

COLLEGE AND CAREER READINESS

Students must be prepared for both college *and* career — not one over the other.

Introduction

All students will graduate ready for success in college and careers. This simple statement can be found within the goals of nearly all state and local education agencies as well as advocacy and community organizations supporting students. It is a recognition that a young person needs more than a high school diploma in order to support themselves and a family. During the recent Great Recession, over 75% of jobs lost belonged to workers with a high school education or less. The growing job market following the recession has almost exclusively rewarded workers with at least some post-secondary education, who have filled 99% of those 11.6 million jobs.¹

In recent years, college and career readiness (CCR) has emerged as a popular phrase and unifying concept to capture the behaviors and measures that demonstrate a student's level of readiness for college, technical training, or the military. An important shift in recent years is the understanding that students must be prepared for both college and career — not one over the other. States are working to align academic and work-based learning experiences in a more integrated set of opportunities across a student's journey to and through high school.

But how do we know when and how each student reaches that goal of future readiness? And in this new era of greater local control under the federal Every Student Succeeds Act (ESSA), how do we ensure states and districts that are promising CCR for all students will actually deliver?

While the answers to these questions may seem complicated, we owe it to our students to figure them out. And we must keep the lens of equity affixed as we examine the ways districts and states offer CCR opportunities to students and then support them along the paths they choose to achieve that readiness.

Broad Recommendations

Community and school district leaders interested in advancing college and career readiness policies and activities should consider the following broad recommendations, drawn from experts across national and local organizations engaged in this work² and described in more detail in the sections that follow:



Data

Understand what kind of data currently exists at all levels in your community about CCR programs and their impact on students, ideally by creating a team of leaders and data analysts across the school district, city, employer, and community organization landscape. Examine all types of data, including facts about local workforce needs and opportunities. Consider how data helps provide a feedback loop for school, district, higher education, workforce, and city leaders. Disaggregate preexisting data to identify which programs are successfully helping groups of students transition from high school to postsecondary education or gainful employment and

where gaps exist. Identify data needs and empower individuals and organizations to set up new data collection and analysis processes.



Awareness

Expose students as early as possible to CCR planning exercises, programs, and advisors to increase their awareness of the opportunities available to them and the actions they must take to be successful. Ensure local CCR definitions and efforts make clear to students that the focus should be on preparation for college and career, not college or career. Increase teachers' awareness of CCR programs and pathways and provide them with professional development opportunities so they may also offer advising and related support to students.



Policy

Examine the state and local policy landscape related to CCR activities to identify levers available to incentivize and promote strong practices as well as potential barriers to student success. Empower those making policies at the local level with the data they need to support informed decisions about CCR offerings.



Equity

Prioritize equity across CCR opportunities by assessing whether all groups of students have access to and are taking advantage of programs and by identifying gaps that can be filled through new programs and partnerships.



Academic Preparation

Require all students to have adequate academic preparation regardless of their intention to pursue college or enter the workforce immediately upon high school graduation, recognizing that students may change their mind at any point in their education journey and should be fully prepared for whichever option they ultimately choose.



Partnerships

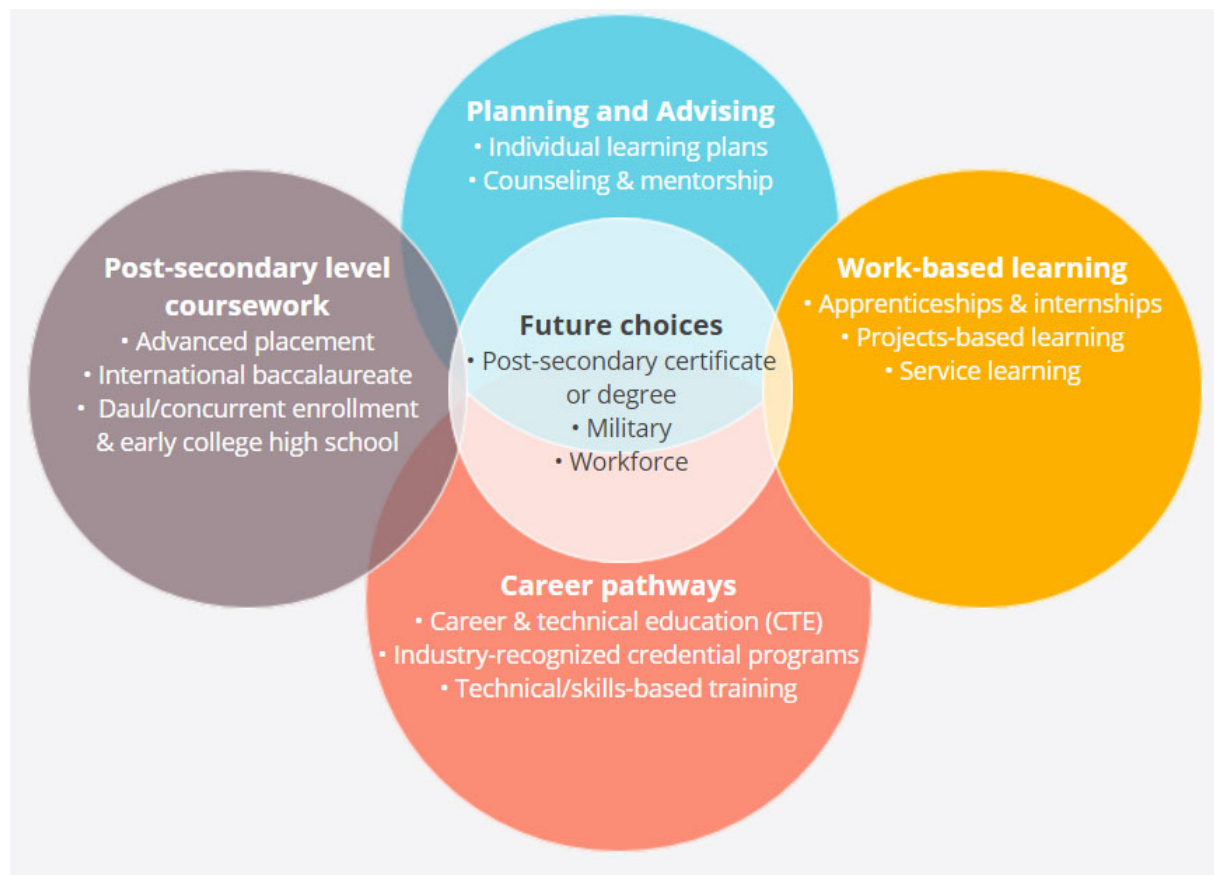
Create and foster community partnerships that can support students across the range of academic, social, and future-planning experiences and needs they will encounter as they prepare to transition from high school. Engage directly with local employers to understand and tailor career readiness programs to local needs.

College and Career Readiness Opportunities and Data

Many activities and programs fall underneath the broad CCR umbrella across the country and overlap exists across the categories of offerings. While career and technical education (CTE) is often referred to as its own entity, many CTE opportunities are found in dual and concurrent enrollment and early college high school programs. Technical/skills-based training and apprenticeships share common elements, and industry-recognized credentials may be obtained through college-level coursework, CTE, and work-based learning. A framing element for all of the CCR elements is the planning and advising component, which also varies drastically across districts and states.

The graphic below depicts one – though certainly not the only — way of organizing CCR offerings. Here we place future choices for students at the center and recognize that the many different types of CCR

opportunities overlap. We also acknowledge that no one category of programming is sufficient for preparing a student for any one future choice; students need exposure to a variety of opportunities across academic, social and emotional, and work-based experiences so that they are prepared for success along any path.



A majority of states are using some element of CCR for high school accountability and many are aligning activities across K-12 and higher education better than ever before; however, CCR data collection and reporting practices vary widely. A best practice is to securely collect, analyze, and report on as many forms of CCR data as possible — even those not used for accountability. Most districts are tracking much of this data currently; how to access and organize that data is likely a common challenge.

Some of the many data sources used across districts and states are listed below. As outlined in the [Policy and Accountability](#) section that follows, experts have analyzed many of these measures and have varying opinions on how effectively they can be used for school accountability. However, there is widespread agreement that tracking and reporting on as many relevant measures as possible promotes transparency and helps provide a full picture of CCR efforts locally. Experts also believe it is helpful to map out the student trajectory across grade levels to understand where these measures fit and how they relate to CCR opportunities and to early warning indicators. This trajectory is outlined in the [Framework for College and Career Readiness in Districts](#).

Data

Academic/College-Readiness Measures in High School

- SAT scores
- ACT scores
- State assessment results
- AP/IB exam scores

Advanced Coursework Access and Completion Measures

- AP/IB enrollment and course completion rates
- Dual/concurrent enrollment and completion rates
- CTE program enrollment and completion rates
- Counseling Opportunities

- Student GPAs
- High school graduation rates
- Employability, military, or workforce readiness assessments
- College FAFSA completion
- Counselor-to-student ratios
- Individualized Learning Plan completion rates

Social and Emotional Learning

(SEL) Measures

- SEL rubrics or surveys
- Self-assessments

Work-based Learning Measures

- Soft skills attainment assessments
- Internship/apprenticeship student evaluations

Post-secondary Access and Attainment Measures

- Industry credential/certificate attainment
- Post-secondary enrollment
- Post-secondary persistence
- College remediation
- Post-secondary completion
- Gainful employment

Awareness

One challenging but important element of helping all students prepare for a successful future is exposing them early to the variety of CCR opportunities available across their journey to and through high school. This helps to both motivate students to pursue experiences that can prepare them for a potential future path and to increase their awareness of the variety of options available. Teacher awareness of and training around these elements is also critical, as teachers can work in partnership with counselors and other mentors to support individual students along their pathways.

What the Experts Say

“Take stock of what data you actually have and look at it not just in aggregate but at the subgroup [i.e., student demographic, socioeconomic or English learner status, etc.] level. This is especially important for CTE given the legacy of tracking. Since college and career readiness can feel like such a decentralized system — including K-12, higher education, and employers — it’s critical to get sense of the scope of what’s happening in your city. Who is participating? What are the outcomes? So often, the data is there but no one has knitted it all together to make a cohesive story — and to find the holes and gaps to fill.”

Kimberly Green, Advance CTE

“When examining outcomes data for a CCR opportunity, one question you have to ask is whether the district makes it available to all students (through financial subsidies or other means); when opportunities are not available to all, you can’t isolate true access and uptake across all student populations.” (For example, if dual enrollment or AP opportunities require students to travel to a different campus or to pay a fee, some students may not be able to participate due to logistical or financial constraints. In many cities, leaders have sought state or federal funds and/or partnered with philanthropies to offer such programs at no charge to students.)

Kim Cook, National College Access Network

“Most efforts to define college and career readiness assume that college is the prerequisite for careers, that you can’t be career-ready until you are college-enabled. It’s smarter to think about pathways that lead

to work in combination with college or in a sequence."

James Kemple, New York University

“Advising and mentoring is critical but by far the weakest link in all these efforts. Even in areas where efforts are underway to address counselor-to-student ratios, for example, leaders are struggling to provide enough supports. School counselors also address student social and emotional needs in addition to career pathway guidance. This may point to an opportunity to empower teachers to work with students on some of those pathway conversations.”

Susan Bowles Therriault, AIR College and Career Readiness and Success Center

“Students cannot be career-ready unless they are college-ready, and vice versa. Academic proficiency must go hand in hand with high quality learning opportunities so students can test drive careers. Whether it be through AP/IB, dual enrollment, work-based learning, internships, or innovation challenges—preparing students for the business of tomorrow must be rooted in building skills for a changing economy.”

Caitlin Codella, U.S. Chamber of Commerce Foundation Center for Education and the Workforce



CCR Policy and Accountability

As part of a policy framework, CCR is a popular but complicated topic, especially when seeking comparability across cities, states, and the country. In addition to the breadth of CCR opportunities and data available, state definitions, standards, and assessments for CCR vary.

Opportunities to support and incentivize good CCR practices are found in the [Every Student Succeeds Act \(ESSA\)](#), the [Carl D. Perkins Vocational and Technical Education Act \(Perkins\)](#), and the [Workforce Innovation and Opportunity Act \(WIOA\)](#) as well as individual state laws and programs.

Many states used their federal waivers from No Child Left Behind (NCLB) to include CCR measures as part of updated accountability systems; prior to submission of state ESSA plans, the majority of states were already including and/or reporting some CCR indicators³. ESSA provides leverage for states to align their educational system with their mission and vision of ensuring all students graduate ready to enter the workforce or pursue postsecondary education.⁴ Of the 50 states and DC, 49 state ESSA plans include at least one strategy to expand CCR, though the combination of what is measured and the process by which schools receive credit vary.

