APPENDIX A

Statewide Indicators of the Educational System - Status of Indicators

Kindergarten Readiness

The Kindergarten Readiness indicator is measured through the Washington Kindergarten Inventory of Developmental Skills (WaKIDS), and is the percentage of children who are kindergarten-ready in the fall of a given year. In this case, kindergarten-ready means that the students meet the standards on all six WaKIDS kindergarten-ready domains.

On June 29, 2015, the Washington Legislature passed the state biennial operating budget which included funding for the statewide implementation of full-day kindergarten. In the 2015-16 school year, 71.9 percent of kindergarten students were funded for full-day kindergarten, and in the 2016-17 school year, 100 percent of will be eligible to receive funding. Not until the 2017-18 school year will all kindergarten students be attending full day kindergarten classes in Washington. To learn more about the WaKIDS, see http://www.k12.wa.us/wakids/.

The WaKIDS is required only in state-funded full-day kindergarten classrooms and is optional for other kindergarten classrooms. As such, the assessed population is less than the total population of kindergarten students and is not necessarily a representative sample. On the 2015-16 WaKIDS, approximately 58,300 students participated and complete results were calculated for approximately 56,400 kindergarten students. At the start of the 2015-16 school year, 79,707 children were enrolled in kindergarten (69,965 full-day and 9742 half-day), which means that the latest WaKIDS data are based on the assessment of approximately 71 percent on the total kindergarten population. Goals and annual targets were developed for the indicator based on the non-representative assessed population, but goals and targets will need to be reset when the assessment is administered statewide to all kindergarten students.

Table A1: Performance on the Kindergarten Readiness indicator by student group.

	2014-15	2015-16	1-Year Gain*	Required Step Increase	2015-16 Target	Difference 2015-16[+]
All Students	**39.5%**	**44.2%**	**4.7**	**4.4**	**51.8%**	**-7.6**
Black / African American	39.3%	41.2%	1.9	4.4	51.4%	-10.2
American Indian / Alaskan Native	34.4%	35.2%	0.8	4.9	46.6%	-11.4
Asian	43.2%	51.5%	8.3	4.2	54.0%	-2.5
Hispanic / Latino	25.1%	31.1%	6.0	5.2	42.6%	-11.5
Native Hawaiian / Pacific Islander	30.2%	33.9%	3.7	5.0	45.3%	-11.4
White	48.5%	50.5%	2.0	3.7	59.6%	-9.1
Two or More	46.5%	49.4%	2.9	3.9	57.0%	-7.6
Students with a Disability	17.4%	19.8%	2.4	5.9	35.5%	-15.7
Limited English	21.0%	27.8%	6.8	5.5	39.1%	-11.3
Low-Income	30.6%	33.7%	3.1	4.9	46.4%	-12.7

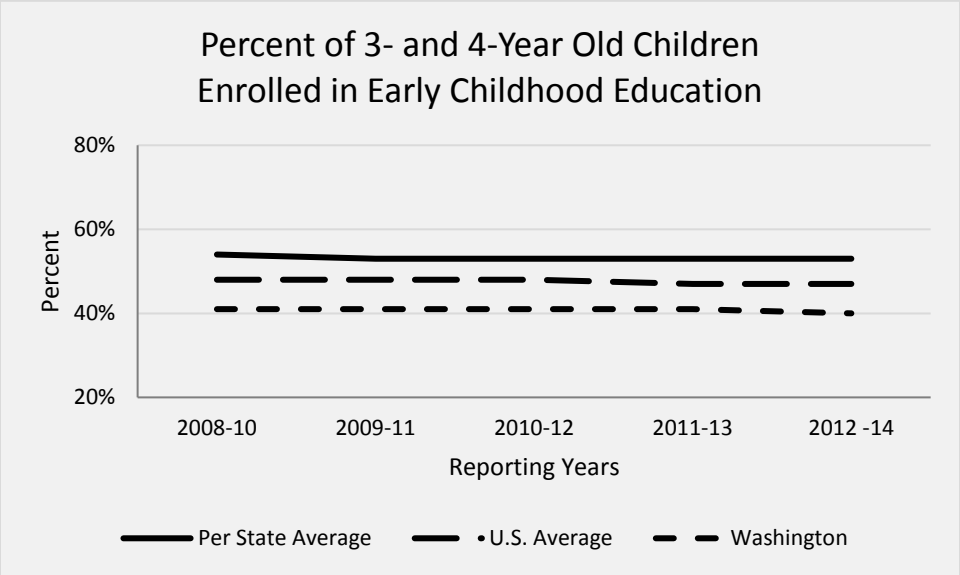
*Note: The one-year gain is the change in performance from the 2014-15 to the 2015-16 school year shown as percentage points.

[+]Note: Difference shown in percentage points as the Target minus the actual performance value.

For the Kindergarten Readiness indicator, the 2011-12 and 2012-13 results were averaged to provide the baseline value of 38.7 percent from which to derive the yearly step increase of 4.4 percentage points for the All Students group. For the All Students group, the 2015-16 performance increase of 4.7 percentage points was not sufficient to meet the gap reduction target of 51.8 percent but exceeded the computed annual step increase. The highlighted cells in the far right column indicate that no subgroup met their individual gap reduction targets and by how much the target was missed. The Asian, Hispanic/Latino, and ELL student groups exceeded the annual step increase target but did not meet their respective 2015-16 performance targets. However, it is noteworthy that the performance of all student groups was higher in 2015-16 as compared to the previous year and that four of the student groups exceeded their annual step targets.

High quality early childhood educational experiences allow children to develop the skills that are required for them to be independent learners when they start school. While it is not possible to compare the WaKIDS on a national or peer state level analysis, comparisons of access to early childhood educational opportunities are possible. Data from the KIDS COUNT Data Center developed by the Anne E. Casey Foundation (Figure A1) shows that access to early childhood education for Washington three and four year-olds is the 40th best of the 50 states (20th percentile nationally), 13 percentage points lower than the Peer State average of 53 percent, and the lowest of the Peer States.

Figure A1: Shows the percentage of 3 and 4 Year-Old Children Accessing Early Childhood Education Opportunities.



