# Road Map Project Community and Technical College Report

OUTCOMES FOR LOCAL HIGH SCHOOL GRADUATES AT LOCAL COMMUNITY AND TECHNICAL COLLEGES

*COMMUNITY CENTER FOR EDUCATION RESULTS*
*January 2016*

The ROAD MAP PROJECT

Supported by CCER

# Our Goal

The Road Map Project's goal is to double the number of students in South Seattle and South King County who are on track to graduate from college or earn a career credential by 2020. We are committed to nothing less than closing the unacceptable opportunity and achievement gaps for low-income students and children of color, and increasing achievement for all students from cradle to college and career.


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# Introduction

The Road Map Project is a community-wide effort aimed at dramatically improving student achievement from cradle through college and career in South King County and South Seattle. Our goal is to double the number of students in our region who are on-track to graduate from college or earn a career credential by 2020 and to eliminate opportunity gaps for low-income students and students of color. To accomplish our goal, we believe in the power of data to understand the outcomes of our students and to illuminate successes, challenges and areas for improvement.

Since it began in 2010, the Community Center for Education Results (CCER), the nonprofit that provides staffing support to the Road Map Project, has reported annually on many Indicators of Student Success,[1] which are important milestones that span from cradle through college. Through a partnership with local community and technical colleges (CTCs), the Washington State Board for Community and Technical Colleges (SBCTC), and the Washington State Education Research and Data Center (ERDC), CCER has combined data from the K-12 system with data from community colleges to look at the progress of local high school graduates on their journey through local CTCs.

We hope this report can help inform ongoing efforts to support students in reaching their postsecondary goals. Annual updates to this report will contribute to the continuous cycle of inquiry and improvement that is happening in programs all over our region.

Unfortunately, our initial data show that not nearly enough students earn a credential in a timely manner. There are also wide gaps in progress, especially between full-time and part-time students, college-ready and non-college-ready students, and when comparing the progress of White and Asian students to other racial and ethnic subgroups. There is great work underway to address these issues, but the magnitude of the challenge is clear. We must step up our efforts to close opportunity gaps in order to ensure a better future for our students.

## The Road Map Project & Postsecondary Partners

In 2010, leaders and activists from many sectors committed to work together as part of the Road Map Project. A collective approach to improving education is warranted due to the magnitude of the challenge. No one organization or person working alone can achieve results at the scale we need.

Postsecondary institutions have been important partners in the Road Map Project since its launch. Most of the colleges included in this report participate in the Puget Sound Coalition for College and Career Readiness, a formal network of K-12 superintendents and college presidents whose goal is to build a seamless transition from high school to college and career across the Puget Sound region. The Coalition colleges are engaged in important joint work aligning and sharing policy and practice. Most recently, the Coalition received funding for Project Finish Line, a collaborative effort focused on completion coaching that includes a peer learning community of colleges and builds upon expertise from national award-winning Walla Walla Community College, which has seen great success in closing opportunity gaps. Project Finish Line is just one example of the amazing work being led by administrators, faculty, and staff on campuses across our region.

The commitment and partnership of the region's postsecondary community made this report possible. All are heavily invested in improving their institutions. We hope that this report can support ongoing efforts and new strategies by helping to inform CTCs with additional data. We also want our community to understand the importance of local CTCs so that they will advocate for their funding and success.

## Postsecondary Education: The Economic Imperative for Washington Residents

Our region is experiencing unprecedented economic growth, presenting a wealth of opportunities for career and financial advancement. More and more, these opportunities require advanced levels of education. According to a study by the Georgetown University Center on Education and the Workforce, 67% of jobs in Washington State will require some form of postsecondary credential by 2018.[2] Currently, only 28% of students from our region receive a two or four-year degree by their mid-20s.[3] These figures present a massive disconnect between our local education system and our knowledge-intensive economy, and are great cause for concern. They show that we aren't preparing many of our youth for the current labor market, and that, ultimately, we are setting them up for failure as they will have to compete against the highly educated talent moving into our region. Postsecondary attainment is key to better jobs, higher wages, and increased economic stability.

**28%**

Current postsecondary completion of students in the Road Map Region

**67%**

Jobs that will require a postsecondary credential by 2018

Students of color face the toughest barriers to gainful employment in our region, evidenced by their low rates of college completion in comparison to their peers. For example, although they comprise a quarter of the entire student population in our region, Hispanic/Latino students complete college at less than half the rate of White and Asian students.[4] We have a responsibility to ensure that all students in our region have the opportunity to participate in our local economy. In order to do so we must address a variety of factors, and we must acknowledge the legacy of historical inequity and structural racism that continue to hinder the educational progress of students of color.

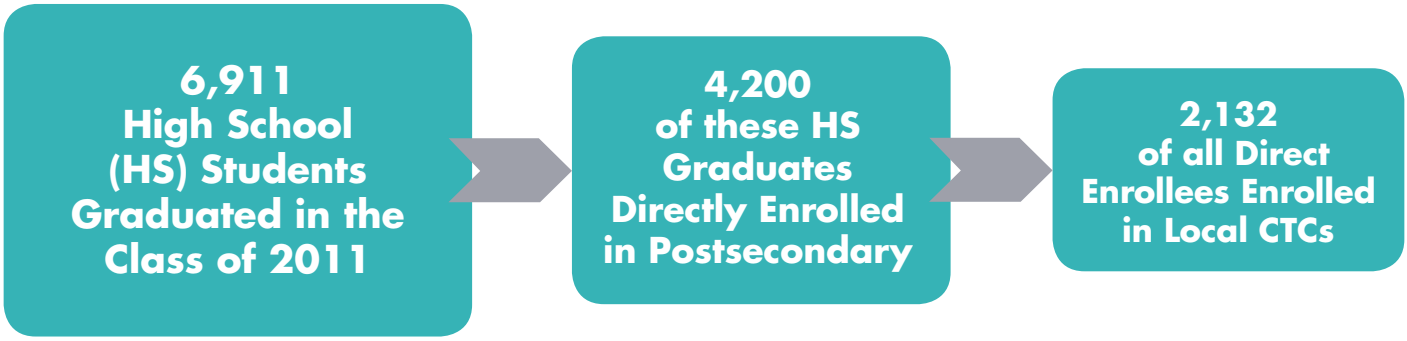
Behind the data in this report are thousands of talented students. We all lose if we don't grow their potential and support them to achieve their educational goals. For the health and sustainability of individuals, families and our region as a whole, it is imperative that we work to eliminate the gap between labor market demands and postsecondary attainment.

## The Critical Importance of Local Community and Technical Colleges

Local CTCs provide a vital on-ramp to postsecondary education. They serve a broad range of students with different educational goals including basic education students, professionals in continuing education programs, high school students in dual-enrollment programs, and adult students in transfer and workforce programs. Many students attend CTCs and then enter directly into the job market, while others attend CTCs and then transfer to four-year colleges. In Washington State, 40% of public baccalaureate graduates start at a community or technical college.[5] Local CTCs are also critical in providing educational opportunity to underrepresented students; both locally and nationally, CTCs serve disproportionately high numbers of low-income students and students of color[6]

This report focuses on seven local CTCs that serve a large proportion of students from the Road Map region: Bellevue College, Green River College, Highline College, Renton Technical College, and the three main campuses of the Seattle Colleges system – North Seattle College, Seattle Central College, and South Seattle College. Of all Road Map Region Class of 2011 high school graduates who enrolled at any college nation-wide within one year of graduating high school, 51% enrolled in one of these local CTCs. Because so many of our college students attend college locally, the Road Map Project community has a tremendous opportunity to support their postsecondary attainment.

### Half of College-Going Recent High School Graduates from the Road Map Region Attend Local CTCs




Recent high school graduates represent only a portion of the student bodies on our local campuses, but in aggregate, this is a large group of students that we want to ensure has support. Research by Complete College America, a national campaign to increase college completion, shows that "time is the enemy of college completion" in that "The longer it takes [to complete college], the more life gets in the way of success."[7] By ensuring recent high school graduates start strong in college, we can reduce time to completion and increase the opportunity for them to earn a living wage early in their career.

# About This Report

This analysis sets a baseline for understanding the trajectories of Road Map Project region high school graduates who attend local CTCs. We provide an overview of student characteristics and show which groups of students are meeting important indicators of success. Finally, we present initial recommendations for how our region can continue to improve postsecondary completion.

## Student Cohort

This report follows the Road Map Project region high school graduating Class of 2011 through local CTCs over a three-year period. We chose the Class of 2011 because this is the most recent cohort of students for which we have at least three years of data (through academic year 2013-14). Looking at three years of postsecondary data allows us to see student outcomes after 150% of the typical two-year time frame it takes to attain an associate degree. Both academic transfer and workforce-track students are included in the cohort. See Appendix III for a technical description of the cohort.

This report only looks at Class of 2011 high school graduates who "directly" enrolled in local CTCs, meaning they enrolled within one year of high school graduation. These direct enrollees represent the bulk of Class of 2011 high school graduates enrolling in local CTCs. That said, not represented in this report are students who enroll in CTCs more than one year post-graduation, and "opportunity youth" or students who did not graduate from high school but make their way to CTCs through reengagement programs.

