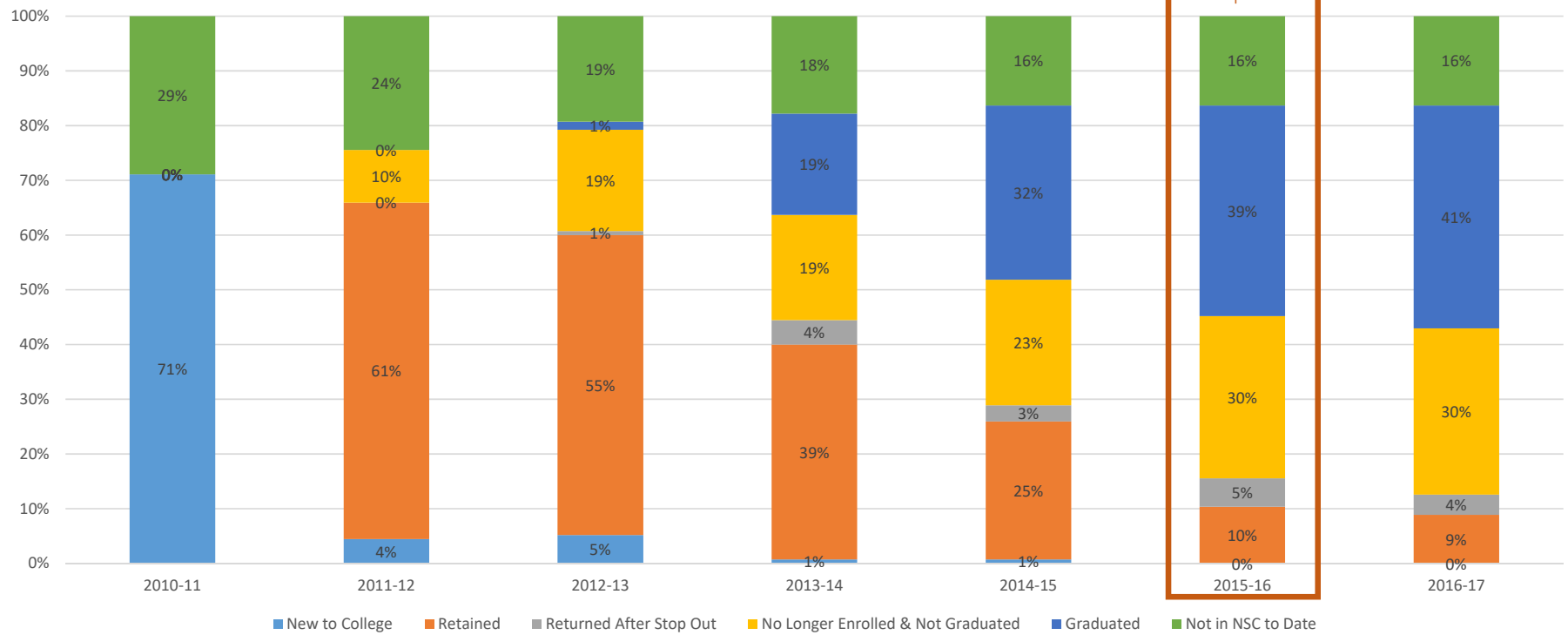


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## T-2-4 Data

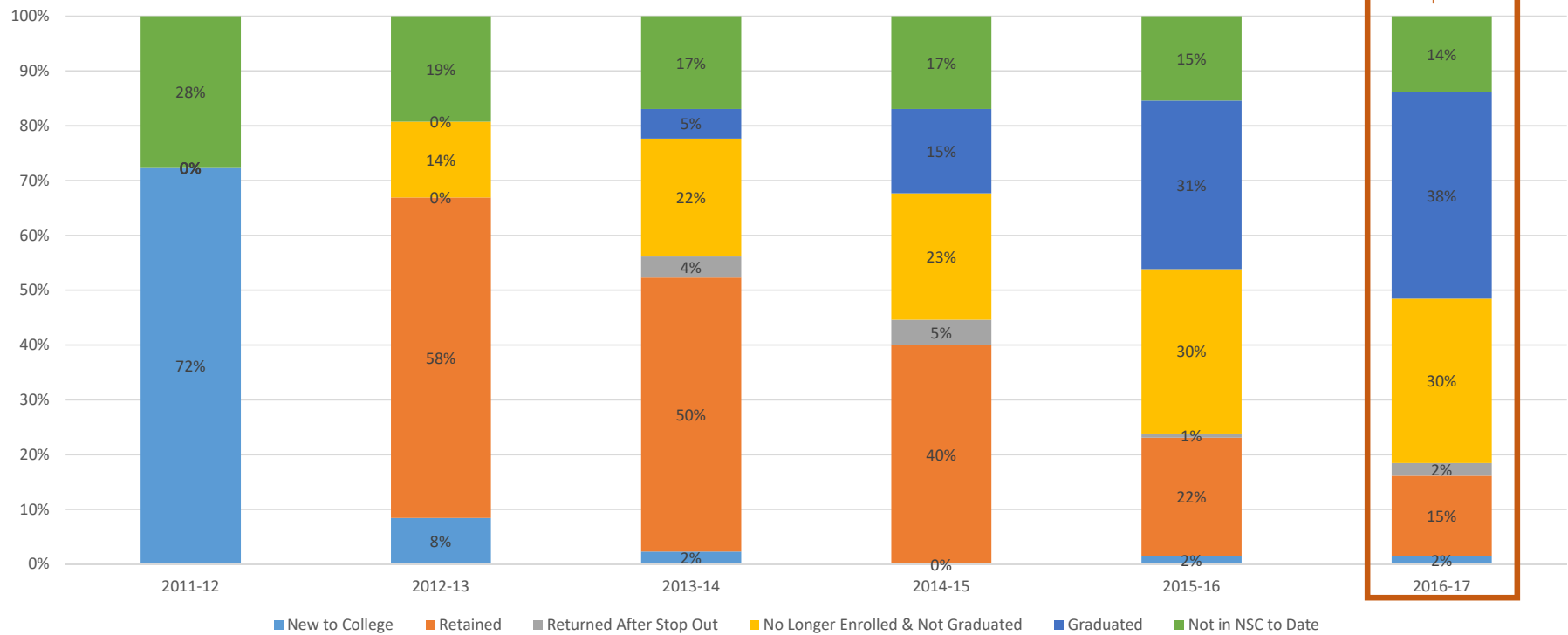
### Percent of Class 2010 Postsecondary Enrollment and Progress (7 years out of high school)





