

Community & Technical College Share of Washington's Educational Attainment Goals for 2023

Background

In 2013, the Washington Student Achievement Council (WSAC) set a 10 year plan for improving the educational attainment of Washington residents.¹ The Roadmap included two educational attainment goals for 2023:

- All adults in Washington, ages 25-44, will have a high school diploma or equivalent.
- At least 70 percent of Washington adults, ages 25-44, will have a postsecondary credential.

The Washington state Legislature passed a bill acknowledging these attainment goals during the 2014 session.² The primary purpose of this report is to estimate what it will take for the state to reach the postsecondary attainment goal for 2023 and what share of the additional credential holders needed to reach this goal would be expected to come from Washington's community and technical college (CTC) system. The following summary section outlines a brief answer to this question; a more detailed description of the background assumptions and analysis to answer this question are provided in the subsequent sections of the report. It was noted during the analysis that the CTC system should also be expected to play a major role in the high school attainment goal, so a similar summary and analysis is provided for the high school attainment goal at the end of this report.

Postsecondary Attainment Goal Summary

- Matching current rates of postsecondary attainment (50 percent) will require 340,000 new credential holders by 2023.
- Reaching the postsecondary attainment goal (70 percent) will require an *additional* 380,000 new credential holders by 2023.
- The community and technical colleges are expected to be responsible for approximately 60 percent of the *additional* new credential holders based on current patterns of enrollment and completion.
- Reaching the postsecondary attainment goal will require efforts that target groups of people who are currently not earning a postsecondary credential by age 25-44:
 - 43 percent have completed some college
 - 70 percent are employed (18 percent report as not in the labor force)
 - 20 percent have a household income less than \$25,000 a year (46 percent have a household income less than \$50,000 a year)
 - 18 percent have a household income more than \$100,000 a year

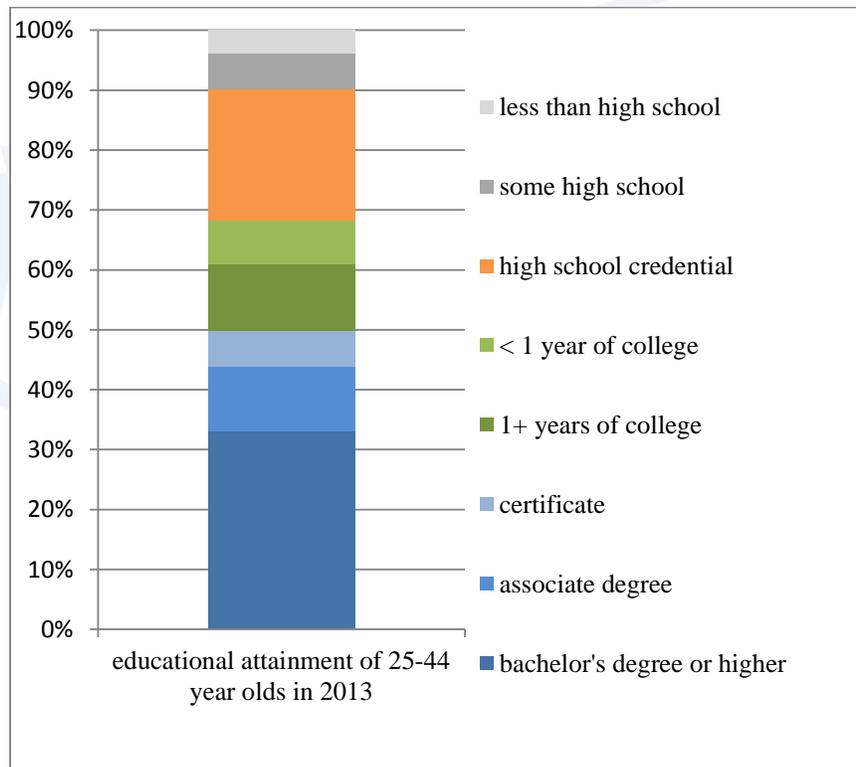
¹ Washington Student Achievement Council. (2013). The roadmap: A plan to increase educational attainment in Washington. Retrieved from <http://www.wsac.wa.gov/sites/default/files/2013RoadmapWeb.pdf>.