Students in this cohort graduated high school from one of the seven Road Map Project region school districts:

- Auburn School District
- Federal Way Public Schools
- Highline Public Schools
- Kent School District
- Renton School District
- South Seattle
  (southern half of Seattle Public Schools)
- Tukwila School District

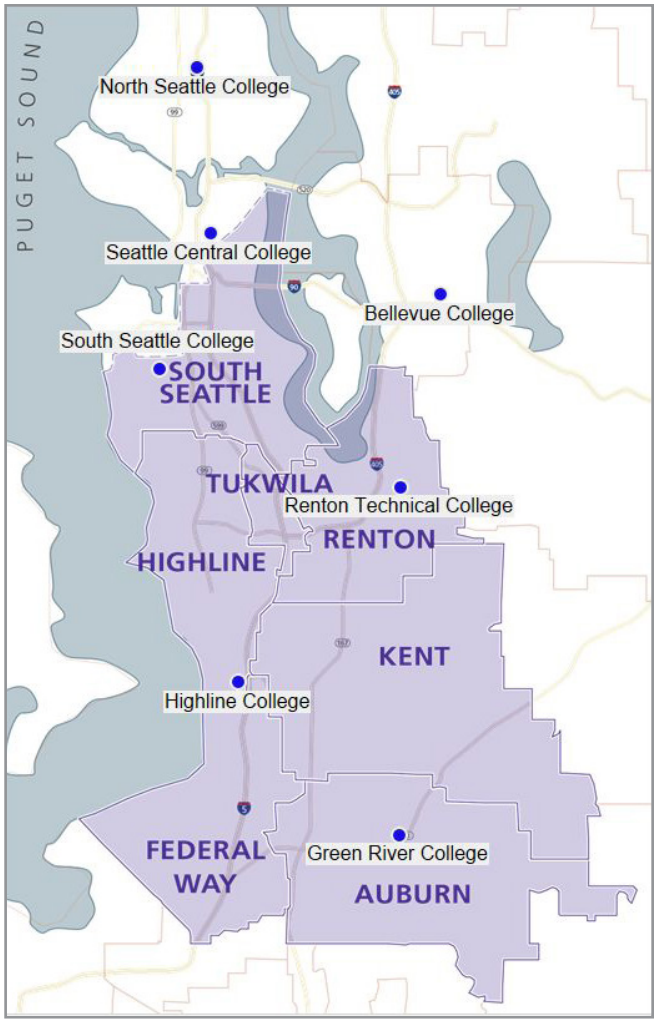
And subsequently enrolled at one (or more) of the following local CTCs:

- Bellevue College
- Green River College
- Highline College
- Renton Technical College
- North Seattle College
- Seattle Central College
- South Seattle College

### WHICH STUDENTS ARE WE LOOKING AT?

- Class of 2011 Road Map Region High School Graduates
- Only those that "directly" enroll at local CTCs (enroll within one year of high school graduation)

### Local Community and Technical Colleges and Road Map Region School District Boundaries



## Student Demographics & Characteristics

Throughout the report, we disaggregate results by several key factors:

- Race/Ethnicity: The racial or ethnic group designated by the student's high school.
- Full-Time Status: For the purpose of this analysis, students are considered full-time when they enroll in an average of 12 or more credits per quarter. Enrollment in 12 credits per quarter is considered full-time for the purposes of financial aid eligibility.
- Participation in the Running Start Program: Running Start is a dual-enrollment program that allows high school students to simultaneously attend local CTCs for college credit. Eligibility for Running Start typically requires that a student place into college-level coursework.
- College-Readiness: For the purpose of this analysis, we consider students as "not college-ready" if they enrolled in any pre-college coursework in math or English during college. Students are considered "college-ready" if they do not enroll in these pre-college courses.

These factors provide additional context on how different characteristics can impact student outcomes and inform policy and interventions. See Appendix IV for technical definitions of disaggregation categories.

## Indicators

The Indicators of Student Success that we focus on in this report were chosen based on discussions with our local CTC partners and metrics developed by national college completion campaigns and partnerships.[8]

The indicators are as follows:

- Becoming College-Ready in Math
- Students Completing 30 or More College Credits Within One Year
- Students Retained to Second Year
- Completing a Degree or Transferring to a 4-year College within Three Years

## Protecting Student Privacy and Limitations of Data

In order to report results from cradle through college and career, we collect data from different sources. The ways in which those sources gather and categorize data determine how information can be shown in this report. This report reflects the race/ethnicity categories used by the data sources, which is limiting when it comes to disaggregation, or distinguishing different groups within the data. For example, the category "Black/African American" does not capture the incredible diversity of language, national origin and culture within that one category. We will continue to advocate for more nuanced information to help inform how to better support all students in the region.

In order to ensure student privacy, we suppress results when the student subgroup being displayed consists of fewer than 10 students. We also employ complementary suppression of the next-smallest subgroup so that the size of suppressed groups cannot be back-calculated by using the remaining reported populations. In our results, we signify this suppression with the letter "s." Please see Appendix III for more information on our policies for protecting student privacy.

Due to data suppression associated with protecting student privacy, we are unable to report on Native Hawaiian/Other Pacific Islander students and students of two or more races/ethnicities. In addition, although we report on American Indian/Alaskan Native students, we caution against drawing strong conclusions on their performance due to their small cohort size. It is our hope that we can better assess outcomes for these three race and ethnic subgroups in a future report by combining multiple cohorts so that the size of these groups are large enough for analysis.

# Analysis

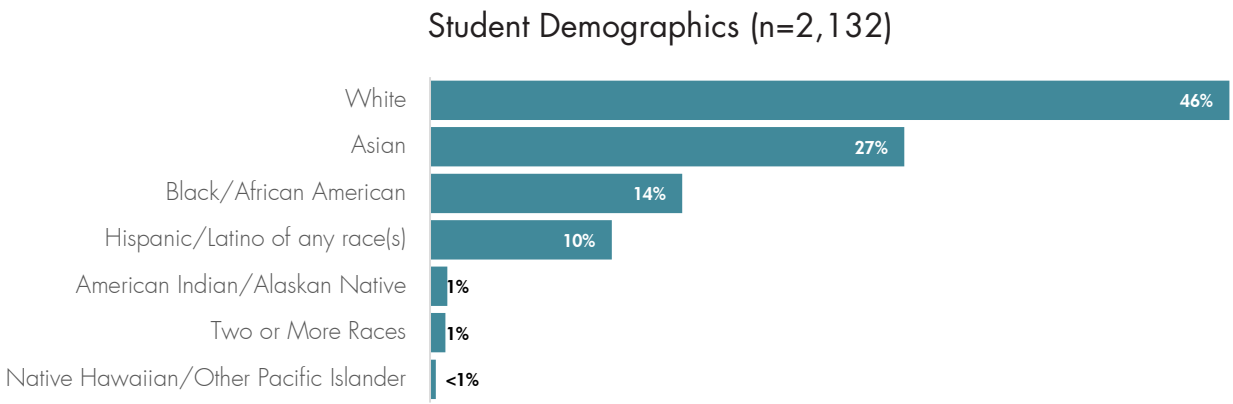
## Student Demographics & Characteristics – Class of 2011

Total High School Graduates Directly Enrolling in Local CTCs: **2,132**

**44%** were low-income students at time of high school graduation[9]
**38%** were enrolled full-time
**62%** were enrolled part-time
**58%** were not college-ready when they first enrolled
**28%** participated in Running Start at a local CTC before enrolling as a college student
**9%** attended more than one local CTC

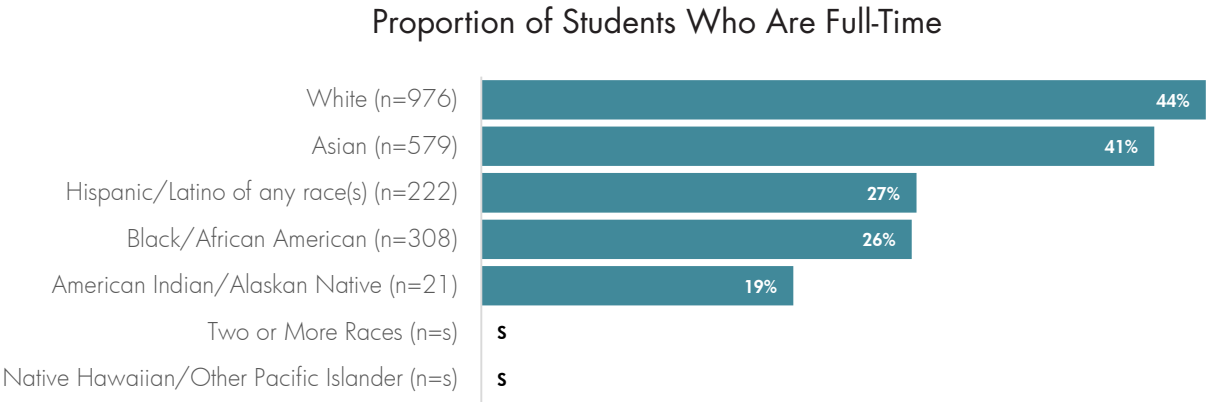
### Race/Ethnicity

Over half – 54% – of CTC enrollees from the high school Class of 2011 are students of color, up from 48% for the Class of 2008. Enrollments at our local CTCs reflect the increasing diversity of our high schools and our region.




### Full-Time Status

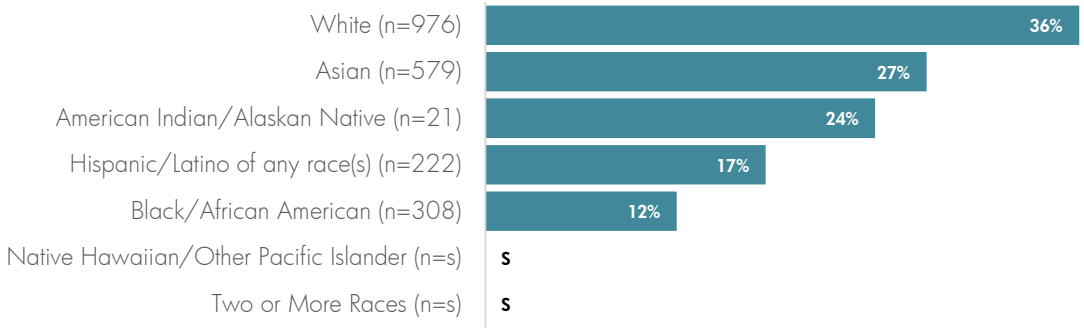
Full-time students experience much higher completion rates and finish college faster than part-time students.[10] Attending college part-time may be necessary for students who have work and family responsibilities, but nearly always puts a student at a disadvantage compared to full-time students. White and Asian students are much more likely to enroll full-time compared with other student subgroups.



## Participation in Running Start

Running Start is a dual-enrollment program that allows high school students in our districts to simultaneously attend local CTCs for college credit. Running Start students get ahead by earning some college credits during high school and are more likely to enroll in college full-time, further increasing their chances of success. The data shows disparities in access to Running Start, with White students participating at three times the rate of Black students.

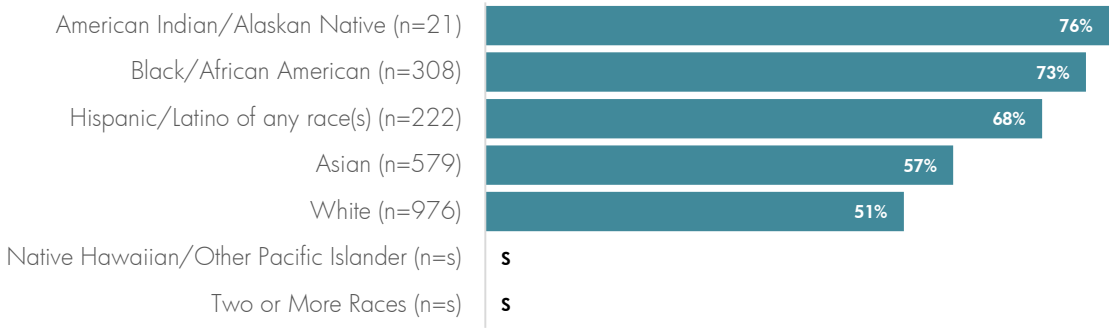
Proportion of Students That Participated in Running Start




## College-Readiness

Many students must complete pre-college level coursework when they enroll in college. Recent high school graduates at our local CTCs are no exception – 58% take pre-college math or English courses. Because pre-college credits do not count toward degree requirements, taking these courses can put a student behind their college-ready peers on the path to completion, burdening them with extra courses and cost. Getting our students college-ready before they begin college is key to improving degree attainment in our region. Rates of pre-college course-taking are particularly high among students of color.

