

**Grading Educational Attainment Improvement in California
Progress to 60X30**



National Center for Higher Education Management Systems

June 1, 2018

Campaign for College Opportunity

Introduction

The Campaign for College Opportunity (the Campaign) has established a goal that 60% of Californians ages 25-64 will have a postsecondary credential by 2030. This level of education attainment would meet the projected workforce needs in the state and if the additional degrees were awarded to underrepresented groups and to residents of historically underserved regions, this level of degree attainment would also suffice to eliminate equity gaps, both regional and statewide. The Campaign contracted with the National Center for Higher Education Management Systems (NCHEMS) to create data analyses to update the California Higher Education Report Card. In the baseline year of 2014, the value of the 25-64 year old postsecondary credential attainment metric was 47.2%; in 2015 it was 48.5%; in 2016 it was 48.4%. This includes an estimate made by the Georgetown Center on Education and the Workforce that 7% of individuals in this age cohort have certificates of value as their highest education credential.

NCHEMS uses a proprietary Student Flow Model to estimate the number of additional degrees required for a state in order to meet the state goal that 60% of Californians ages 25-64 will have a postsecondary credential by 2030. The model assumes trends in rising educational attainment will continue indefinitely and uses population projections and the most recent available data on student enrollments and completions to create the estimate. Net migration patterns and other components of population change such as births and deaths are captured in the projections and in the share of the population with postsecondary credentials. The model estimates that number of additional degrees and certificates needed to meet California's 2030 goal (beyond the continuation of existing trends) is 1,655,618.

Next, we assume that the state will have to make linear progress toward producing the number of additional degrees required between the current year (rather, the year for which the most recent data are available) and the target year. In 2016, California's colleges and universities produced 381,082 undergraduate degrees and certificates of at least one year in length. In order for a state to meet its goal, it must increase its production by the number of credentials specified in each subsequent year. To meet California's 2030 goal, California must produce an additional 12,174 credentials each year.

In order to monitor progress toward achievement of that goal, the Campaign has developed a Report Card that indicates the extent of improvement on factors that affect attainment of the overarching goal. These factors are:

- Preparation – how well are recent high school graduates academically prepared to successfully engage in college-level work?
- Access – are students (both recent high school graduates and adults) enrolling at rates that will allow the goal to be met?
- Completion – Are students who enroll in college successfully completing a program of study?
- Affordability – Is the cost of going to the public institutions within the means of California's low-income and media-income families?

In some cases there are multiple metrics within a category. In these cases, each metric is weighted equally for grading purposes.

The Approach to Setting Targets and Grading

For the factors identified as key contributors to the attainment of the goal – preparation, access, completion, and affordability – targets have been established as follows:

- a. College-ready curriculum –100% of high school graduates will have completed a college-ready (A-G) curriculum with a C or better by 2030. The 2014 baseline for this metric is 41.9%.
- b. Proportion of 19-year olds with a high school diploma –100% of 19-year olds will have earned a high school diploma by 2030. The 2014 baseline for this metric is 89.6%.
- c. Proportion of 18-24 year olds enrolled in college – the average of the three best-performing states in 2016, which was 52.3% is set as California’s 2026 target. The 2014 baseline for California for this metric is 46.3%. The same annual percentage increase required to move from the 2014 actual rate to the 2026 target rate was then used as the percentage increase required yearly from 2026 to 2030.
- d. Proportion of 25-49 year olds without a postsecondary credential enrolled in college – The target pace is set to equal the pace required for the number of credentials produced overall. Achieving the 1,655,618 total number of additional awards by 2030 works out to require an annual compounded rate of increase equal to 2.7 percent and this compounded rate is applied to this metric. The 2014 baseline for this metric is 6.5%.
- e. Number of undergraduate degrees and certificates awarded – the annual increase in number of credentials awarded necessary to reach the 60% goal is 12,174 undergraduate credentials – 12,174 in year 1, 24,348 in year 2, etc. By 2030 the required increase in additional credentials produced in that year over the 2014 level of 359,638 will be about 200,000. The 2016 distribution of undergraduate degrees awarded by all institutions in California is as follows:

- Baccalaureate 50.6%
 - Associates 29.8%
 - Certificates 19.6%
- 100%

The additional degrees and certificates required to meet the 60% target, based on existing patterns of degree/certificate production, are as follows:

	In 2030	Cumulative to 2030
Baccalaureate	98,561	837,743
Associate	58,045	493,374
Certificates	<u>38,178</u>	<u>324,501</u>
Total	194,784	1,655,618

Achieving the 1,655,618 total number of awards works out to require an annual compounded rate of increase equal to 2.7 percent. This rate is applied to the remaining metrics in the Completions category, in order to achieve 2030 goals, yielding the following targets:

- 14.7% of the 18-24 year old population of the state will have a baccalaureate degree by 2030. The 2014 baseline for this metric is 9.5%.
- The number of community college students transferring to a four-year university in the state will increase from 102,410 in 2014 to 157,875 by 2030.

Affordability – For this category, NCHEMS developed metrics for both low-income and median-income families for dependent students enrolling in each of the three public sectors in the state – the community colleges, California State University System, and University of California System. For all metrics the targets are that grant aid plus a student work contribution and a family contribution (e.g., from parents of dependent students) will cover the cost of attendance. For low-income students at the California Community Colleges (CCC), California State University (CSU), and University of California (UC), grant aid plus student work should cover the entire cost of attendance. For median-income students at the CCC, CSU and UC, grant aid plus student work and family contribution should cover the entire cost of attendance. Our target therefore is to reduce any unmet need amount from its starting point in 2013-14 to the amount a student can earn by working 10 hours a week, which will be \$7,500 by 2029-30 based on expected changes in the state minimum wage.