² House Bill 2626, signed by the Governor April 3, 2014, effective June 12, 2014.

Baseline

Figure 1 shows a summary of educational attainment among 25-44-year-olds in 2013. In the WSAC 2013 Roadmap report, the baseline for educational attainment among 25-44-year-olds was set at 89 percent of the population with a high school diploma or equivalent, and just less than 50 percent with a postsecondary credential.³ This baseline is primarily based on estimates from the American Community Survey (ACS), an annual survey administered by the U.S. Census Bureau that helps track population changes between census years.⁴ For the postsecondary credential baseline, the ACS data does not include postsecondary certificates, so WSAC researchers added an estimated range of 4 to 11 percent of the population who have earned a postsecondary certificate based on data from the Georgetown University Center on Education and the Workforce.⁵ Including this estimated range of certificate holders gives a range of total postsecondary credential holders between 48 and 54 percent of the population. The reported baseline of 50 percent was selected as the rounded center of this range. According to ACS data, the educational attainment in the state has remained fairly consistent with a small increase over the past several years, so 90 percent high school attainment and 50 percent postsecondary attainment is close to what would be expected for 2023 without significant changes and are what will be used as the baseline attainment for this report.

Figure 1



³ WSAC. (2013), p. 2

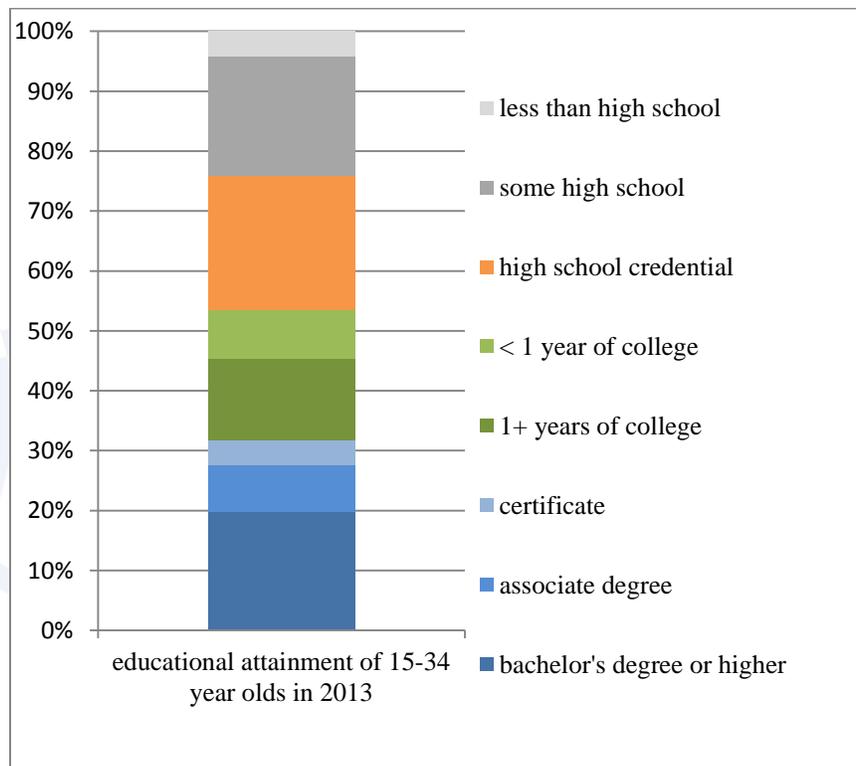
⁴ American Community Survey. (2014). Retrieved from <https://www.census.gov/programs-surveys/acs/>

⁵ Georgetown University Center on Education and the Workforce. (2012). Certificates: Gateway to gainful employment and college degrees. Retrieved from <https://cew.georgetown.edu/wp-content/uploads/2014/11/Certificates.FullReport.061812.pdf>.