Proportion of Students Taking Pre-College Math or English



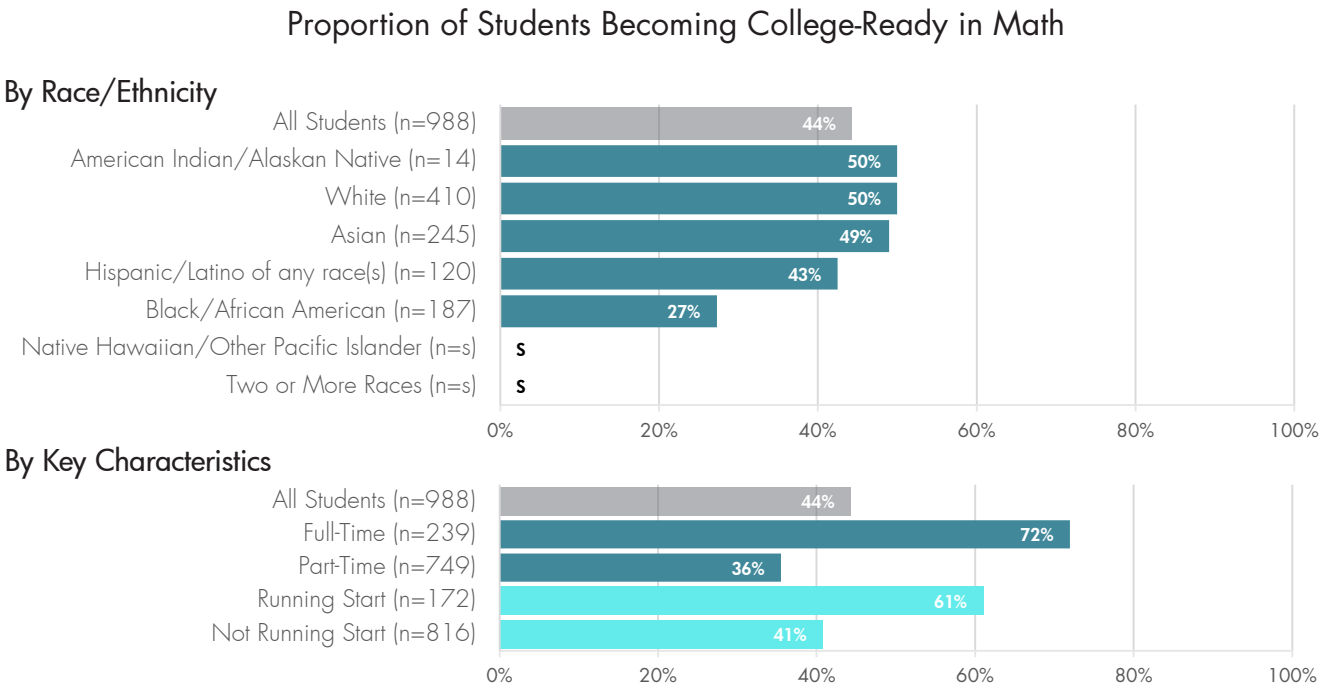

See Appendix for technical definitions of disaggregation categories.

# Indicators of Student Success

This section provides baseline analyses for key Indicators of Student Success in the local college setting.

## Becoming College-Ready in Math

This indicator measures the proportion of students that were not college-ready in math (i.e. took pre-college math in their first year) but progressed to college-level math within two-years of enrolling. The sooner students complete pre-college course requirements, the sooner they can enroll in college-level courses required for graduation. College math is a particularly important milestone as it is required for nearly all two-year academic and applied associate degrees. A large proportion (46%) of our students take pre-college math during their first year, and only 44% of these students transition to college-level math within two-years of enrolling. Hispanic and Black students have the lowest success rates in transitioning from pre-college level to college-level math.

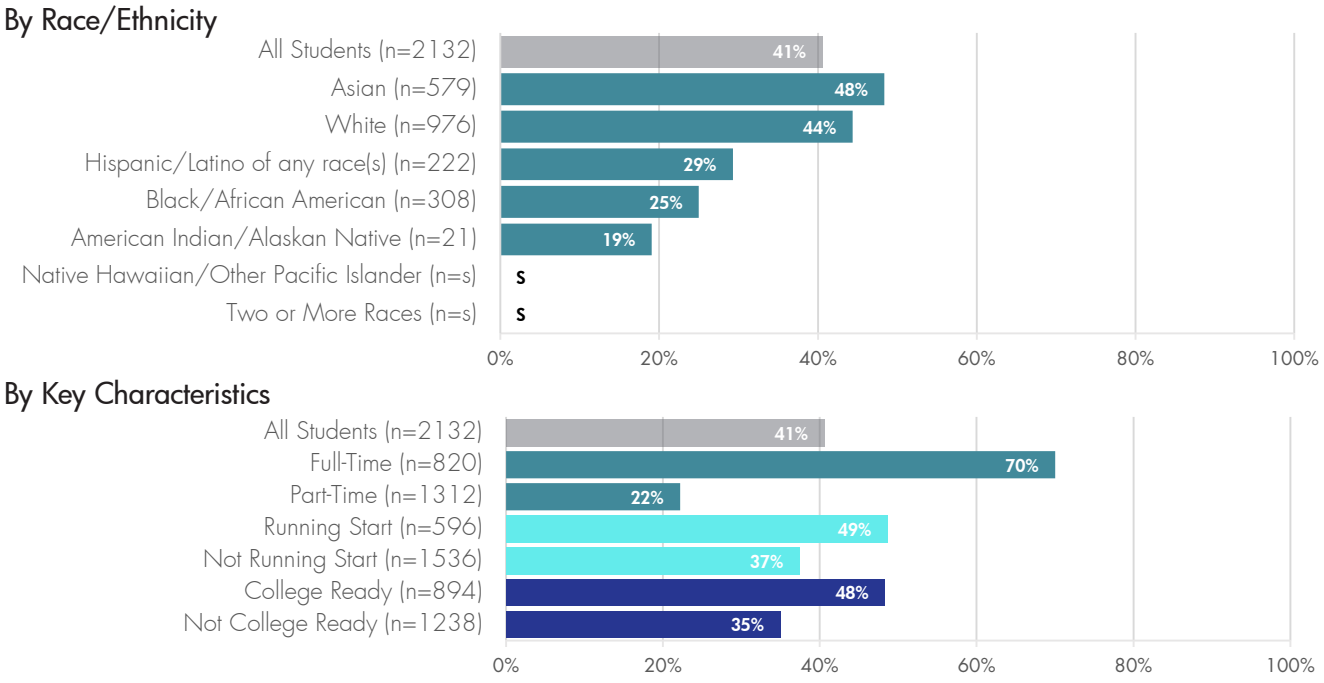



Note: only students that took pre-college math during their first year are included.

## Completing 30 or More College Credits Within One Year

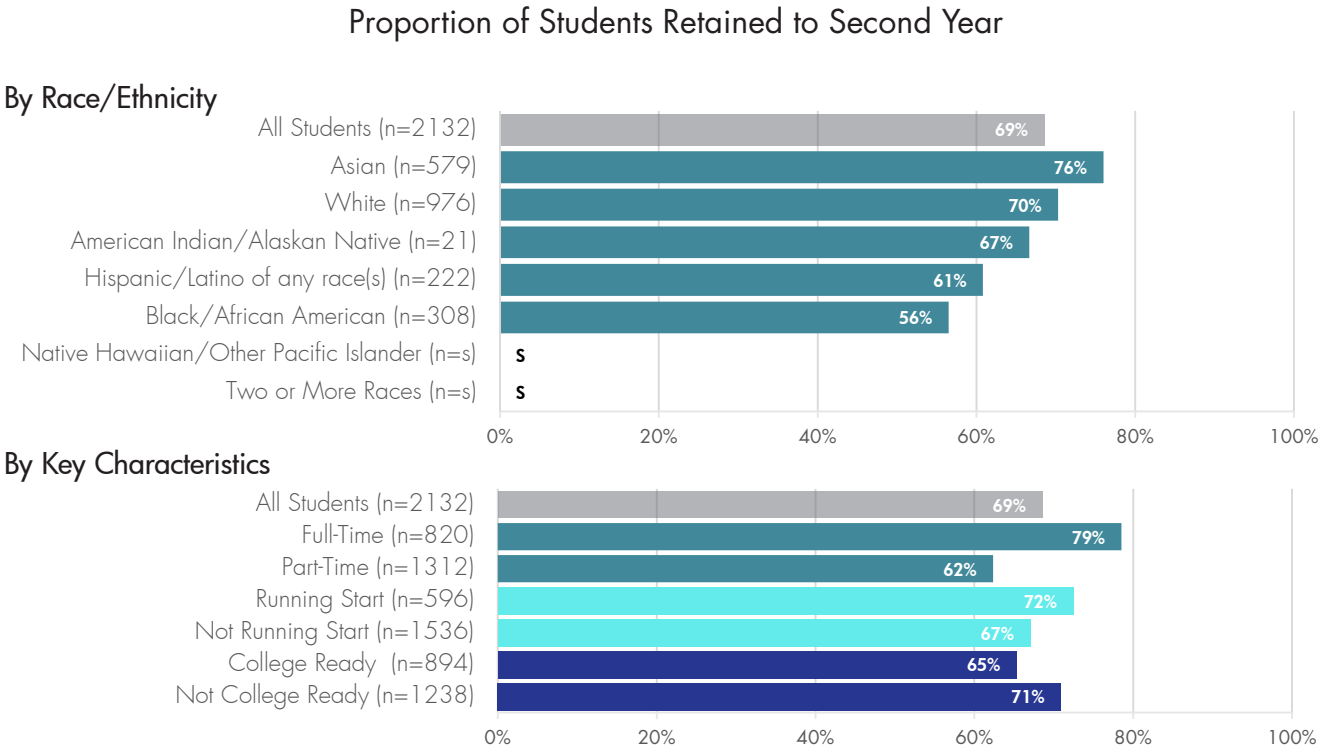
This indicator measures the proportion of students who complete 30 or more college-level credits during their first year of enrollment. Completing college-level coursework in a timely manner is linked with student success. Research performed by the Community College Research Center at Columbia University analyzed CTC outcomes across Washington State and determined important credit milestones, including completing 30 college credits in the first year, that correlate with high rates of completion and transfer to four-year colleges.[11] Although it is difficult to make strong conclusions about Native American students due to their small population size (21 students), the data shows they are the least likely of all race and ethnic subgroups to complete 30 or more college credits during their first year. Of students not meeting this indicator, it is important to acknowledge that many are still making strong progress on the pre-college level coursework they need to advance to college-level courses.