The Council of Chief State School Officers has worked with several partners over the past few years on recommendations for those CCR measures best suited for state accountability systems. These recommendations fit into four categories:

1. Progress Toward a Credential After High School
 - a. Types of Measures: Completion of a validated CCR course of study, successful attainment of post-secondary credit in high school
2. Co-Curricular Learning and Leadership Experiences
 - a. Types of Measures: Completion of work-based learning or other state-designated experiences aligned to a student's individualized learning plan with some type of evaluation of student success in such experiences

3. Assessment of Readiness

- a. Types of Measures: Scores on valid state and national CCR assessments (i.e., validated state or consortium assessments, AP, IB, industry-recognized technical skills assessments)

4. Transitions Beyond High School

- a. Types of Measures: Successful enrollment in some type of post-secondary education/training or into the military or workforce within one year after high school graduation (successful indicating no need for remediation)⁵

Many states utilized School Quality and Student Success (SQSS) indicator within ESSA to include CCR in accountability structures — and to incorporate completion/outcomes in addition to simple access to CCR opportunities.⁶ For 35 states, the approach to supporting CCR at the high school level involves a menu of readiness options that are factored into final accountability scores. Menu options often include dual enrollment, advanced coursework like AP and IB, industry-recognized credentials, and work-based learning opportunities. States are also supporting post-secondary attainment goals by better aligning K-12, post-secondary, and workforce systems, as well as resources to advance CCR. At least 12 states described in their ESSA plan a vision to align K-12 outcomes and post-secondary attainment goals to ensure students are graduating high school and college with the necessary knowledge and skills.⁷

While ESSA is widely regarded as the major federal law governing accountability as it relates to CCR, both Perkins and WIOA offer additional funding and regulations for related education activities. AIR's College and Career Readiness and Success Center has put together a [brief, workbook, and tool](#) to help local and state leaders understand how these three laws intersect and to identify opportunities to align local efforts accordingly.

Individual state laws also impact CCR accountability and opportunities at the local level. For example, [Texas House Bill 5](#) created the Foundation High School Program effective for all students as of 2014-15, requiring students to create a personal graduation plan to inform their program of study.⁸ In 2009, Colorado passed a law requiring students to create an Individual Career and Academic Plan (ICAP) to develop a personal pathway to and through high school graduation.⁹ As city leaders explore ways to prioritize and promote local CCR initiatives, an understanding of the federal and state laws and funding opportunities that govern these efforts is critical.

What the Experts Say

“Some states have put access to high-level coursework as an accountability factor under ESSA – they will have to figure out how to interpret that information. If they see kids from certain areas not taking a given CCR opportunity, they will have to crosswalk that finding with access questions. Just looking at uptake patterns won't give an accurate picture of who had access.” **Rachel Anderson, Data Quality Campaign**

“Some districts do their own data collection, but most rely on what the state collects. This is a great opportunity for leaders to start engaging to provide guidance and guardrails for the city's priorities. And as states implement ESSA plans, they must disaggregate data by student populations. In some cases, the state will put out a data point like '50% of kids are college and career ready' — but will not show how many students met that benchmark through the various indicators like AP, CTE, dual enrollment — and certainly not by subgroup. City leaders must have that kind of information to examine access and success. And at the city level, you can look at the delivery system and whether different programs are producing different results. If a student completes a CTE program in a comprehensive school versus dual enrollment or an

area technical center, how do the results differ? What do outcomes look like across delivery systems and student populations? Local leaders should want to know these answers and be part of diagnosing problems and developing solutions."

Kate Kreamer, Advance CTE

“It takes time to get at the outcomes we want to see for CCR; things like post-secondary attainment and employment are strong indicators, but they occur outside the domain of control of the K-12 system. This causes a challenge, and so states have looked inward for CCR indicators. Early warning indicators like attendance and being on track to graduate are great for employing interventions, but these predictive elements may be better used as a feedback loop than for accountability purposes. One good aspect of ESSA is that it builds in continuous improvement for states to reconsider accountability measures over time. Leaders should choose indicators backed by research, even when they require a longer timeframe and stronger data system."

Susan Bowles Therriault, AIR College and Career Readiness and Success Center

“Not all CCR indicators are created equally. This is particularly true of industry-recognized certifications and credentials, but also extends to dual credit and CTE program completion rates. For instances, there is a sizable difference in the lifelong value (in terms of wages, advancement, etc.) between a CTE program completion in cosmetology versus advanced manufacturing, between a culinary arts certification and an IT certification (such as CompTIA), and between dual credit for Introduction to Art as compared to Engineering Design. Parents and students – not to mention educators – need to be aware of these differences when making decisions about college and career pathways. This requires both a regular review of extant labor market data, as well as ongoing engagement with regional employers."

Quentin Suffren, Excel in Ed



The Equity Imperative

The most recent national civil rights data shows that access to high-level math and science courses is the most limited for vulnerable student populations. Up to a quarter of high schools across the country do not offer more than one of these types of courses (like Algebra I & II and biology) and a third of high schools with the highest percentage of black and Latino students do not offer chemistry. Students with disabilities, English language learners, and black and Latino students are underrepresented among students taking and succeeding in AP courses.¹⁰

The CCR arena has some historical affiliation with ability tracking, where certain students or groups of students are shepherded along a path of rigorous academics toward college-readiness, or along a path of more technical/skills-based experiences and career preparation. Experts working across the CCR landscape see the benefits of exposing students to a variety of opportunities and not presupposing future outcomes for kids – especially according to demographic, income, language, or special education status. To achieve this reality, district and state leaders must examine the options available to all students across a CCR pathway, as well as the data on which groups of students are taking and succeeding in those options across the pathway openly and consistently over time.



In addition, leaders in this field strongly recommend that all students receive adequate academic preparation for high school graduation, regardless of the future path they intend to pursue.

Given that students may change their mind about any number of post-secondary or career options at any point along their pathway, it is critical that they have the rigorous academic background they need to succeed without requiring remediation for material they should have learned in high school.

What the Experts Say

“Every student should be ready for college even if they don't choose to go to college. If a student wants to pursue a technical profession or vocation, s/he should still meet all the same academic graduation requirements as a student who wants to go to college.”

Rachel Anderson, Data Quality Campaign

“Many organizations thinking about college and career readiness are terrified that a focus on career readiness is exclusive of college, and could mean we are systematically trying to exclude some group of students from going to college – we need to directly confront that fear.”

James Kemple, New York University

“We don't distinguish between college and career as two separate paths. All programs of study should have a transition to post-secondary opportunities, whether a credential, 2-year, or 4-year program. There is a place for workforce training in any career, but we have to ask ourselves: what do we expect K-12 education to provide? We have to look at regional workforce demand and better align it with student interests. We want to see people blur those lines more than they traditionally have.”

Quentin Suffren, Excel in Ed

“The question we must pursue is how to build a system that promotes opportunities across all student populations and doesn't unfairly relegate any student to a particular path prematurely.”

Abby Whitbeck, The College Board

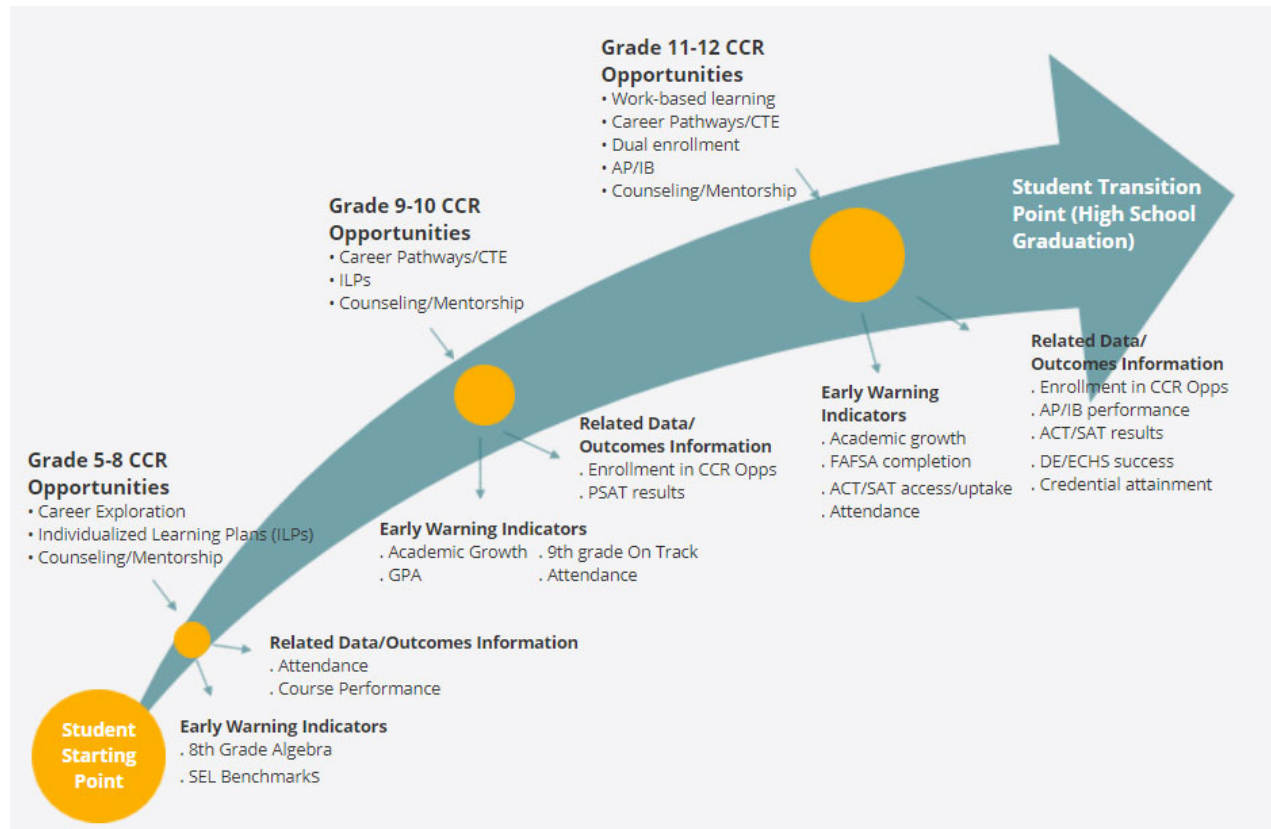
A Framework for College and Career Readiness in Districts

The following student trajectory graphic seeks to depict the range of elements across the CCR landscape from a student's early exposure to college and career preparation through and beyond high school graduation. Identifying points across that trajectory where students access opportunities and examining how they do with those opportunities is a good starting point. By also examining early warning indicators that can signal if a student is staying on track, we can create a more robust and meaningful picture of a student's path.

This is one way to simplify a complicated concept: if city leaders focus on access, progress, and outcomes for students across the CCR trajectory, they can hold themselves accountable for specific objectives along the way. And by identifying the many options students may pursue after high school, leaders can work to ensure the opportunities across trajectory will adequately prepare every student for any potential future.

The opportunities, data/outcomes information, and early warning indicators listed here are examples – and by no means an exhaustive list – of the types of elements that can be mapped out for a given city or school district. And while the transition point here is high school graduation, it is critical to keep in mind potential future choices students may make, whether some type of post-secondary education or credential attainment, the military, or direct employment. This way, leaders can emphasize a commitment to preparing students for any and all choices upon high school graduation.

The additional resources that follow provide detailed information and research to support the use of a range of elements.



As with nearly all successful efforts to support students, partnerships are critical for promoting and supporting CCR opportunities and effective data use across this trajectory. Groups like the following all have important roles to play in helping students along their individual paths to a successful future:

- Teachers and school leaders
- Counselors and mentors
- District leaders
- Families
- Employers and business organizations, such as the Business Roundtable and Chamber of Commerce
- Community-based organizations
- Philanthropies

What the Experts Say

“Connecting classrooms to careers is not simply identifying one indicator or measure, rather it is a unique combination of academic and experiential measures that, when consistently and reliably validated by the

business community, makes for a robust college and career readiness approach."

Caitlin Codella, U.S. Chamber of Commerce Foundation Center for Education and the Workforce

“District leadership is critical for successful efforts at the school level, since those leaders can ensure college and career readiness is a priority and that advisors are empowered to best serve students. In addition, the cities doing this work best have multiple partners that help the school district – and they include supports after high school. Post-secondary support encompasses organizations that work with students after they’ve transitioned from high school in bridge programs to ensure students continue on a successful path.”

Sarah Shah, College Advising Corps

“Qualitatively speaking, having access to CTE coursework in middle school is important; many schools have scaled this back and are now slowly adding such opportunities back in.”

Kimberly Green, Advance CTE

“The exploratory phase of career education in many cases doesn’t start until late in high school – typically 11th grade. Leaders should examine their delivery systems to find opportunities to offer exploration to students earlier.”