Target Population

The target population of 25-44-year-olds in 2023 is the state's 15-34-year-old population in 2013. This group of 15-34-year-olds is projected to grow between 2013 and 2023, as the number of people moving into the state (in-migrants) is anticipated to be larger than the number of people leaving the state in this age group (out-migrants). The in-migrants could be included in the target population for the attainment goals, but the majority of people in this group earn a high school diploma and postsecondary credential before moving to the state.⁶ Limiting the target population to current residents gives a more clearly defined group of people for the state to focus on in working towards the educational attainment goals. Figure 2 shows a summary of educational attainment among our target group of 15-34-year-olds in 2013; 32 percent had a postsecondary credential and 76 percent had a high school diploma or equivalent.⁷

Figure 2



⁶ WSAC. (2013). A skilled and educated workforce: 2013 update, pp. 12-13. Retrieved from https://www.sbctc.edu/resources/documents/colleges-staff/research/workforce-research/skilled_educated_workforce_2013.pdf

⁷ Based on same data sources used for baseline attainment rates, ACS (2014) & Georgetown University Center on Education and the Workforce (2012).

Number of New Credential Holders Needed to Reach Goal

Figure 3 shows a summary of the number of new credential holders that will be needed to reach the postsecondary attainment goal for 2023 based on analysis of the ACS data discussed in the baseline and target population sections of this report. Out of the total population of 1.9 million 15-34-year-olds in 2013, 610,000 already had a postsecondary credential. Expecting this population to reach the current attainment rate of 50 percent, we expect 340,000 more people to receive a postsecondary credential by 2023. To reach the 70 percent attainment goal will require an additional 380,000 new credential holders by 2023.

Figure 3

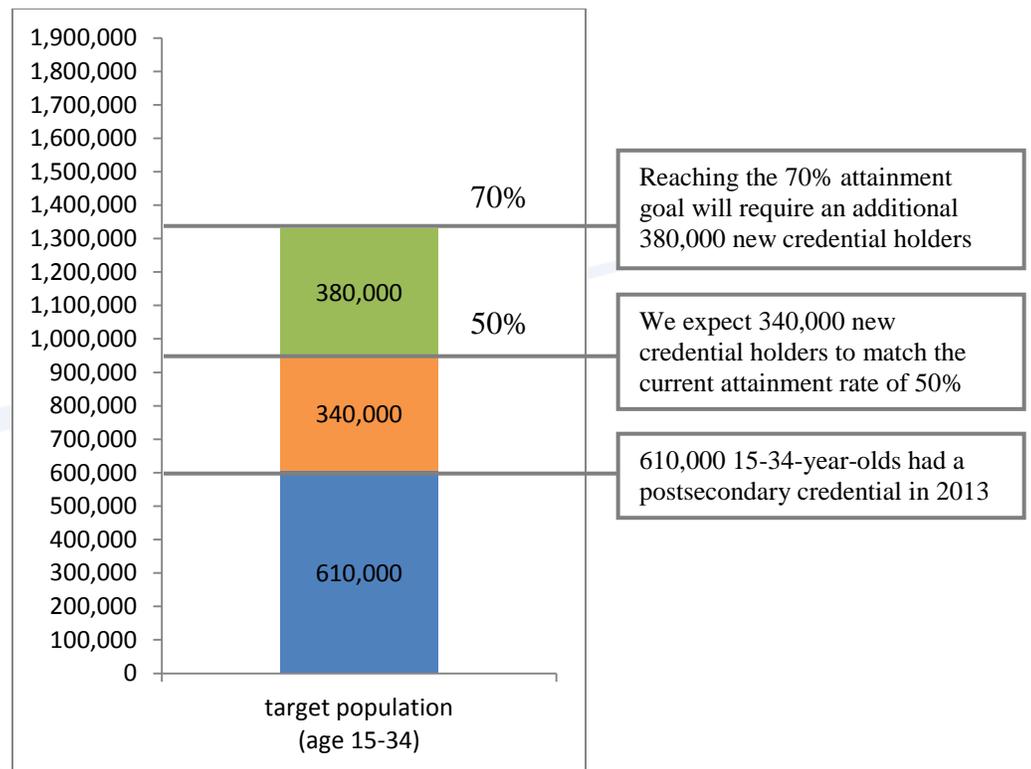
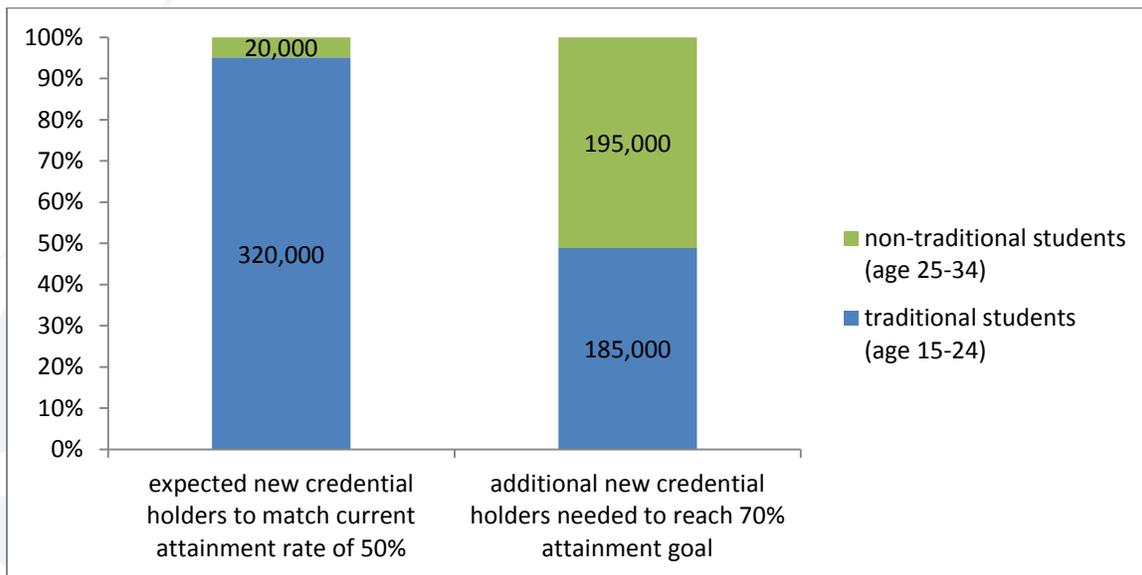