## T-2-4 Data

### Percent of Class 2011 Postsecondary Enrollment and Progress (6 years out of high school)



## **F. Most Common Colleges Attended**

# Most Common College/University of Enrollment

(SBISD graduates 2010 to 2017)

## Spring Branch ISD – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
HOUSTON COMMUNITY COLLEGE	1	TX	2-year	Public	1,542
TEXAS A&M UNIVERSITY	2	TX	4-year	Public	1,071
UNIVERSITY OF TEXAS AT AUSTIN	3	TX	4-year	Public	983
UNIVERSITY OF HOUSTON	4	TX	4-year	Public	702
LONE STAR COLLEGE SYSTEM DISTRICT	5	TX	2-year	Public	516
UNIVERSITY OF HOUSTON-DOWNTOWN	6	TX	4-year	Public	324
BAYLOR UNIVERSITY	7	TX	4-year	Private	256
TEXAS TECH UNIVERSITY, LUBBOCK	8	TX	4-year	Public	252
TEXAS STATE UNIVERSITY - SAN MARCOS	9	TX	4-year	Public	229
BLINN COLLEGE	10	TX	2-year	Public	224
SAM HOUSTON STATE UNIVERSITY	11	TX	4-year	Public	221
UNIVERSITY OF TEXAS - SAN ANTONIO	12	TX	4-year	Public	210
LOUISIANA STATE UNIVERSITY - AG	13	LA	4-year	Public	171
UNIVERSITY OF OKLAHOMA	14	OK	4-year	Public	163
TEXAS CHRISTIAN UNIVERSITY	15	TX	4-year	Private	143
STEPHEN F. AUSTIN STATE UNIVERSITY	16	TX	4-year	Public	108
AUSTIN COMMUNITY COLLEGE	17	TX	2-year	Public	103
UNIVERSITY OF MISSISSIPPI	18	MS	4-year	Public	84
RICE UNIVERSITY	19	TX	4-year	Private	79
HOUSTON BAPTIST UNIVERSITY	20	TX	4-year	Private	78
TEXAS A&M UNIVERSITY - GALVESTON	21	TX	4-year	Public	73
TRINITY UNIVERSITY	22	TX	4-year	Private	71
ST EDWARDS UNIVERSITY	23	TX	4-year	Private	65
UNIVERSITY OF ALABAMA	24	AL	4-year	Public	64
UNIVERSITY OF TEXAS AT DALLAS	25	TX	4-year	Public	62

## Memorial High School – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
UNIVERSITY OF TEXAS AT AUSTIN	1	TX	4-year	Public	554
TEXAS A&M UNIVERSITY	2	TX	4-year	Public	514
HOUSTON COMMUNITY COLLEGE	3	TX	2-year	Public	301
UNIVERSITY OF HOUSTON	4	TX	4-year	Public	232
BAYLOR UNIVERSITY	5	TX	4-year	Private	170
TEXAS TECH UNIVERSITY, LUBBOCK	6	TX	4-year	Public	117
TEXAS CHRISTIAN UNIVERSITY	7	TX	4-year	Private	103
BLINN COLLEGE	8	TX	2-year	Public	96
LOUISIANA STATE UNIVERSITY - AG	9	LA	4-year	Public	95
UNIVERSITY OF TEXAS - SAN ANTONIO	10	TX	4-year	Public	74
AUSTIN COMMUNITY COLLEGE	11	TX	2-year	Public	71
TEXAS STATE UNIVERSITY - SAN MARCOS	12	TX	4-year	Public	62
UNIVERSITY OF MISSISSIPPI	13	MS	4-year	Public	56
UNIVERSITY OF OKLAHOMA	14	OK	4-year	Public	50
RICE UNIVERSITY	15	TX	4-year	Private	48
LONE STAR COLLEGE SYSTEM DISTRICT	16	TX	2-year	Public	44
UNIVERSITY OF HOUSTON-DOWNTOWN	17	TX	4-year	Public	44
UNIVERSITY OF ALABAMA	18	AL	4-year	Public	43
SOUTHERN METHODIST UNIVERSITY	19	TX	4-year	Private	38
TRINITY UNIVERSITY	20	TX	4-year	Private	38
BLINN COLLEGE- BRYAN CAMPUS	21	TX	2-year	Public	36
ST EDWARDS UNIVERSITY	22	TX	4-year	Private	36
TEXAS A&M UNIVERSITY - GALVESTON	23	TX	4-year	Public	36
UNIVERSITY OF GEORGIA	24	GA	4-year	Public	36
UNIVERSITY OF ARKANSAS AT FAYETTEVILLE	25	AR	4-year	Public	31

## Northbrook High School – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
HOUSTON COMMUNITY COLLEGE	1	TX	2-year	Public	320
LONE STAR COLLEGE SYSTEM DISTRICT	2	TX	2-year	Public	164
UNIVERSITY OF HOUSTON-DOWNTOWN	3	TX	4-year	Public	115
TEXAS A&M UNIVERSITY	4	TX	4-year	Public	79
UNIVERSITY OF HOUSTON	5	TX	4-year	Public	79
SAM HOUSTON STATE UNIVERSITY	6	TX	4-year	Public	51
UNIVERSITY OF TEXAS AT AUSTIN	7	TX	4-year	Public	29
TEXAS STATE UNIVERSITY - SAN MARCOS	8	TX	4-year	Public	21
UNIVERSITY OF TEXAS - SAN ANTONIO	9	TX	4-year	Public	19
PRAIRIE VIEW A&M UNIVERSITY	10	TX	4-year	Public	17
STEPHEN F. AUSTIN STATE UNIVERSITY	11	TX	4-year	Public	16
HOUSTON BAPTIST UNIVERSITY	12	TX	4-year	Private	15
TEXAS SOUTHERN UNIVERSITY	13	TX	4-year	Public	14
BLINN COLLEGE	14	TX	2-year	Public	13
DEVRY UNIVERSITY - HOUSTON	15	TX	4-year	Private	11
TEXAS A&M UNIVERSITY, KINGSVILLE	16	TX	4-year	Public	10
LAMAR UNIVERSITY - BEAUMONT	17	TX	4-year	Public	6
SAN JACINTO COLLEGE	18	TX	2-year	Public	6
TEXAS A&M UNIVERSITY - CORPUS CHRISTI	19	TX	4-year	Public	6
KANSAS CITY KANSAS COMMUNITY COLLEGE	20	KS	2-year	Public	3
SANTA MONICA COLLEGE	21	CA	2-year	Public	3
TEXAS STATE TECHNICAL COLLEGE - FORT BEND	22	TX	2-year	Public	3
TEXAS WOMAN'S UNIVERSITY	23	TX	4-year	Public	3
UNIVERSITY OF HOUSTON-VICTORIA	24	TX	4-year	Public	3
UNIVERSITY OF TEXAS ARLINGTON	25	TX	4-year	Public	3