Proportion of Students Completing 30 or More College Credits Within One Year



## Retained to Second Year

This indicator measures the proportion of students who continue on to a second year of college or who complete a degree or credential during their first year. Overall, 69% of recent high school graduates from our region returned for a second year or graduated in their first year. However, some student groups face more barriers to continuing or finishing their education than others; the largest gap being 20 percentage points between Asian and Black students.



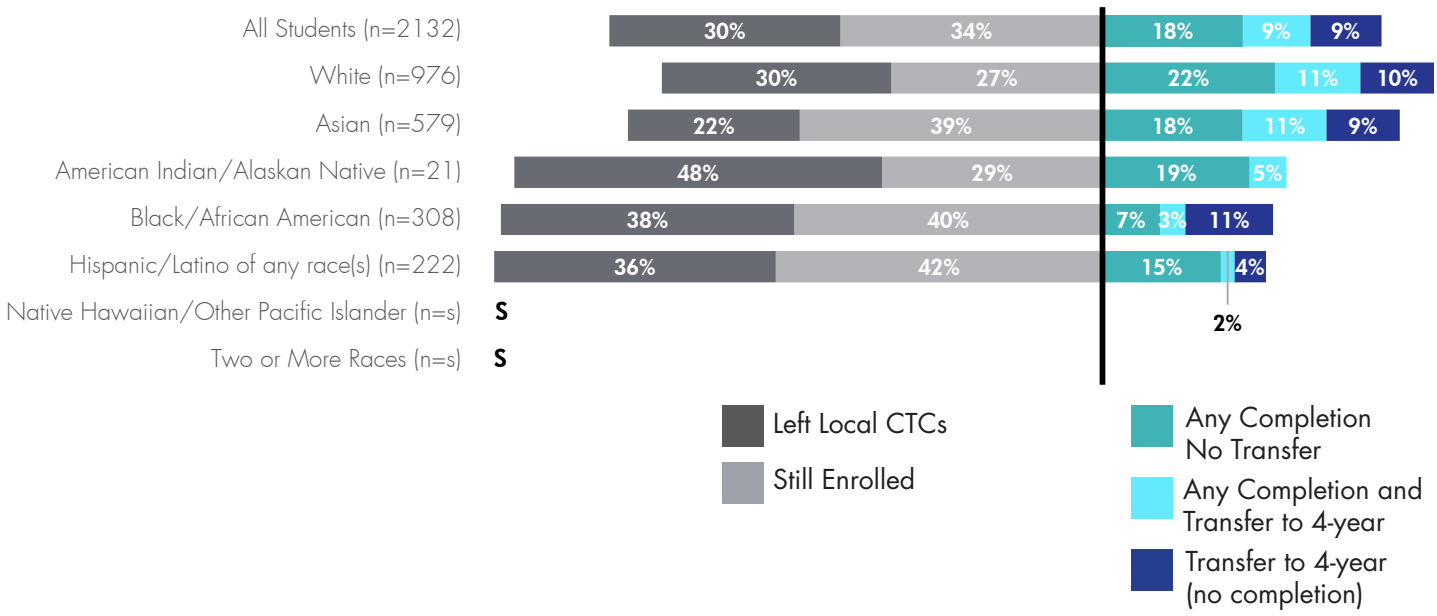
## Completing a Degree or Transferring to a 4-year College Within Three Years

This indicator measures the proportion of students who, three years after they enroll, complete degrees or transfer to a four-year college. Looking at these outcomes allows us to assess how our CTC system performs as a whole for different groups of students. Disaggregating the data reveals large disparities in outcomes between racial/ethnic groups and between other groups of students. The largest gap is between full-time and part-time students, providing further evidence that full-time status is crucial to graduating on-time. Additionally, White students have a combined completion/four-year college transfer-out rate of 43% while Black and Hispanic students both have combined completion/four-year college transfer-out rates of 21%.

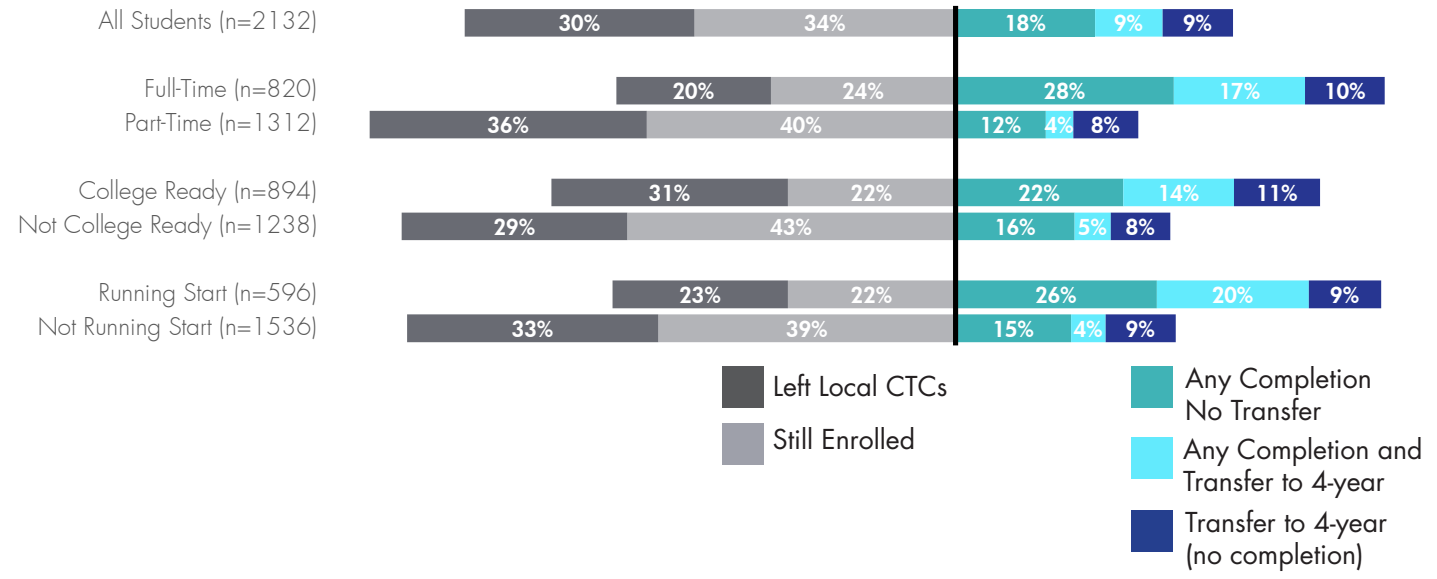
Completion types include academic associate degrees, workforce and applied associate degrees, long certificates and short certificates. See next page for descriptions of each of these credentials.

3-Year Outcomes

By Race/Ethnicity




By Key Characteristics



## Types of Completions

Our local CTCs grant several different types of degrees and certificates described below. In some cases, students earn more than one degree or certificate. In reporting types of completions, we only include a student's "highest" credential completed, based on the ordering below (credentials are listed in descending order from highest to lowest).

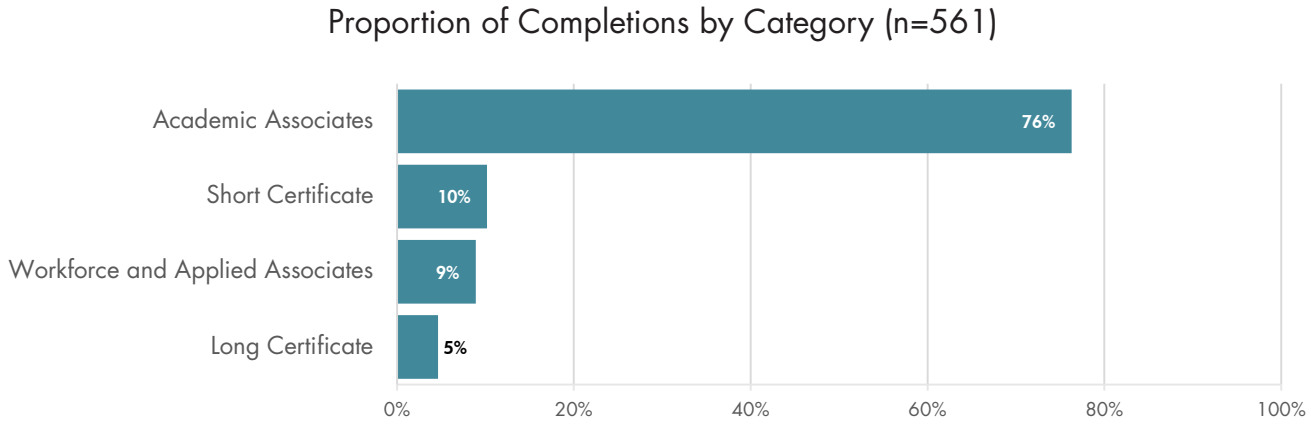
1. Academic Associates: A two-year degree aimed at preparing students for transfer to a four-year program to earn a bachelor's degree, or to go straight to work.

2. Workforce and Applied Associates: A two-year degree aimed at preparing students for immediate employment. In some cases, the credits earned may be applied toward study at a four year program, but are not generally intended for transfer.

3. Long Certificates: Career-oriented training for a specific industry, job or skill. Requires 45 or more credits to complete (one or more years of full-time study), with different credit requirements for each program.

4. Short Certificates: Career-oriented training for a specific industry, job or skill. Requires fewer than 45 credits to complete (one year or less of full-time study), with different credit requirements for each program.

The majority of completions are associate degrees, which prepare students for transfer to four-year colleges and give them an advantage in the labor market compared to high school diploma holders, in terms of both wage earning power and lower unemployment rates.[12]




Note: Only a student's highest degree earned in the 3-year period is counted.

# Summary of Findings

## KEY FINDINGS

- Just over one-third of students attend full-time and these students are more than twice as likely as part-time students to graduate or transfer to a 4-year college within three years of enrolling.
- Region-wide, 27% of recent high school graduates enrolling in our local CTCs complete a degree or credential within 3 years, with an additional 9% transferring to a 4-year college without a degree or credential.
- Black students have the lowest rates of progress of any race/ethnic group on three out of four indicators, with the smallest proportion becoming college-ready in math, the smallest proportion retained to a second year of college and the lowest three-year rate of degree/credential completion.
- White students complete a degree or credential at about two times the rate of Latino students and three times the rate of Black students.