Figure 4 shows a breakdown by age of the 340,000 expected new credential holders and the 380,000 additional new credential holders needed to reach the attainment goal. The reported age groups were selected to represent the populations of potential traditional students (people who earn their first postsecondary credential before age 25) and potential non-traditional students (people who earn their first postsecondary credential at age 25 or older). As shown in the figure, over 90 percent of the expected new credential holders are expected to be traditional students, but over half of the additional new credential holders needed to reach the attainment goal are expected to be non-traditional students. This suggests that reaching the attainment goal will require a special emphasis on non-traditional students.

Figure 4



CTC Share of Goal

The CTC system is expected to be responsible for approximately 60 percent of the *additional* new credential holders needed to reach the postsecondary attainment goal. Figure 5 shows a summary of the steps used to come to this estimate.

Figure 5

Estimates for CTC share of postsecondary attainment goal based on...	
Total number of undergraduate awards reported in IPEDS	52%
Adjusted estimate for only first-time undergraduate awards	55%
Adjusted estimate for expected age groups of additional new credential holders	60%

Starting with the 2012-13 undergraduate award counts reported in IPEDS, the estimated CTC share of total awards is 52 percent.⁸ IPEDS is the best source that SBCTC has available for comparable award

⁸ National Center for Education. (n.d.). IPEDS data center. Retrieved from <http://nces.ed.gov/ipeds/datacenter/Default.aspx>.

counts for all sectors of higher education in Washington. However, these counts include a large number of postsecondary awards being earned by students who already have another postsecondary credential, which would not add to the total number of postsecondary credential holders.

Figure 6 shows a summary of the IPEDS awards counts and adjusted estimates for the number of first-time undergraduate awards. To adjust for the number of students who earn postsecondary certificates or short-term awards before earning another certificate or degree, all awards of less than one year were removed from the counts. To adjust for the number of students who earn a bachelor's degree after completing an associate degree or other shorter term credential, all bachelor's degrees were removed from the CTC count. This removal represents applied bachelor's degrees that are earned after completing an associate degree. Additionally, 40 percent of the bachelor's degrees were removed from the public four-year count (based on the *Role of Transfer* study which found that 31 percent of public four year bachelor's students transfer from a CTC with an associate degree and another 9 percent transfer from a CTC with at least 40 credits already completed)⁹, and 30 percent of the private sector bachelor's degrees were removed from the private sector count (a proportional estimate based on the *Role of Transfer* study findings and the relative transfer rate of students to public four-year and private sector colleges reported in the SBCTC Academic Year Report).¹⁰ With these adjustments, the estimate for CTCs share of first-time undergraduate awards is 55 percent.