Kate Kreamer, Advance CTE

“Research about student understanding of financial aid found discouraging results; about half of students who hadn’t completed the FAFSA didn’t think they were eligible and often just plain didn’t know aid was available or how to access it. This is highly relevant to the conversation about aspiration-building in middle and high school, helping students see there is support and they shouldn’t rule themselves out when they see tuition that’s more than their family income.”

Kim Cook, National College Access Network

“When you construct pathways, often K-12 districts will work with one partner or on their own. Creating meaningful pathways for work really starts at the regional level and must be grounded in partnerships where employers provide input and show what opportunities are out there for students and what they will need to be prepared for those opportunities.”

Quentin Suffren, Excel in Ed

Case Studies

New York City Case Study

-

New York City leaders have been helping to drive policies that promote college and career readiness (CCR) for many years. Through collaborations with state officials and the State University of New York (SUNY) and City University of New York (CUNY) systems, leaders have developed metrics to better assess the CCR of students graduating from New York high schools and included those metrics on school report cards.

New York's Every Student Succeeds Act (ESSA) plan builds on this long-standing work and includes the College, Career, and Civic Readiness Index as part of the School Quality and Student Success (SQSS) measure for high schools. The Index awards points for students passing high school level courses and extra credit for those achieving additional credit, such as meeting cut scores on state or national exams or earning college credit through dual enrollment. The Index also accounts for students completing career and technical education (CTE) courses of study, earning industry-recognized credentials, participating in state alternate assessments, and completing the Seal of Biliteracy. The state has promised to investigate an additional measure of civic engagement for the future.¹

In addition, New York's state ESSA plan articulates broad goals that align with those of the My Brother's Keeper initiative – namely, that students:

- Enter school ready to learn;
- Read on level by grade 3;
- Graduate high school ready for college and careers;
- Complete postsecondary education or training;
- Successfully enter the workforce; and
- Grow up in safe communities and get a second chance if a mistake is made.²

These goals mirror many elements of the CCR trajectory presented in this spotlight, and recognize the need for a holistic approach across all stages of education to best prepare students for success.

New York City

New York City is the largest school district in the country, with over 1,800 schools serving over 1.1 million students. The most recent demographic snapshot shows that Hispanic students form the largest subgroup at 40.4%, followed by Black (26.5%), Asian (15.8%), and White (14.9%) students. Over 75% of these students face poverty, nearly 20% receive services for disabilities, and over 13% are English language learners.³

The city's Office of Postsecondary Readiness (OPSR) is home to the College and Career Planning team, which spearheads the College Access for All initiative to promote the various elements of CCR across the school system. One of the team's stated goals – part of the Mayor and Chancellor's larger Equity and Excellence for All agenda – is for every student to have an individual college and career plan as well as resources to support the plan on the path to high school graduation and beyond.⁴ The team offers a series of resources and tools that help support student CCR pathways.

An extensive [College and Career Readiness Toolkit](#) covers four domains identified by OPSR as integral to CCR success: Academic Skills, Academic and Personal Behaviors, Academic Programming, and College and Career Access. Through each of these domains, the city outlines the CCR trajectory and the elements within it that are important for students as they pursue pathways to graduation

and beyond. The toolkit includes a “Blueprint” for readiness that identifies detailed activities across a timeline for each year from grades 9-12.

The toolkit forms the foundation of a curriculum for training of counselors and school leaders and is the basis for a citywide college and career planning calendar, which engages all high schools in implementing events and supports for students at key moments in the timeline. For example, see the Year One Timelines for College and Career Access and Academic Programming:

College & Career Access		YEAR ONE TIMELINE
	WHAT STUDENTS DO	WHAT SCHOOLS DO
Exploration to Understand Trends & Pathways to Success	Visit at least 1 college.	At least 1 college tour per student, per grade is planned. Designate staff responsible for planning, and ensure that diverse mix of 2 and 4 year colleges are visited across students' four years. Staff prepare with students prior to trip (review colleges, brainstorm questions) and debrief trip with students following trip.
	Start researching colleges. By the end of the year, you should be able to describe different types of colleges (2 year, 4 year) and degrees, have a list of three colleges you are interested in, know the colleges' SAT and GPA requirements, etc. Resource: Visit Chapter 3 of the College Planning Handbook .	Identify where in the school day college and career planning take place and what staff are responsible. Have programming, curriculum and a college search tool in place. Some ways to do this are through Advisory or having a college and career center.
	Understand graduation requirements and college ready requirements.	Ensure that one staff person is knowledgeable about college and career training options, including which colleges excel at working with Students with Disabilities (SWDs), to ensure that "best fit" matches are made.
	Attend events to gain exposure to a variety of careers such as job talks, career shadow days, and career fairs.	Ensure that advisement includes discussion of basic graduation requirements and recommended courses for college readiness. Make sure programming structures are in place for all students to take challenging courses aligned with recommendations for college readiness.
	Complete a career inventory. Use career inventory tools like Career Zone to see how your interests match up with college majors and career paths.	Register to participate in Career Exploration Month and plan activities (January).
Getting In	Identify three career options and what further education they require.	Career interest inventories, including web based tool selected, staff trained and tools used with all students.
	Work with curriculum committee or lead teachers to develop a research project on exploring careers.	Work with curriculum committee or lead teachers to develop a research project on exploring careers.
Transitions and Financial Planning	Every student meets 1-1 with school staff to review program, transcript and planning for key access events (exams, application submission, etc.)	Establish a college and career readiness inquiry team or planning team. Determine what systems and structures you will put into place to ensure that 1-1 meetings occur.
	Register for a professional sounding email (your name@gmail.com).	Functional computer and internet access available daily for all students. Students have opportunities to learn about and practice written communication via email.
Adult Networks	By the end of this year, you should understand different types of financial aid and the processes around H/EOP, FAFSA, and grants/loans/scholarships. Resource: Visit Chapter 6 of the College Planning Handbook .	Integrate financial planning and knowledge into the school's college and career planning scope and sequence. Students delay planning for college if they believe they cannot afford it. Accurate, consistent information beginning in 9th grade is key.
	Meet with school staff and discuss taking the SAT II subject tests next year. If you are planning to take the SAT II subject tests, save some money for the registration fee.	Identify and meet 1-1 with students who are candidates to take Subject Tests to review the tests, costs and plan with student and family testing schedule and saving plan for test costs or waiver eligibility.
Adult Networks	Make sure your teachers get to know you. You'll need them to write recommendations for you for college, jobs, and internships.	Ensure that all teachers are trained in the basics of college planning and application process to ensure a school-wide college going culture and accurate information is given to students.

NYCDOE | College Access for All

9-12 Blueprint for College and Career Readiness

Academic Programming		YEAR ONE TIMELINE
	WHAT STUDENTS DO	WHAT SCHOOLS DO
Engage in Experiential Learning Opportunities	Participate in extracurricular activities consistently each year of school.	Extracurricular activities are crucial to student development and college readiness. Students need to consistently participate in activities each year to ensure a competitive college application and gain important interpersonal skills. Schools should ensure that a diverse array of activities are staffed and supported.
	Participate in at least 2-3 classes in which a unit brings you in contact with real-world problems.	Support teachers in planning lessons and units that connect academic skills to real-world problems that are relevant to modern-day college majors and careers.
	Every student should plan a summer activity that helps them develop college and career ready skills: a job , internship , classes, or enrichment activities.	Designate a staff member responsible for collecting and distributing summer program information and maintaining a centrally located bulletin board with information about summer programs. Find time in school schedule (e.g. advisory) for students to review and select summer opportunities. Require a "summer plan" for each student to be completed by June.
Gain Career-Specific Knowledge and Skills	Be able to talk about common jobs held by their family members, community members, or other adults that you know.	Identify opportunities within course offerings for students to write about careers.
	At least once every 5 weeks, reflect in writing or verbally on how what you are learning ties to something of value to you or your family.	Provide teachers with PD and support to see and clearly articulate how entire classes, or specific lessons and units within those classes, are relevant to specific college majors and careers, and how those careers in turn have a social purpose. Help counselors to understand the career relevance of courses offered to 9th graders. This can be deepened by providing staff with opportunities to visit employers or job shadow to better understand the skills and experiences students should have to be prepared.
Enroll in and Pass Rigorous Courses and Graduate with Additional Credentials	Start talking with your counselor about planning for advanced courses and making sure you know what you need to do to be eligible for those courses.	Use diagnostic assessments with incoming 9th-graders to identify gaps that may inhibit success, and program courses to build fundamental literacy and numeracy skills to address those gaps. Assign strong teachers to those courses.
Take Courses and Meet Requirements for Postsecondary Readiness	Aim for an overall GPA of 80% or above in each class to be eligible for the widest possible range of colleges.	1-1 advisement with school staff scheduled for all students at the mid-point and end of the school year to support students meet college readiness requirements for course sequencing and Regents.
	Earn 10+ credits during your freshman year to stay on track for graduation (to graduate you will need 44 total credits). Make sure you know the course and regents exams requirements for a diploma, as well as your advanced diploma options.	1-1 advisement providing students and their families with an overall vision of the pathway from entry to graduation and beyond. Support students to be on track to meet the Regents graduation requirements. The 4+1 Option Regents Graduation Requirement describes the increased flexibility students now have in their fifth choice of assessment. To earn a diploma, students must pass one (65+) assessment in ELA, mathematics, science, social studies and one fifth assessment: any other Regents exam or an additional approved option.

Source: NYCDOE 9-12 Blueprint for College and Career Readiness <https://drive.google.com/file/d/0Bxc3-kiwpHpnQVZUeDJ1YnNYXOU/view>

This kind of detailed guidance articulated across years helps provide clear pathways for students and the adults supporting them along those paths. Included within the framework are several "anchor" events, such as visiting at least one college campus by 8th or 9th grade and participating in

the SAT in high school, which the city offers for free during the school day. Both of these anchors have been instituted as part of the College Access for All and Equity and Excellence for All agenda.

Many of these events have an equity focus, ensuring all students have access to CCR opportunities like these when previously, certain subgroups were less likely to have access.⁵ For example, the [AP for All](#) initiative aims to increase Advanced Placement (AP) participation and performance especially for Black and Hispanic students by providing all NYC high schoolers access to at least five AP classes by fall 2021. In 2017, significantly more Black and Hispanic students took and passed at least one AP exam than in 2016 (exam-taking increases: +8.9% black, 13.2% Hispanic; exam-passing increases: 6.5% Black, 4.3% Hispanic).

In addition, the OPSR toolkit includes a detailed self-assessment for school leaders around the structures and data capabilities they have in order to fully understand their CCR offerings and identify potential gaps.

New York City has seen impressive gains for its efforts to promote meaningful CCR opportunities. More than double the number of students took the SAT in 2017 as compared to 2011. When the city covered SAT costs for all high school juniors in 2017, it saw a 25-point increase from the previous year in the percentage of students taking the exam at least once over three years in high school – representing over 20,000 more students taking the exam.

From 2005-2017, the city's four-year high school graduation rate has improved from 46.5% to 74.3%. Nearly 57% of the class of 2016 enrolled in some type of post-secondary education within six months of graduation, such as a 2- or 4-year college, technical, or public service program – compared to 40% for the class of 2007.⁶

CUNY Dual Enrollment Collaborations: College Now and the Early College Initiative

New York is unique in that a large percentage of students who graduate from city high schools enter the CUNY system, which includes 24 colleges and schools serving over 500,000 students. Up to 75% of students who enter CUNY schools as first-time freshmen are graduates of the city public school system, which facilitates data sharing across grade levels and institutions. The New York City Department of Education has worked closely with CUNY on CCR and has chosen to mirror CUNY's remediation cutoffs (which are higher than state graduation requirements) in its central metric – the college readiness index. The percentage of graduates meeting CUNY college readiness benchmarks is one of the accountability indicators on city high school data reports.⁷

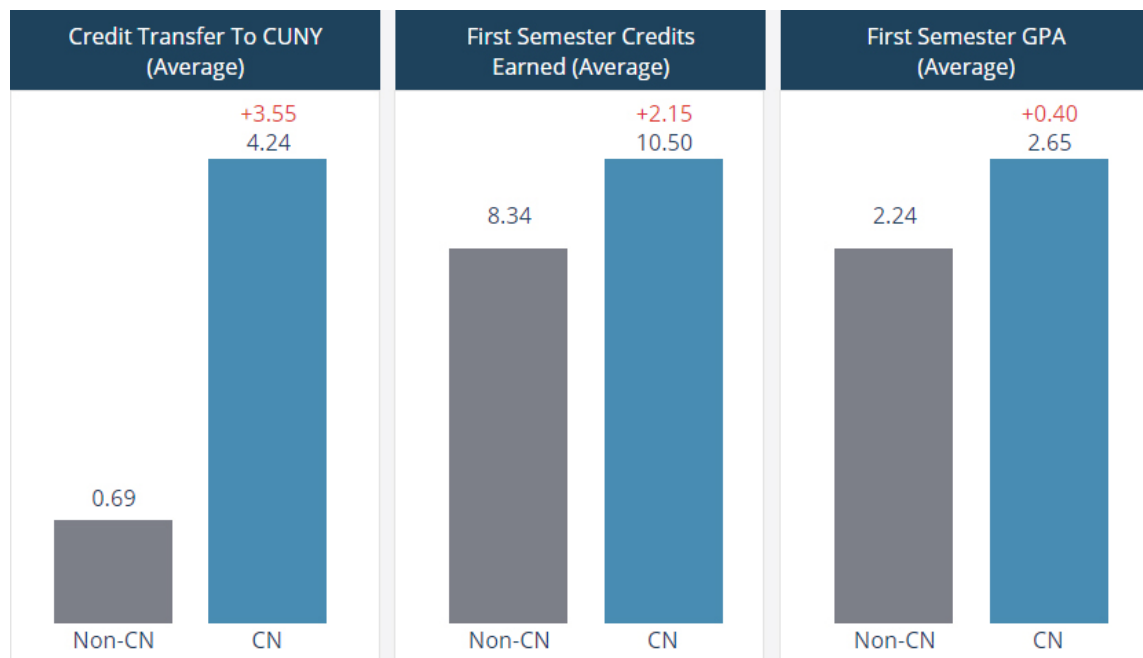
In addition, CUNY is a major driver of New York City's two major dual enrollment programs - **College Now** and the **Early College Initiative**.