Grades are established for progress from the base year of 2013-14 to the current year. The basis for grading is:

- Annual progress relative to the annual change required to achieve the target level by 2030
- Progress of 93% or more yields a grade of A
 - Progress of 90-92% yields a grade of A-
 - Progress of 87-89% yields a grade of B+
 - Progress of 83-86% yields a grade of B
 - Progress of 80-82% yields a grade of B-
 - Progress of 77-79% yields a grade of C+
 - Progress of 73-76% yields a grade of C
 - Progress of 70-72% yields a grade of C-
 - Progress of 67-69% yields a grade of D+
 - Progress of 65-66% yields a grade of D
 - Progress of <65% yields a grade of F

Even though these metrics are each separately measured, it is important to recognize that they are not unrelated. For California to achieve its educational attainment goals, improvements in each of these areas will be necessary. Doing so while reducing equity gaps will be especially crucial for a state that is rapidly diversifying. There is an absence of policy guidance from the state about which point(s) along the educational pipeline will receive priority for achieving the state goal. Therefore, targets were selected for these metrics in a way designed so that each is realistic yet ambitious while being derived from actual data and the goal.

Preparation

The preparation grade is based on two metrics:

- A. Proportion of high school graduates in most recent year who have completed a college-ready (A-G) curriculum with a C or better. The data file that states the number of high school graduates completing all courses required for UC or CSU are from the California Department of Education (CDE).
- B. Proportion of 19-year olds who have completed high school.

A. Percentage completing college-ready curriculum

Metric definition: The number of students meeting the University of California/California State University (UC/CSU) entrance requirements divided by the total number of high school graduates.

Data source: CDE 2014-15 and 2015-2016 data.

The target counts and rates for improvement on this metric are shown in the following table.

Table 1. California High School Graduates Who Have Completed a College-Ready Curriculum with a C or Better

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		41.9		
2015	44.2	43.4	3.5%	3.5/5.6=63%
2016	46.7	45.4	4.6%	4.6/5.6=82%
2017	49.3			
2018	52.1			
2019	55.0			
2020	58.1			
2021	61.3			
2022	64.7			
2023	68.4			
2024	72.2			
2025	76.1			
2026	80.5			
2027	85.0			
2028	89.7			
2029	94.7			
2030	100.0			

Source: California Department of Education

In 2015, 43.4% of high school graduates completed a college-ready curriculum. The rate of gain on this metric for the initial year was 62.7% of the progress required to reach the 100% target level in 2030. This yields a grade of F on this metric. In 2016, 45.4% of high school graduates completed a college-ready curriculum. The rate of gain on this metric from 2015 to 2016 was 81.6% of the progress required to meet the 2030 goal. This yields a grade of B- on this metric. From 2014 to 2016, the rate of gain on this metric was 71.6%. This yields a cumulative grade over both years of C-.

The rate of high school graduates completing a college-ready curriculum differs substantially when comparing the overall rate to the rate for underrepresented minority groups (URM), consisting of Black, Latinx, and American Indian/Alaska Native individuals. While the 2016 overall college curriculum completion rate is 45.4%, for URMs it is 38.2% (34.4% of Black students and 37.2% of Latinx students, compared with 51.7% of White students). If equity across racial groups is the objective, the rate of increase for URMs would have to be 7.1% per year versus the 5.6% for the overall high school graduate population. URM high school graduates completed a college-ready curriculum at a rate slightly over the needed rate of increase between 2014-15 and 2015-2016 (yielding a grade of A) but fell short of the target change from 2014 to 2016 (94% of the target increase was met, which yields a cumulative grade of A).

B. Proportion of 19-year olds who have completed high school

Metric definition: The estimated total of 19 year olds with education attainment of at least high school graduate or equivalency divided by the estimated total of 19 year olds.

Data Source: U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files were used for data reported for 2014, 2015, and 2016, respectively.

The proportion of 19-year olds with a high school diploma increased from 89.5% to 90.3% between 2015 and 2016. The improvement in high school attainment among 19 year-olds of 0.9% was about 124% of the 0.7% target gain. This earns California an A on this particular metric. However, from 2014 to 2016, the rate of gain on this metric was 54.1% of the target gain. This yields a cumulative grade of F.

Table 2. Percent of California 19-Year Olds Who Have Completed High School

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		89.6		
2015	90.2	89.5	-0.1%	-0.1/0.7= -15.7%
2016	90.8	90.3	0.9%	0.9/0.7=124.3%
2017	91.4			
2018	92.1			
2019	92.7			
2020	93.4			
2021	94.0			
2022	94.6			
2023	95.3			
2024	96.0			
2025	96.6			
2026	97.3			
2027	98.0			
2028	98.6			
2029	99.3			
2030	100.0			

Source: American Community Survey, U.S. Census Bureau

Considering the goal of equity on high school graduation, the URM rate would need to increase from 86% in 2014 to 100% by 2030, which is an annual increase of 0.9%. When the URM population is considered, the rate of change on this metric from 2015-2016 was 85.5% of the target rate of change, yielding a grade of B; however, the rate of change from 2014 to 2016 was only 26% of the target change, which yields a cumulative grade of F. The 2016 high school completion rate for the URM population was 86.5%; the Black rate was 88.1%, the Latinx rate was 86.3%, compared the White rate of 94.8%.

Grade Summary for Preparation

	Current year grade (points)	Cumulative grade (points)
College ready curriculum	B- (2.7)	C- (2)
College ready curriculum (URM)	A (4)	A (4)
High school completion	A (4)	F (0)
High school completion (URM)	B (3)	F (0)
<hr/>		
Total points:	13.7	6
Average points:	3.425	1.5
Preparation grade:	B+	C-

Academic preparation is essential to student access to college and successful completion of a program of study once enrolled. It also matters to productive engagement in a labor market defined by increasing levels of skills requirements, often requiring education and training beyond high school, regardless of whether individuals go directly to college. Insufficient progress on this metric bodes ill for the accomplishment of a 60% attainment goal by 2030.