Figure 6

Undergraduate awards for Washington state residents by college sector, 2012-13

Target Population	<1 year awards	1+ year awards	Associate degrees	Bachelor's degrees	Total awards	% of total awards	First-time awards estimate	% of first-time awards
Public 2-year (CTCs)	11,990	5,445	25,404	187	43,026	52%	30,849	55%
Public 4-year	275	0	0	22,866	23,141	28%	13,720	24%
Private Sector	1,964	5,092	1,069	7,703	15,828	19%	11,553	21%
Washington total	14,229	10,537	26,473	30,756	81,995	100%	56,122	100%

One limitation of using IPEDS award counts is that the age of first-time undergraduate award earners is not taken into account. As noted earlier in this report, a significantly higher percentage of the additional new credential holders will come from nontraditional students who are not enrolling in college directly out of high school. Using enrollment patterns by college sector and age group reported by the National Center for Higher Education Management Systems (NCHEMS), the estimate for the CTCs' share of first-time undergraduate *enrollment* for the expected age groups for additional new credential holders is 62 percent. Taking this into account, the estimate for the CTC share of first-time undergraduate awards for additional new credential holders was rounded up to 60 percent.

⁹ Washington State Board for Community and Technical Colleges (SBCTC). (2013). The role of transfer in the attainment of baccalaureate degrees at Washington public bachelor's degree institutions: Class of 2011. Retrieved from <https://www.sbctc.edu/resources/documents/colleges-staff/research/transfer-research/13-5transferstudy.pdf>

¹⁰ SBCTC. (2014). Academic year report: 2013-2014, pp. 61-65. Retrieved from <https://www.sbctc.edu/colleges-staff/research/annual-reports/academic-year.aspx>

Special Populations to Target

Reaching the postsecondary attainment goal will require strategies that target groups of people who are not currently earning a high school diploma and/or postsecondary credential by age 25-44. Assuming that the 25-44-year-old population in 2013 is not significantly different from the target population of 15-34-year-olds in 2013, a more detailed look at the baseline 25-44-year-old population may help to reveal some characteristics of people who are not currently earning a postsecondary credential. To help check this assumption, Figure 7 shows a demographic summary of 15-34-year-olds and 25-44-year-olds in 2013, using ACS population estimates.¹¹ While the two groups differ in terms of demographics that you would expect to change with age (i.e., having young children in the home, school enrollment, employment status and household income), the 15-34-year-old population and 25-44-year-old population appear to be fairly similar in terms of the demographics that are less likely to change with age (i.e., sex, race/ethnicity, English speaking ability and reported disability). This similarity suggests that a more detailed look at the baseline 25-44-year-old population may help to reveal some likely groups that may need special attention in reaching the attainment goals for 2023.

Figure 7

Demographic summary for Washington 15-34-year-olds and 25-44-year-olds in 2013

	15-34-year-olds in 2013	25-44-year-olds in 2013
population	1,904,019	1,890,838
Demographics: less likely to change with age		
% female	49%	49%
% of color	33%	32%
% who speak English less than very well	8%	10%
% with a disability	7%	8%
Demographics: more likely to change with age		
% with children under age 6 in the home	26%	33%
% enrolled in school	36%	10%
% employed	60%	75%
% unemployed	8%	6%
% not in labor force	27%	18%
% with a household income less than \$25,000 a year	20%	14%
% with a household income less than \$50,000 a year	42%	35%
% with a household income of \$100,000 a year or more	24%	29%

¹¹ American Community Survey. (2014). Retrieved from <https://www.census.gov/programs-surveys/acs/>

Figure 8 shows a demographic summary of the 25-44-year-old population in 2013 by postsecondary degree completion, using 2013 ACS population estimates.¹²

Figure 8

Washington 25-44-year-olds who have earned...