Our first-ever analysis of Road Map Project region high school graduates enrolling in local CTCs reveals most students are not making strong progress toward a degree or certificate. Region-wide, just over one-third of students complete a credential or transfer to a four-year college within three years. However, completion and transfer rates vary significantly between local CTCs. **See Appendix I for data by college.**

Opportunity gaps are large and threaten the promise of CTCs as a pathway to equity and educational attainment. Completion and transfer rates are significantly lower for Black, Latino and American Indian/Alaskan Native students. White students complete credentials at about twice the rate of Latino students and three times the rate of Black students. This is unacceptable.

A variety of factors, including historical inequity and structural racism, influence the educational progress of students of color. In the context of postsecondary attainment in particular, college readiness and attending full-time play key roles. Across campuses, most of our students (58%) start out behind because they must enroll in pre-college courses and few students consistently attend college full-time (38%). Students that start behind and attend part-time experience slower progress and lower completion rates. These students are disproportionately students of color.

Attaining education or training beyond high school is necessary in order to compete for the middle- and high-wage jobs in our economy. Our local colleges are critical to improving the educational attainment of our region's increasingly diverse students. While our baseline analysis is sobering, we are encouraged by the great work taking place to provide a quality education to all students. From reforming developmental education and improving orientation programs to developing innovative online planning tools and targeted student supports, CTCs in the Road Map region are working hard to ensure that every student has the support they need to achieve their postsecondary goals.

# Recommended Actions

A growing research base points to the importance of community college placement policies, developmental education reform and guided pathways as key strategies, among others, to increasing student success and completion. Our colleges are innovating every day. They are rethinking and redesigning their policies, programs and services in order to better serve all students and meet the economic needs of our region. Change is not easy, but we are excited by the momentum. Investing in systemic solutions is the only way we will reach our 2020 Road Map Project goal of doubling the number of students in our region that achieve a degree or career credential and eliminating racial disparities in student performance.

We can't list all of the innovative activities and improvement efforts being implemented by local colleges in this report. However, we want to provide a few recommendations for addressing the challenges that are illuminated by this analysis. If we are going to dramatically improve outcomes and grow the talent in our community, we must better support both our local CTCs and students. There are important roles for stakeholders both inside and outside of colleges to play; everyone can have a voice in supporting higher education. We hope you will join us!

1. **Continue efforts to improve the college readiness of high school graduates and reduce the need for pre-college courses.**

   If students don't receive the preparation they need in high school, they start out college behind and are less likely to complete. There are many examples of strategies that are improving curricular alignment between K-12 and postsecondary and helping more students to graduate college-ready. These include implementation of Washington State K–12 Learning Standards and Guidelines, Bridge to College transition courses and placing greater emphasis on senior year course-taking. We've also seen tremendous work in our region to increase access to rigorous curricular offerings. Students of color are participating in Advanced Placement, International Baccalaureate, Cambridge and College in the High School at higher rates than ever before. Additional focus on in-school capacity for college and career advising, particularly the guidance counselor role and ratio, and implementation of high school and beyond planning can also improve college readiness and ensure student course-taking is aligned to postsecondary and career aspirations.

2. **Support our postsecondary institutions in establishing a culture of completion campus-wide.**

   Our local community colleges are on the right track with the many completion efforts they are undertaking, but we must continue to eliminate barriers to opportunity. While we want to increase the number of students that are college-ready coming out of high school, we also need to build **student-ready** institutions that are responsive, accessible and focused on ensuring students achieve their educational goals.

   As we continue working to better meet the needs of students, it is critical that we learn from data and also students themselves. As those most directly affected, students represent an important source of ideas and capacity for improving their colleges. Students past, present and future are the most powerful voices in identifying the barriers they face and developing solutions.

   Policy and practice also contribute to the culture of completion on campuses. Many of our local CTCs are implementing data tools that bring real-time data insights to faculty and staff, improving their ability to provide students the support they need to stay on-track. Some are also engaged in making policy changes that eliminate barriers in the final stages of earning a credential. For example, instead of requiring students to apply for their diploma, colleges are automatically conferring degrees and removing associated fees.

Given the number of students in our cohort that transfer to a 4-year college before completing a credential at one of our CTCs, reverse transfer policies could be a promising completion strategy. Reverse transfer policies allow students to apply academic credits for coursework earned at a university to the community college for the purpose of awarding an associates degree. This process recognizes the credits that have been earned by students across colleges and awards them the degree they deserve, increasing their value in the labor market. Other states have automated this system, and Washington should as well.

### 3. Pursue targeted, culturally responsive strategies to close opportunity gaps.

Given the large opportunity gaps identified in this report, it is imperative that we develop culturally responsive teaching, programs and support for Black, Hispanic, Pacific Islander and Native students. In order to close the opportunity gap, we must listen more to our students of color, learn from their experiences on our campuses and improve how we serve them. Targeted strategies that address both cultural and academic needs can close gaps. Current and future faculty and staff need access to ongoing professional development that enhances their understanding of systemic racism and culturally competent practice. Hiring and retaining a diverse teaching and support staff that reflects our students is also important.[13]

Many colleges in Washington and across the country are closing gaps for students of color, but this doesn't happen without resources and intentionality. We can learn from these colleges as we develop new strategies to better support students.

### 4. Increase funding for the State Need Grant, maintain the College Bound Scholarship program and encourage other financial aid policies that support low-income students.

We must continue to advocate for expansion of the State Need Grant and other financial aid policies that support low-income students to pay for college and attend full-time. Reducing financial barriers will ensure students are more likely to attend full-time and complete a credential. In the 2015-2017 Washington state budget, the legislature cut four-year college tuition costs by 15 to 20 percent and CTC tuition by 5 percent.[14] This was a good step after Washington students experienced the 2nd largest tuition increase in the nation following the 2008 recession,[15] but it is not enough. We also need to increase financial aid and scholarships for low-income students.

The State Need Grant helps students with the lowest family incomes to go to college. Most State Need Grant recipients are independent students with average incomes of only $13,900. The State Need Grant is one critical lever for supporting student success and is credited with higher retention and completion rates for students with the lowest family incomes.[16] During the 2013-14 school year, close to 34,000 eligible students did not receive the State Need Grant because the money ran out. The State Need Grant is also the source of funding for low-income, eligible non-citizen students who file the Washington Application for State Financial Aid (WASFA). We must continue to support these students to access a college education!

The College Bound Scholarship program provides financial assistance to low-income students who want to achieve the dream of a college education. This early promise of financial aid is intended to alleviate the financial barriers that prevent low-income students from considering higher education as a possibility. Since its inception, over 200,000 students in the state have applied for the program, including over 30,000 in the Road Map Project region. This program is critical to supporting recent high school graduates to enroll in postsecondary and must be continued. Students already signed up for the scholarship should be able to count on the funding and should also receive adequate guidance throughout high school in order to become college ready.

## 5. Advocate for community and technical college funding.

CTCs are critical on-ramps for students to attain education beyond high school that will increase their earnings and support family well-being. These institutions serve a high proportion of low-income students and if we are to have an equitable higher education system, we need to make sure they have sufficient resources to succeed. In many cases our CTCs know what works for students such as bridge programs, more intensive advising and supplemental academic supports, but budget constraints minimize the staff dedicated to these types of programs.

CTCs operate on budgets much smaller than their peer research universities. In Washington, state higher-education funding per student declined 27.9% between 2008 and 2012 and enrollment increased 15.3%.[17] While our state's economy has begun to recover, 2015 state funding for higher education in Washington remains far below pre-recession levels.[18] These cuts have had serious impacts on student's ability to pay for college and college's capacity to provide high-quality instruction and supports. Much more needs to be done to prioritize higher education in our state. In order to grow our local talent and address income inequality in our region we must invest in our community's postsecondary institutions.

# Acknowledgments

The Community Center for Education Results (CCER) team would like to extend special thanks to everyone who contributed to this report.

This report would not have been possible without the involvement of our local school districts and community and technical colleges who supported data sharing and provided ongoing input and feedback on the report. We'd especially like to express our gratitude to the colleges' institutional research staff for providing guidance on the indicators and analysis.

The Puget Sound Coalition for College and Career Readiness was instrumental to the development of this report and we are appreciative of the coalition co-chairs and Puget Sound Educational Service District staff that facilitate their work.

The Road Map Project's ongoing research would also not be possible without support from state education agencies, including the Washington State Office of Superintendent for Public Instruction (OSPI), Washington State Education Research & Data Center (ERDC), the Washington State Board for Community & Technical Colleges and the Washington Student Achievement Council (WSAC)

We want to acknowledge our principal funder for this project, the Lumina Foundation. We are honored to be partners in their goal to increase the proportion of Americans with high-quality degrees, certificates and other credentials. We would also like to thank CCER's additional funders: Aspen Institute, Ballmer Family Giving, Bezos Family Foundation, the Bill & Melinda Gates Foundation, Boeing Company, College Spark Washington, Microsoft, Raikes Foundation, Seattle Foundation and Washington STEM.

Finally, we want to recognize all the Road Map Region students, working hard to achieve their educational goals, who inspired us to write this report and the countless teachers, faculty, counselors and staff who support them.

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# Appendices

## Appendix I

### Data by College

Each CTC is unique in terms of the programs that they offer and the students that they serve. The following college profiles include information and outcomes for the Class of 2011 recent high school graduates enrolling at each college. Data is provided on which Road Map region districts students graduated from, their demographics and other characteristics in order to provide context for the students from this cohort at each college. Student completion and transfer outcomes are included as well as the types of completions being earned and the most common degrees awarded.

BELLEVUE COLLEGE

Green River COLLEGE

HIGHLINE COLLEGE

RTC RENTON TECHNICAL COLLEGE

SEATTLE CENTRAL COLLEGE

South Seattle College

**NOTE**

- Students that attend more than one CTC are excluded.
- Individual results for North Seattle College are not included due to small number of students from Road Map Project region high schools that only enroll at North Seattle College.
- Reported proportions may not sum to exactly 100% due to rounding.