Access

The access category is comprised of two separate metrics, one indicating enrollment rates of 18-24 year olds and another indicating enrollment rates of 25-49 year olds. Measures of progress on these two metrics are as follows:

- Number of 18-24 year olds enrolled in college relative to the total number of 18-24 year olds in the population
- Number of 25-49 year olds enrolled in college relative to the total number of 25-49 year olds in the population who do not have a college credential

Results are presented below:

A. Percent of 18-24 year olds enrolled in college

Metric definition: The estimated total of 18-24 year olds enrolled in college (college undergraduate and graduate or professional school beyond a bachelor's degree) divided by the estimated total number of 18-24 year olds.

Data Source: U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files.

Data regarding the participation rates of young adults are shown in Table 3.

Table 3. Percent of California 18-24 Year Olds Enrolled in College Relative to 18-24 Year Olds in the Population

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		46.3		
2015	46.8	47.1	1.8%	1.8/1.0=175%
2016	47.2	47.7	1.3%	1.3/1.0=128%
2017	47.7			
2018	48.2			
2019	48.7			
2020	49.2			
2021	49.7			
2022	50.2			
2023	50.7			
2024	51.2			
2025	51.8			
2026	52.3			
2027	52.8			
2028	53.4			
2029	53.9			
2030	54.4			

Source: American Community Survey, U.S. Census Bureau

On this metric California achieved a rate of gain of 128% of the targeted rate from 2015 to 2016. This level of performance warrants a grade of A on this metric. From 2014 to 2016, the rate of gain on this metric was 152%. This yields a cumulative grade of A on this metric.

The percent of 18-24 year old URM's enrolled in college relative to all 18-24 year old URM's in the population in 2016 is 41.6 percent (42.1% of Black 18-24 year olds, 41.6% of Latinx 18-24 year olds) compared to 49.6 percent of White 18-24 year olds enrolled in college relative to all 18-24 year olds. The rate of improvement on this metric for the URM population earned California a grade of F from 2015 to 2016 and also from 2014 to 2016.

B. Proportion of 25-49 year olds without postsecondary credentials enrolled in college

Metric definition: The estimated total of 25-49 year olds without a college degree who are enrolled in college divided by the estimated total number of 25-49 year olds.

Data source: U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files were used for data reported for 2014, 2015, and 2016, respectively.

Table 4. Percent of 25-49 Year Olds without a Postsecondary Credential Enrolled in College

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		6.51		
2015	6.69	6.34	-2.5%	-2.5/2.7= -93%
2016	6.87	6.62	4.3%	4.3/2.7=156%
2017	7.06			
2018	7.25			
2019	7.45			
2020	7.66			
2021	7.87			
2022	8.08			
2023	8.30			
2024	8.53			
2025	8.77			
2026	9.01			
2027	9.25			
2028	9.51			
2029	9.77			
2030	10.04			

Source: American Community Survey, U.S. Census Bureau

From 2015 to 2016, there was an increase in percent of 25-49 year olds without a postsecondary credential enrolled in college that was above the targeted rate, yielding a grade of A on this metric from 2015 to 2016 for the overall population and URMs. However, the rate of improvement on this metric from 2014 to 2016 earns California a cumulative grade of F for the overall population and the URM population. Only 5.1% of Latinx 25-49 year olds without a college credential and 9.4% of Black 25-49 year olds without a college credential were enrolled in 2016 (compared to 8% of White 25-49 year olds without a college credential).

Grade Summary for Access

	Current year grade (points)	Cumulative grade (points)
18-24 year olds enrolled	A (4)	A (4)
18-24 year olds enrolled (URM)	F (0)	F (0)
25-49 year olds enrolled	F (0)	F (0)
25-49 year olds enrolled (URM)	F (0)	F (0)
<hr/>		
Total points:	4	4
Average points:	1	1
Access grade:	D	D

Completion

The completion category is comprised of six separate components as follows:

- Increase in number of undergraduate postsecondary degrees and certificates of at least one year in length awarded
- Proportion of 18-24 year olds holding a baccalaureate degree
- The number of community college students who transfer to a four-year university (public or private) in California or in another state.
- Degrees and certificates awarded to 18-24 year olds as a proportion of the 18-24 year old population in the state
- Degrees and certificates awarded to 25-49 year olds as a proportion of the 25-49 year old population not having earned a college credential
- Success rates of underprepared students

The performance of California on these metrics is as follows:

A. Number of undergraduate degrees and certificates awarded

Metric definition: Total number of students receiving certificates of at least one year in length, associate's degrees, and bachelor's degrees from Title IV institutions (except Ashford University since it is a 4-year proprietary institution primarily serving out-of-state students online).

Data source: NCES IPEDS Completions Survey, c2014_c; Completions Survey, c2015_c; and Completions Survey, c2016_c.

Along with in-migration, this is the factor that will be the determinant of whether or not California reaches the target level of 60% of the 25-64 year old population having a postsecondary credential of value. Using 2014 as the base year, this means that California must increase production of undergraduate degrees and certificates by about 12,174 each year from a base number of about 360,000 in 2014.

The necessary cumulative increases are shown in Figure 1.

Figure 1. Additional Credentials Awarded Each Year to Reach that Target

Total Additional Credentials Required 1,655,618.
 Annual Increase in Credentials Required 12,174