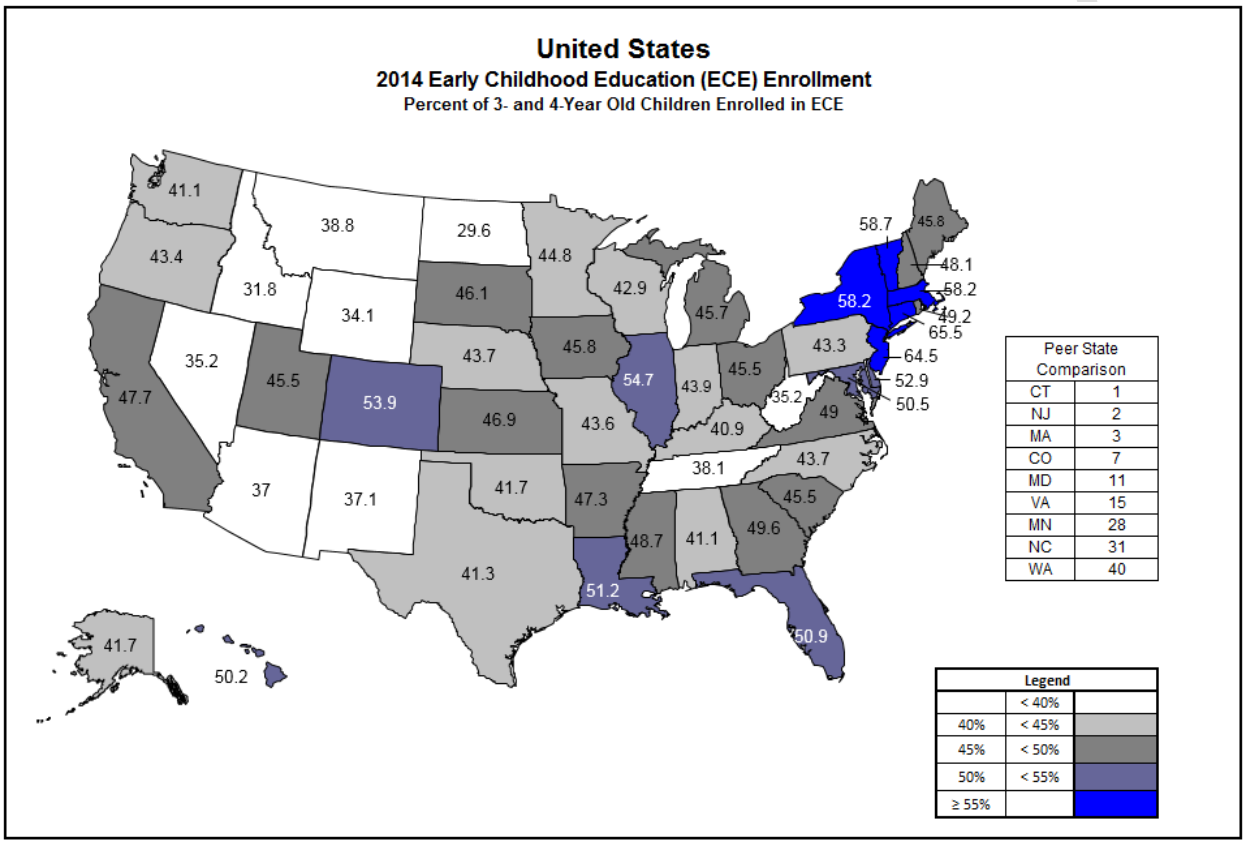
The data in Figure A1 uses a three year rolling average to report on the early childhood enrollment measure to reduce the impact of year-to-year variations, and that is reflected in the chart. The chart shows that Washington families consistently enroll young children in early childhood education (ECE) programs at a rate lower than the national average and lower than the peer state average. Figure A2 provides a one year snapshot of the ECE enrollment for 2014 and shows how the peer states rank nationally and in comparison to one another.

For the Kindergarten Readiness Educational System Health Indicator:

- Table A1 shows that the indicator is not on-track to meet gap reduction goals

- Figure A1 shows that the percentage of three- and four-year old children accessing early childhood educational opportunities is lower than the national average and lower than the peer state average.
- Based on the 2014 data, Washington ranks in the bottom quartile of all 50 states on the measure of early childhood education enrollment and is the lowest performer of the peer states.

Figure A2: Shows the percent of 3- and 4-year old children who were enrolled in early childhood education programs in 2014.



3rd Grade Literacy

The percentage of 3rd grade students meeting or exceeding standards on the 3rd grade MSP Reading Assessment was recommended as an indicator in the December 2013 Initial Report. Beginning in the 2014-15 school year, Washington transitioned to the Smarter Balanced Assessment System (SBA) for statewide summative testing. The new recommended measure for the 3rd Grade Literacy indicator is the percentage of students meeting standard on the 3rd grade English/language arts (ELA) assessment developed by the Smarter Balanced Consortia. Because the computed annual targets are specific to an assessment, annual performance targets need to be reset or recomputed for the new Smarter Balanced assessments.

For the 3rd Grade Literacy indicator (All Students group), the 2014-15 and 2015-16 SBA ELA results were combined to create the two-year average baseline (53.2 percent) and the annual step increase was computed at 3.3 percentage points (Table A2). The target-setting methodology adopted in the initial work requires that student groups performing at lower levels make larger annual gains to meet gap reduction targets. See that the highest performing student group (Asian) is required to increase performance at a rate of 2.2 percentage points annually, while the lowest performing student group (ELL) is required to increase performance at a rate of 5.7 percentage points annually to meet targets.

Table A2: Performance on the 3rd Grade Literacy Indicator by ESEA subgroup.

	2014-15	2015-16	2-Year Baseline	2016-17 Target	Annual Step Increase*
All Students	**52.1%**	**54.3%**	**53.2%**	**56.5%**	**3.3**
Black / African American	34.2%	37.0%	35.6%	40.2%	4.6
American Indian / Alaskan Native	25.9%	26.4%	26.2%	31.4%	5.3
Asian	69.6%	72.8%	71.2%	73.3%	2.1
Hispanic / Latino	33.8%	35.1%	34.5%	39.1%	4.7
Pacific Islander / Native Hawaiian	31.6%	32.5%	32.1%	36.9%	4.9
White	59.9%	62.4%	61.2%	63.9%	2.8
Two or More	54.6%	58.9%	56.8%	59.8%	3.1
Students with a Disability	26.7%	26.3%	26.5%	31.8%	5.3
Limited English	19.2%	20.6%	19.9%	25.6%	5.7
Low-Income	36.0%	37.7%	36.9%	41.4%	4.5

*Note: The annual step increase is shown as percentage points.