## Stratford High School – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
TEXAS A&M UNIVERSITY	1	TX	4-year	Public	346
HOUSTON COMMUNITY COLLEGE	2	TX	2-year	Public	330
UNIVERSITY OF TEXAS AT AUSTIN	3	TX	4-year	Public	278
UNIVERSITY OF HOUSTON	4	TX	4-year	Public	159
TEXAS TECH UNIVERSITY, LUBBOCK	5	TX	4-year	Public	112
UNIVERSITY OF OKLAHOMA	6	OK	4-year	Public	107
TEXAS STATE UNIVERSITY - SAN MARCOS	7	TX	4-year	Public	80
BAYLOR UNIVERSITY	8	TX	4-year	Private	74
BLINN COLLEGE	9	TX	2-year	Public	74
LOUISIANA STATE UNIVERSITY - AG	10	LA	4-year	Public	71
UNIVERSITY OF TEXAS - SAN ANTONIO	11	TX	4-year	Public	65
LONE STAR COLLEGE SYSTEM DISTRICT	12	TX	2-year	Public	64
SAM HOUSTON STATE UNIVERSITY	13	TX	4-year	Public	46
TEXAS CHRISTIAN UNIVERSITY	14	TX	4-year	Private	39
UNIVERSITY OF HOUSTON-DOWNTOWN	15	TX	4-year	Public	29
UNIVERSITY OF NORTH TEXAS	16	TX	4-year	Public	27
TEXAS A&M UNIVERSITY - GALVESTON	17	TX	4-year	Public	26
UNIVERSITY OF ARKANSAS AT FAYETTEVILLE	18	AR	4-year	Public	26
UNIVERSITY OF MISSISSIPPI	19	MS	4-year	Public	26
AUSTIN COMMUNITY COLLEGE	20	TX	2-year	Public	25
STEPHEN F. AUSTIN STATE UNIVERSITY	21	TX	4-year	Public	25
RICE UNIVERSITY	22	TX	4-year	Private	23
OKLAHOMA STATE UNIVERSITY - STILLWATER/TULSA	23	OK	4-year	Public	19
TRINITY UNIVERSITY	24	TX	4-year	Private	19
UNIVERSITY OF ALABAMA	25	AL	4-year	Public	18

## Spring Woods High School – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
HOUSTON COMMUNITY COLLEGE	1	TX	2-year	Public	416
LONE STAR COLLEGE SYSTEM DISTRICT	2	TX	2-year	Public	161
UNIVERSITY OF HOUSTON	3	TX	4-year	Public	145
TEXAS A&M UNIVERSITY	4	TX	4-year	Public	91
UNIVERSITY OF HOUSTON-DOWNTOWN	5	TX	4-year	Public	85
UNIVERSITY OF TEXAS AT AUSTIN	6	TX	4-year	Public	82
SAM HOUSTON STATE UNIVERSITY	7	TX	4-year	Public	73
TEXAS STATE UNIVERSITY - SAN MARCOS	8	TX	4-year	Public	56
UNIVERSITY OF TEXAS - SAN ANTONIO	9	TX	4-year	Public	33
BLINN COLLEGE	10	TX	2-year	Public	30
STEPHEN F. AUSTIN STATE UNIVERSITY	11	TX	4-year	Public	29
HOUSTON BAPTIST UNIVERSITY	12	TX	4-year	Private	23
PRAIRIE VIEW A&M UNIVERSITY	13	TX	4-year	Public	17
UNIVERSITY OF NORTH TEXAS	14	TX	4-year	Public	13
SAN JACINTO COLLEGE	15	TX	2-year	Public	12
TEXAS A&M UNIVERSITY - CORPUS CHRISTI	16	TX	4-year	Public	11
TEXAS TECH UNIVERSITY, LUBBOCK	17	TX	4-year	Public	11
LAMAR UNIVERSITY - BEAUMONT	18	TX	4-year	Public	10
BLINN COLLEGE- BRYAN CAMPUS	19	TX	2-year	Public	7
BAYLOR UNIVERSITY	20	TX	4-year	Private	6
TEXAS SOUTHERN UNIVERSITY	21	TX	4-year	Public	6
DEVRY UNIVERSITY - HOUSTON	22	TX	4-year	Private	5
ST EDWARDS UNIVERSITY	23	TX	4-year	Private	5
TEXAS STATE TECHNICAL COLLEGE - FORT BEND	24	TX	2-year	Public	5
TEXAS WOMAN'S UNIVERSITY	25	TX	4-year	Public	5



## WAIS – 2010-2017

### Most Common Institutions of Enrollment for All Classes by Number of Students

Name	Rank	State	Level	Type	Total
HOUSTON COMMUNITY COLLEGE	1	TX	2-year	Public	151
UNIVERSITY OF HOUSTON	2	TX	4-year	Public	87
LONE STAR COLLEGE SYSTEM DISTRICT	3	TX	2-year	Public	78
UNIVERSITY OF HOUSTON-DOWNTOWN	4	TX	4-year	Public	51
TEXAS A&M UNIVERSITY	5	TX	4-year	Public	41
UNIVERSITY OF TEXAS AT AUSTIN	6	TX	4-year	Public	39
SAM HOUSTON STATE UNIVERSITY	7	TX	4-year	Public	22
UNIVERSITY OF TEXAS - SAN ANTONIO	8	TX	4-year	Public	19
STEPHEN F. AUSTIN STATE UNIVERSITY	9	TX	4-year	Public	17
UNIVERSITY OF TEXAS AT DALLAS	10	TX	4-year	Public	15
HOUSTON BAPTIST UNIVERSITY	11	TX	4-year	Private	10
TEXAS TECH UNIVERSITY, LUBBOCK	12	TX	4-year	Public	10
BLINN COLLEGE	13	TX	2-year	Public	9
ST EDWARDS UNIVERSITY	14	TX	4-year	Private	9
TRINITY UNIVERSITY	15	TX	4-year	Private	9
TEXAS STATE UNIVERSITY - SAN MARCOS	16	TX	4-year	Public	8
RICE UNIVERSITY	17	TX	4-year	Private	7
TEXAS A&M UNIVERSITY - GALVESTON	18	TX	4-year	Public	7
UNIVERSITY OF ST THOMAS	19	TX	4-year	Private	7
UNIVERSITY OF NORTH TEXAS	20	TX	4-year	Public	6
TEXAS A&M UNIVERSITY - CORPUS CHRISTI	21	TX	4-year	Public	5
BAYLOR UNIVERSITY	22	TX	4-year	Private	4
AUSTIN COMMUNITY COLLEGE	23	TX	2-year	Public	3
PENNSYLVANIA STATE UNIVERSITY	24	PA	4-year	Public	3
UNIVERSITY OF MARY HARDIN-BAYLOR	25	TX	4-year	Private	3

## **G. CTE Enrollment – Overview**

## 2017-2018 Grades 9-12 Current Enrollment in CTE

Enrollment is defined as having at least one CTE course in a student's schedule.