Each of CUNY's 18 undergraduate colleges has its own localized College Now program, coordinated centrally from the main office at CUNY. A program that started over twenty years ago, College Now offers opportunities in the vast majority of city high schools, with most of the related classes offered to students before or after regular school hours or over the summer. Some courses take place on college campuses, while some are offered in the high school setting; all are taught by college faculty.

Over 22,000 students across New York City high schools participate in this program and are eligible to earn up to 12 college credits at no charge to the student. These credits transfer to other CUNY and SUNY schools and can also transfer to institutions outside the system, depending on their policies.⁸

Since 2012, the number of New York City public school graduates who had College Now experiences and then enrolled in CUNY degree programs as full-time freshmen has increased every year, accounting for 31% of CUNY freshmen from NYC schools in 2016. Participating students typically earn more credits during their freshman year of college and post higher GPAs than non-participants. Retention rates are also higher for College Now participants; of the cohort of NYC public school graduates entering CUNY schools as full-time freshmen in 2012, nearly 32% with College Now experience earned an associate's degree within four years, compared to 24% of all CUNY students, and 21% of NYC graduates without College Now. For earning 4-year degrees within four years, these numbers are 29% for College Now participants, 25% for all CUNY students, and 23% for NYC graduates without College Now.⁹

This chart shows first semester academic outcomes for Fall 2016 CUNY full time freshmen with and without College Now (CN) experience:



Source: CUNY College Now Postsecondary Snapshot: Fall 2016 and Historical Trends

Includes all graduates of NYC public high schools who enter CUNY as first-time freshmen within 15 months of graduating.

Students who participated in Early College Initiative were excluded.

The **CUNY Early College Initiative (ECI)** first launched in 2003 and now operates in 17 individual schools serving approximately 9,000 students across New York City. These schools embody the early college high school model, where students are exposed to rigorous, college-level coursework and the ability to earn college credit and the potential for an associate's degree prior to graduation. School models vary from 6-12, 9-12, 9-13, 9-14, and career and technical education (CTE)-focused.¹⁰

Each school is imagined and led by a team of educators that bridge middle school, high school, and college and create an integrated system of support to improve students' experiences and opportunities for future success. In addition, a number of external partners join state and city leaders to support these schools and their initiatives; for example, philanthropies and national organizations like the Gates Foundation and Jobs for the Future provide financial and strategic support for schools, and industry partners like Con-Edison and IBM support P-TECH programs.¹¹

The 9-14 or "P-TECH" model school, is perhaps the best known ECI model. Seven P-TECH-model schools are part of ECI, following a 9-14 grade sequence where students follow a staged trajectory of

high school, college, and work-based and technical learning experiences that result in graduation after six years with both a high school diploma and a 2-year associate's degree. P-TECH schools are designed by partners across education and industry to ensure tight alignment between educational experiences and workplace skills and needs.¹²

ECI tracks various types of data to analyze program offerings and success over time. In the 2013 cohort, 69% of students were of low socioeconomic status and 76% were Black or Hispanic. Of these participants, approximately 87% graduated high school and earned an average of 28 college credits. Looking back to the 2011 cohort, 77% enrolled in college after graduating from an ECI school and 44% enrolled within CUNY. Of the CUNY enrollees, 93% enrolled full-time.¹³ The first graduating cohort from Brooklyn P-TECH (the first P-TECH school) completed their associates degree on time at a rate of four times above the national average. Where citywide, about 55% of students pursue a four-year degree, over 80% of these Brooklyn P-TECH graduates are doing so.¹⁴

The leadership of both CUNY and the New York City Department of Education provide strong support for College Now and the Early College Initiative. Dual enrollment is seen as an important piece of the city-wide effort to thoroughly prepare public school students for college and career. Such support from the top is critical to the success of any such approach.

What the Experts Say

“We began this work over a decade ago, as cities and states were recognizing the mismatch between high school diploma requirements and the ways colleges were defining readiness for their work. We have continued to deepen our focus on how to achieve high-quality, individualized post-secondary planning for all New York City students. This includes preparing students in a more comprehensive way for career pathways and related credentials and truly integrating that into the work of our schools.”

Andrea Soonachan, Office of Postsecondary Readiness, NYC Department of Education

“With a focus on college and career readiness from City Hall, we've had more partners come to the table to support the work. Our college access work in particular has benefited from leadership support. Through a focus on strengthening advising and counseling experiences for students, we have been able to leverage national partners like the College Advising Corps to scale efforts from 25 schools to 125 over the next two years. This is a great example of taking a key partner and leveraging public and philanthropic funding as well as university partners to drive a city-wide goal to support students.”

Andrea Soonachan, Office of Postsecondary Readiness, NYC Department of Education

“Not only are these students earning college credit earlier and for free, they generally are better prepared to succeed in college thanks to their early exposure. They have a much better understanding of college-level expectations, as well as a level of confidence that they can successfully navigate the system.”

Cass Conrad, University Dean of K16 Initiatives at CUNY

“

- College Now and ECI are emblematic of the alignment between the New York City Department of Education and CUNY as we collaborate to create more opportunities for students to be college and career ready. Our faculty have concerns about students who enter college unprepared, and have come to recognize the benefit of students participating in these early college experiences. Faculty who participate in the programs also help to inform the student pipeline, communicating back to the high schools about areas where students need more support."

Cass Conrad, University Dean of K16 Initiatives at CUNY

Additional Resources

- For more about the NYC College and Career Planning Team and listed initiatives, see the [OSPR website](#) and [CCR toolkit](#).
- For more about College Now, please see the [CUNY website](#).
- To learn more about NYC's college and career readiness metrics, see the district [report page](#).
- To learn more about ECI at CUNY and P-TECH, visit the [ECI CUNY website](#) and [resources pages](#) and [P-TECH website](#).

1. <http://www.p12.nysed.gov/accountability/essa/documents/nys-essa-plan-final-1-16-2018.pdf> p 64
2. <http://www.p12.nysed.gov/accountability/essa/documents/nys-essa-plan-final-1-16-2018.pdf> p 7
3. <http://schools.nyc.gov/AboutUs/default.htm>; http://schools.nyc.gov/NR/rdonlyres/20056B95-8351-4E45-B8A1-9901B4B6A93B/0/DemographicSnapshot201112to201516Public_FINAL.xlsx; correspondence with NYCDOE officials
4. <http://schools.nyc.gov/Offices/OPSR/College+and+Career+Planning+Team.htm>
5. Interview with Andrea Soonachan, OPSR, NYCDOE
6. NYC Department of Education: Graduation and Dropout Rates for NYC Students
7. Interview with Cass Conrad, University Dean of K-16 Initiatives, CUNY and COLLEGE NOW Postsecondary snapshot: Fall 2016 and historical trends; correspondence with NYCDOE officials
8. <https://www.csi.cuny.edu/academics-and-research/specialized-programs/high-school-programs/college-now/faqs>
9. Interview with Cass Conrad, University Dean of K-16 Initiatives, CUNY and COLLEGE NOW Postsecondary snapshot: Fall 2016 and historical trends
10. <http://earlycollege.cuny.edu/our-approach/>
11. <http://earlycollege.cuny.edu/our-partners/>
12. <https://secure-media.collegeboard.org/pdf/research/college-credit-high-school-working-group-report.pdf>
13. <http://earlycollege.cuny.edu/results/>
14. <https://secure-media.collegeboard.org/pdf/research/college-credit-high-school-working-group-report.pdf>

San Antonio Case Study



Texas State Policy

The state of Texas requires that middle school students receive instruction towards college and career preparation and the state education agency approves courses for that purpose. ¹State law also requires 9th graders to develop personal high school graduation plans under the advisement of counselors or other school staff and signed by parents. These plans outline a course of study aligned with college and career readiness (CCR) and designed to ease the transition from high school to higher education.²

Texas's Every Student Succeeds Act (ESSA) plan counts the College, Career, and Military Readiness indicator as 40% of the School Quality and Student Success (SQSS) measure for high schools. This indicator allows students to meet one of many benchmarks, such as reading or math performance, AP or similar exam scores, dual enrollment or other post-secondary credit or degrees obtained in high school, military enlistment, industry certifications, etc.³

San Antonio

Over fifteen independent school districts serve several hundred thousand students in the greater San Antonio area. 4 San Antonio Independent School District (SAISD) serves over 53,000 of these students, of which over 90% are Hispanic, 6% African American, and 2% white. In addition, 92% are economically disadvantaged, 19% English language learners, and 10% receive special education services. In 2016, over 20% of these students took career and technical education (CTE) courses. The 4-year graduation rate for the class of 2016 was over 80%; nearly 68% of these students took the SAT (average score 1186) and/or ACT (average score 16.3).⁵

SAISD Superintendent Pedro Martinez provides leadership from the top that emphasizes a college-going culture and a variety of opportunities and experiences for students across the CCR trajectory.⁶ In his February 2018 "State of the District" address, Martinez highlighted the focus on early warning indicators such as third grade reading, fifth grade math, and advance coursework participation starting as early as eighth grade to promote college readiness. In less than three years as superintendent, Martinez has led efforts to improve student performance across these indicators and spread awareness of CCR opportunities for students and parents.⁷

Martinez uses a data-driven approach to do this work. Using data from the state education agency, the district's Institutional and Community Based Research team compiled a [detailed profile](#) of SAISD student post-secondary readiness and attainment from 2007-2014. This profile looks across the high school campuses to identify which are meeting the most success in sending students to "Tier 1" institutions of higher education. Detailed snapshots of how students are faring with CCR options like dual credit and advanced coursework are included, as well as college remediation rates.⁸ This data helped to inform a baseline from which Martinez identified 10 five-year goals around three key areas:

1. Ensure proficiency, growth, and a personalized graduation plan
2. Cultivate high-performing students
3. Implement targeted focus on post-secondary success⁹

The district has launched a Pipeline to College Success Program starting for the Class of 2019. This program employs two full-time college alumni Advisors as part of the district College and Career Readiness office. These Advisors work with high school juniors and seniors and then continue to support them as they graduate from SAISD and move to and through their first year post-graduation (whether to higher education, military, or workforce), providing vital counseling during a challenging transition time. Pipeline to College Success also provides funding to increase the number of students who can join the district on college visits out of state during spring break and early summer. SAISD identifies schools for these district-sponsored trips based on their ability to provide 100% financial aid as well as adequate academic and social supports for students and evidence of previous SAISD alumni succeeding at the college.¹⁰

In addition, a full-time college data analyst works with the CCR office and the district research and evaluation team to ensure data specific to CCR initiatives can be connected to the broad range of

programs and support services offered across SAISD, including those described below.