Because the two most recent years serve as baseline, the performance on the 2016-17 SBA assessments will be the first year to determine whether gap reduction targets are met for this indicator. For the national ranking and peer state comparison analyses, the 4th Grade Reading NAEP (discussed below) was utilized.

4th Grade Reading

The ESSB 5491 specified indicator is the percentage of 4th grade students meeting or exceeding standards on the 4th grade MSP assessment. The 2013 Initial Report recommended that the 4th Grade Reading indicator be replaced with the 3rd Grade Literacy Indicator. Because Washington transitioned to the SBA in the 2014-15 school year, the specified indicator should be referred to as the 4th Grade ELA as measured by the 4th Grade SBA ELA.

The 2014-15 and 2015-16 Smarter Balanced assessment results were used to establish the All Students group reset baseline of 55.8 percent (Table A3). The reset annual step increase for the All Students group is 3.32percentage points. See that the annual step increase differs for each ESEA student group depending on the computed two-year baseline value. The initial goal attainment determination based on the reset targets will be made based on the 2016-17 assessment results are reported in the fall of 2017.

Table A3: Performance on the 4th Grade ELA Indicator by ESEA subgroup.

	2014-15	2015-16	2-Year Baseline	2016-17 Target	Annual Step Increase*
All Students	**54.6%**	**57.0%**	**55.8%**	**59.0%**	**3.2**
Black / African American	36.4%	38.7%	37.6%	42.0%	4.5
American Indian / Alaskan Native	26.5%	29.9%	28.2%	33.3%	5.1
Asian	72.8%	75.1%	74.0%	75.8%	1.9
Hispanic / Latino	36.1%	38.8%	37.5%	41.9%	4.5
Native Hawaiian / Pacific Islander	34.7%	36.1%	35.4%	40.0%	4.6
White	62.6%	65.0%	63.8%	66.4%	2.6
Two or More	56.1%	58.5%	57.3%	60.4%	3.1
Students with a Disability	24.3%	24.9%	24.6%	30.0%	5.4
Limited English	17.4%	20.6%	19.0%	24.8%	5.8
Low-Income	37.9%	40.2%	39.1%	43.4%	4.4

*Note: Annual step increase is shown as percentage points.

For the 4th Grade Reading indicator, the 4th Grade NAEP Reading (Figure A3 and A4) results are utilized for national and Peer State comparisons. On the 2015 NAEP, Washington 4th grade students posted an average scaled score of 225.9, which was the 14th highest in the nation placing Washington at the 72nd percentile of all states. The Peer State scaled score average for the 4th Grade NAEP Reading was 227.4, which is 1.5 scaled score points higher than Washington. On the measure, Washington was the 5th best of the nine Peer States

The goal and annual targets for the 4th Grade Reading indicator of the Educational System Health were reset due to the transition to the Smarter Balanced assessments in the 2014-15 school year, so a status determination is not possible. When using the 4th Grade NAEP Reading as the measure for comparison:

- Washington is not ranked in the top ten percent nationally
- Washington's performance is considered comparable to the peer states.

Figure A3: Shows the average scaled scores for the national and peer state comparisons using the 4th Grade NAEP Reading results.

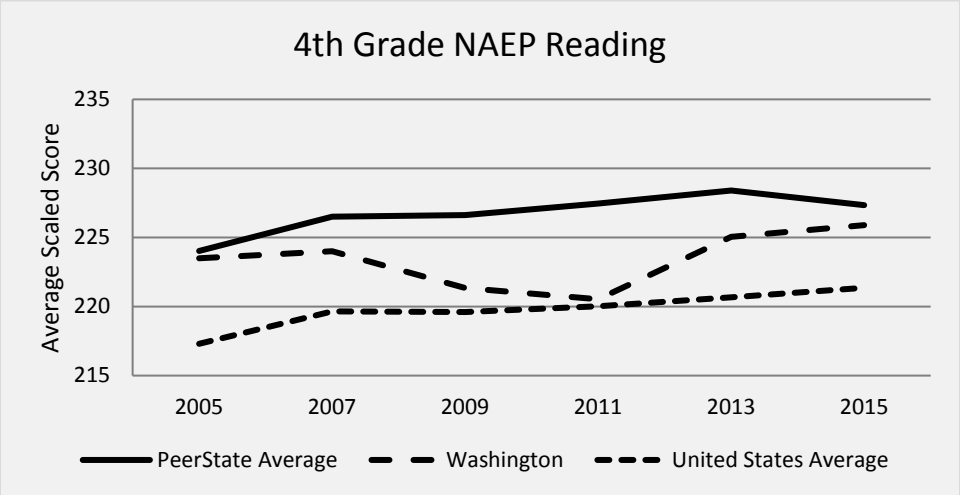
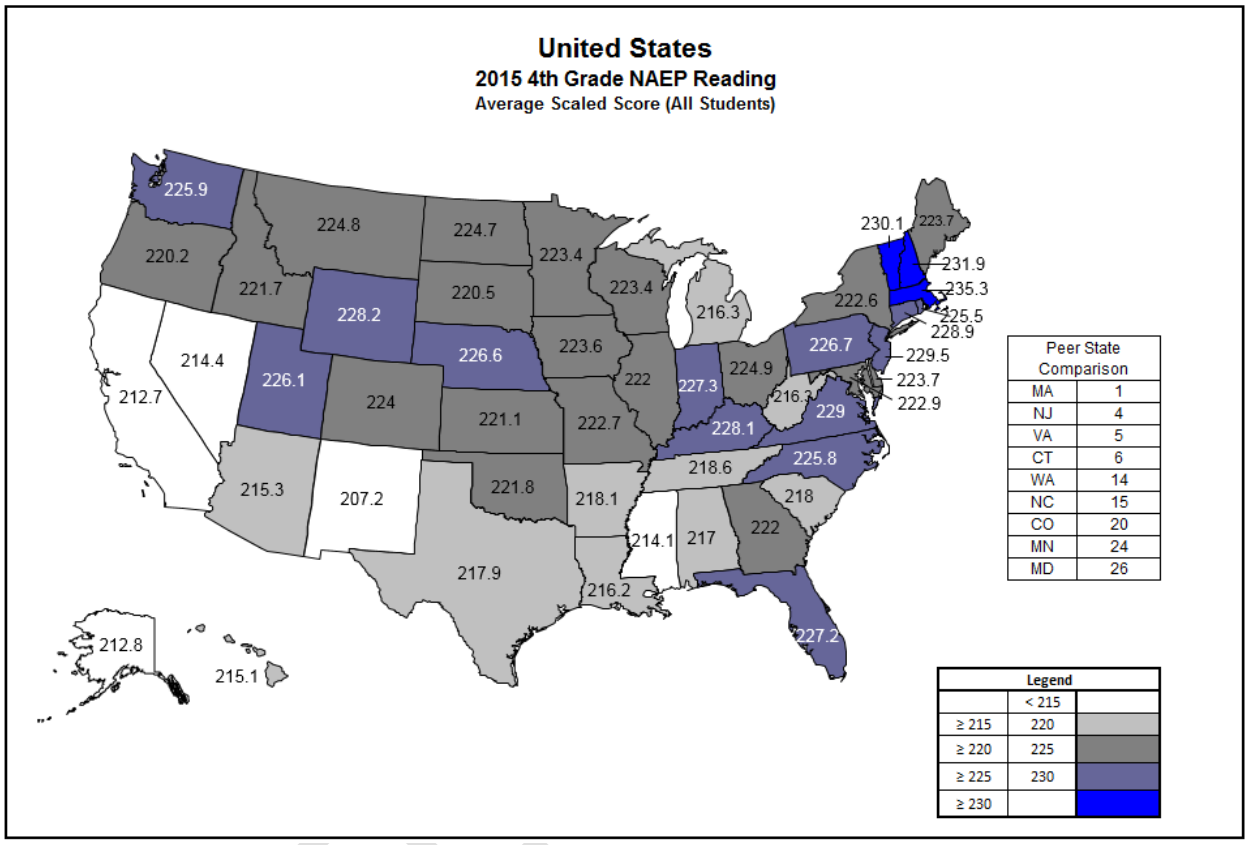