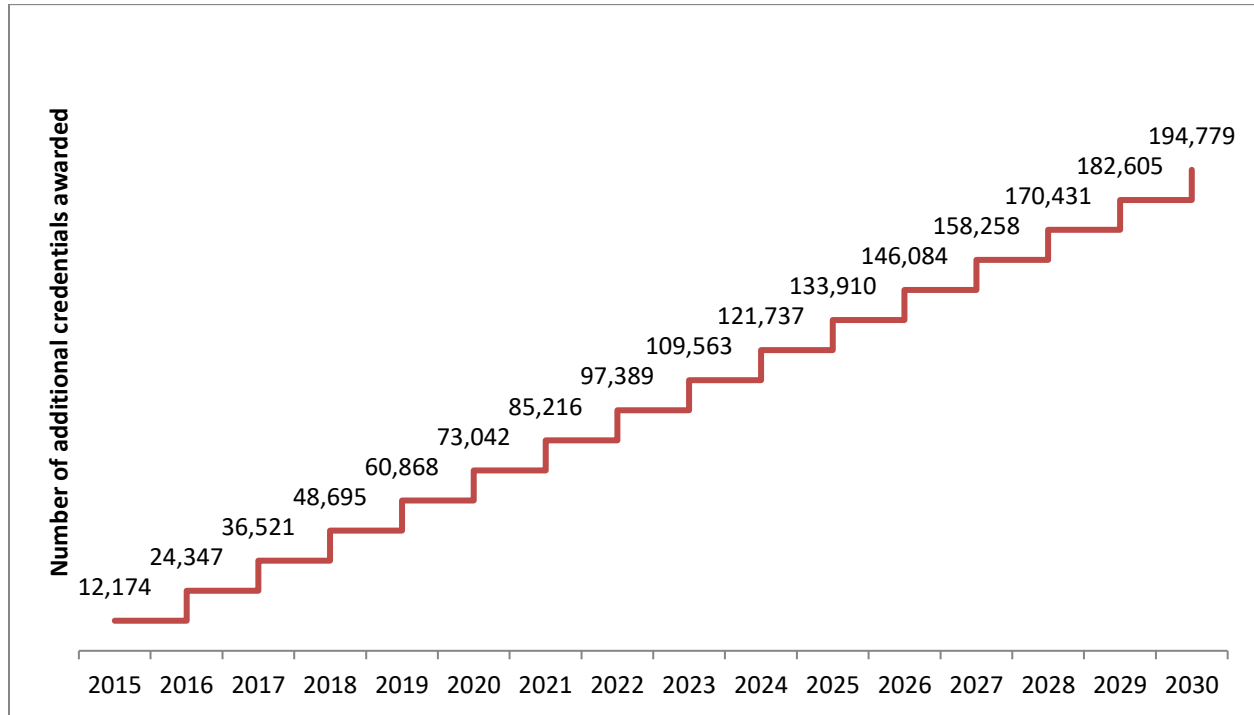


Table 5 indicates the numbers of degrees that need to be produced each year in order to meet the 2030 attainment goal and the actual number of certificates of at least one year in length and degrees produced. From 2015 to 2016, California surpassed the target change, earning an A on this metric. From 2014 to 2016, 88% of the target change was achieved and this earns California a cumulative grade of B+ on this metric.

Table 5. Number of Degrees Needed to be Produced Each Year in

Order to Reach Goal

Year	Required Degree Production	Actual Degree Production	Actual Change from Prior Year	Actual Change as a % of Target Change
2014		359,638		
2015	371,812	365,576	5,938	5,938/12,174 = 49%
2016	383,985	381,082	15,506	15,506/12,174=127%
2017	396,159			
2018	408,333			
2019	420,506			
2020	432,680			
2021	444,854			
2022	457,027			
2023	469,201			
2024	481,375			
2025	493,548			
2026	505,722			
2027	517,896			
2028	530,069			
2029	542,243			
2030	554,417			

Source: NCHEMS/CLASP Education Attainment Model; National Center for Education Statistics Integrated Postsecondary Education Data System; American Community Survey, U.S. Census Bureau

By 2030, an estimated 49% of California’s 25 to 64 year olds will be URM. The 2030 target on this metric for the URM population was set so that 49% of the 2030 degrees come from the URM population and this comes out to 8,800 additional degrees needed annually from that population. The 14,016 increase in number of degrees awarded to URMs from 2015 to 2016 yields a grade of A. The 20,084 increase in degrees awarded to URMs from 2014 to 2016 earns California a cumulative grade of A.

B. Percentage of 18-24 year-olds with a baccalaureate degree

Metric definition: The estimated total of 18-24 year olds with education attainment of at least a bachelor’s degree divided by the estimated population of 18-24 year olds.

Data source: For the state, U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files.

The following table shows actual gain on this metric relative to the target gain.

Table 6. Percent of 18-24 Year-olds with a Baccalaureate Degree

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		9.5		
2015	9.8	9.6	0.04%	0.04/2.7=1.4%
2016	10.1	10.1	5.6%	5.6/2.7=206%
2017	10.4			
2018	10.6			
2019	10.9			
2020	11.2			
2021	11.5			
2022	11.9			
2023	12.2			
2024	12.5			
2025	12.9			
2026	13.2			
2027	13.6			
2028	13.9			
2029	14.3			
2030	14.7			

Source: American Community Survey, U.S. Census Bureau

The gain from 2014 to 2015 is 1.4% of the needed improvement, a level of performance that yields an F on this metric. However, from 2015 to 2016, the gain surpasses the targeted gain and earns California an A on this metric and the gain from 2014 to 2016 earns California a cumulative grade of A. California’s cumulative growth in the percent of 18-24 year olds with a baccalaureate degree masks the disparity between the overall population and the URM population. While in 2016 10.1% of all 18-24 year-olds had a baccalaureate degree or higher, only 4.9% of the URM 18-24 year olds did. The cumulative growth on this metric for URM’s earns California a cumulative grade of an F signaling that California is not on a path to closing the equity gap and meeting the 2030 goal.

C. Number of Community College Transfers

Metric definition: The number of students who transfer from California community colleges to four-year institutions (California public, in-state private and out-of-state institutions). Transfer students are assigned to the institution / region they transfer from.

Data source: California State University, University of California, and California Community Colleges Chancellor’s Office data.

The data in Table 7 show the target number of students who must transfer from community colleges to four-year institutions (private or public universities in California or another state).