P16Plus

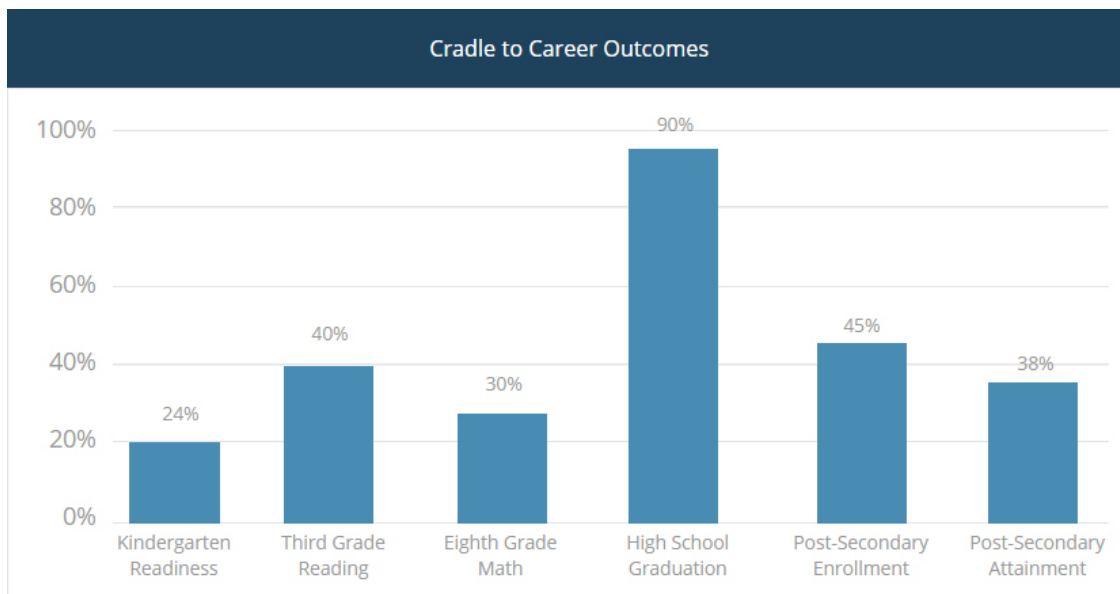
The city of San Antonio is located in Bexar County, Texas, which is home to the P16Plus Council. This county-wide partnership began in 2008 to help support underserved students in successfully reaching high school graduation and beyond. Their mission today is to ensure all youth are ready for the future.¹¹ P16Plus is part of the national [StriveTogether Cradle to Career Network](#), a data-centric, community-driven approach to supporting education, and is currently working on five programs in Bexar County.

P16Plus has formed a Data Support Council, inclusive of researchers and data analysts who can offer expertise in capturing and effectively using the data they collect. Council members represent area school districts, community groups supporting education efforts, and local colleges and universities.

Using data dashboards that track a series of “Cradle to Career Outcomes” across the CCR trajectory, the P16Plus team helps to ensure that regular, ongoing conversations about areas of strength and challenge continue. These include:

- Kindergarten Readiness: Students assessed as “very ready” in at least four of five domains on the Early Development Instrument
- 3rd Grade Reading: Students meeting grade level proficiency on state test
- 8th Grade Math: Students meeting grade level proficiency on state tests
- High School Graduation: Students meeting federal 4-year graduation rate
- Post-Secondary Enrollment: Percentage of high school graduates in Bexar County ISDs enrolled in a Texas public or independent institution of higher education the following fall
- Post-Secondary Attainment: Percentage of Bexar County residents ages 25-34 who have received an Associate’s degree or higher

P16Plus shows progress toward these outcomes in the percentages of students meeting these benchmarks:



Source: P16Plus Program

P16Plus offers support for several initiatives in Bexar County, including *Diplomás* and the My Brother's Keeper San Antonio program.

Founded in 2012, **Diplomás** taps partners across education, business, and community groups to work towards increasing college attainment for Latino students in greater San Antonio. Together, these partners reach almost 80% of public K-12 Latino students across Bexar County. After piloting the partnership along with twelve other sites across the country with support from the Lumina Foundation, the San Antonio partners committed to *Diplomás* sustained the initiative and worked to align its goals with the Texas Higher Education Coordinating Board.

The team set the goal for 60% of Bexar County Hispanics ages 25-34 to hold a certificate or higher by 2030. This ambitious goal was set with the recognition that less than 30% of this group currently holds a post-secondary degree or credential, compared to nearly 55% for non-Hispanic whites in the area.¹²

The *Diplomás* team has identified four key policy areas to target as they work towards the attainment goal: counseling and advising, dual credit, student support pathways, and college affordability.¹³ P16Plus supports these policy areas using data to help inform those efforts that are most successful for students. P16Plus declares, "We use data as a flashlight, not a hammer."¹⁴ This emphasizes their commitment to using real-time information about student progress and confronting gaps and challenges to drive improvements. Given the new frontier of accountability for states using measures of CCR, this motto is an example of how to embrace data outside of formal state accountability to focus on a specific goal and group of students.

My Brother's Keeper (MBK) San Antonio is local program building off the national challenge from former president Barack Obama for city leaders to address unique challenges faced by boys and men of color, and also supported by P16Plus. In the San Antonio area, 76% of males under age 35 are non-white; 140,000 of these males attend school in one of fifteen Bexar County districts.¹⁵

MBK is focused on helping these individuals graduate high school, complete some form of post-secondary training or education, achieve employment, remain safe from violent crime, and receive opportunities to reengage productively following arrest and imprisonment. The initiative is also

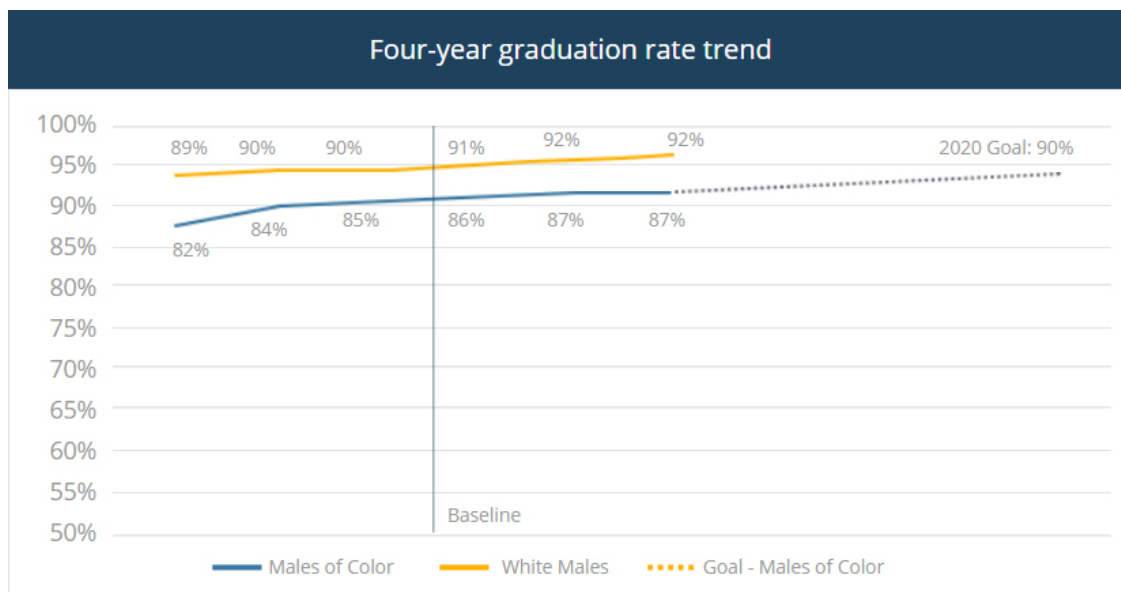
focused on ensuring efforts to address these challenges are sustainable.¹⁶

To support these efforts, MBK San Antonio employed a Mayor's Steering Committee and Community Convenings to engage leaders and community members in addressing the challenges faced by boys and men of color. These groups were bolstered by Pillar Council Supports and Action Networks used to strategize for and then activate people and groups around a particular need.¹⁷

As with Diplomás, MBK San Antonio examines data across indicators to inform local efforts, including metrics for opportunity youth, violent crime, and high school graduation. Data captured to date shows the education gaps faced by young men of color as compared to their white peers:

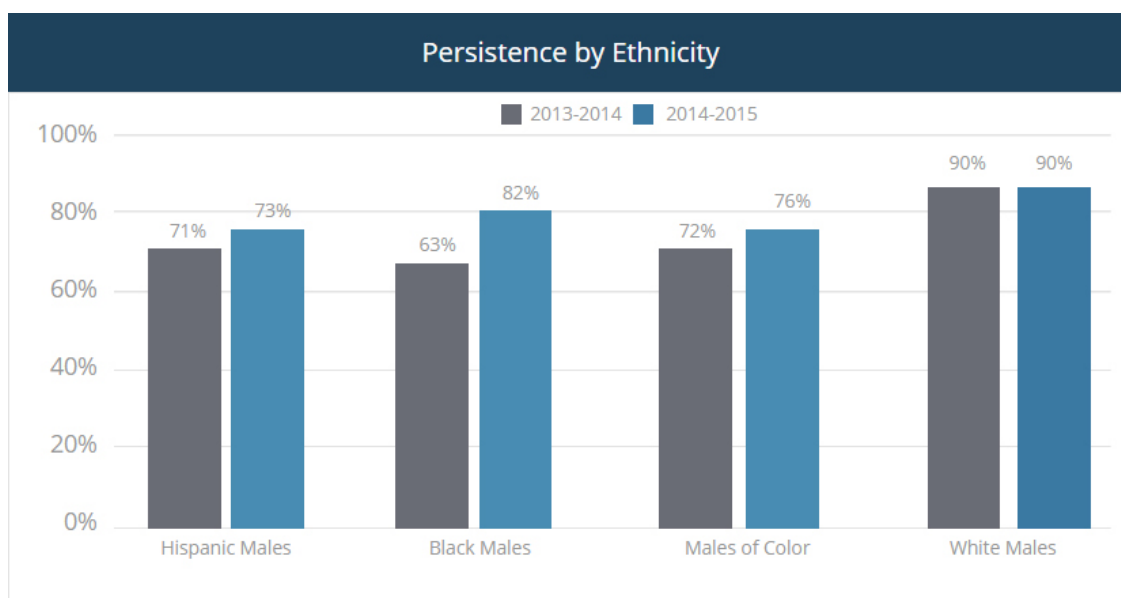
- 5% fewer males of color graduate high school on time
- 21% fewer earn a post-secondary credential or degree

For high school graduation, MBK San Antonio tracks third-grade reading, 9th-grade retention, and the 4-year drop-out rate as key indicators. The initiative focuses on four strategies to support improvement: building supportive communities, creating networks of educator and other services "champions", increasing engagement of role model men of color in the lives of boys, and supporting families in providing a home environment supportive of the program's goals. From 2014-2016, MBK San Antonio shows improvements for each of the key indicators and an upward trend for high school graduation overall:



Source: Source: Texas education agency, division of research and analysis, Bexar County 15 ISDs

For post-secondary attainment, MBK San Antonio identifies indicators of enrollment, persistence, and college completion rates. Strategies for improvements across these indicators include promoting community and family engagement, demystifying higher education access and procedures, building mentoring and navigation supports throughout the higher education experience, and focusing on accountability for institutions in providing appropriate experiences and supports for young men of color. From 2013-15, persistence, or the percentage of students who re-enroll in the same or another institution in the second consecutive year, improved most for this population.¹⁸



Source: MBK San Antonio: <http://mbksa.org/sites/default/files/mbksa-annual-indicators-report-2017-09-21.pdf>

This disciplined approach to engaging entire community networks, outlining specific strategies, and employing data to track progress for each is a proven model that other city leaders can look to.

San Antonio Works

An employer-focused approach underway in this area is **San Antonio Works** (known as SA Works), a program incubated by industry and city leaders in 2015 to align education and employment for better economic mobility, especially within STEM fields. This initiative aims to provide experiential learning opportunities for Bexar County students across a menu of options provided directly by businesses and other employers, and to build career pathways leading to successful employment. At the time of launch, SA Works set the goal of placing 20,000 youth into applied learning internships with area employers – an increase of 75% -- to help San Antonio gain recognition as a leader of education and workforce alignment across leading industries. In 2016, SA Works was transitioned to the San Antonio Economic Development Foundation.¹⁹

SA Works registers business partners with the initiative, allowing them to post internships to an online board where students can directly apply. Employers can offer opportunities like job shadowing and site tours, summer jobs, apprenticeships for college and technical students, internships and co-ops, and educator externships to help teachers use project-based learning in their classrooms. In partnership with other organizations, SA Works provides student offerings are available across the CCR trajectory:

- Grades 7/8: Career fairs led by partners like the San Antonio Hispanic Chamber of Commerce to expose students and parents to employment pathways
- Grade 9: Speakers Bureau, classroom visits by employers
- Grade 10: Job Shadowing, Site Tours
- Grades 11/12: 6-8-week internships

- Certificate or Associate's Degree Students: Apprenticeship model of 2 days in class, 3 days on job site
- Bachelor's Degree Students: Co-op experiences
- Teachers and Counselors: Project-based learning externships²⁰

This initiative has also filled a critical gap by naming for students those “soft skills” most in demand by employers and supporting an emphasis on development of those skills, such as communication, confidence, likability, willingness to listen and learn, adaptability, flexibility, self-reliance, teamwork, dependability, and honesty.²¹ Students gain exposure to these skills through direct work experience with area employers seeking the next generation of trained workers. Program leaders work with the employers and the school district to integrate the skills and experiences across the academic and work programs. Job shadowing and internship opportunities are matched as closely as possible with students' career exploration interests.