Figure A4: Shows the average scaled score by state for the All Students group on the 2015 4th Grade NAEP in Reading.



8th Grade Math

The indicator is the percentage of 8th grade students meeting or exceeding standards on the 8th grade MSP Math Assessment. The indicator was specifically named and described in the ESSB 5491 legislation but the 2013 Initial Report recommended that the 8th Grade Math Indicator be replaced with the 8th Grade High School Readiness Indicator. Because Washington transitioned to the SBA in the 2014-15 school year, the specified indicator should be referred to as the 8th Grade Math indicator as measured by the 8th Grade SBA in Math.

A reset baseline value for the All Students group of 54.7 percent was computed for the 2014-15 and 2015-16 assessment results which also resulted in a 3.2 percentage point annual step increase. The Asian student group is the highest performing and needs to improve by 1.7 percentage points per year to meet the long-term goal, while three other student groups must improve by more than 5.0

percentage points annually to meet their long-term goals. Student groups that are currently performing at lower levels must make large annual gains to meet the gap reduction targets.

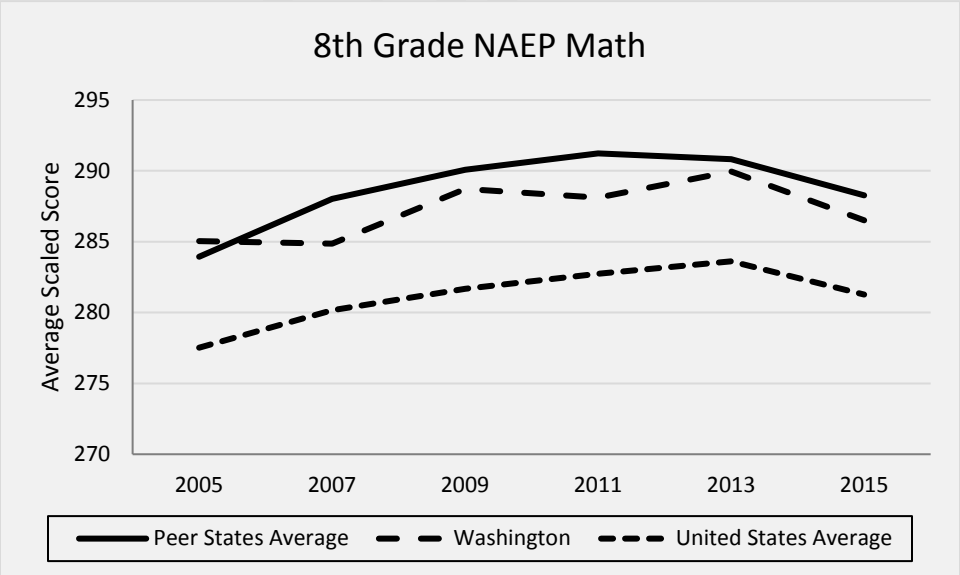
Table A4: Performance on the 8th Grade Math Indicator by ESEA subgroup

	2014-15	2015-16	2-Year Baseline	2016-17 Target	Annual Step Increase*
All Students	**54.0%**	**55.4%**	**54.7%**	**57.9%**	**3.2**
Black / African American	34.4%	34.7%	34.6%	39.2%	4.7
American Indian / Alaskan Native	26.9%	28.7%	27.8%	33.0%	5.2
Asian	75.7%	77.5%	76.6%	78.3%	1.7
Hispanic / Latino	35.2%	37.5%	36.4%	40.9%	4.5
Native Hawaiian / Pacific Islander	35.3%	37.1%	36.2%	40.8%	4.6
White	61.4%	63.0%	62.2%	64.9%	2.7
Two or More	55.0%	56.2%	55.6%	58.8%	3.2
Students with a Disability	25.7%	26.0%	25.9%	31.1%	5.3
Limited English	22.6%	24.3%	23.5%	28.9%	5.5
Low-Income	30.2%	38.9%	34.6%	39.2%	4.7

*Note: Annual step increase is shown as percentage points.

The 8th Grade NAEP Math was used for the national and Peer State comparisons. On the 2015 NAEP Math (Figure A5), Washington 8th graders posted an average scaled score of 286.5, which was the 12th best in the nation and placing the state at the 76th percentile nationally. Washington's scaled score was higher than the U.S. average of 281.3, lower than the Peer State average scaled score of 288.3, and the 5th best of the peer states (Figure A5).