Table 7. Number of Community College to 4-year University Transfers

Year	Required Number	Actual Number	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		102,410		
2015	105,218	103,640	1.2%	1.2/2.7= 44%
2016	108,103	100,651	-2.9%	-2.9/2.7= -105%
2017	111,067	103,710	3.0%	3.0/2.7= 111%
2018	114,113			
2019	117,242			
2020	120,457			
2021	123,760			
2022	127,153			
2023	130,640			
2024	134,222			
2025	137,903			
2026	141,684			
2027	145,569			
2028	149,560			
2029	153,661			
2030	157,875			

Source: California Community Colleges Chancellor’s Office, California State University System, University of California System

The increase in community college transfers to four-year universities between 2016 and 2017 of 3.0% is above the targeted increase and earns California a grade of A. However, the number of community college transfers to four-year universities increased by only 1,300 students (from 102,410 to 103,710) between 2014 and 2017 and this increase relative to the target earns California a cumulative grade of F on this component.

By 2030, an estimated 49% of California’s 25 to 64 year olds will be URM. The 2030 target on this metric for the URM population was set so that 49% of the 2030 target transfers come from the URM population and this comes out to an 8.3% annual percentage increase required. The increase in number of URMs transferring from California Community Colleges to four-year institutions from 21,650 in 2014 to 27,711 in 2017 earns California a cumulative grade of A.

D. Degrees and certificates awarded to 18-24 year olds per 10,000 18-24 year olds without a college credential.

Metric definition: 10,000 multiplied by the quotient of the total number of 18-24 year olds receiving awards of at least 1 year in length divided by the total estimated number of 18-24 year olds with an education attainment of less than high school, just high school or equivalency, and some college but no degree.

Data Source: U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files; NCES IPEDS Directory Information Files hd2014 Final Release Data File, hd2015 Provisional Release Data File, and hd2016 Provisional Release Data File; NCES IPEDS, Completions survey file c2014_c_rv Final Release Data File, c2015_c_rv Final Release Data File, and c2016_c Provisional Release Data File.

As shown in Table 8, between 2015 and 2016 this proportion changed from 653.3 to 705.3 –an increase of 3.0%. This is 109% of the 2.7% target. On this component California gets a grade of A for improvement from 2014 to 2016 as well.

Table 8. Degrees & Certificates Awarded to 18-24 Year-Olds per 10,000 18-24 Year-Olds Without a College Credential

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		634.3		
2015	651.7	653.3	3.0%	3.0/2.7=109%
2016	669.6	705.3	8.0%	8.0/2.7=290%
2017	687.9			
2018	706.8			
2019	726.2			
2020	746.1			
2021	766.5			
2022	787.6			
2023	809.2			
2024	831.3			
2025	854.1			
2026	877.6			
2027	901.6			
2028	926.3			
2029	951.7			
2030	977.8			

Source: Integrated Postsecondary Education Data System, National Center for Education Statistics; American Community Survey, U.S. Census Bureau

E. Degrees and certificates awarded to 25-49 year olds per 10,000 individuals in that age cohort without a college credential.

Metric definition: 10,000 multiplied by the quotient of the total number of individuals age 25 and over receiving awards of at least 1 year in length divided by the total estimated number of 25-49 year olds with an education attainment of less than high school, just high school or equivalency, and some college but no degree.

Data Source: U.S. Census Bureau 2014, 2015, and 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) Files; NCES IPEDS Directory Information Files hd2014 Final Release Data File, hd2015 Provisional Release Data File, and hd2016 Provisional Release Data File; NCES IPEDS, Completions Survey File c2014_c_rv Final Release Data File, c2015_c_rv Final Release Data File, and c2016_c Provisional Release Data File.

From 2014 to 2015, there was a decrease in degrees and certificates awarded to 25-49 year olds per 10,000 25-49 year olds from 183.4 to 180.6, a change that earns California an F on this metric. However, there was an increase in production of degrees relative to size of the eligible population from 180.6 per 10,000 in 2015 to 189.1 in 2016. This increase yields a grade of A for the improvement from 2015 to 2016 but is not enough to keep up with the targeted rate. The level of performance from 2014 to 2016 yields California a cumulative grade of F on this metric.

Table 9. Degrees and certificates awarded to 25-49 year olds per 10,000 individuals in that age cohort without a college credential.

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		183.4		
2015	188.4	180.6	-1.5%	-1.5/2.7= -56%
2016	193.6	189.1	4.7%	4.7/2.7=172%
2017	198.9			
2018	204.4			
2019	210.0			
2020	215.7			
2021	221.6			
2022	227.7			
2023	234.0			
2024	240.4			
2025	247.0			
2026	253.7			
2027	260.7			
2028	267.8			
2029	275.2			
2030	282.7			

Source: Integrated Postsecondary Education Data System, National Center for Education Statistics; American Community Survey, U.S. Census Bureau

F. Success rates of underprepared students.

Metric definition: The percentage of degree, certificate and/or transfer-seeking students who enrolled in developmental math or English and accumulated 30 credits within 6 years.

Data Source: California Community Colleges Student Success Scorecard. Data listed in year 2014 are for students who entered Fall of 2008. Data listed in year 2015 are for students who entered Fall of 2009. Data listed in year 2016 are for students who entered Fall of 2010.

The data for this metric is community college data only. Two metrics were investigated for this particular component:

- Percent of degree, certificate and/or transfer-seeking students who enrolled in developmental math or English and accumulated 30 credits within 6 years.
- Percentage of credit students who enrolled in a remedial class in either English or math and completed a college level course in that discipline within six years.

The first of these two options was chosen because it better reflects the kind of progress required to get to the ultimate goal.

Table 10. Percent of Degree Seeking Underprepared Students who Achieved 30 Units.

Year	Required Rate	Actual Rate	Actual % Change from Prior Year	Actual Change as a % of Target Change
2014		65.0		
2015	66.8	65.8	1.2%	1.2/2.7=45%
2016	68.6	66.8	1.5%	1.5/2.7=56%
2017	70.5			
2018	72.4			
2019	74.4			
2020	76.4			
2021	78.5			
2022	80.6			
2023	82.8			
2024	85.1			
2025	87.4			
2026	89.8			
2027	92.2			
2028	94.8			
2029	97.3			
2030	100.0			

Source: California Community College Student Success Scorecard

From 2014 to 2015, the percent of degree seeking underprepared students who achieved 30 units increased from 65% to 65.8% but this increase was only 45% of the targeted change and earns California an F. Similarly, the increase from 65.8% to 66.8% from 2015 to 2016 was only 56% of the target change and earns California a grade of F on this metric. The level of performance on this metric earns California a cumulative

grade of F on this metric.