Campus	Grade Level	CTE	Total	% CTE
001 MEMORIAL H S	09	117	679	17.2%
	10	335	659	50.8%
	11	375	630	59.5%
	12	465	669	69.5%
	Total:	1292	2637	49.0%
003 SPRING WOODS H S	09	181	552	32.8%
	10	245	520	47.1%
	11	371	518	71.6%
	12	343	493	69.6%
	Total:	1140	2083	54.7%
005 NORTHBROOK H S	09	127	514	24.7%
	10	256	451	56.8%
	11	228	369	61.8%
	12	244	483	50.5%
	Total:	855	1817	47.1%
006 STRATFORD H S	09	186	554	33.6%
	10	309	505	61.2%
	11	395	552	71.6%
	12	372	509	73.1%
	Total:	1262	2120	59.5%
015 WESTCHESTER ACADEMY INTERNATIONAL STUDIES	09	62	159	39.0%
	10	87	142	61.3%
	11	91	140	65.0%
	12	106	161	65.8%
	Total:	346	602	57.5%
016 ACADEMY OF CHOICE 016	09	6	21	28.6%
	10	17	24	70.8%
	11	9	20	45.0%
	12	16	48	33.3%
	Total:	48	113	42.5%
017 YES PREP (HS)	09	7	232	3.0%
	10	17	206	8.3%
	11	48	143	33.6%
	Total:	72	581	12.4%
APT APT	12	3	13	23.1%
	Total:	3	13	23.1%

<b>DST DISTRICT AEP</b>	09	7	17	41.2%
	10	3	7	42.9%
	11	5	7	71.4%
	Total:	15	31	48.4%
<b>HPT HIGH POINT</b>	09	1	2	50.0%
	Total:	1	2	50.0%
<b>TOP OVER-AGE SPECIALITY ***</b>	12	0	10	0.0%
	Total:	0	10	0.0%
<b>District Totals</b>	09	694	2730	25.4%
	10	1269	2514	50.5%
	11	1522	2379	64.0%
	12	1549	2386	64.9%
	Total:	5034	10009	50.3%

## 2017-2018 Grades 9-12 Ever Enrolled in CTE

Percentage indicates students that have had at least one CTE course. Percentages are cumulative. So, for instance, 89.4% of the 12<sup>th</sup> graders at MHS have had at least one CTE course during high school.

Campus	Grade Level	CTE	Total	% CTE
<b>001 MEMORIAL H S</b>	09	308	679	45.4%
	10	452	659	68.6%
	11	510	630	81.0%
	12	598	669	89.4%
	Total:	1868	2637	70.8%
<b>003 SPRING WOODS H S</b>	09	410	552	74.3%
	10	433	520	83.3%
	11	491	518	94.8%
	12	479	493	97.2%
	Total:	1813	2083	87.0%
<b>005 NORTHBROOK H S</b>	09	282	514	54.9%
	10	394	451	87.4%
	11	341	369	92.4%
	12	450	483	93.2%
	Total:	1467	1817	80.7%
<b>006 STRATFORD H S</b>	09	332	554	59.9%
	10	408	505	80.8%
	11	498	552	90.2%
	12	482	509	94.7%
	Total:	1720	2120	81.1%

015 WESTCHESTER ACADEMY INTERNATIONAL STUDIES	09	74	159	46.5%
	10	100	142	70.4%
	11	125	140	89.3%
	12	141	161	87.6%
	Total:	440	602	73.1%
016 ACADEMY OF CHOICE 016	09	15	21	71.4%
	10	22	24	91.7%
	11	20	20	100.0%
	12	47	48	97.9%
	Total:	104	113	92.0%
017 YES PREP (HS)	09	57	232	24.6%
	10	60	206	29.1%
	11	82	143	57.3%
	Total:	199	581	34.3%
APT APT	12	4	13	30.8%
	Total:	4	13	30.8%
DST DISTRICT AEP	09	13	17	76.5%
	10	7	7	100.0%
	11	7	7	100.0%
	Total:	27	31	87.1%
HPT HIGH POINT	09	1	2	50.0%
	Total:	1	2	50.0%
TOP OVER-AGE SPECIALITY ***	12	8	10	80.0%
	Total:	8	10	80.0%
District Totals	09	1492	2730	54.7%
	10	1876	2514	74.6%
	11	2074	2379	87.2%
	12	2209	2386	92.6%
	Total:	7651	10009	76.4%

## 2017-2018 Grades 6-8 Currently Enrolled in CTE

Enrollment is defined as having at least one CTE course in a student's schedule.

Campus	Grade Level	CTE	Total	% CTE
014 WESTCHESTER ACADEMY FOR INTERNATIONAL STUDIES	07	0	132	0.0%
	08	3	136	2.2%
	Total:	3	268	1.1%
041 LANDRUM MIDDLE	07	58	215	27.0%
	08	74	225	32.9%

	Total:	132	440	30.0%
042 MEMORIAL MIDDLE	07	0	469	0.0%
	08	1	476	0.2%
	Total:	1	945	0.1%
043 SPRING BRANCH MIDDLE	07	133	351	37.9%
	08	135	370	36.5%
	Total:	268	721	37.2%
044 SPRING WOODS MIDDLE	07	89	294	30.3%
	08	142	318	44.7%
	Total:	231	612	37.7%
045 SPRING FOREST MIDDLE	07	102	269	37.9%
	08	140	288	48.6%
	Total:	242	557	43.4%
046 SPRING OAKS MIDDLE	07	120	249	48.2%
	08	154	250	61.6%
	Total:	274	499	54.9%
047 NORTHBROOK MIDDLE	07	0	163	0.0%
	08	0	167	0.0%
	Total:	0	330	0.0%
048 CORNERSTONE ACADEMY	07	0	123	0.0%
	08	1	119	0.8%
	Total:	1	242	0.4%
055 KIPP COURAGE	07	29	103	28.2%
	08	9	96	9.4%
	Total:	38	199	19.1%
057 YES PREP (MS)	07	0	139	0.0%
	08	0	137	0.0%
	Total:	0	276	0.0%
058 MIDDLE SCHOOL FOR THE HIGHLY GIFTED	07	4	14	28.6%
	08	5	8	62.5%
	Total:	9	22	40.9%
DST DISTRICT AEP	07	6	10	60.0%
	08	7	16	43.8%
	Total:	13	26	50.0%
HPT HIGH POINT	07	1	1	100.0%
	08	0	1	0.0%
	Total:	1	2	50.0%
District Totals	07	542	2532	21.4%
	08	671	2607	25.7%
	Total:	1213	5139	23.6%

## 2017-2018 Grades 6-8 Ever Enrolled in CTE

Percentage indicates students that have had at least one CTE course. It is cumulative over the years.