Figure A5: Shows the average scaled scores for the 8th Grade NAEP Math results.



A determination as to whether the annual gap reduction target is met cannot be made until the 2016-17 assessment results are reported by the OSPI. Overall, Table A4 and Figure A5 show that the 8th Grade Math indicator specified in the ESSB 5491 legislation is not ranked in the top ten percent nationally, but is comparable to the Peer States.

8th Grade High School Readiness

The indicator is the percentage of 8th grade students who pass all of the 8th Grade MSP content area assessments in reading, math, and science. The 2013 Initial Report recommended that this 8th Grade High School Readiness Indicator replace the 8th grade math indicator. The indicator is now the measure of the percentage of 8th grade students who meet or exceed standard on the 8th Grade SBA in ELA and math and the MSP in science.

A reset baseline value of 38.3 percent was computed based on the 2014-15 and 2015-16 SBA results and this resulted in an annual step increase of 4.4 percentage points for the All Students group. All of the ESEA student groups, except for the Asian, White, and Two or More Races groups, must make annual gains of 5.6 to 6.9 percentage points to meet their respective gap reduction targets. All of the student groups, except for the Pacific Islander and Native Hawaiian group, posted a modest performance increase in 2015-16 from the previous year.

The 8th Grade NAEP Reading can be utilized for the national and peer state comparisons in combination with the 8th Grade NAEP Math. On the 2015 NAEP Reading (Figure A6), Washington 8th graders posted an average scaled score of 267.3, which was the 21st highest in the country and this scaled score placed Washington at the 58th percentile of all states. The Washington average scaled score was higher than the U.S. average of 264.0 but was lower than the peer state average scaled score of 269.0. The average scaled score posted by Washington 8th grade students was the 7th best of the nine peer states.

Table A5: Shows the annual steps by student group and other data elements for the 8th Grade High School Readiness indicator.

	2014-15	2015-16	2-Year Baseline	2016-17 Target	Annual Step Increase*
All Students	**37.5%**	**39.0%**	**38.3%**	**42.7%**	**4.4**
Black / African American	16.6%	19.5%	18.1%	23.9%	5.9
American Indian / Alaskan Native	14.2%	15.7%	15.0%	21.0%	6.1
Asian	60.9%	64.2%	62.6%	65.2%	2.7
Hispanic / Latino	19.9%	21.3%	20.6%	26.3%	5.7
Native Hawaiian / Pacific Islander	20.5%	19.3%	19.9%	25.6%	5.7
White	43.3%	45.0%	44.2%	48.1%	4.0
Two or More	40.0%	40.5%	40.3%	44.5%	4.3
Students with a Disability	3.8%	4.8%	4.3%	11.1%	6.8
Limited English	3.1%	3.4%	3.3%	10.2%	6.9
Low-Income	21.4%	22.1%	21.8%	27.3%	5.6

*Note: Annual step increase is shown as percentage points.

Because the recommended indicator represents the combination of three distinct assessments, the 8th Grade NAEP results in reading and math were combined to determine whether the performance of Washington students was comparable to the peer states and to determine the national ranking. After

averaging the reading and math scaled scores, Washington's average scaled score of 276.9 was the 16th best in the nation, placing Washington at the 68th percentile nationally. Washington's average scaled score was the 6th best of the nine peer states (Figure A7).

Figure A6: Shows the Average Scaled Scores for the 8th Grade NAEP Reading Results.

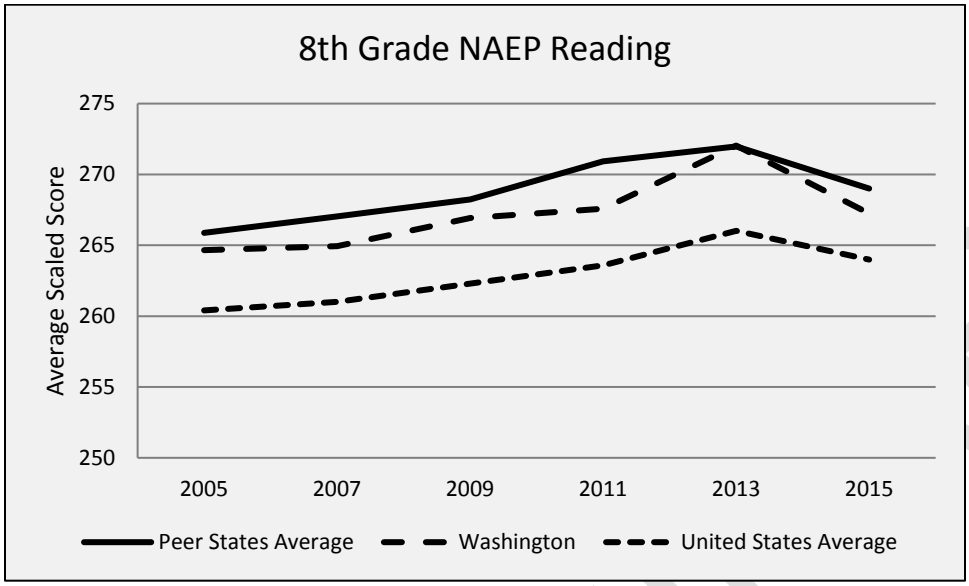
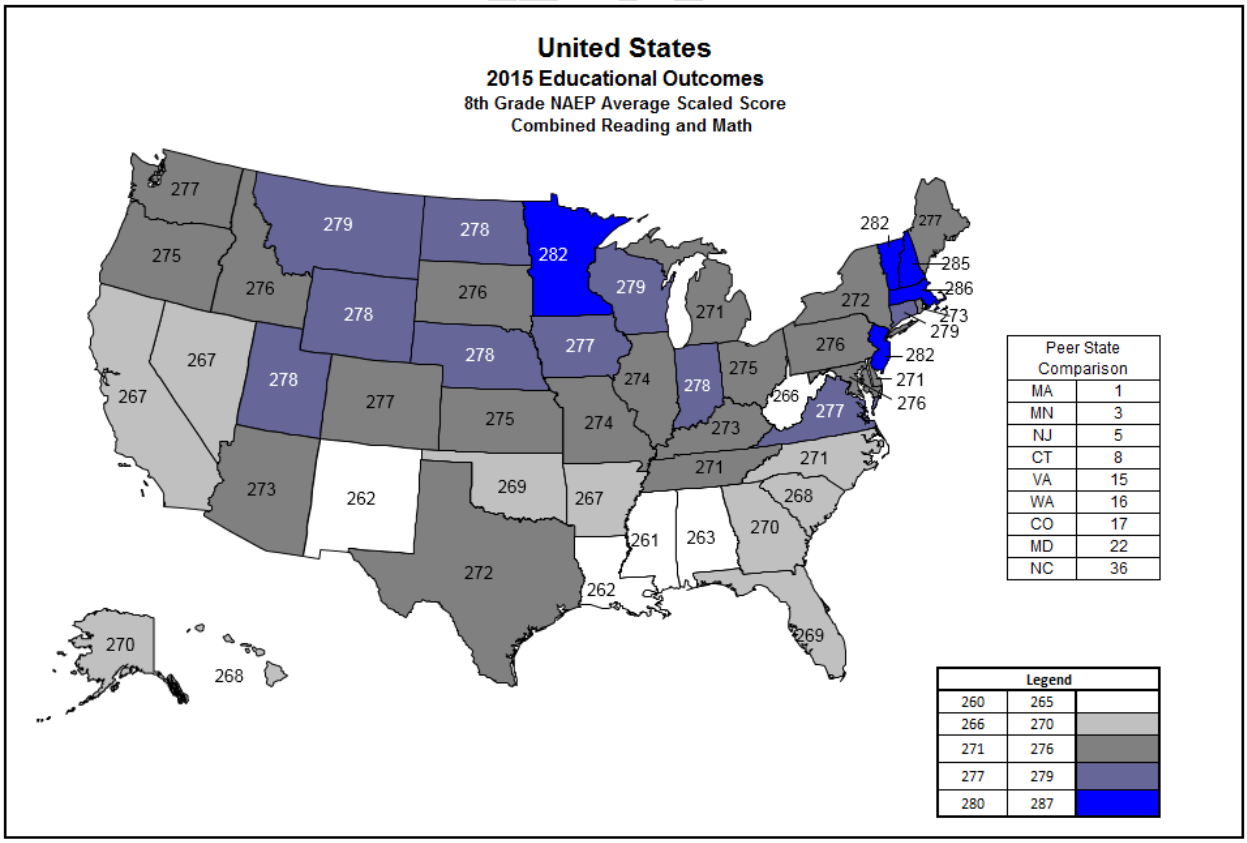