Grade Summary for Completion

	Current year grade (points)	Cumulative grade (points)
Degrees and certificates awarded	A (4)	B+ (3.3)
Degrees and certificates awarded (URM)	A (4)	A (4)
Proportion of 18-24 year olds holding a baccalaureate degree	A (4)	A (4)
Proportion of 18-24 year olds holding a baccalaureate degree (URM)	A (4)	F (0)
Community college student transfer	A (4)	F (0)
Community college student transfer (URM)	A (4)	A (4)
Degree and certificate production: 18-24 yo	A (4)	A (4)
Degree and certificate production: 25-49 yo	A (4)	F (0)
Success rates of underprepared students	F (0)	F (0)
<hr/>		
Total points:	32	19.3
Average points:	3.5	2.14
Completion grade:	B+	C

Affordability

For all metrics the targets are that grant aid plus student work contribution plus a family contribution cover the cost of attendance. This methodology is consistent with the Lumina Affordability Benchmark (<https://www.luminafoundation.org/files/resources/affordability-benchmark-1.pdf>). The data for 2013-14, 2014-15, and 2015-16 are shown in the following tables (more recent data are not available).

The targets are as follows:

- Low income students attending community college
 - Grant aid + student work should cover the entire cost of attendance
- Low income students attending CSU or UC
 - Grant aid + student work should cover cost of attendance
- Median income students attending community college
 - Grant aid + student work + family contribution should cover cost of attendance
- Median income students attending CSU or UC
 - Grant aid + student work + family contribution should cover cost of attendance

The values calculated for each of these metrics are as follows:

Table 11. Affordability as Calculated for 2013-14

Grading Educational Attainment in California: Progress to 60X30

2013-14				
	Cost of Attendance	Grant Aid	Family Contribution	Remainder
Low Income CC	17,995	6,552	--	11,442
Low Income CSU	22,352	12,427	--	9,925
Low Income UC	32,323	22,313	--	10,010
Median Income CC	18,096	3,905	5,722	8,469
Median Income CSU	22,645	7,733	5,722	9,188
Median Income UC	32,317	18,081	5,722	8,514

Source: Integrated Postsecondary Education Data System, National Center for Education Statistics

Table 12. Affordability as Calculated for 2014-15

2014-15				
	Cost of Attendance	Grant Aid	Family Contribution	Remainder
Low Income CC	18,351	6,685	--	11,666
Low Income CSU	22,974	12,634	--	10,339
Low Income UC	33,178	23,547	--	9,631
Median Income CC	18,490	4,007	6,323	8,160
Median Income CSU	23,117	7,300	6,323	9,494
Median Income UC	33,117	19,092	6,323	7,703

Source: Integrated Postsecondary Education Data System, National Center for Education Statistics

Table 13. Affordability as Calculated for 2015-16

2015-16				
	Cost of Attendance	Grant Aid	Family Contribution	Remainder
Low Income CC	18,907	6,961	--	11,946
Low Income CSU	23,251	12,517	--	10,733
Low Income UC	33,749	23,745	--	10,004
Median Income CC	19,093	4,042	7,158	7,893
Median Income CSU	23,584	7,602	7,158	8,824
Median Income UC	33,709	19,534	7,158	7,017

Source: Integrated Postsecondary Education Data System, National Center for Education Statistics

These data assume/are derived as follows:

- Cost of attendance is based on on-campus housing for UC and CSU and on off-campus housing, not with family, for the community colleges
- The grant aid numbers are taken from the IPEDS Student Financial Aid Survey. They have the following limitations:
 - They cover only in-state first-time, full-time students who received Title IV aid. Community college data are less representative of the student body as a whole given the large number of community college students who start as part-time students.
 - The grant aid data for “median” income students are really those for the \$48-75,000 income band (the band that includes median income for the state).

- The Lumina Affordability Benchmark incorporates an expectation that student earnings for working be included in meeting costs of attendance at a rate of the prevailing minimum wage * 10 hours/week * 50 weeks/year. In this formulation, we excluded this component because California’s recent changes in the statewide minimum wage (especially between 2015 and 2016 from \$9 to \$10 per hour) would have resulted in the appearance of substantial improvements in affordability that were tied to that substantial one-year change, rather than to any adjustments in postsecondary finance policies. By 2022, California’s minimum wage will be \$15/hour, barring any changes in statute. Assuming it does not increase further from there, the Lumina-based student contribution would be $\$15/\text{hr} * 10 \text{ hours/week} * 50 \text{ weeks/year} = \$7,500$. If we use that amount as the target for achieving affordability by that year, we can isolate the impact of postsecondary finance policies on affordability from single-year changes in the minimum wage. That said, under this conception of an affordability benchmark, it is evident that increases in the minimum wage can be a substantial policy instrument for keeping college costs within reach.
- The family contribution is based on 10% of that portion of the family’s income that exceeds twice the Federal Poverty Level for California (from the California Department of Health Care Services):

	Median Income		2xFPL (Family of 4)		
2013-14	\$70,590	-	\$47,700	=	\$22,890
2014-15	\$73,793	-	\$48,500	=	\$25,293
2015-16	\$77,232	-	\$48,600	=	\$28,632

Using the Lumina Algorithm that 10% of this amount saved each year for ten years, this is the amount of savings to be drawn upon over four years at CSU and UC. We depart from the Lumina Affordability Benchmark for the community colleges, since a strict reliance on that approach would yield a family contribution amount equal to twice the amount applicable to students in the four-year segments. In our judgment, this serves to make the community colleges appear more affordable than the other segments simply because their degree programs are shorter, effectively charging students and their families a greater amount for certificate and associate degree programs with generally lower labor market payoffs than bachelor’s degrees. Instead, we limit the family contribution of students in the community college sector to the same level as that applicable to the four-year segments.