Campus	Grade Level	CTE	Total	% CTE
014 WESTCHESTER ACADEMY FOR INTERNATIONAL STUDIES	07	0	132	0.0%
	08	6	136	4.4%
	Total:	6	268	2.2%
041 LANDRUM MIDDLE	07	105	215	48.8%
	08	162	225	72.0%
	Total:	267	440	60.7%
042 MEMORIAL MIDDLE	07	0	469	0.0%
	08	2	476	0.4%
	Total:	2	945	0.2%
043 SPRING BRANCH MIDDLE	07	189	351	53.8%
	08	288	370	77.8%
	Total:	477	721	66.2%
044 SPRING WOODS MIDDLE	07	118	294	40.1%
	08	156	318	49.1%
	Total:	274	612	44.8%
045 SPRING FOREST MIDDLE	07	132	269	49.1%
	08	169	288	58.7%
	Total:	301	557	54.0%
046 SPRING OAKS MIDDLE	07	120	249	48.2%
	08	181	250	72.4%
	Total:	301	499	60.3%
047 NORTHBROOK MIDDLE	07	2	163	1.2%
	08	1	167	0.6%
	Total:	3	330	0.9%
048 CORNERSTONE ACADEMY	07	0	123	0.0%
	08	2	119	1.7%
	Total:	2	242	0.8%
055 KIPP COURAGE	07	29	103	28.2%
	08	28	96	29.2%
	Total:	57	199	28.6%
057 YES PREP (MS)	07	1	139	0.7%
	08	0	137	0.0%
	Total:	1	276	0.4%
058 MIDDLE SCHOOL FOR THE HIGHLY GIFTED	07	4	14	28.6%
	08	7	8	87.5%
	Total:	11	22	50.0%
DST DISTRICT AEP	07	7	10	70.0%

HPT HIGH POINT	08	8	16	50.0%
	Total:	15	26	57.7%
	07	1	1	100.0%
	08	1	1	100.0%
	Total:	2	2	100.0%
District Totals	07	708	2532	28.0%
	08	1011	2607	38.8%
	Total:	1719	5139	33.5%



## **H. CTE Enrollment – Detailed Data**

# CTE Enrollment - District Wide 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Agricultural Sciences</b>							
GC	PRINCIPLES AG	7	6	3	7	2		25
GC	LIVESTOCK PROD	10	6	4	1	1		22
GC	SMALL ANIMAL MG	14	12	13	4	3		46
GC	EQUINE SCIENCE	14	12	13	5	3	1	48
GC	VET MED APPL	3	4	7	5	1		20
GC	ADV ANIMAL SCI	3	1		5	1		10
GC	WILDLIFE MGT	7	3	5	4	5		24
GC	LANDSCAPE DSG	4	1	6	8	4		23
GC	TURF GRASS MGMT	4	1	5	8	4		22
GC	HORTICULT SCI	8	4	5	8	4		29
GC	AGRICULT MECH	6	3	2	2	5		18
GC	OIL AND GAS 1	1	1	3	1			6
GC	OIL AND GAS 2	1	1	2	1			5
		82	55	68	59	33	1	298
	<b>Architecture &amp; Construction</b>							
	JACK ALL TRADES		80	124				204
	INTERIOR DESIGN			1	4			5
	CONSTR TECH I		8	15				23
GC	ARCH DESIGN 2	6	4	3	8	7		28
	CONSTR TECH II		6	2				8
GC	PRACT ARCH DSGN		4	4	2	6		16
GC	ARCH DESIGN	10	6	13	12	11	1	53
GC	PRINCIPLES ARCH	10	6	14	12	11	1	54
GC	ELEC TECH 1	3	9	16	8	6	1	43
GC	APPLD MATH TP	3	9	17	8	6	2	45
		32	132	209	54	47	5	479
	<b>Arts &amp; Audio Video Technology</b>							
GC	3D ANI GAME LAB	15	8	21	27	8		79
GC	FM VID PRO & LB	13	6	10	14	15	3	61
GC	GRAPH DES & LAB	12	8	5	8	6	1	40
GC	COMM PHOTO	3	5	16	11	18	2	55
GC	FASH DES & LAB			1	6			7
GC	3D AN GAM LAB 2	3	5	1	7	5		21
GC	FM VID PR2 & LB	6	1	4	8	4		23
GC	GRAPH DES 2 LAB	1		2	4	3		10
GC	COMM PHOTO 2	2		3	3	7		15
GC	FILM VIDEO PRAC	1	3	1	3	2		10
GC	3D AN GAME PR 1	1	2	1	5			9
GC	COMM PHOTO PRAC	4		2		2		8
GC	3D AN GAME PR 2				2	1		3
		61	38	67	98	71	6	341

## CTE Enrollment - District Wide 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Business &amp; Finance</b>							
	PRIN BUS FIN	77	21	46	135			279
	BUS INFO MGT I	264	46	55	143	23	6	537
	BUSINESS LAW	66		10	26		25	127
	BUS INFO MGT II		3		1			4
	BUS MAN PRACT				1			1
	MONEY MATTERS		43	1	49	69		162
	ACCOUNTING 1	100	23	20	106	19		268
	ACCOUNTING 2				33			33
	FINANCIAL MATH	121	72	23	103			319
	GLOBAL BUSINESS	119	27	46	27	10	25	254
	BANK/FIN SVC	58	45	41	49			193
		805	280	242	673	121	56	2177
	<b>Career Development</b>							
	CAREER PREP 2		19				19	38
	CAREER PREP II				2		2	4
GC	INTERNSHIPS 1							0
GC	INTERNSHIP II			1			1	2
			19	1	2		22	44
	<b>Hospitality &amp; Tourism</b>							
	INTRO CULINARY		152	48				200
	HOSP/TOURISM			2	28			30
GC	HOTEL MGT 1	1	5	3	1			10
GC	HOSP SER PRAC 1	1	5	3	1			10
GC	CULINARY ARTS	20	6	34	27	35	2	124
GC	CULINARY ARTS 2	2	9	6	8	11		36
	CTED CUL ARTS		5	2	2			9
	CTED PRACT CA	6						6
	FOOD SCIENCE		62					62
GC	CHEF TRAINING	1	2	3	2	6		14
GC	CAFE OPERATIONS	1	2	5	3	9		20
GC	HOTEL MGT 2			1				1
GC	HOSP SER PRAC 2			1				1
		32	248	108	72	61	2	523
	<b>Information &amp; Technology</b>							
GC	COMP MAINT LAB	5	8	9	16	4	2	44
GC	NETWORKING & LB	10	2		5	4	1	22
GC	DIG/IA MEDIA		57				5	62
GC	COMPUTER TECH	3	3	5	3	1		15
GC	NETWORK 2 PRACT	3	1		1	2		7
GC	COMP PROG 1 GC	1	1	11	1	3		17
GC	COMP PROG 2 GC	1	1	10	1	3		16
		23	73	35	27	17	8	183