# Class of 2011 Road Map Graduates Enrolling at Bellevue College

## K-12 District of Origin*

- **1%** Auburn School District
- **3%** Federal Way Public Schools
- **2%** Highline Public Schools
- **29%** Kent School District
- **49%** Renton School District
- **14%** South Seattle
- **1%** Tukwila School District

## Demographics

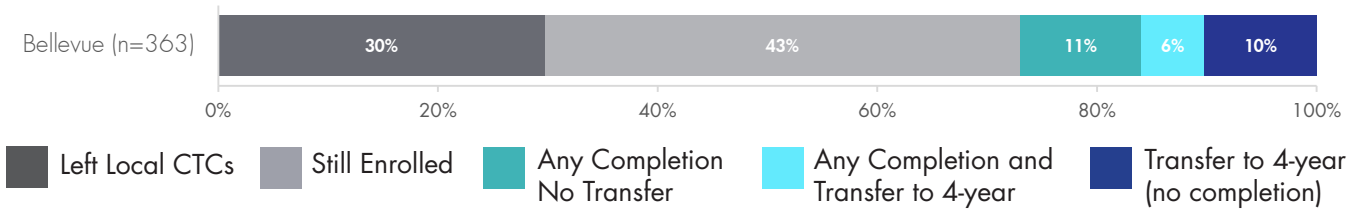
- **0%** American Indian/Alaskan Native
- **39%** Asian
- **12%** Black/African American
- **10%** Hispanic/Latino of any race(s)
- **0%** Native Hawaiian/Other Pacific Islander
- **1%** Two or More Races
- **37%** White

## Characteristics

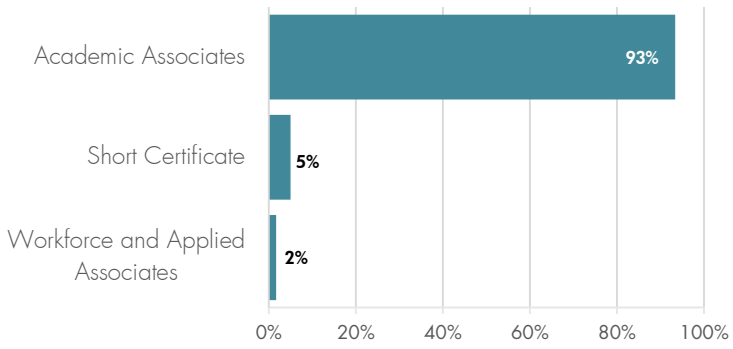
- **363** total enrollees
- **39%** were enrolled full-time
- **23%** participated in Running Start
- **57%** were not college-ready

*Note: Only districts from within the Road Map region are included.

## 3-Year Outcomes at Bellevue College




## Percent of Completions by Category at Bellevue College (n=60)




## Top 5 Degrees at Bellevue College

1. Associate of Arts & Sciences **(33)****
2. Associate in Business **(12)**
3. Associate of Science - Track 1, Life Sciences **(6)**
4. Associate of Science - Track 2, Physical Sciences **(4)**
5. Associate of Science - Engineering **(2)**

**Note: Number of degrees awarded

# Class of 2011 Road Map Graduates Enrolling at Green River College

## K-12 District of Origin*

- **40%** Auburn School District
- **10%** Federal Way Public Schools
- **1%** Highline Public Schools
- **45%** Kent School District
- **3%** Renton School District
- **1%** South Seattle
- **<1%** Tukwila School District

## Demographics

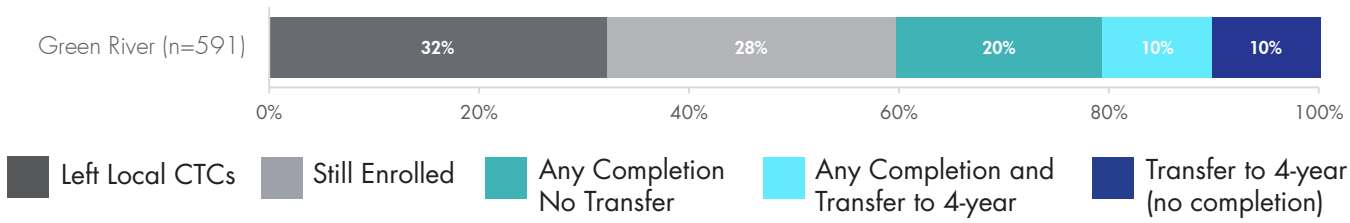
- **1%** American Indian/Alaskan Native
- **13%** Asian
- **11%** Black/African American
- **8%** Hispanic/Latino of any race(s)
- **<1%** Native Hawaiian/Other Pacific Islander
- **1%** Two or More Races
- **66%** White

## Characteristics

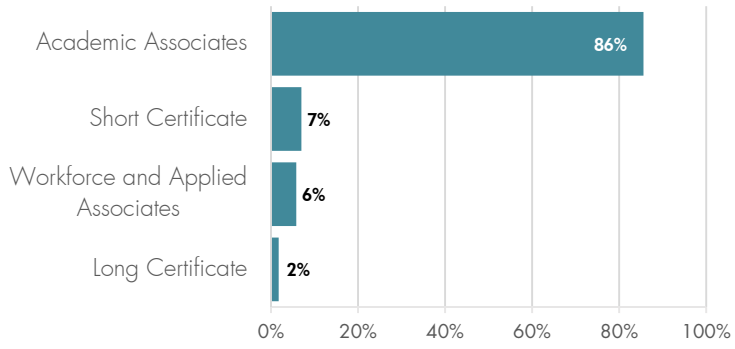
- **591** total enrollees
- **38%** were enrolled full-time
- **31%** participated in Running Start
- **56%** were not college-ready

*Note: Only districts from within the Road Map Region are included.

## 3-Year Outcomes at Green River College




## Percent of Completions by Category at Green River College (n=173)




## Top 5 Degrees at Green River College

1. Associate of Arts **(115)****
2. Associate in Business **(22)**
3. Certificate - Electrical Systems **(9)**
4. Certificate - Engine Performance **(7)**
5. Certificate - Heating/Air Conditioning **(7)**

**Note: Number of degrees awarded

# Class of 2011 Road Map Graduates Enrolling at Highline College

## K-12 District of Origin*

**6%** Auburn School District

**42%** Federal Way Public Schools

**25%** Highline Public Schools

**17%** Kent School District

**4%** Renton School District

**2%** South Seattle

**4%** Tukwila School District

## Demographics

**1%** American Indian/Alaskan Native

**28%** Asian

**12%** Black/African American

**14%** Hispanic/Latino of any race(s)

**<1%** Native Hawaiian/Other Pacific Islander

**1%** Two or More Races

**44%** White

## Characteristics

**616** total enrollees

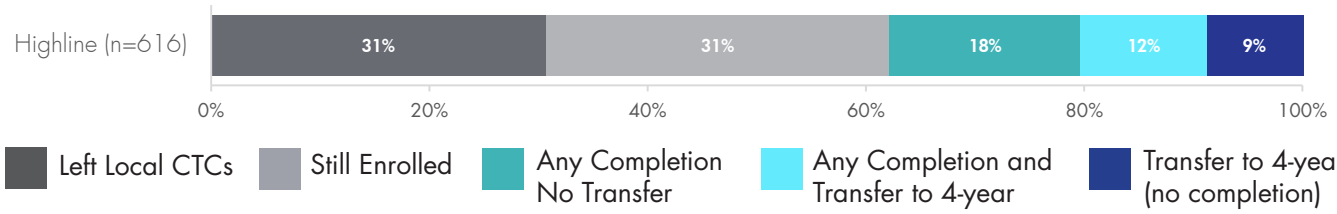
**40%** were enrolled full-time

**30%** participated in Running Start

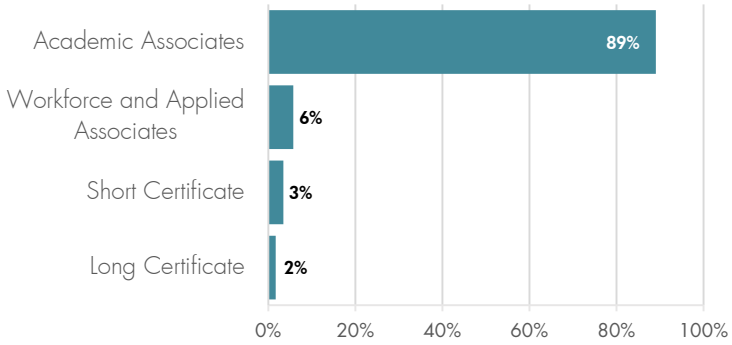
**57%** were not college-ready

*Note: Only districts from within the Road Map Region are included.

## 3-Year Outcomes at Highline College




## Percent of Completions by Category at Highline College (n=174)




## Top 5 Degrees at Highline College

1. Associate of Arts **(117)****
2. Associate in Pre-Nursing **(16)**
3. Associate in Business **(12)**
4. Associate of Science - Engineering **(9)**
5. Associate of Science - Biology **(5)**

**Note: Number of degrees awarded

# Class of 2011 Road Map Graduates Enrolling at Renton Technical College

## K-12 District of Origin*

**3%** Auburn School District

**10%** Federal Way Public Schools

**7%** Highline Public Schools

**33%** Kent School District

**34%** Renton School District

**10%** South Seattle

**2%** Tukwila School District

## Demographics

**0%** American Indian/Alaskan Native

**24%** Asian

**12%** Black/African American

**5%** Hispanic/Latino of any race(s)

**0%** Native Hawaiian/Other Pacific Islander

**2%** Two or More Races

**57%** White

## Characteristics

**58** total enrollees

**60%** were enrolled full-time

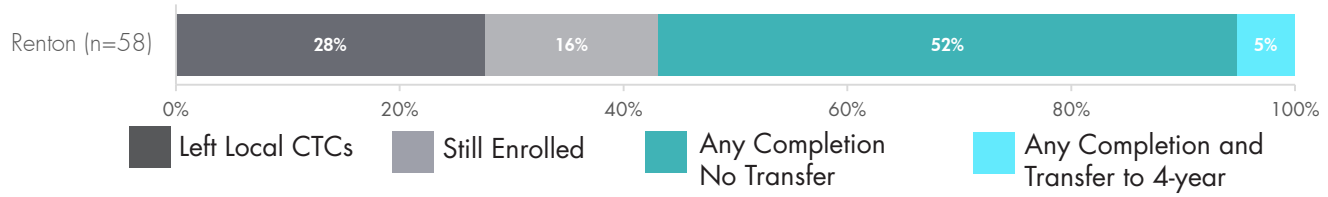
**17%** participated in Running Start

**38%** were not college-ready*

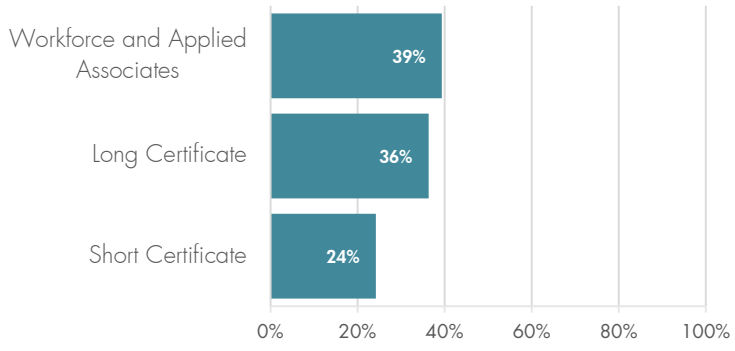
*Many students take certificate programs that do not require college-level math or English

*Note: Only districts from within the Road Map Region are included.