The rightmost column of the tables below show the annual percentage change to reduce the unmet need amount to \$7,500 (which, as described above, represents a projected amount for the student contribution from work) from its starting point in 2013-14.

Low Income

Community Colleges

Year	Unmet Actual	% Change*	\$ Change Target	% Change Target
2013-14	\$11,442	-		
2014-15	\$11,666	2.0%	-\$246	-2.2%
2015-16	\$11,946	2.4%	-\$246	-2.2%
2016-17			-\$246	-2.3%
2017-18			-\$246	-2.3%
2018-19			-\$246	-2.4%
2019-20			-\$246	-2.4%
2020-21			-\$246	-2.5%
2021-22			-\$246	-2.5%
2022-23			-\$246	-2.6%
2023-24			-\$246	-2.7%
2024-25			-\$246	-2.7%
2025-26			-\$246	-2.8%
2026-27			-\$246	-2.9%
2027-28			-\$246	-3.0%
2028-29			-\$246	-3.1%
2029-30	\$7,500 (target)		-\$246	-3.2%

Change from 2014-15 to 2015-16 is -109% of that required.

CSU

Year	Unmet Actual	% Change*	\$ Chg Target	% Change Target
2013-14	\$9,925			
2014-15	\$10,339	4.2%	-\$152	-1.5%
2015-16	\$10,733	3.8%	-\$152	-1.6%
2016-17			-\$152	-1.6%
2017-18			-\$152	-1.6%
2018-19			-\$152	-1.6%
2019-20			-\$152	-1.7%
2020-21			-\$152	-1.7%
2021-22			-\$152	-1.7%
2022-23			-\$152	-1.7%
2023-24			-\$152	-1.8%
2024-25			-\$152	-1.8%
2025-26			-\$152	-1.8%
2026-27			-\$152	-1.9%
2027-28			-\$152	-1.9%
2028-29			-\$152	-1.9%
2029-30	\$7,500 (target)		-\$152	-2.0%

Change from 2014-15 to 2015-16 is -246 % of that required

UC

Year	Unmet Actual	% Change*	\$ Chg Target	% Change Target
2013-14	\$10,010			
2014-15	\$9,631	-3.8%	-\$157	-1.6%
2015-16	\$10,004	3.9%	-\$157	-1.6%
2016-17			-\$157	-1.6%
2017-18			-\$157	-1.6%
2018-19			-\$157	-1.7%
2019-20			-\$157	-1.7%
2020-21			-\$157	-1.7%
2021-22			-\$157	-1.8%
2022-23			-\$157	-1.8%
2023-24			-\$157	-1.8%
2024-25			-\$157	-1.9%
2025-26			-\$157	-1.9%
2026-27			-\$157	-1.9%
2027-28			-\$157	-2.0%
2028-29			-\$157	-2.0%
2029-30	\$7,500 (target)		-\$157	-2.0%

Change from 2014-15 to 2015-16 is -244% of that required.

*relative to the total reductions between 2013-14 and 2029-30 needed to reach \$7,500.

Median Income

Community Colleges

Year	Unmet Actual	% Change*	\$ Chg Target	% Change Target
2013-14	\$8,469			
2014-15	\$8,160	-3.7%	-\$61	-0.7%
2015-16	\$7,893	-3.3%	-\$61	-0.7%
2016-17			-\$61	-0.7%
2017-18			-\$61	-0.7%
2018-19			-\$61	-0.7%
2019-20			-\$61	-0.7%
2020-21			-\$61	-0.7%
2021-22			-\$61	-0.8%
2022-23			-\$61	-0.8%
2023-24			-\$61	-0.8%
2024-25			-\$61	-0.8%
2025-26			-\$61	-0.8%
2026-27			-\$61	-0.8%
2027-28			-\$61	-0.8%
2028-29			-\$61	-0.8%
2029-30	\$7,500		-\$61	-0.8%

Grading Educational Attainment in California: Progress to 60X30

Change from 2014-15 to 2015-16 is 454% of that required.

CSU

Year	Unmet Actual	% Change*	\$ Chg Target	% Change Target
2013-14	\$9,189			
2014-15	\$9,494	3.3%	-\$106	-1.1%
2015-16	\$8,824	-7.1%	-\$106	-1.2%
2016-17			-\$106	-1.2%
2017-18			-\$106	-1.2%
2018-19			-\$106	-1.2%
2019-20			-\$106	-1.2%
2020-21			-\$106	-1.2%
2021-22			-\$106	-1.2%
2022-23			-\$106	-1.3%
2023-24			-\$106	-1.3%
2024-25			-\$106	-1.3%
2025-26			-\$106	-1.3%
2026-27			-\$106	-1.3%
2027-28			-\$106	-1.4%
2028-29			-\$106	-1.4%
2029-30	\$7,500		-\$106	-1.4%

Change from 2014-15 to 2015-16 is 607% of that required.

UC

Year	Unmet Actual	% Change*	\$ Chg Target	% Change Target
2013-14	\$8,514			
2014-15	\$7,703	-9.5%	-\$63	-0.7%
2015-16	\$7,017	-8.9%	-\$63	-0.7%
2016-17			-\$63	-0.8%
2017-18			-\$63	-0.8%
2018-19			-\$63	-0.8%
2019-20			-\$63	-0.8%
2020-21			-\$63	-0.8%
2021-22			-\$63	-0.8%
2022-23			-\$63	-0.8%
2023-24			-\$63	-0.8%
2024-25			-\$63	-0.8%
2025-26			-\$63	-0.8%
2026-27			-\$63	-0.8%
2027-28			-\$63	-0.8%
2028-29			-\$63	-0.8%
2029-30	\$7,500		-\$63	-0.8%

Change from 2014-15 to 2015-16 is 1186% of that required.

*relative to the total reductions between 2013-14 and 2029-30 needed to reach \$7,500.