The teacher externship program is another unique feature of SA Works. Here, high school teachers have the opportunity over the summer to gain hands-on experience in career fields related to the subjects they teach. This allows them to bring ever more relevant content to their classroom teaching as they seek to align academics with career pathways for their students. SA Works, in partnership with other organizations, has opened this experience up to school counselors as well, addressing a critical gap in preparing those individuals with relevant career knowledge as they advise high school students along the CCR trajectory.

SA Works partners with organizations such as Goodwill, the San Antonio Education Partnership, and the Education Service Center - Region 20, among others. Leaders are now seeking ways to leverage the data capabilities of P16Plus to add even more robust program analysis structures, including a look at how youth who engage in their programs fare in higher education and employment. Partners like these provide additional counseling and data supports to promote a meaningful experience for students and an accountability structure for program organizers.²²

Data on the program to date is quite promising, showing significant growth in opportunities and uptake over the past three years. In 2017, over 3,000 students from over 60 schools participated in job shadowing with over 100 employers. Eighty percent of these students agreed the experience highlighted what skills and credentials they might need for a chosen career, and closer to ninety percent would consider a job with the employer they shadowed.²³

SA Works' infographic on the internship program provides more strong data about the impact of the initiative:



THE EMPLOYED LIFE

All SA Works interns gain a real-world, hands-on and paid experience and get exposure to new career paths.

OVER 700

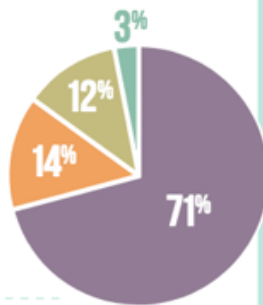
14-19 YEAR-OLDS EMPLOYED



77 TOTAL NUMBER OF SCHOOLS

in 19 school districts

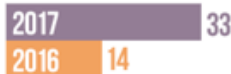
- 55 Public Schools
- 9 Private Schools
- 11 Charter Schools
- 2 Home Schools



STUDENT INTERNSHIP ENGAGEMENT



EMPLOYER INTERNSHIP ENGAGEMENT



HOW OUR EMPLOYERS BENEFIT

- Increased productivity
- Potential recruitment
- Mentorship opportunities
- Fresh ideas and perspectives

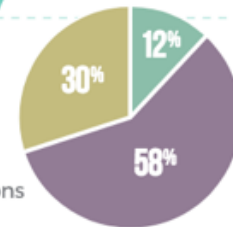
ECONOMIC IMPACT OF EMPLOYMENT

TOTAL IMPACT

\$1,102,500

33 EMPLOYERS REPRESENTING

- 19 Private Sector Companies
- 10 Non-Profit Organizations
- 4 Public Sector Entities



ROI EXAMPLE



H-E-B SAVED \$34,000

in their Electronic Maintenance department by repairing equipment in-house with intern assistance.

GET INVOLVED!

Help us grow San Antonio's talent.

sanantonioworks.org

What the Experts Say

“Our superintendent’s vision is to foster our post-secondary goal of 80-50-10: 80% of SAISD graduates go to college, 50% attend a four-year program, and 10% attend Tier 1 or Ivy League schools. In his most recent State of the District address, Superintendent Martinez brought our SAISD students accepted to Tier 1 schools this year and featured the work of their high schools. This kind of leadership drives our district culture.”

Dr. Linda Vargas-Lew, Director of College Readiness, San Antonio Independent School District (SAISD)

“These experiences benefit the students in so many ways – exposing them to the real-world skills they will need to succeed in work or college, teaching them some financial literacy as they receive their first electronic checks – but it also serves as part of a talent retention strategy. Students see the opportunities available to them in San Antonio across diverse industries. Employers gain exposure to student strengths and weaknesses and can communicate directly with school district leaders to discuss the skills that need more attention in the classroom. Ideally, employers go on to hire student interns and benefit from the experiences those students have already gained on the job.”

Romanita Matta-Barrera, San Antonio Works

“Our collective impact is based on role clarity. We have many different leaders and institutions with vital roles to play, but we have to figure out what each partner’s contributions are and align them where the whole can be greater than the sum of its parts.”

Ryan Lugalía-Hollon, P16 Plus

“We focus on CTE partners in our highest demand industries – employers who can provide economic mobility for our youth through stronger pathways into these professions. We can help students understand the academic and career trajectory they will need to succeed in specific jobs – which might be an industry-recognized credential.”

Romanita Matta-Barrera, San Antonio Works

“From the partner side, the replicable piece is this collective impact approach, helping an ecosystem determine where they are aligned, where there are gaps, choosing what to measure and how to build relationships. We are now on year five of Diplomas and we’ve moved from our siloes to a unified approach, coming together to increase Latino student success. Our data dashboard shows the needle moving for kids; in the beginning we didn’t even know what needle we need to have.”

Ravae Villafranca Shaeffer, Education Service Center, Region 20; Transformation Central STEM Center, University of Texas San Antonio

“It’s most helpful to have a collaborative with trust among partners to share what is working and what’s not on a regular basis. We’ve done this with rapid-cycle data around FAFSA completion, for example. The completion rate is rising every year, with over a 5% increase last year, thanks in large part to this kind of collaborative, data-focused work.”

Ginger Walker, P16Plus

Additional Resources

- To read about SAISD’s CCR efforts, visit the [SAISD CCR web page](#) and [counseling resources](#).

- To learn more about P16Plus, Diplomás, and My Brother's Keeper San Antonio, visit the P16Plus website and initiatives and data pages.
- For more about San Antonio Works, see the SA Works website and resources page

1 <https://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=51539619611> p 39

2 <https://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=51539619611> p 81-82

3 <https://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=51539619616> slide 14;
<https://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=51539619611> p 23-25

4 <http://www.wegopublic.com/districts.html>

5 Texas Education Agency Snapshot 2016: School District Profile for San Antonio ISD, retrieved from <https://tea.texas.gov/perfreport/snapshot/index.html> 2/21/18

6 <https://www.the74million.org/article/chiefs-talk-choice-pedro-martinez-has-sights-set-on-1-north-star-for-students-graduation-but-there-are-many-pathways-there/>

7 <http://tpr.org/post/saisd-superintendent-wants-be-district-defies-odds>

8 http://www.saisd.net/main/index.php?option=com_content&view=article&id=6205&Itemid=0

9 https://www.saisd.net/main/documents/2016/SAISD_Blueprint2.pdf

10 <https://www.saisd.net/main/documents/2017/insiderNov16.pdf>

11 <https://p16plus.org/p16-plus-about/>; correspondence with P16Plus officials

12 <http://p16plus.org/diplomas-p16plus-initiative/>; <http://p16plus.org/wp-content/uploads/2017/11/diplomas.pdf>

13 <http://p16plus.org/wp-content/uploads/2017/11/diplomas.pdf>

14 <http://p16plus.org/data/>

15 <http://mbksa.org/sites/default/files/mbksa-annual-indicators-report-2017-09-21.pdf>

16 <https://mbksa.org/>

17 <http://mbksa.org/sites/default/files/mbksa-annual-indicators-report-2017-09-21.pdf>

18 <http://mbksa.org/sites/default/files/mbksa-annual-indicators-report-2017-09-21.pdf>

19 <https://therivardreport.com/san-antonio-works-workforce-development-in-stem-industries/>;
 correspondence with SA Works Executive Director

20 https://www.sa2020.org/wp-content/uploads/2015/07/Appendix_San-Antonio-Works-Overview-FINAL.pdf

21 <http://www.sanantonioworks.org/>

22 <https://therivardreport.com/san-antonio-works-workforce-development-in-stem-industries/>

23 <http://www.sanantonioworks.org/wp-content/uploads/2018/03/SA-Works-Job-Shadow-Day.pdf>

New Mexico State Policy

Over the last several years, New Mexicans have come together to set a vision for the future of the state's college and career readiness (CCR) landscape. New Mexico Governor Susana Martinez, in conjunction with stakeholders from the higher education community, laid out the ambitious "[Route to 66](#)" plan in September 2016. The plan sets a target of 66% of working-age New Mexicans earning a college degree or post-secondary credential by the year 2030 – a rigorous goal given the current attainment rate of 45%.¹ The plan also sets a vision for New Mexico to be the fastest growing state in the nation when it comes to student outcomes, with a goal to increase the percentage of students who demonstrate readiness to more than 60% on the state English language arts (ELA) and math assessments.² These efforts are significant considering New Mexico's historically lower student academic proficiency rates compared to other states and to national averages³, and demonstrate how leaders are driving a sense of urgency to improve.

Following the launch of Route to 66, the New Mexico Public Education Department (PED) developed their *2017-2020 Strategic Plan: New Mexico Wins*, which established ambitious short-term achievement goals to ensure more students are prepared for the rigors of college and career. New Mexico's short-term goals include that by 2020:

- More than 50% of students are academically proficient in ELA and math
- More than 80% of students graduate high school
- No more than 25% of college enrollees require remediation⁴

Since 2015, New Mexico has made steady progress, with 15,000 more students reading and doing math on grade level.⁵ In 2016, New Mexico's students made progress in 19 of 21 tested areas in math, science, and ELA. In addition, between 2011 and 2016, the graduation rate increased by 5.6% - higher than the growth in the national graduation rate.⁶

Following the passage of the Every Student Succeeds Act (ESSA), the PED launched [NMRISING](#), a statewide initiative to inform the development of [New Mexico's state plan](#)⁷ and build upon the momentum of recent student success.⁸ The plan reinforces the PED's commitment to robust CCR standards and assessments, meaningful school accountability, a commitment to ensure that all students are served by excellent educators, and dynamic strategies for turning around the state's struggling schools.

To support the vision of students graduating prepared for post-secondary success, the PED established a working group to review graduation requirements and develop a CCR indicator to be implemented during the 2018-2019 school year. In developing the indicator, the state is considering measures such as college remediation and persistence, as well as emerging indicators in career and technical education (CTE) fields.⁹

The Collaborative for Student Success and Bellwether Education Partners conducted an [independent peer review process](#) of every state's ESSA plan to identify best practices. New Mexico was one of the [highest rated states](#)¹⁰ given their commitment to maintaining CCR expectations, engaging stakeholders, and intervening in low performing schools.¹¹ A separate review from the Data Quality

Campaign praised the New Mexico school grading system for providing clear ratings, allowing users to “quickly gauge school performance.”¹²

As the state continues to set a broad vision and develop parameters for supporting districts and schools, city leaders are forging partnerships to carry this same mantle locally.

Albuquerque and Mission: Graduate

The Albuquerque metropolitan area is comprised of four counties including Bernalillo, Sandoval, Torrance, and Valencia. It is estimated that at least 63% of jobs within central New Mexico will require a college education by 2020 and yet there are approximately 224,000 working age adult residents who do not have a college degree.¹³ To address this skills gap, the United Way of Central New Mexico engaged local partners to launch [Mission: Graduate](#), a cradle-to-career initiative committed to producing 60,000 new graduates with college degrees and certificates by 2020.¹⁴

Mission: Graduate was formally announced in 2013 following a period of planning and development led by the United Way of Central New Mexico. The initiative now receives support from a variety of local and national funders, including the Daniels Fund, United Way, Intel, the Lumina Foundation, and many more – and is part of the Strive Together network.¹⁵

Mission: Graduate works collaboratively with individuals and institutions representing the key sectors in the region: higher education, K-12 education, early childhood, business, workforce, nonprofit service providers, government, community-based organizations, and many others. The work centers on their belief that they already have many of the assets needed to help children succeed. They have charged themselves with building upon these assets to improve and, at times, increase, the supports that are available to children and families.¹⁶ Mission: Graduate has been a critical partner to Albuquerque Public Schools (APS) in their recent efforts around CCR.

APS is the largest school district in New Mexico and the 31st largest in the nation, serving over 84,000 students in 142 schools scattered across nearly 1,200 square miles. APS serves a highly ethnically, culturally, linguistically, and economically diverse population encompassing students from Native American pueblos, historical Spanish-speaking land grant communities, and dense urban areas. Two-thirds of APS students are Hispanic and 15% are English language learners. APS is the largest employer in Albuquerque, providing jobs for more than 12,000 people including 6,000 teachers.¹⁷

In 2015, APS formed a steering committee, appointed by Superintendent Raquel Reedy, to develop the [Academic Master Plan](#)¹⁸, a revised roadmap for reshaping education and charting a path to improvement for the district’s students and schools.¹⁹ The steering committee established the following goals to guide the direction of the district:

- Goal 1: Early Learning
- Goal 2: College & Career Readiness
- Goal 3: Developing the Whole Child

A key component of the APS Academic Master Plan is a joint project with Mission: Graduate to develop a “Graduate Profile,” which outlines three primary categories of knowledge, skills, and attitudes that every student should possess upon graduation.²⁰ It also identifies foundational experiences that can help propel the student, such as having opportunities for civic engagement,

being able to apply learning in real-world situations, and having support from caring adults. The Graduate Profile was developed after deep consultation with more than 412 business professionals, educators, students, parents, community members, and college faculty in over 50 focus group sessions and has now been formally adopted as part of the APS Academic Master Plan.²¹

The Graduate Profile is used by APS to inform the district's long-term priorities to improve student success and graduation outcomes. The hot air balloon summarizes the knowledge, skills, and attitudes (KSAs) high school graduates need to succeed. The Launchpad describes ten foundational experiences that support the development of these KSAs. At the center of the Launchpad are basic needs that are foundational to students' well-being and ability to learn.