# CTE Enrollment - District Wide 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Manufacturing</b>							
	INTRO WELDING		52					52
	WELDING 1		11					11
	WELDING 2							0
			63					63
	<b>Marketing</b>							
	SOCIAL MEDIA		20					20
	SPORTS ENT MKT		37		49			86
			57		49			106
	<b>Education &amp; Training</b>							
	HUMAN GROWTH		102	36	59			197
	INSTRUCT PRAC	12		12	18			42
	EDUCATION PRAC		1	3	13			17
	PRACT IN ED 2				2			2
		12	103	51	92			258
	<b>Health Science</b>							
	PRIN HEALTH SCI	61	120	44	123	1	2	351
	MEDICAL TERM		61		49	1	2	113
	HLTH SCI TH&CL	40	36	36	40			152
	HEALTH SCI PRAC		4	2				6
GC	PHARMACY TECH	2		3	1	17		23
	HLTH SCI THEORY	2	1	1	5	12	1	22
GC	PHARMACOLOGY	2	1	1	5	12		21
	MED MICROBIOL		28		48			76
	PATHOPHYSIOLOGY		27		46			73
	ANAT & PHYS	121	61	79	103	30	18	412
	SCI RSCH & DSGN				53			53
		228	339	166	473	73	23	1302
	<b>Human Services</b>							
	PRINC OF HSERV				21			21
	CHILD DEVELOP			47				47
	CHILD GUIDANCE		16		17			33
GC	COSMETOLOGY 1	4	9	1	3	3		20
GC	COSMETOLOGY 2		4	5		2		11
	LIFETIME NUTRIT			104	96	1		201
	INTERPERS STUDI			45				45
		4	29	202	137	6		378

## CTE Enrollment - District Wide 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Law &amp; Public Service</b>							
	FIREFIGHTER 1			7	1			8
	FIREFIGHTER 2			3				3
	FORENSIC SCI	163	50					213
GC	LAW ENFORCEMENT	9	17	32	12	9	1	80
GC	COURT SYSTEMS	9	17	33	13	9	1	82
GC	LAW ENFORCE 2		6	6	2	8		22
GC	CRIMINAL INV		6	6	2	8		22
GC	FORENSIC SCI		3	14	7	3		27
		181	99	101	37	37	2	457
	<b>STEM &amp; Engineering</b>							
	ADV BIOTECH DC	46						46
	BIOTECHNOLOGY	37						37
	INTRO ENGR DES	117	92		94			303
	PLTW PRIN ENG	70	15		25			110
	PLTW CIVIL ENG	23						23
	PLTW COM MFG	11						11
	PLTW ENG DESIGN	25						25
	PLTW AERO ENG		10					10
		329	117		119			565
	<b>Career Development</b>							
	CAREER PREP 1		17		44		9	70
	CAREER PREP 2				18			18
GC	INTERNSHIP 1	7	7	9	5	5		33
GC	INTERNSHIP 2			1				1
		7	24	10	67	5	9	122
		<b>1796</b>	<b>1613</b>	<b>1260</b>	<b>1959</b>	<b>471</b>	<b>134</b>	<b>7233</b>

NOTE: GC indicates courses offered only at the Guthrie Center.

NOTE: This data shows CTE courses taken by high school students in SBISD. If you look back to the CTE Enrollment - Summary Data section, you will see that just over 50% (5,034 out of 10,009) of SBISD high school students enrolled in a CTE course. Therefore, 5,034 SBISD high school students took 7,233 CTE courses during the 2017-2018 school year. There are several factors affecting the number of courses taken: Some take a CTE course in the fall and a different one in the spring, which would count twice in this data. Some Guthrie courses are set up for students to take two CTE courses at a time in a single 90 minute blocked period. Some students simply take two or more CTE courses in a regular 7 or 8 period schedule (e.g., a business class and a health science class).

NOTE: Approximately 1,400 high school students took a course at Guthrie Center in 2017-2018.

# CTE Enrollment - Guthrie Center Only 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Agricultural Sciences</b>							
GC	PRINCIPLES AG	7	6	3	7	2		25
GC	LIVESTOCK PROD	10	6	4	1	1		22
GC	SMALL ANIMAL MG	14	12	13	4	3		46
GC	EQUINE SCIENCE	14	12	13	5	3	1	48
GC	VET MED APPL	3	4	7	5	1		20
GC	ADV ANIMAL SCI	3	1		5	1		10
GC	WILDLIFE MGT	7	3	5	4	5		24
GC	LANDSCAPE DSG	4	1	6	8	4		23
GC	TURF GRASS MGMT	4	1	5	8	4		22
GC	HORTICULT SCI	8	4	5	8	4		29
GC	AGRICULT MECH	6	3	2	2	5		18
GC	OIL AND GAS 1	1	1	3	1			6
GC	OIL AND GAS 2	1	1	2	1			5
		82	55	68	59	33	1	298
	<b>Architecture &amp; Construction</b>							
GC	ARCH DESIGN 2	6	4	3	8	7		28
GC	PRACT ARCH DSGN		4	4	2	6		16
GC	ARCH DESIGN	10	6	13	12	11	1	53
GC	PRINCIPLES ARCH	10	6	14	12	11	1	54
GC	ELEC TECH 1	3	9	16	8	6	1	43
GC	APPLD MATH TP	3	9	17	8	6	2	45
		32	38	67	50	47	5	239
	<b>Arts &amp; Audio Video Technology</b>							
GC	3D ANI GAME LAB	15	8	21	27	8		79
GC	FM VID PRO & LB	13	6	10	14	15	3	61
GC	GRAPH DES & LAB	12	8	5	8	6	1	40
GC	COMM PHOTO	3	5	16	11	18	2	55
GC	FASH DES & LAB			1	6			7
GC	3D AN GAM LAB 2	3	5	1	7	5		21
GC	FM VID PR2 & LB	6	1	4	8	4		23
GC	GRAPH DES 2 LAB	1		2	4	3		10
GC	COMM PHOTO 2	2		3	3	7		15
GC	FILM VIDEO PRAC	1	3	1	3	2		10
GC	3D AN GAME PR 1	1	2	1	5			9
GC	COMM PHOTO PRAC	4		2		2		8
GC	3D AN GAME PR 2				2	1		3
		61	38	67	98	71	6	341
	<b>Career Development</b>							
GC	INTERNSHIPS 1							0
GC	INTERNSHIP II			1			1	2
			0	1	0		1	2