Figure A7: Shows the average scaled score for the 2015 8th Grade NAEP in reading and math combined.



Overall, the Table A5 and Figures A6 and A7 show that the 8th Grade High School Readiness indicator recommended in the 2013 Initial Report is:

- improving but another year of data is required to determine whether the indicator is on-track to meet gap reduction targets,
- not ranked in the top ten percent nationally, and
- partially comparable or slightly lower than the peer states.

4-Year Adjusted Cohort Graduation Rate (ACGR)

The indicator is the official on-time graduation rate following the Adjusted Cohort methodology utilized by all of the United States. The 2010-11 and 2011-12 ACGR results were utilized to compute the baseline value of 76.9 percent and the annual step increase of 1.7 percentage points (Table A6). The On-Time ACGR increased in 2013 to 78.1 percent for the All Students group but the increase was not sufficient to meet the annual gap reduction target. The highlighted cells in the "Difference" column indicate that no subgroup met their individual gap reduction targets and shows by how much the target was missed by each group.

Table A6: Shows the On-Time Adjusted Cohort Graduation Rate by ESEA Subgroup.

High School Graduation	2013-14	2014-15	Target 2014-15	Difference 2014-15	Annual Step Increase*
All Students	**77.2%**	**78.1%**	**81.9%**	**-3.8**	**1.7**
Black / African American	67.8%	68.8%	74.8%	-6.0	2.3
American Indian / Alaskan Native	53.7%	56.4%	68.0%	-11.6	2.9
Asian	86.5%	87.8%	87.9%	-0.2	1.1
Hispanic / Latino	67.3%	69.6%	74.1%	-4.5	2.4
Pacific Islander / Native Hawaiian	64.6%	67.0%	73.0%	-6.0	2.5
White	80.5%	80.9%	85.1%	-4.2	1.4
Two or More	75.5%	77.9%	81.0%	-3.1	1.7
Students with a Disability	55.7%	57.9%	67.4%	-9.5	3.0
Limited English	53.7%	55.8%	64.0%	-8.2	3.3
Low-Income	66.4%	68.0%	74.3%	-6.3	2.3

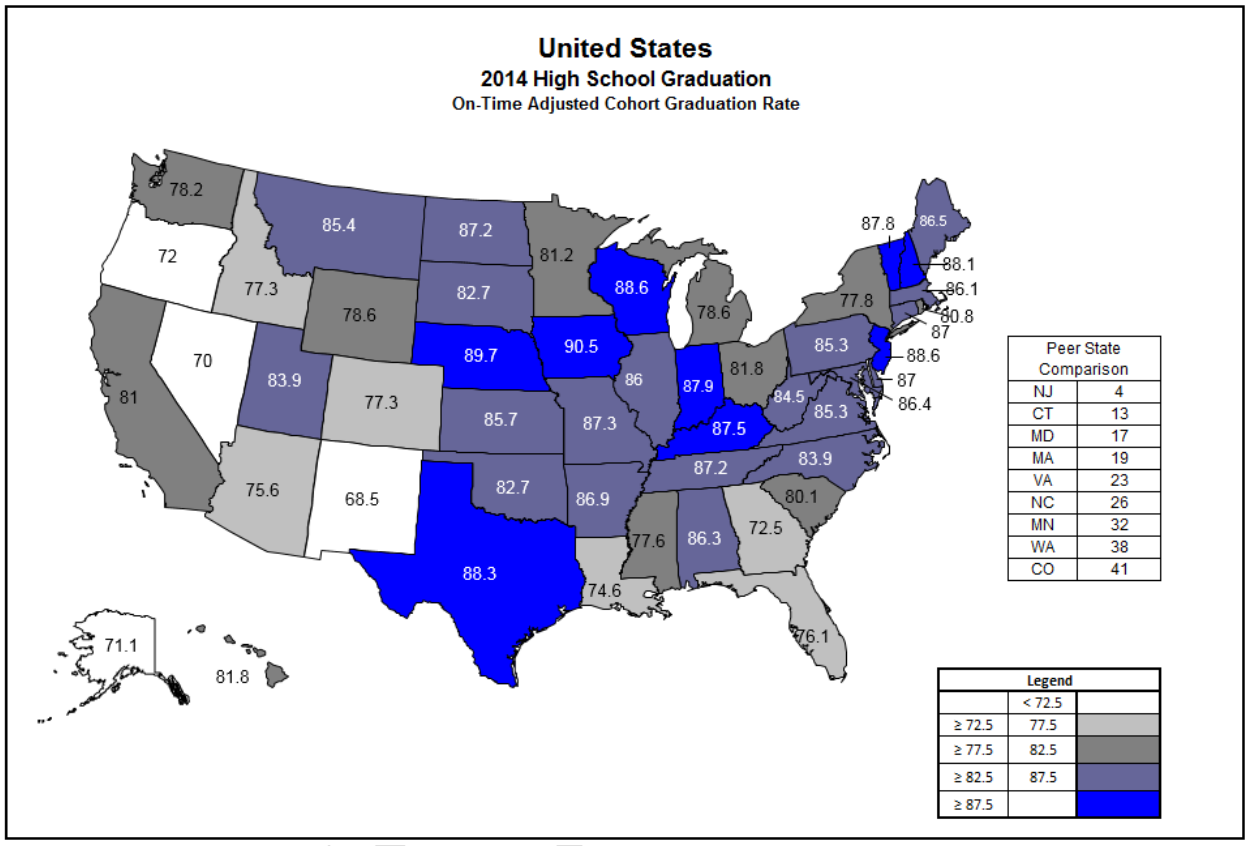
*Note: Annual step increase is shown as percentage points.