	a postsecondary degree	no degree
population	829,242	1,061,596
% who have completed some college	--	43%
% female	53%	46%
% of color	27%	36%
% who speak English less than very well	5%	15%
% with a disability	4%	11%
% with children under age 6 in the home	32%	33%
% enrolled in school	11%	8%
% employed	83%	70%
% unemployed	4%	8%
% not in labor force	13%	22%
% w/household income less than \$25,000 a year	7%	20%
% w/household income less than \$50,000 a year	21%	46%
% w/household income of \$100,000 a year or more	43%	18%

As shown in the table, the population without a postsecondary degree was more likely to be male, more likely to have a reported disability, more likely to be unemployed, and less likely to be enrolled in school. It is hopeful to note that 43 percent have made some progress toward a postsecondary credential, but this also means that almost half of the target group has taken some postsecondary courses and yet did not complete a credential. Strategies for increasing postsecondary attainment will need to accommodate for time spent in family obligations (33 percent of the group of 25-44 -year-olds without a degree has young children at home) and employment (70 percent is employed). Significant proportions of this group appear to be experiencing financial strains that would make it more difficult to forego work opportunities to complete a postsecondary credential (20 percent has a household income of less than \$25,000 a year; 46 percent has a household income of less than \$50,000 a year). This group also includes 18 percent with a household income of \$100,000 or more. This group from higher income households, and the 20 percent who report as not being in the labor force, may represent some of the people in this group who would need to have an incentive other than employment opportunities to pursue further education.

¹² American Community Survey. (2014). Retrieved from <https://www.census.gov/programs-surveys/acs/>

High School Attainment Goal

This section outlines a similar summary and subsequent analysis for the high school attainment goal.

- Matching current rates of high school attainment (90 percent) will require 280,000 new credential holders by 2023.
- Reaching the high school attainment goal (100 percent) will require an *additional* 180,000 new credential holders by 2023.
- The community and technical colleges are expected to be responsible for approximately 55 percent of the *additional* new credential holders based on current patterns of high school completion.
- Reaching the high school attainment goal will require efforts that target groups of people who are currently not earning a high school credential by age 25-44:
 - 65 percent identify as a person of color; 50 percent as Hispanic or Latino
 - 44 percent speak English less than very well; 39 percent have not completed any high school courses
 - 59 percent are employed (31 percent report as not in the labor force)
 - 31 percent have a household income less than \$25,000 a year (64 percent have a household income less than \$50,000 a year)

Number of New Credential Holders Needed to Reach Goal

Figure 9 shows a summary of the number of new credential holders that will be needed to reach the high school attainment goal for 2023 based on analysis of the ACS data discussed in the baseline and target population sections of this report. Out of the total population of 1.9 million 15-34-year-olds in 2013, 1,440,000 already had a high school diploma or equivalent. Expecting this population to reach the current attainment rate of 90 percent, we expect 280,000 more people to receive a postsecondary credential by 2023. Reaching the 100 percent attainment goal will require an additional 180,000 new credential holders by 2023.