# CTE Enrollment - Guthrie Center Only 2017-2018

		Number of Students Enrolled						Total
	Course	MHS	SWH	NHS	SHS	WAIS	AOC	
	<b>Hospitality &amp; Tourism</b>							
GC	HOTEL MGT 1	1	5	3	1			10
GC	HOSP SER PRAC 1	1	5	3	1			10
GC	CULINARY ARTS	20	6	34	27	35	2	124
GC	CULINARY ARTS 2	2	9	6	8	11		36
GC	CHEF TRAINING	1	2	3	2	6		14
GC	CAFE OPERATIONS	1	2	5	3	9		20
GC	HOTEL MGT 2			1				1
GC	HOSP SER PRAC 2			1				1
		26	29	56	42	61	2	216
	<b>Information &amp; Technology</b>							
GC	COMP MAINT LAB	5	8	9	16	4	2	44
GC	NETWORKING & LB	10	2		5	4	1	22
GC	DIG/IA MEDIA		57				5	62
GC	COMPUTER TECH	3	3	5	3	1		15
GC	NETWORK 2 PRACT	3	1		1	2		7
GC	COMP PROG 1 GC	1	1	11	1	3		17
GC	COMP PROG 2 GC	1	1	10	1	3		16
		23	73	35	27	17	8	183
	<b>Health Science</b>							
GC	PHARMACY TECH	2		3	1	17		23
GC	PHARMACOLOGY	2	1	1	5	12		21
		4	1	4	6	29	0	44
	<b>Human Services</b>							
GC	COSMETOLOGY 1	4	9	1	3	3		20
GC	COSMETOLOGY 2		4	5		2		11
		4	13	6	3	5		31
	<b>Law &amp; Public Service</b>							
GC	LAW ENFORCEMENT	9	17	32	12	9	1	80
GC	COURT SYSTEMS	9	17	33	13	9	1	82
GC	LAW ENFORCE 2		6	6	2	8		22
GC	CRIMINAL INV		6	6	2	8		22
GC	FORENSIC SCI		3	14	7	3		27
		18	49	91	36	37	2	233
	<b>Career Development</b>							
GC	INTERNSHIP 1	7	7	9	5	5		33
GC	INTERNSHIP 2			1				1
		7	7	10	5	5	0	34
		257	303	405	326	305	25	1621

NOTE: Approximately 1,400 high school students took a course at Guthrie Center in 2017-2018.

# **I. CTE Endorsement and Pathway Completion**



# CTE Pathways and Graduation Endorsements

Endorsement	Career Cluster	Pathway
<b>Business and Industry</b>	Agriculture, Food and Natural Resources	Animal Science: Veterinary Technician
		General Agricultural Sciences: Animal Focus
		General Agricultural Sciences: Plant Focus
		Plant Science: Plant Production
	Architecture and Construction	Oil and Gas Production
		Architectural Design
		Construction Technology
		Electrical Technician
	Arts, Audio/Video, Technology and Communications	Interior Design
		3D Animation
		Commercial Photography
		Fashion Design
	Business, Management and Administration	Film and Video Production
		Graphic Design
	Finance	Business Administration
		International Business Law
	Hospitality and Tourism	Academy of Finance
		Accounting
		Culinary Baking and Pastry
		Culinary Chef
	Information Technology	Culinary Science
		Hotel Management
		Computer Networking
<b>Public Services</b>	Education and Training	Computer Service Technician
		Geological Data Technician
	Health Science	Welding
		Retail Management
	Human Services	Teaching
		Early Childhood
	Law, Public Safety, Corrections and Security	Medical Health Professions
		Pharmacy Technician
<b>STEM</b>	STEM	Emergency Medical Technician (EMT)
		Cosmetology
		Law Enforcement and Legal Representation
		Navy Junior Reserve Officers Training Corps (NJROTC)
	STEM	Digital Electronics - PLTW
		Aerospace Engineering - PLTW
		Civil Engineering - PLTW
		Computer Integrated Manufacturing - PLTW

## CTE Pathway Completion

SBISD Class of 2017-2018

Endorsement Area	Career Cluster (Program Area)	Pathways Completed by Campus						TOTAL
		MHS	NHS	SHS	SWHS	WAIS	AOC	
Business & Industry	Agriculture, Food, and Natural Resources	1		1				2
Business & Industry	Architecture and Construction	1	5	2	4	6		18
Business & Industry	Arts, Audio/Video, Technology and Communications							0
Business & Industry	Business, Management and Administration							0
Business & Industry	Finance	43	2	41	2	1		89
Business & Industry	Hospitality and Tourism	1	6	3		12		22
Business & Industry	Information Technology			1	1	2		4
Business & Industry	Manufacturing							0
Business & Industry	Marketing							0
Public Service	Education and Training		2	2				4
Public Service	Health Science	1	3	1				5
Public Service	Health Science (under prior pathway rules)	30	24	12	21			87
Public Service	Human Services							0
Public Service	Law, Public Safety, Corrections and Security							0
STEM	Engineering							0
	<b>TOTALS</b>	<b>77</b>	<b>42</b>	<b>63</b>	<b>28</b>	<b>21</b>	<b>0</b>	<b>231</b>

NOTES: These results are from the SBISD graduating class of 2017-2018, the first class to graduate (go the full four years) under the new Foundation Graduation Plan created by House Bill 5. There were approximately 2,200 SBISD graduates in total.

The pathway data shown is in summary form listed by career cluster rather than by specific pathway. For instance, in the Hospitality and Tourism career cluster, there are four pathways for students to choose: (1) Culinary Baking and Pasty, (2) Culinary Chef, (3) Culinary Science, and (4) Hotel Management. This data shows 22 graduates completed one of these four pathways and therefore earned the Public Service Endorsement, but not which specific pathway the 22 students completed.