The methodology to compute the Adjusted Cohort Graduation Rate is uniform across the country, so it is possible to compare the ACGR for Washington to other states. Because of the different reporting requirements across the states, the national and peer state comparisons are based on the class of 2013-14 ACGR. These comparisons are made using data from the National Center for Education Statistics (NCES) found at https://nces.ed.gov/programs/digest/d15/tables/dt15_219.46.asp?current=yes, which differs a little from the ACGR computed by the OSPI. Nonetheless, Washington's graduation rate for the class of 2014 reported by the NCES was the 38th best in the country placing the state in the bottom quartile nationally (Figure A8).

As for the peer state comparison, Washington's NCES reported 2014 ACGR was the second lowest of the peer states that averaged 80.4 percent. The NCES-reported 2014 ACGR of 78.2 percent for Washington

was approximately 7.3 percentage points lower than the peer state average and was the second lowest of the peer states.

Figure A8: Shows the 2014 ACGR for the 50 states as reported by the NCES.



To summarize these results, Table A6 and Figure A8 show that the 4-Year Graduation Rate indicator specified in the ESSB 5491 legislation is:

- not on-track to meet gap reduction targets,
- not ranked in the top ten percent nationally, and
- not comparable to the peer states.

Access to Quality Schools

This indicator is a measure of the percentage of students attending schools rated as Good, Very Good, or Exemplary as shown on the Washington Achievement Index data file. This indicator was recommended for inclusion in the Educational System Health Indicators in the 2013 Initial Report.

The six tier ratings incorporated as part of the Achievement Index are based primarily on the Composite Index rating, which is the average annual Index rating for the three years included in the Index version. The state now has three complete versions of the Index from which to calculate the percentage of students attending schools rated as Good, Very Good, or Exemplary schools (Table AX).

The Index tier classifications are relative in the sense that the rating cut point for each tier changes from one year to the next depending on the performance of schools. The current methodology requires that, the top five percent of schools (approximately 90) based on Composite Index rating be classified as Exemplary. As a result, the percentage of students in Good or Better schools would not be expected to change systematically. This means that the goal-setting methodology is unsuitable for this indicator.

Table A7: Shows the Percentage of Students Attending Good or Better Rated Schools.

	Index Version		
	2012-13	2013-14	2014-15
Number of Students in Good or Better Schools	533,871	553,659	564,568
Percent of Students in Good or Better Schools*	53.6	55.2	55.3
*Note: the denominator is the total number of students enrolled in schools with an Index tier assignment.			

The Access to Quality Schools indicator is not amenable to the adopted goal-setting methodology, a national comparison, or a peer state comparison. Until the tier classification methodology based on relative performance is changed to a criterion based methodology, the state will be viewed as meeting target if either the number or percent of students enrolled in Good or better schools increases from one Index version to the next.

Quality of High School Diploma

The indicator is the percentage of high school graduates who bypass remedial courses in college during the year immediately following graduation. The December 2014 report to the legislature recommended a change to the Quality of High School Diploma indicator but continued to report on the indicator specified in the original legislation (ESSB 5491 of 2013) until updated data files could be delivered. By reporting on the recommended indicator (Table A8), the legislature and other stakeholders will be provided a clearer picture about the remedial course taking patterns of the recent high school graduates who actually enroll in higher education. The recommended change requires that annual targets be reset.

Table A8: Shows how the recommended indicator differs from the indicator specified in the original bill (ESSB 5491 in 2013) that was signed into law.

Specified Indicator in Bill	Current Reporting	Recommended Indicator
The percentage of high school graduates enrolled in precollege or remedial courses in public post-secondary institutions.	The percentage of recent high school graduates who bypass remedial courses.	The percentage of recent high school graduates who **enroll in higher education and** bypass remedial courses.

Using 2011-12 and 2012-13 high school graduation data provided by the Washington Educational Data and Research Center (ERDC), a two-year baseline value of 73.3 percent and an annual step increase of 1.9 percentage points for the All Students group was computed (Table A9). This means that approximately 73 percent of recent high school graduates who enroll in higher education enroll directly in credit-bearing coursework in English and math.

Table A9: Shows the annual steps by student group and other data elements for the Quality of High School Diploma indicator.