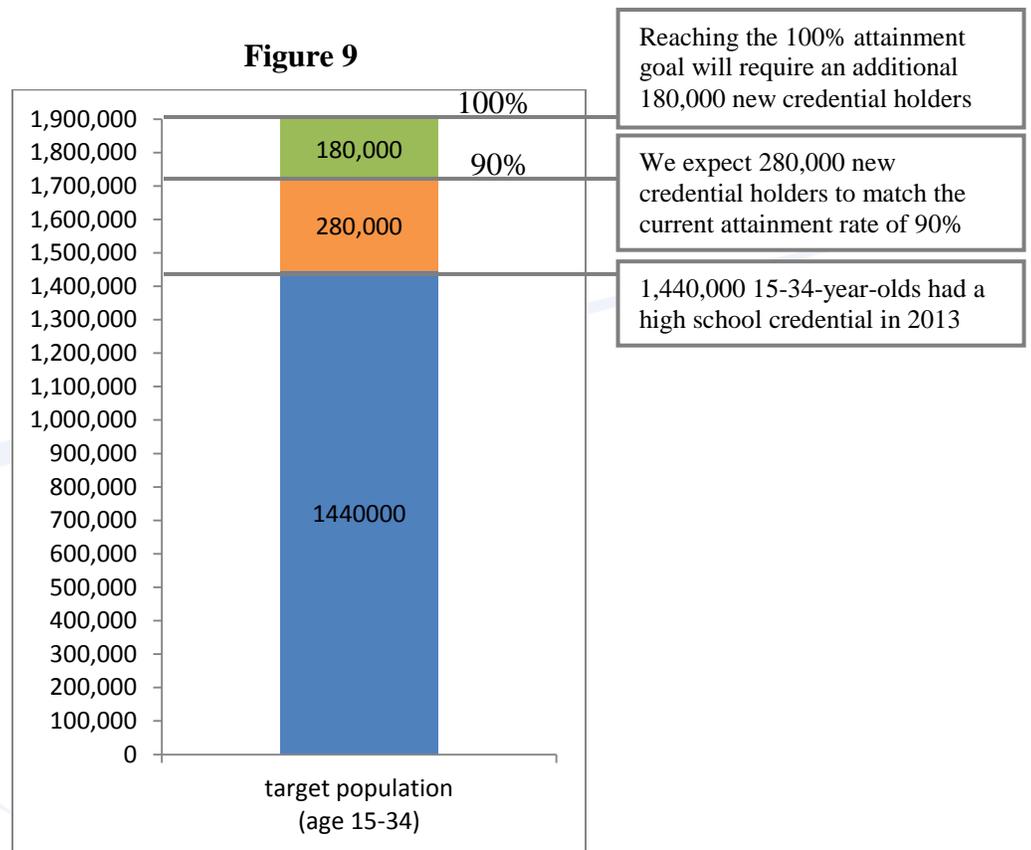
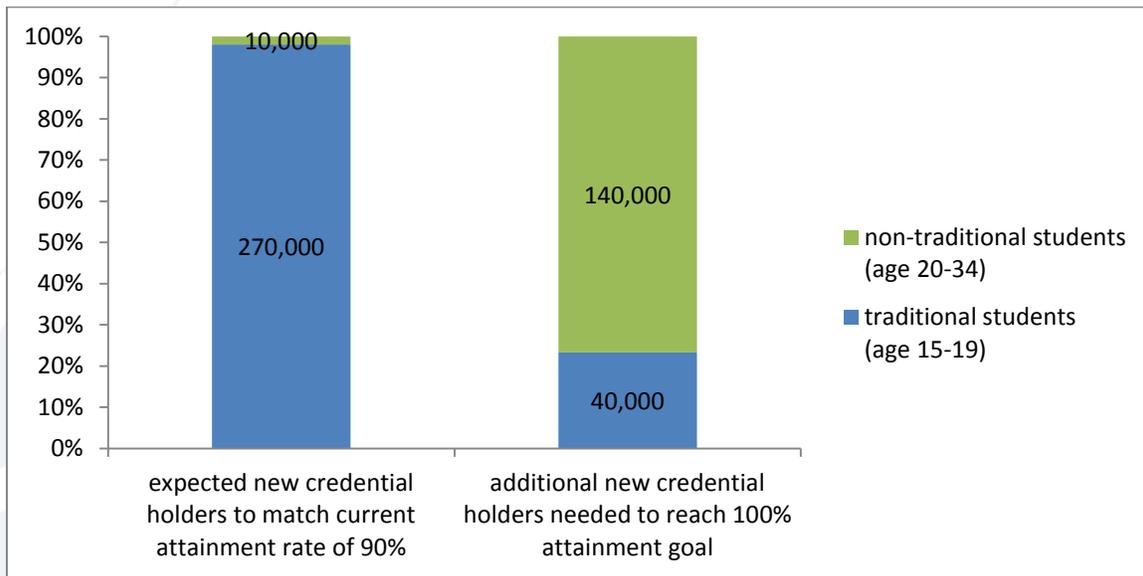


Figure 10 shows a breakdown by age of the 280,000 expected new credential holders and the 180,000 additional new credential holders needed to reach the attainment goal. The reported age groups were selected to represent the populations of potential traditional students (people who complete a high school diploma or equivalent before age 20) and potential non-traditional students (people who complete a high school diploma or equivalent at age 20 or older). As shown in the figure, over 95 percent of the expected new credential holders are expected to be traditional students, but a large majority of the additional new credential holders needed to reach the attainment goal are expected to be non-traditional students.