## **J. Certifications**

## CTE Certifications Offered in SBISD 2017-2018

Endorsement	Cluster	Pathway	Certification
Business and Industry	Agriculture, Food and Natural Resources	Animal Science: Veterinary Technician	Certified Veterinary Assistant Level 1 (Must complete a 400-hour internship before graduation)
		General Agricultural Sciences	Texas Hunters Education Certification, OSHA General 10 Hour Certification
		Oil and Gas Production	International Association of Drilling Contractors Rig Pass, OSHA General 10 Hour Certification
		Plant Science: Plant Production	Texas State Florists' Association High School Floral Design Certification
	Architecture and Construction	Architectural Design	Autodesk AutoCad Cerified User, Autodesk REVIT Architecture Certified User
		Construction Technology	OSHA General 10 Hour Certification
		Electrical Technician	OSHA General 10 Hour Certification, Electrical Helper Level 1 Certificate
	Arts, Audio/Video, Technology & Communications	3D Animation	Autodesk 3Ds Max Certified User
		Commercial Photography	Adobe Photoshop Certified Associate
		Film and Video Production	Apple Final Cut Pro
		Graphic Design	Adobe Illustrator and InDesign Certified Associate
	Business, Management and Administration	Business Administration	Microsoft Office Specialist Word and Excel
		International Business Law	Microsoft Office Specialist Word
	Finance	Academy of Finance	Microsoft Office Specialist Word and Excel, Quickbooks User Certification, Academy of Finance Endorsement
		Accounting	QuickBooks User Certification
	Hospitality and Tourism	Culinary Chef	ServSafe Food Handler, ServSafe Food Manager
		Culinary Baking and Pastry	ServSafe Food Handler Certification
		Culinary Science Pathway	ServSafe Food Handler Certification
		Hotel Management	AHLEI Certified Guest Service Professional Food Handler
	Information Technology	Computer Networking	CCENT (Cisco Certification Entry Network Technician)
		Computer Service Technician	CompTIA A+ Certification (test 801 and/or 802)
	Manufacturing	Welding	American Welding Society D1.1 Welding
	Marketing	Retail Management	National Retail Federation - Retail Management Certificate attainable through UH Downtown

Endorsement	Cluster	Pathway	Certification
Public Services	Naval JROTC	NJROTC	Potential Advanced Pay Grade Upon Enlistment After Completing 2+ Years; First Aid/CPR/AED Certification
	Education and Training	Early Childhood	First Aid/CPR/AED Certification
		Teaching	First Aid/CPR/AED Certification
	Health Science	Medical Health Professions	First Aid/CPR/AED Certification
		Pharmacy Technician	First Aid/CPR/AED Certification, Pharmacy Technician Certification (PTCE), National Sterile Products (IV) Certification
	Human Services	Cosmetology	Texas Cosmetology Operators License
	Law, Public Safety, Corrections & Security	Firefighting	Texas Firefighter 1, EMT Basic, FCC Radioman, FEMA ICS 100, Open Water Scuba

Endorsement	Cluster	Pathway	Certification
STEM	Engineering	Civil Engineering - PLTW	AutoDesk Inventor
		Computer Integrated Manufacturing - PLTW	AutoDesk Inventor
		Aerospace/Digital Electronics - PLTW	AutoDesk Inventor

# SBISD Certifications Earned by Students

2011-2018

	CERTIFICATIONS	2010 2011	2011 2012	2012 2013	2013 2014	2014 2015	2015 2016	2016 2017	2017 2018
GC	Cosmetology	12	5	4				2	4
GC	ServSafe Food Handlers						128	114	129
GC	A+ Certification	2	4	4	1	1	3	4	2
GC	A+ Test 801 (Comptia)				15	10			12
GC	ProStart Culinary (2 tests plus 400 hrs OJT)			64	5				
GC	Texas Hunters Education			8	13	19	23	35	7
GC	Autodesk 3d Max User				5	22	10	4	1
GC	AutoCad Certified Associate				32	13	15	18	28
GC	Final Cut Video Certification				2	3	8	11	18
GC	AHELI Certified Guest Service				20	11	14	10	12
GC	Red Cross First Aid/CPR/AED Certification				57	45	38	44	22
GC	Dell Hardware (laptop and desktop)				96			17	
GC	Autodesk REVIT User					9	7	10	6
GC	Adobe Certified Associate - Photoshop					8	8	16	19
GC	Adobe Certified Associate - InDesign					11	7	11	6
GC	Adobe Certified Associate - Illustrator					2	10	3	17
GC	ServSafe Food Manager					11	11	23	121
GC	ACT WorkKeys					21	21	26	29
GC	RigPass						12		3
GC	Texas State Floral Design						1		
GC	Cisco CCENT							1	
GC	Sterile IV Certification							4	14
GC	Teen Police Academy - PCT5							75	57
GC	OSHA 10 Hour								44
GC	TRIO Scissor Lift Certification								49
GC	NJROTC Year 3 Completion								30
ALL	Red Cross First Aid/CPR/AED Certification					384	531	247	310
MHS	Business IC3 or MOS WORD								60
MHS	QuickBooks						104	57	
MHS	AutoDesk Inventor						174	5	

CERTIFICATIONS		2010 2011	2011 2012	2012 2013	2013 2014	2014 2015	2015 2016	2016 2017	2017 2018
NHS	Business IC3 or MOS WORD					3	2		8
NHS	MOS EXCEL								4
NHS	MOS PUBLISHER								22
NHS	FCC Radioman (Firefighter Academy)						10	10	3
NHS	Open Water SCUBA (Firefighter Academy)						3		4
NHS	ICS100 (Firefighter Academy)						10	10	9
NHS	ICS200 (Firefighter Academy)							12	9
NHS	ICS700 (Firefighter Academy)							12	9
NHS	ICS800 (Firefighter Academy)							12	9
NHS	Courage Be Safe (Firefighter Academy)							12	2
NHS	National Incident Management								1
SHS	Business IC3 or MOS WORD						116		81
SHS	MOS EXCEL								57
SHS	MOS PUBLISHER								45
SHS	QuickBooks							6	
SHS	AutoDesk Inventor						38		7
SWHS	Business IC3 or MOS WORD	10				16	17	29	8
SWHS	MOS EXCEL								5
SWHS	MOS PUBLISHER								5
SWHS	QuickBooks								
SWHS	AutoDesk Inventor						48	2	3
SWHS	AWS - D1.1 Welding			5			5		
SWHS	ServSafe Food Handlers					70	137	68	
Totals		24	9	85	246	659	1511	910	1291