## 3-Year Outcomes at Renton Technical College




## Percent of Completions by Category at Renton Technical College (n=33)




## Top 5 Degrees at Renton Technical College

1. Certificate - Nursing Assistant **(4)****
2. Certificate - Automotive Technology **(3)**
3. Certificate - Culinary Arts **(3)**
4. Associate of Applied Science - Culinary Arts **(2)**
5. Associate of Applied Science - Automotive Technology/ITEC **(2)**

**Note: Number of degrees awarded

# Class of 2011 Road Map Graduates Enrolling at Seattle Central College

## K-12 District of Origin*

**2%** Auburn School District

**3%** Federal Way Public Schools

**9%** Highline Public Schools

**3%** Kent School District

**15%** Renton School District

**66%** South Seattle

**1%** Tukwila School District

## Demographics

**0%** American Indian/Alaskan Native

**47%** Asian

**32%** Black/African American

**6%** Hispanic/Latino of any race(s)

**0%** Native Hawaiian/Other Pacific Islander

**0%** Two or More Races

**15%** White

## Characteristics

**117** total enrollees

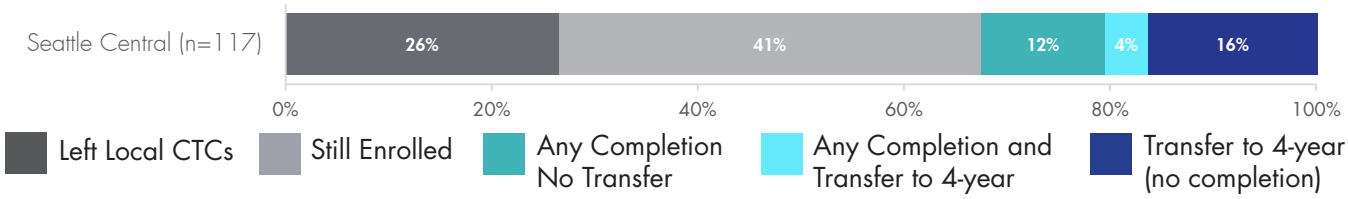
**32%** were enrolled full-time

**18%** participated in Running Start

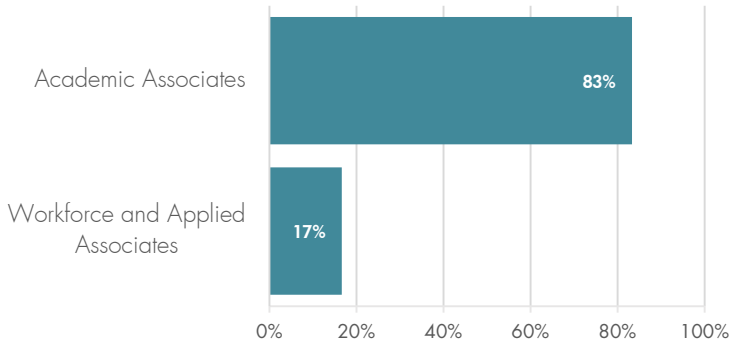
**64%** were not college-ready

*Note: Only districts from within the Road Map Region are included.

## 3-Year Outcomes at Seattle Central College




## Percent of Completions by Category at Seattle Central College (n=18)




**Note: Number of degrees awarded

## Top 5 Degrees at Seattle Central College

1. Associate of Arts **(12)****
2. Associate of Science - Option 2, Physical Sciences **(3)**
3. Associate of Applied Science - Opticianry **(2)**
4. Associate of Applied Science - Apparel Design **(1)**
5. Associate of Science - Option 1, Life Sciences **(1)**

# Class of 2011 Road Map Graduates Enrolling at South Seattle College

## K-12 District of Origin*

- **0%** Auburn School District
- **3%** Federal Way Public Schools
- **33%** Highline Public Schools
- **2%** Kent School District
- **4%** Renton School District
- **52%** South Seattle
- **4%** Tukwila School District

## Demographics

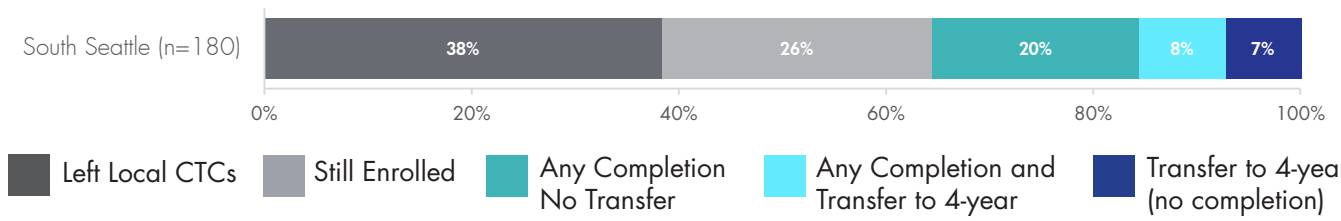
- **2%** American Indian/Alaskan Native
- **33%** Asian
- **21%** Black/African American
- **16%** Hispanic/Latino of any race(s)
- **1%** Native Hawaiian/Other Pacific Islander
- **0%** Two or More Races
- **27%** White

## Characteristics

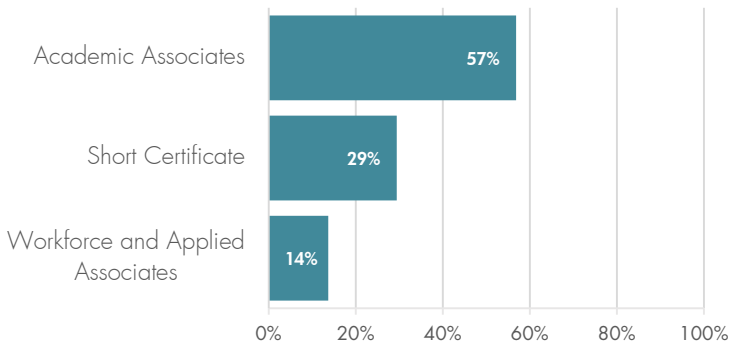
- **180** total enrollees
- **36%** were enrolled full-time
- **23%** participated in Running Start
- **65%** were not college-ready

Note: Only districts from within the Road Map Region are included.

## 3-Year Outcomes at South Seattle College




## Percent of Completions by Category at South Seattle College (n=51)




## Top 5 Degrees at South Seattle College

1. Associate of Arts **(24)****
2. Certificate - Automotive Transmissions **(5)**
3. Certificate - Electrical/Air Conditioning **(4)**
4. Certificate - General Service Technician/ Automotive **(4)**
5. Associate in Business **(3)**

**Note: Number of degrees awarded

# Appendix II

## Areas for Further Research

This report provides a valuable baseline for the performance of recent high school graduates from South Seattle and South King County in our local CTCs. It also raises a number of areas where further research is needed.

1. **Analyze how recent increases in Advanced Placement, International Baccalaureate and Cambridge course-taking in high school are impacting the college readiness and success of recent high school graduates enrolling in our local CTCs.**

   Improving access to rigorous course-taking in high school has been a priority of the Road Map Project since its inception. AP, IB and Cambridge course content is aligned to college standards, and these programs help prepare students for the rigor of postsecondary education. Based on data in the Road Map Project's annual Results Report, this is an area of great gains across school districts in our region over the past few years. Achievement gaps are closing between students of color and White and Asian students. From 2013 to 2014 alone, the proportion of graduating seniors taking one or more AP, IB or Cambridge course(s) rose 6 percentage points from 58% to 64%. Black students saw the largest gains with a 10 percentage point increase (from 48% – 58%). Using our longitudinal data system, we want to analyze whether these students are achieving better outcomes in postsecondary education, both in terms of progress and completion outcomes.

   College-level math course-taking is especially important because college-level math is needed for many degrees and certificates that provide living wage employment outcomes. Future analysis should explore math course-taking in high school, including how GPA and high school characteristics predict or influence college math readiness.

   Results could be shared with students to provide them with better information about how their high school course selection can impact their postsecondary goals.

2. **Conduct multi-year analysis on the progress and completion of Native Hawaiian/Other Pacific Islander, American Indian/Alaskan Native and students of two or more races.**

   Unfortunately, the data for Hawaiian/Other Pacific Islander and students of two or more races had to be suppressed throughout much of this report due to the smaller sizes of these groups. While American Indian/Alaskan Native students were included, their cohort size was small and additional cohorts of data would be beneficial to drawing conclusions. By combining data for multiple high school classes, we can increase group sizes enough to report on the Indicators of Student Success for these students.

3. **Conduct qualitative research with current and former CTC students to better understand attendance patterns, barriers to attending full-time and the supports needed by part-time students to complete their credential.**

   Given the disparate outcomes experienced by full-time students compared to part-time students, more research is needed to understand the factors that influence student attendance patterns. Qualitative research should be accompanied by a review of best practice policies, incentives and supports that encourage full-time attendance.

4. **Further analyze students who are still enrolled after three years but have not completed a credential or transferred.**

   Our colleges have a large number of students who are still enrolled after three years but have not completed a credential or transferred; the range is between 16% and 43% at each college. More analysis needs to be done to understand how much progress these students have made and what is causing student progress to stall. Information about when and why students stall can help inform effective interventions to increase completion rates.

5. **Research the economic value of specific credentials being earned by Road Map Region students, particularly short-term certificates.**

   Research conducted by both Georgetown University's Center on Education and the Workforce and the Seattle Jobs Initiative highlights that not all degrees are created equal.[19/20] The college major or program a student chooses impacts the earning power of their degree or certificate. We want to better understand which credentials are leading to employment and family sustaining wages, and share this information with students so they are making informed decisions about their education and career pathways. It would be valuable to conduct qualitative research with current and former CTC students to better understand how they select their program of study, which supports they accessed and what additional resources could help their planning.

# Appendix III

## Student Privacy and Data Suppression

CCER collects and analyzes education data for only research purposes. Research can be very beneficial to help improve school systems, programs and practices. CCER puts a premium on the protection of student confidentiality and identity. All information about students that CCER accesses is handled in compliance with data-privacy laws, including the Family Educational Rights & Privacy Act (FERPA). Strong internal safeguards are in place regarding who can use the information and for what purpose. No unauthorized sharing of information will occur. Only individuals who work directly with CCER to support the Road Map Project's research and reporting are granted access to the information – and only for that purpose. Research reports to the community and third-parties present the data in a way where no individual students could be identified.