	2-Year Baseline	Gap to 100%[+]	50% of Gap[+]	Yearly Step[+]	2019-20 Midpoint	2026-27 End Goal
All Students	73.3%	26.7	13.3	1.9	86.9%	100.0%
Black / African American	63.1%	36.9	18.4	2.6	82.2%	100.0%
American Indian / Alaskan Native	63.1%	36.9	18.5	2.6	83.5%	100.0%
Asian	79.4%	20.6	10.3	1.5	90.1%	100.0%
Hispanic / Latino	55.5%	44.5	22.2	3.2	78.4%	100.0%
Native Hawaiian / Pacific Islander	66.3%	33.7	16.8	2.4	80.9%	100.0%
White	76.3%	23.7	11.8	1.7	88.6%	100.0%
Two or More	73.3%	26.7	13.4	1.9	86.0%	100.0%
Students with a Disability	43.4%	56.6	28.3	4.0	72.7%	100.0%
Limited English	36.3%	63.7	31.9	4.6	68.6%	100.0%
Low-Income	59.5%	40.5	20.3	2.9	79.9%	100.0%

[+]Note: Gap values and yearly step values are in percentage points.

As for national and Peer State comparisons, one analysis (*Remediation: Higher Education's Bridge to Nowhere*, conducted by Complete College America in 2012) provided summary data separately for two- and four-year higher institutional remediation rates. Washington's two- and four-year institution remediation rates were lower than the Peer State average and substantially lower than the national rates.

In summary, we cannot say one way or another whether Washington met the gap reduction targets, but we can report that Washington ranks high nationally on this indicator and outperforms the Peer States.

Post-Secondary Attainment

The SBE recommended measure for the Post-Secondary Attainment indicator is the percentage of high school graduates attaining a credential, certificate, or completing an apprenticeship prior to age 26. This indicator is prominent in both the Results Washington work on the "World Class Education Goal" (www.results.wa.gov/whatWeDo/measureResults/education.aspx), the Community Center for Education Results Road Map Project (www.roadmapproject.org), and the SBCTC Achievement Index (www.sbctc.ctc.edu/college/e_studentachievement.aspx).

The ERDC conducted the initial analysis of this measure and estimated this percentage at approximately 42 percent (Figure A10). The ERDC report found at http://www.erdc.wa.gov/briefs/pdf/201507.pdf explains more about the analysis and states that this estimate understates the true and real percentage for the following reasons:

- Some degree completions are not reported by the National Student Clearinghouse and some students block their information from being reported
- Some graduates complete Federal apprenticeship programs or those based outside Washington. ERDC does not receive this information
- Private vocational school data are included for the most recent year only, so completions in this sector between 2006-07 and 2011-12 are not incorporated into this analysis, and

- Many credentials earned in medical and dental fields, including massage therapy, are represented in professional license data from the Department of Health. ERDC does not have access to this source.

To make this estimate, the ERDC examined the post-secondary educational outcomes for the class of 2006 because these graduates would be 26 years old (18 years old at graduation plus seven years of time for post-secondary attainment).

Figure A10: shows the percent of students completing a credential, certificate, or apprenticeship before age 26.

Percent of High School Graduates Earning a Credential or Certificate by Age 26	Class of 2006
	Reported in Spring 2015
All Students	42%
Black / African American	29%
American Indian / Alaskan Native	23%
Asian	55%
Hispanic / Latino	24%
Native Hawaiian / Pacific Islander	25%
White	44%
Two or More	39%
Students with a Disability	11%
Limited English	25%
Low-Income	25%

Disproportionality in Discipline and the Composition Index

There are different manners in which one might examine disproportionality in student behavior and discipline. The OSPI discipline equity workgroup considered several measures for representing disproportionality and opted to use the Disproportionality Composition Index (CI). The Composition Index is a measure of whether students assigned to a student group are suspended at a rate proportionate to their representation in the total student population. The Disproportionality Composition Index (CI) is computed as follows.

$$CI = \frac{(number\ of\ suspended\ students\ from\ XYZ\ group \div total\ number\ of\ suspended\ students)}{(number\ of\ students\ in\ XYZ\ group \div total\ number\ of\ students)}$$

A Composition Index greater than one indicates the group makes up more of the suspensions and expulsions than their representation in the population generally. A Composition Index equal to less than one indicates the group makes up less of the suspensions and expulsions than their representation in the population generally. On this measure, a Disproportionality Composition Index of 1.00 for all student groups means that no student group is being subjected to suspensions and expulsions at a disproportionately high or low rate. Learn more about the OSPI's Disproportionality Composition Index at http://www.k12.wa.us/DataAdmin/PerformanceIndicators/DataAnalytics.aspx#discipline.

Based on data from the three most recent years ending with the 2014-15 school year (Table A11), the Black-African American, Native American/Alaskan, Hispanic/Latino, Hawaiian/Pacific Islander, and the

Two or More Races have Disproportionality Composition Index greater than one. This means that the students comprising each group are experiencing disproportionally high suspension and expulsion rates. The students with a disability and students participating in the Free and Reduced Price Lunch program are also experiencing disproportionally high suspension and expulsion rates.

Table A11: Shows the Disproportionality Composition Index for student groups for the three most recent years.

Reduction in Disproportionality Composite Index	2012-13	2013-14	2014-15	2015-16 Target
All Students	**1.00**	**1.00**	**1.00**	
Black / African American	2.46	2.27	2.21	2.15
American Indian / Alaskan Native	1.75	1.78	1.94	1.80
Asian	0.38	0.35	0.30	NA
Hispanic / Latino	1.21	1.19	1.16	1.16
Native Hawaiian / Pacific Islander	1.45	1.42	1.38	1.37
White	0.83	0.84	0.86	NA
Two or More	1.11	1.14	1.29	1.20
Students with a Disability	1.87	1.94	2.03	1.91
Limited English	1.00	0.97	0.98	NA
Low-Income	1.51	1.50	1.53	1.48

Note: NA = Not Analyzed

The Composition Index differs from the other Statewide Indicators of the Education System in a couple of important ways.

- When a student group lowers their Composition Index closer to 1.00 another group's Composition Index must increase, moving closer to 1.00.
- Annual improvement targets are not possible for the All Students group as the Composition Index for the All Students will always equal 1.00.

For these reasons, annual improvement targets are computed only for the student groups experiencing disproportionate suspension and expulsion rates.

Length of Exclusion

The length of time a student is removed from the educational environment represents lost education opportunity. In the future, we will be able to examine the length of time students are excluded by behavior type. We will also be able to assess the cumulative effect that multiple suspensions for an individual student may have. For example, in the current data, if a student is suspended for 5 days three times, it is represented as three 5 day suspensions, but in the future it could be represented as 15 days of lost instructional time.

At this time, this secondary indicator is more descriptive to help understand the scope of the lost educational opportunity, and will be more meaningful as more data becomes available.