The tool is designed to facilitate discussions that extend beyond the usual academic topics and help students learn more about the qualities needed in a professional employee. For example, the internship coordinator at one of Mission: Graduate's partner high schools uses the Graduate Profile to help prepare students for their internship experience through discussion about employers' expectations and the skills needed to succeed in the workplace.²²



Source: <https://missiongraduatennm.org/graduate-profile>

The Graduate Profile is the foundational document for Mission: Graduate's college and career readiness strategy.²³ By mapping out the KSAs and providing the Launchpad of those key experiences students need to follow a successful path, APS and Mission: Graduate are putting useful tools in the hands of students, parents, teachers, and counselors. A new video is being developed for parents to make this information accessible to those closest to students.

Data at Work

Mission: Graduate has developed a score card depicting progress toward seven core outcomes defined by partners from the community, including:

1. Kindergarten readiness

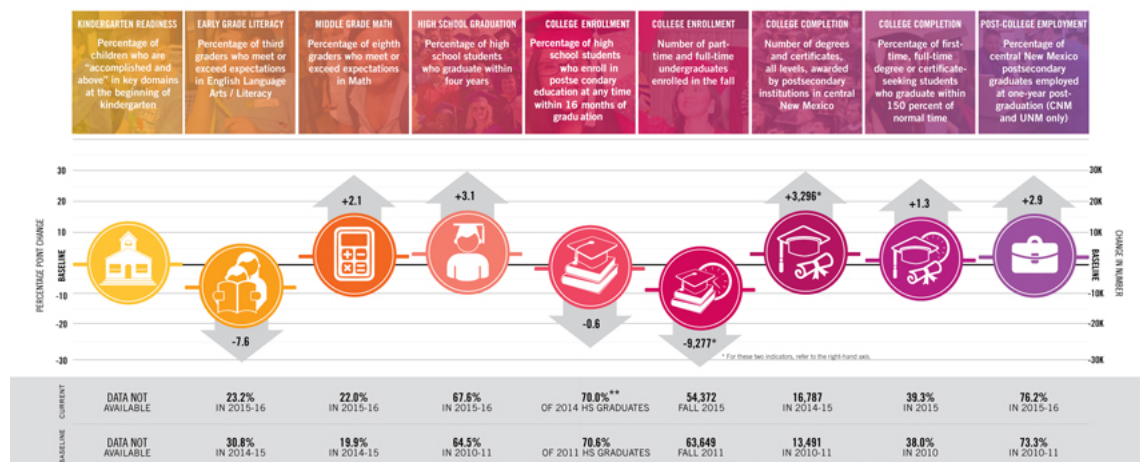
2. Early grade literacy
3. Middle grade math
4. High school graduation
5. College enrollment
6. College completion
7. Employment

This data is shared using an [interactive dashboard](#), which demonstrates a commitment to results-based accountability. In 2015 (the most recent data available from Mission: Graduate), educational attainment in central New Mexico had increased by 15,873 new graduates since 2010. In fact, all but two districts and state charters in the central New Mexico area saw an increase in high school graduation rates from 2010-2016.²⁴

Mission: Graduate tracks college enrollment in two ways. The first indicator looks at students who are in the traditional pipeline, enrolling in college shortly after graduating from high school. The second indicator takes into account all of the students who enroll in college, many of whom are adults.

College completion is the outcome that most directly impacts Mission: Graduate's goal of 60,000 new graduates with college degrees and certificates by 2020. The first completion indicator looks at the total number of degrees and certificates awarded by colleges and universities in the four-county area. The second reviews completion rates. In its most recent data, the central New Mexico region shows gains on both measures.

In its 2017 report, Mission: Graduate's dashboard shows progress in some areas and challenges in others. This is to be expected given the ambitious goals set and the realities of the baseline data in the region. However, this transparent approach to taking an honest look at progress helps to ensure that leaders stay focused on the need to improve.



Source: <https://missiongraduatennm.org/what-we-do/research/fired-60k-challenge-mission-graduate-annual-data-report/jul-10-2017>

In addition to more traditional metrics, Mission: Graduate leaders constantly ask key questions about program success, such as: *How many people were served or activities conducted? What was the quality of the services? Did we make a difference?* and then seek ways to answer these questions with as much information as possible (tracking program offerings and participation, surveying participants, etc.)²⁵

The Importance of Partnerships

One of the biggest areas of focus – and success – for New Mexico and the Albuquerque region in recent years has been the establishment of robust partnerships among cross-sector leaders.

The work of Mission: Graduate and APS on the Graduate Profile is one clear example of the results of such leaders working together. Mission: Graduate’s Executive Director, Angelo Gonzales, sits on the state’s working group looking at the state’s new grading system. APS Superintendent Reedy is an active participant in Mission: Graduate’s work and seeks to ensure local CCR initiatives are aligned with this regional support system.

The reach of Mission: Graduate spans the P-20 spectrum and seeks to address multiple ways to ensure students come to school prepared and can graduate ready for college and the workforce. The organization continues to launch new partnerships and initiatives that address community needs. For instance, in 2017, Mission: Graduate launched [Graduate! ABQ](#), a partnership between the New Mexico Workforce Connection Central Region, the New Mexico Department of Workforce Solutions, the city of Albuquerque, the University of New Mexico, and Central New Mexico Community College. Graduate! ABQ targets adults without a degree or credential by connecting them with a graduate coach who can provide financial, academic, and mentorship supports necessary to receive a degree or credential from one of the partnership institutions.²⁶

Recognizing that truancy was a barrier to ensuring students were graduating prepared and on time, the Mission: Graduate network partnered with New Mexico PBS, targeting families and students with public service announcements on the importance of attending school while also launching a broader campaign to ensure schools in the region have the necessary tools to address issues related to chronic absenteeism.²⁷ The latest convening connected 41 schools across seven districts.²⁸

Mission: Graduate also facilitated a partnership between Rio Rancho public schools and local business organizations including Wells Fargo, the Air Force Research Laboratory, Intel, and Sandia National Laboratories to conduct a summer institute for 80 educators to bridge the gap between the workforce and schools by demonstrating how math is utilized in the workforce. The third year of the institute is scheduled for 2018 with plans to expand to other districts in the area.²⁹

What the Experts Say

“We talk about college and career readiness, but often see more emphasis on the first “C,” which is college. This is important, but we would like to see more efforts to take the second “C” – career – seriously and measure progress toward career success. Employers especially are asking for this, as we hear about the skills gaps for jobs. We need to build more data at scale as to what this looks like and how we can effectively address our challenges.”

Angelo Gonzales, Mission: Graduate

“The challenge before us as a community is how can we come together to improve the traditional pipeline of students who graduate from high school and go directly to college, as well as the many nontraditional pathways that can support individuals for whom the traditional path is no longer an option.”

Angelo Gonzales, Mission: Graduate

“

- When we developed our Graduate Profile, we had business leaders actively participating in the conversations. One thing we realized was that many people were saying the same thing but using different words. For example, the skills gained by students through social-emotional learning, project-based learning, or competency-based learning are closely related to many of the so-called “soft skills” that employers say are lacking in the workforce. We created space for them to understand each other and work together in a new way, fostering true collaboration with people on equal ground.”

Angelo Gonzales, Mission: Graduate

- “Over the past few years, Mission: Graduate has successfully brought the community together, including business, community, K-12, and higher education leaders. Their comprehensive vision is a multi-pronged effort spanning the P-20 spectrum. Through their leadership, Mission: Graduate changed the conversation about ensuring our students graduate college and career ready and is helping Albuquerque prepare for the workforce needs that lie ahead.”

Amanda Aragon, New Mexico Kids Can

Additional Resources

For more information about the APS Master Plan, a description of their plans, and a master framework visit their [website](#) and view information on their [College and Career Readiness goal](#).

For more information on how New Mexico’s ESSA plan incorporates college and career readiness along with career and technical education visit [Every Student Succeeds Act \(ESSA\): Delivering on College and Career Readiness and a Well-Rounded Education](#)

For additional resources on Mission: Graduate’s seven core outcomes and interactive dashboard visit their [Monitoring Progress](#) page.

A bill currently under consideration by the state legislature would require students in grades 8-11 to develop an individualized CCR plan mapping out their path to either commit to an internship, apprenticeship, or military service or to apply to a post-secondary institution before high school graduation. This approach is unique in the nation and would require additional counseling and mentorship resources; however, the effort demonstrates the recognition of state leaders that more action must be taken to improve graduation and post-secondary attainment rates for New Mexicans.

1. <https://www.abqjournal.com/851813/nm-governor-announces-new-goal-on-higher-education-degrees-credentials.html>;
<http://strongernation.luminafoundation.org/report/2018/#state/NM>
2. <https://www2.ed.gov/admins/lead/account/stateplan17/nmcsa2017.pdf>
3. https://www.nationsreportcard.gov/profiles/stateprofile/overview/NM?cti=PgTab_OT&chort=1&sub=MAT&sj=NM&fs=Grade&st=MN&year=2015R3&sg=Gender%3A+Male+vs.+Female&sgv=Difference&ts=Single+Year&sfj=NP
4. <https://www2.ed.gov/admins/lead/account/stateplan17/nmconsolidatedstateplan.pdf>
5. <https://bloximages.newyork1.vip.townnews.com/santafenewmexican.com/content/tncms/assets/v3/editorial/d/02/d02dbf70-7131-11e7-831a-5fdc0bdc1437/597735453c0f6.pdf.pdf>
6. <https://webnew.ped.state.nm.us/information/essa-new-mexico/updates/>
7. <https://webnew.ped.state.nm.us/information/essa-new-mexico/updates/> and <http://nmfirst.org/event-details/excellence-in-education>
8. <https://webnew.ped.state.nm.us/information/essa-new-mexico/updates/>

9. <https://webnew.ped.state.nm.us/wp-content/uploads/2018/02/FINAL-APPROVED-NM-State-ESSA-Plan.pdf>
10. <https://www.abqjournal.com/1024507/independent-reviewers-new-mexico-education-plan-best-in-the-nation-2.html>
11. <https://checkstateplans.org/states/new-mexico/>
12. <https://www.abqjournal.com/1107486/reviewers-nm-education-plan-top-in-the-nation.html>
13. <https://missiongraduatenm.org/what-we-do/research/fired-60k-challenge-mission-graduate-community-report/jan-23-2018>
14. <https://missiongraduatenm.org/who-we-are/history>
15. <https://missiongraduatenm.org/who-we-are/sponsors>;
<https://missiongraduatenm.org/sites/default/files/Press%20release%202010-14-13%20Final.pdf>
16. <https://missiongraduatenm.org/how-we-work>
17. <http://www.aps.edu/about-us>
18. <http://www.aps.edu/academics/academic-master-plan>
19. <https://www.abqjournal.com/1047655/new-academic-master-plan-will-guide-aps-for-years.html>
20. <https://missiongraduatenm.org/graduate-profile>
21. <https://missiongraduatenm.org/what-we-do/research/fired-60k-challenge-mission-graduate-community-report/jan-23-2018>
22. <https://missiongraduatenm.org/news/what-do-graduates-need-know-succeed-beyond-high-school/mar-1-2016>;
correspondence with Mission: Graduate Executive Director Angelo Gonzales
23. <https://missiongraduatenm.org/what-we-do/strategies/college-and-career-readiness>
24. <https://missiongraduatenm.org/what-we-do/research/fired-60k-challenge-mission-graduate-annual-data-report/jul-10-2017>
25. Interview with Angelo Gonzales
26. <https://news.unm.edu/news/unm-joins-graduate-abq-partnership-helping-adults-get-to-and-through-college> and
http://www.krqe.com/fox-new-mexico/living/for-your-education-graduate-abq_20180104025919733/900327444
27. <https://missiongraduatenm.org/what-we-do/strategies/attendance-and-engagement>
28. <https://missiongraduatenm.org/what-we-do/research/fired-60k-challenge-mission-graduate-community-report/jan-23-2018>
29. <https://missiongraduatenm.org/what-we-do/research/fired-60k-challenge-mission-graduate-community-report/jan-23-2018>
30. <https://www.cnn.com/2018/02/01/health/new-mexico-graduation-trnd/index.html>

Additional Resources and Endnotes

CCR Opportunities & Data

Several resources can be used to examine how CCR opportunities, standards, definitions, and measures are employed across states, including:

- AIR College & Career Readiness & Success Center:
 - [Work-Based Learning Definitions: Themes from States and National Organizations](#)
 - [College and Career Readiness Assessment Resource List](#)
- Achieve: [The College and Career Readiness of U.S. High School Graduates](#)
- Achieve & Advance CTE: [How States Are Making Career Readiness Count](#)
- [Advance CTE: Learning that Works Resource Center](#)
- College Board: [College Credit in High School Working Group Report](#)
- The Data Quality Campaign: [Turning Data Into Information](#) (Appendix covering state examples of using CCR data to inform program improvements)
- [Education Commission of the States: College and Career Readiness Measures by State](#)
- New American Foundation: [College and Career Readiness State Definitions](#)
- The New Skills for Youth Initiative: [The State of CTE: Career Advising and Development](#)

- Both ACT and College Board release annual reports on CCR based on the ACT and SAT exam results and various related factors:
 - [ACT Condition of CCR](#)
 - [College Board SAT Report on CCR](#)
- The College Board illustrates increasing numbers of students participating and succeeding in AP classes in *AP Program Results: Class of 2017*.
- The National Center for Education Statistics [Forum Guide to CCR Data](#) outlines recommendations for using data to best promote and support CCR programs and continuous improvement. The guide is intended to help district and state leaders “determine appropriate data elements, metrics, and reporting tools needed to support specific CCR initiatives.”
- The [Perkins Data Explorer](#) provides data on CTE enrollment and performance across states and student groups.