In compliance with the Federal Education Rights and Privacy Act (FERPA), we have suppressed data in some tables and graphs where noted by "s." Data for student groups with fewer than 10 individuals were completely removed. In addition, complementary subgroups have been suppressed, so that performance of suppressed subgroups cannot be determined using the overall population.

For additional information on data suppression, definitions, analyses, please contact CCER.

# Appendix IV - Technical Appendix

## Data Sources

Our analysis combines students' high school enrollment records with CTC and National Student Clearinghouse (NSC) college enrollment records. The WA Education Research & Data Center (ERDC) provides CCER with all of this data. Before received by ERDC, high school records are collected from individual school districts in the Road Map Project region by the Office of the Superintendent for Public Instruction (OSPI), through the CEDARS statewide student-level database. CTC records are collected from the individual colleges by the State Board for Community and Technical Colleges (SBCTC). ERDC performs all matching of student information between data sets, providing CCER with linked research IDs that allow us to perform longitudinal analyses. ERDC does not provide us with data for students outside the Road Map region.

## Student Cohort Selection

Typically-cited graduation rates are those that colleges must report as per federal requirements through the Student Right-To-Know act. These graduation rates pertain to a cohort of students that differs from the cohort in our analysis in some key ways. First, graduation rates reported by colleges only include "first-time, full-time" students, which divides students into groups based on the year they first enrolled in a postsecondary institution, regardless of age or whether they graduated from high school. Our cohort is more targeted in that we only include high school graduates, and only those who enroll in CTCs within one year of graduating high school (called "direct enrollees"). Additionally, typical reporting cohorts are limited to students that were considered full-time during their first term. We include students regardless of first-quarter full-time status, as a student's full-time status varies from term-to-term. For example, although 68% of our students start as full-time students, only 38% are full-time on-average (i.e. they average 12+ credits enrolled per quarter throughout their time at CTCs, not counting summer quarters and quarters where they did not enroll). Finally, typical reporting cohorts are also limited to those who first enroll in the fall term. In addition to fall, we include students first enrolling in summer, winter and spring, as a full 25% of our students enroll during these quarters. For students who first enroll in summer, we also require that they enroll in an additional quarter during their first year to be included. Although these definitions make our rates difficult to directly compare to other colleges' and to state and national statistics, they more comprehensively identify the group of recent high school graduates we seek to understand.

## Technical Definitions of Disaggregation Categories

**Race/Ethnicity:** The racial or ethnic group designated by the student's high school.

**Full-Time Student:** In this report, students are considered full-time if their average per-quarter course-load is 12 or more credits. To compute this, we divide a student's total credits enrolled over the 3-year period by their total number of enrolled quarters (omitting any credits and enrollments during summer quarters).

**Running Start Student:** To be counted, students must have participated in Running Start at any local CTC, and are counted even if they enroll in a different CTC after graduating high school than the CTC at which they took courses as part of Running Start. We use the field provided in SBCTC enrollment data that indicates whether a student has participated in Running Start at a particular institution.

**College-Ready Student:** Students are considered not college-ready if they enroll in any pre-college coursework in math or English at any time during the 3-year period. We follow the SBCTC definition of pre-college level courses, which counts any course numbered below 100 to be at the pre-college level.[21] College-ready students are those who did not take pre-college math or English during the 3-year period. The group of college-ready students may include some students that never took college-level math or English and thus may have either dropped out of college before taking college-level courses or were in a certificate program that did not require college-level math or English courses.

# Appendix IV Continued

## Technical Definitions of Indicators

For each indicator, time is measured in quarters (1 year = 4 quarters), and starts at the first quarter a student enrolls during the academic year directly following their high school graduation year.

### Becoming College-Ready in Math

This indicator measures the proportion of students that were not college-ready in math (i.e. took pre-college math in their first year) but progressed to college-level math within two-years of enrolling.

**Numerator:** The number of students that take one or more pre-college math courses during their first year AND that take one or more college-level math courses during their first 2-years.
**Denominator:** The number of students that take one or more pre-college math courses during their first year.

Pre-college courses are those numbered less than 100, and college-level courses are numbered 100 and above (as per SBCTC definition).[21]

### Completing 30 College Credits Within One Year

A student meets this metric if they complete 30 or more college-level credits within one full academic year of their first enrollment.

**Numerator:** The number of students that earn 30 or more college-level credits during their first year.
**Denominator:** All students included in the cohort (see section 'Student Cohort Selection').

### Retained to Second Year

This indicator measures the proportion of students who continued to a second year of college or completed a degree/certificate during their first year. Students transferring out of local CTCs into a 4-year college by their second year are also counted as continuing to a second year of college.

**Numerator:** The number of students who enrolled in a second academic year during the fall term (fall term of academic year 2012-13) OR completed a degree/certificate during their first year in college OR transferred out of local CTCs into a 4-year college by their second academic year.
**Denominator:** All students included in the cohort (see section 'Student Cohort Selection').

### Completing a Degree or Transferring to a 4-year College Within Three Years

This indicator shows student status at the end of three full academic years following high school graduation. As a result, students who first enroll in winter or spring terms (25% of all students) are given less time between their first enrollment and the time their outcome is measured, as compared to students first enrolling in the fall term.

Completions include all types of 2-year associate degrees and workforce degrees as well as short-term (fewer than 45 credits) and long-term (45 credits or more) certificates.

# Appendix IV Continued

## Outcome Categories for Completing a Degree or Transferring to a 4-Year College

- **Any Completion No Transfer:** Student has completed a degree or credential but has not transferred to a 4-year college by their third year.
- **Any Completion and Transfer to 4-year:** Student has completed a degree or credential *and* has transferred to a 4-year college by their third year. Students are considered to have transferred to a 4-year college if they do not enroll in a local CTC during their third year and enroll in a 4-year college during any academic year after their final enrollment year in a local CTC, but prior to the end of their third year. We use National Student Clearinghouse enrollment and completion records to determine whether a student has enrolled in a 4-year college outside of local CTCs.
- **Transfer to 4-year (no completion):** Student has not completed a degree or credential but has transferred to a 4-year college by their third year. See above bullet for a definition of transfer to 4-year college.
- **Still Enrolled:** Student has not completed a degree or credential, has not transferred to a 4-year college by their third year, and is still enrolled in a local CTC in their third year.
- **Left CTCs:** Student has not completed a degree or credential, has not transferred to a 4-year college by their third year, and is no longer enrolled in a local CTC in their third year.

# Appendix V - Sources & Notes

[1] 2014 Road Map Project Results Report – CCER (www.roadmapproject.org)

[2] Georgetown University Center on Education and The Workforce – "Help Wanted: Projections of Jobs and Education Requirements Through 2018" (https://cew.georgetown.edu/wp-content/uploads/2014/12/State-LevelAnalysis-web.pdf)

[3] 2015 Road Map Project Results Report – CCER (www.roadmapproject.org)

[4] 2014 Road Map Project Results Report – CCER (www.roadmapproject.org)

[5] Washington State Board for Community and Technical Colleges Public Information (http://sbctc.edu/public/a_index.aspx)

[6] Center for American Progress – "Effects of State Higher Education Cuts on Communities of Color" (https://www.americanprogress.org/issues/higher-education/report/2014/10/27/99721/effects-of-state-higher-education-cuts-on-communities-of-color/)

[7] Complete College America - "Time Is The Enemy" (http://www.completecollege.org/docs/Time_Is_the_Enemy.pdf)

[8] In the development of our Indicators of Student Success, we were guided by the work of Complete College America, the American Association of Community Colleges through their Voluntary Framework of Accountability, and the Community College Research Center on their own sets of student indicators.

[9] The low-income figure represents the proportion of students qualifying for Free or Reduced Price Lunch (FRPL) during their senior year of high school. It does not include students graduating high school in Kent School District or Seattle Public Schools as these districts do not provide us with FRPL data. Receipt of a Pell grant is typically used as a proxy for low-income students in college, but we do not have access to student financial aid records.

[10] Complete College America - "Time Is The Enemy" (http://www.completecollege.org/docs/Time_Is_the_Enemy.pdf)

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[12] Pew Research Center – "The Rising Cost of Not Going to College" (http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/)

[13] Educational Opportunity Gap Oversight and Accountability Committee (EOGOAC) – "Closing the Opportunity Gap—2015 Annual Report from the EOGOAC" (http://www.k12.wa.us/Workgroups/EOGOAC/pubdocs/EOGOAC2015AnnualReport.pdf)

[14] The Seattle Times – "Historic tuition cut sets state apart from rest of U.S." (http://www.seattletimes.com/seattle-news/education/historic-tuition-cut-sets-state-apart-from-rest-of-us/)

[15] Washington State Budget & Policy Center – "Washington State Higher Education Led to 2nd Largest Tuition Increase in Nation" (http://budgetandpolicy.org/schmudget/washington-state-higher-education-cuts-led-to-2nd-largest-tuition-increase-in-nation) Center on Budget and Policy Priorities – "Sates Are Still Funding Higher Education Below Pre-Recession Levels" – (http://www.cbpp.org/research/states-are-still-funding-higher-education-below-pre-recession-levels?fa=view&id=4135.)

[16] Washington Student Achievement Council – "2014 State Need Grant Legislative Report" (http://www.wsac.wa.gov/sites/default/files/WSAC.2014SNGreport.Final.pdf)

[17] Center for American Progress – "A Great Recession, a Great Retreat: A Call for a Public College Quality Compact" (https://cdn.americanprogress.org/wp-content/uploads/2014/10/PublicCollege-report.pdf AND https://www.americanprogress.org/issues/higher-education/news/2014/10/27/99667/the-impact-of-the-great-recession-on-public-colleges/)

[18] Center on Budget and Policy Priorities – "Years of Cuts Threaten to Put College Out of Reach for More Students" (http://www.cbpp.org/sites/default/files/atoms/files/5-13-15sfp.pdf)

[19] Georgetown University Center on Education and the Workforce – "What's It Worth?: The Economic Value of College Majors (https://cew.georgetown.edu/report/whats-it-worth-the-economic-value-of-college-majors/)

[20] Seattle Jobs Initiative – "Certificate Programs and their Economic Value: A Look at King County Postsecondary Institutions" (http://www.seattlejobsinitiative.com/wp-content/uploads/SJI_CertsReport_v9.5.13.pdf)

[21] State Board for Community and Technical Colleges – Data Warehouse Documentation (http://sbctc.edu/college/_d_datawarehouse.aspx)