Figure 10



CTC Share of Goal

Figure 11 shows a summary of high school completion counts used to estimate the CTC share of the additional high school credential holders needed to reach the high school attainment goal. In the table, the counts of high school equivalency exams (HSE) completed after self-study or no study are separated out to show that they were not included in estimating overall shares of additional credential holders. These self-study/no study HSE counts were excluded based on the assumption that educational programs will be responsible for any significant increases in the number of people completing a HSE or other high school credential. As shown in the table, diplomas completed at a high school represent the vast majority of high school credentials earned by 15-19-year-olds in Washington (95 percent), but the CTCs are responsible for a significant proportion of high school credentials earned by 20-34-year-olds. It is estimated that the CTCs are responsible for less than five percent of high school credentials earned by 15-19-year-olds, and almost 70 percent of credentials earned by 20-34-year-olds. These estimates applied to the expected number of additional new credential holders from each age group gives an overall estimate that the CTCs will be responsible for approximately 55 percent of the additional new high school credential holders needed to reach the high school attainment goal.

Figure 11

Summary of high school completion counts in Washington by age group

	15-19-year-olds		20-34-year-olds	
	N	%	N	%
Washington high school ¹³	64,083	95%	0	0%
CTC: High School 21+ ¹⁴	0	0%	138	3%
CTC: diploma award with associate degree	325	0%	248	6%
CTC: other high school completions	612	1%	473	11%
CTC: HSE after CTC classes	1,417	2%	2,105	49%
HSE: after other prep classes ¹⁵	909	1%	1,351	31%
subtotal	67,346	100%	4,315	100%
HSE: after self-study/no study	2,219		3,297	
total	69,565		7,612	

¹³ Washington high school counts are based on 2013-14 graduation statistics from the Washington State Office of Superintendent of Public Instruction, <http://www.k12.wa.us/dataadmin/>

¹⁴ All CTC counts are based on 2013-14 ward counts from the SBCTC data warehouse

¹⁵ All HSE counts are based on SBCTC analysis of statistical reports and analytics provided by GED Testing Service®

Special Populations to Target

Figure 12 shows a demographic summary of the 25-44-year-old population in 2013 by high school diploma or equivalent completion, using 2013 ACS population estimates.¹⁶

Figure 12

Washington 25-44-year-olds who have earned...

	a high school diploma/equivalent	no diploma
population	1,705,778	185,060
% who have <i>not</i> completed some high school	--	39%
% female	50%	43%
% of color	29%	65%
% who speak English less than very well	7%	44%
% with a disability	7%	14%
% with children under age 6 in the home	32%	40%
% enrolled in school	10%	3%
% employed	77%	59%
% unemployed	6%	10%
% not in labor force	17%	31%
% w/household income less than \$25,000 a year	13%	31%
% w/household income less than \$50,000 a year	32%	64%
% w/household income of \$100,000 a year or more	31%	9%

As shown in the table, the population without a high school diploma or equivalent was more likely to be male, more likely to have a reported disability, more likely to be unemployed, and less likely to be enrolled in school. The majority of the no diploma group reported identifying with a racial/ethnic group of color (65 percent). This racial/ethnic disparity is predominantly due to a much higher proportion of this population identifying as Hispanic or Latino (50 percent of the no diploma group identified as Hispanic or Latino).¹⁷ A significant proportion has not completed any high school courses (39 percent). English education or multi-lingual education opportunities will be a critical part of reaching the high school attainment goal (44 percent report speaking English less than very well). Strategies for increasing postsecondary attainment will need to accommodate for time spent in family obligations (40 percent has young children at home) and employment (59 percent is employed). Financial strain will be a major barrier for a large proportion of the group (31 percent has a household income of less than \$25,000 a year; 64 percent has a household income of less than \$50,000 a year). Several members of this group will likely need incentives other than employment to complete a high school diploma or equivalent (31 percent report that they are not in the labor force).

¹⁶ American Community Survey. (2014). Retrieved from <https://www.census.gov/programs-surveys/acs/>

¹⁷ ACS demographic analysis conducted by SBCTC, February 2015