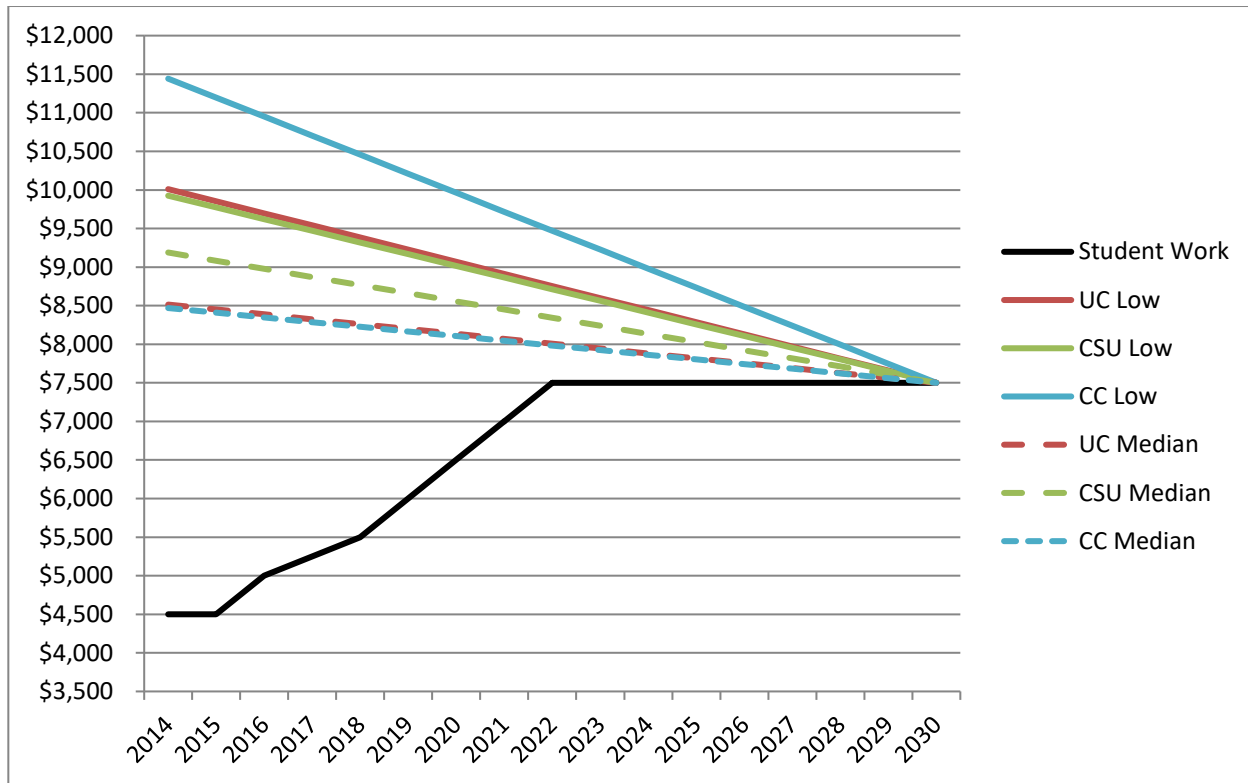
Grade Summary for Affordability

	Current year grade (points)	Cumulative grade (points)
Low-Income Grade	F (0)	F (0)
Median-Income Grade	A (4)	A (4)
<hr/>		
Total points:	4	4
Average points:	2	2
Affordability grade:	C	C

Figure 2 below illustrates how much progress must be made in each of California’s segments to reach the affordability target, which is set so that the costs of attendance that students from low- and median-income families face, net of grant aid and a reasonable savings expectation, equal the amount a student can earn working 10 hours per week. The student work contribution is depicted by the solid black line, which rises as the minimum wage in California changes, reaching \$7,500 in 2022 and holding steady at that point. The descending lines illustrate the pace at which net price, after grants and the family contribution, must decline to hit the target for each segment for low- and median-income students, represented by solid and dotted lines, respectively.

Figure 2 illustrates that the UC institutions and the Community Colleges have similar distances to travel in actual dollar terms to reach the affordability target for median income students; these distances are shorter than the distance for low income students in the three segments as well as median income students in CSU institutions. Low-income Community college students face the largest affordability gap in terms of dollars and the pace of closing the gap must substantially increase.

Figure 2. Closing Affordability Gaps for Low- and Median-Income Students



- The largest dollar gap is for low income community college students. The following data make clear that this is also the category having the largest numbers of students.

Counts of First-time, Full-time Students by Income Category, 2015-16

	UC	CSU	Community Colleges
Income 0 – 30K	7,223	16,354	34,758
Income 48K – 75K	3,708	6,735	5,851

- The calculated need for median income students attending community colleges is based on the assumption that parental contributions for students in two-year programs is the same as contributions for students in four-year programs. If savings were spread over two or three years, there would be no unmet need for median income students in community colleges.

California's progress toward the 60% attainment goal by 2030 is mixed. While there has been progress across many of the metrics between 2015 and 2016, the progress since 2014 has not been enough. California needs to continue to improve, particularly for URM students in order to achieve 60% attainment by 2030.

Acknowledgments

NCHEMS staff have updated the 2017 report to create this 2018 report. Data for the 2017 and 2018 reports were commissioned by the Campaign for College Opportunity and produced by the National Center for Higher Education Management Systems (NCHEMS). The primary author of the 2017 background report is Dennis Jones, President Emeritus of NCHEMS. The selection of categories and determination of metrics was guided by expert advice from Patrick Callan, Debbie Cochran, Will Doyle, Joni Finney, Hans Johnson, David Longanecker, and Nancy Shulock. The Campaign for College Opportunity staff contributing to the work were Audrey Dow and Michele Siqueiros. NCHEMS staff contributing to the work were Rachel Christeson, John Clark, Patrick Kelly, Brian Prescott, Sarah Torres Lugo, and Liz Weeks.