CCR Policy & Accountability



-
- The American Institutes for Research (AIR) College and Career Readiness and Success Center offers several resources and tools for exploring state activities related to ESSA and other federal laws:
 - [Interactive State Policy Map](#)
 - [Developing a College- and Career-Ready Workforce: An Analysis of ESSA, Perkins, and WIOA](#)
 - The Council of Chief State School Officers (CCSSO) and Education Strategy Group have produced resources that outline ways that state accountability systems can focus on CCR:
 - [Destination Known: Valuing College AND Career Readiness in State Accountability Systems](#)
 - [Leveraging ESSA: Shining a Spotlight on K-12 Higher Education Alignment](#) (in partnership with National Association of System Heads, State Higher Education Executive Officers association, and Higher Ed for Higher Standards)
 - The Data Quality Campaign’s resource [Opportunities to Make Data Work for Students in the Every Student Succeeds Act](#) provides recommendations for states using data through ESSA across a set of four identified policy priorities.
 - The International Association for Online K-12 Learning (iNACOL): [Rethinking State Accountability to Support Personalized, Competency-Based Learning in K-12 Education](#) brief offers suggestions and additional resources for leveraging ESSA to develop student-centered accountability systems.
 - Excel in Ed’s [Putting Career and Technical Education to Work for Students: A Playbook for State Policymakers](#) explores current CTE offerings and opportunities and recommends structures for high-quality programs.

- Advance CTE released [Career Readiness & the Every Student Succeeds Act: Mapping Career Readiness in State ESSA Plans](#) to provide insights into how states are measuring career readiness.
- Achieve and Jobs for the Future's [Integrating Earning College Credit in High Schools into Accountability Systems](#) describes various opportunities for post-secondary credit earning in high school, research on how such opportunities can promote college success, the current state policy landscape as related to accountability, and recommendations for effective policies.
- The Joint Economic Committee Democrats released a set of findings, principles, examples, and recommendations for strengthening middle-skills pathways in [Expanding Opportunities through Middle-Skills Education](#).
- University Ventures outlines suggestions for policies that support effective apprenticeship experiences in [Making Apprenticeships Work: Five Policy Recommendations](#).
- Urban Alliance outlines its recommendations for and examples of efforts to align high school and work in [Job Training Starts Now: Why High School Students Need Youth Employment Opportunities](#).
- American Enterprise Institute: [Earning to Learn: How America's Work Colleges Are Bridging Equity Gaps and Serving Society](#). Soft skills attainment is one area where education institutions have struggled, at times, to adequately support students. Part of the problem is the challenge in identifying the soft skills most critical to future success and finding ways to integrate attainment of those skills into both the academic curriculum and work-based learning opportunities. At the higher education level, the federal [work colleges](#) offer a promising example of how to do this work. These institutions require students to work 8-20 hours/week to help subsidize their tuition for academic coursework. In many cases, students' work assignments are aligned to their course of study, and they receive separate work grades based on their soft skills attainment in areas like communication, teamwork, and problem-solving. Work supervisors communicate with academic leaders to ensure skills students most need to develop are also addressed in the classroom setting. This is a model other colleges and even high schools could consider, especially when aligning internships and apprenticeships with high school work.

The Equity Imperative



-
- The U.S. Chamber of Commerce Foundation has [identified challenges](#) states face in using CCR for accountability systems that result, in part, from questions about rigor and equity and long-standing stigmas associated with CTE and other technical or skills-based opportunities. Like other groups, the USCCF recognizes the need to include both college and career readiness (and not one or the other) and to tailor an approach that best meets the needs of a given region and business community.
 - Education Counsel outlines [20 questions](#) a state or district should ask to examine whether CCR opportunities are maximized for all students. These questions cover everything from vision to theory of action to the metrics, interventions, supports, and community

engagement needed to bolster a robust strategy for helping all students prepare for a successful future.

- ACT identifies and outlines [four “essential domains”](#) for student readiness: core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation. A focus on this “holistic approach” emphasizes the range of skills and aptitudes students need to do well after high school.
- Students with disabilities make up about 13% of the total population of students aged 3-21 served by the Individuals with Disabilities Education Act (IDEA). These students graduate at lower rates than the regular education population – almost 20 percentage points lower, according to recent data.¹¹ They are also less likely to engage in CCR opportunities such as high-level math and science as well as AP courses. The College and Career Readiness Success Center at AIR has [outlined strategies](#) to serve this student population and ensure equitable access to CCR.
- The [USED Civil Rights Data Collection: CCR Data Snapshot](#) offers national statistics on disparities in various student population attainment of college and career readiness based on the most recent national civil rights data.

A Framework for CCR in Districts



-
- The National College Access Network (NCAN) has created [Common Measures](#), a set of outcome metrics used widely for CCR initiatives and backed by research; the [handbook](#) and dashboard tool will be useful to district leaders seeking to identify the most appropriate measures for local use.
 - The AIR College and Career Readiness and Success Center has created a [College and Career Readiness and Success Organizer](#), which graphically displays Goals and Expectations, Outcomes and Measures, Resources and Structures, and Pathways and Supports and lists out the many indicators, measures, resources, processes, skills, and supports that correspond to each element of CCR. In addition, their study on [College and Career Readiness in Boston: Understanding and Tracking Competencies and Indicators](#) provides information on early warning and other measures.
 - In Jobs For the Future’s [Building student Momentum from High School to College](#), Elisabeth Barnett of the Community College Research Center outlines examples of opportunities, outcomes, and indicators across the student CCR trajectory, focusing on late high school into college. This resource also highlights how local partnerships support student CCR success.
 - The University of Chicago Consortium on School Research has the [On Track for Graduation](#) series, which provides several studies on the development of graduation tracking indicators.
 - Achieve explores the 9th-grade on track measure as an early warning indicator in [On Track or Falling Behind? How States Include Measures of 9th-Grade Performance in Their ESSA Plans](#).
 - In The [State of Career and Technical Education: Career Advising and Development](#), Advance CTE explores the critical role of advising students along career pathways, as well as related policy recommendations.

- The New York City Department of Education has published an extensive [College and Career Readiness Toolkit](#) covering four domains: Academic Skills, Academic and Personal Behaviors, Academic Programming, and College and Career Access. Through each of these domains, the city outlines the CCR trajectory and the elements within it that are important for students as they pursue pathways to graduation and beyond. The toolkit includes a “Blueprint” for readiness that identifies detailed activities across a timeline for each year from grades 9-12.
- Many states require Individualized Learning Plans (ILPs), which are personalized plans developed by students and school personnel to set goals that help students focus on their academic and career futures. States have many names for ILPs including Academic Achievement Plans, Personal Learning Plans, Personal Graduation Plans, or 4-Year Plans. Students, parents, and community partners can work together to create ILPs for all students regardless of mandates. ILPs should involve students and parents and should be reviewed periodically as students’ interests evolve. For more, see:
 - The Department of Labor conducted a study of [ILPs Across the U.S.](#), mapping out state policies as of 2016.
 - Hobsons conducted a national study of [Individual Learning Plans for College and Career Readiness: State Policies and School Based Practices](#).
 - The Colorado Department of Education published an [Individual Career Academic Plan Toolkit](#).
 - The Georgia Department of Education has a guide for [School Counselors, Advisors, and Educators: Helping Students Make Informed Decisions about their Individual Graduation Plans](#).
 - The [Nebraska Department of Education Personal Learning Plan](#) incorporates a career education model.

Experts Consulted for this Spotlight Include



-
- Rachel Anderson, Associate Director, Federal Policy and Advocacy, Data Quality Campaign
 - Amanda Aragon, Executive Director, NewMexicoKidsCAN
 - Victoria Bustos, Executive Director of Student Support Services, SAISD
 - Caitlin Codella, Senior Director of Policy and Programs, U.S. Chamber of Commerce Foundation (USCCF) Center for Education and the Workforce
 - Cass Conrad, University Dean, K-16 Initiatives, City University of New York (CUNY)
 - Kim Cook, Executive Director, National College Access Network (NCAN)
 - Kimberly A. Green, Executive Director, Advance CTE
 - Austin Estes, Policy Associate, Advance CTE
 - Jaimie Francis, Director of Programs and Operations, U.S. Chamber of Commerce Foundation (USCCF) Center for Education and the Workforce
 - Angelo Gonzales, Executive Director, Mission: Graduate

- Dr. James Kemple, Executive Director Research Alliance for New York City Schools; Research Professor, Steinhardt School of Culture, Education, and Human Development at New York University
- Kate Blossveren Kreamer, Deputy Executive Director, Advance CTE
- Jim Larimore, Chief Officer, Center for Equity in Learning, ACT
- Ryan Lugalía-Hollon, Ph.D., Executive Director, P16 Plus, San Antonio
- Romanita Matta-Barrera, Executive Director, San Antonio Works
- Michele McNeil, Executive Director, K-12 Policy, College Board
- Ravae Villafranca Shaeffer, Coordinator III, Instructional Services, Education Service Center, Region 20, Co-Director, Transformation Central STEM Center, University of Texas San Antonio
- Sarah Shah, Director of Evaluation and Impact Measurement, College Advising Corps
- Quentin Suffren, Managing Director, Innovation Policy, Excel in Ed
- Susan Bowles Therriault, Ed.D., Director – College & Career Readiness & Success Center, Managing Researcher, American Institutes for Research
- Joel Vargas, Vice President, School and Learning Designs, Jobs for the Future
- Dr. Linda Vargas-Lew, Director of College Readiness, San Antonio Independent School District (SAISD)
- Ginger Walker, Data Director, P16Plus San Antonio
- Andrea Soonachan, Executive Director of College and Career Planning, Office of Postsecondary Readiness, NYC Department of Education
- Abby Whitbeck, Executive Director, AP Strategy and Analytics, College Board

Bush Institute Project Team

- Anne Wicks, Director, Education Reform
- Eva Chiang, Director, Research and Evaluation
- Abby Hoak-Morton, Manager, Education Reform

Research Partners

- Terrell Halaska, HCM Strategists
- Jocelyn Pickford, HCM Strategists

Endnotes



-
1. Georgetown University Center on Education and the Workforce, America's Divided Recovery: College Haves and Have-Nots, 2016, <https://cew-7632.kxcdn.com/wp-content/uploads/Americas-Divided-Recovery-web.pdf>

2. See list of experts consulted for this spotlight.
3. <https://www.uschamberfoundation.org/sites/default/files/CareerReadinessFINAL.pdf>
4. <https://www.ed.gov/essa?src=ft>
5. <https://www.ccsso.org/sites/default/files/2017-11/DestinationKnown.pdf>
6. http://edstrategy.org/wp-content/uploads/2017/12/Mapping_Career_Readiness_ESSA_FULL_2017.pdf
7. https://www.sreb.org/sites/main/files/file-attachments/tenets_march2017.pdf
8. <http://www4.esc13.net/cc/house-bill-5>
9. <https://www.cde.state.co.us/postsecondary/icap-background>
10. <https://www2.ed.gov/about/offices/list/ocr/docs/crdc-college-and-career-readiness-snapshot.pdf>
11. https://ccrcenter.org/sites/default/files/ESSA-IDEA_CollegeCareerReadiness.pdf