

The Washington State Board of Education

Governance | Accountability | Achievement | Oversight | Career & College Readiness

Title:	Data Review	
As Related To:	<input type="checkbox"/> Goal One: Effective and accountable P-13 governance. <input type="checkbox"/> Goal Two: Comprehensive statewide K-12 accountability. <input type="checkbox"/> Goal Three: Closing achievement gap.	<input checked="" type="checkbox"/> Goal Four: Strategic oversight of the K-12 system. <input type="checkbox"/> Goal Five: Career and college readiness for all students. <input type="checkbox"/> Other
Relevant To Board Roles:	<input type="checkbox"/> Policy Leadership <input checked="" type="checkbox"/> System Oversight <input type="checkbox"/> Advocacy	<input type="checkbox"/> Communication <input type="checkbox"/> Convening and Facilitating
Policy Considerations / Key Questions:	1. How might the 2011-12 Achievement Index data inform our work to revise the achievement and accountability system? 2. What are possible implications of recent changes to the graduation calculation methodology for the revised Achievement Index?	
Possible Board Action:	<input checked="" type="checkbox"/> Review <input type="checkbox"/> Adopt <input type="checkbox"/> Approve <input type="checkbox"/> Other	
Materials Included in Packet:	<input type="checkbox"/> Memo <input type="checkbox"/> Graphs / Graphics <input type="checkbox"/> Third-Party Materials <input checked="" type="checkbox"/> PowerPoint	
Synopsis:	<p>A review of timely and topical P-20 continuum data is regularly presented to the Board at every meeting for their review.</p> <p>This presentation provides an overview of school performance in the current Index as well as recent nationwide changes to the calculation and reporting of graduation rates. The most recent USED release of states' graduation rate data reflects graduation rates that have, for the first time, been calculated using the same standardized methodology. The new standardized data allows us to compare and rank states' graduation rates. Washington's 2010-11 "4-year Actual Adjusted Cohort rate" was 76%, which ranked 32nd in the nation.</p>	

DATA REVIEW

JANUARY 2013 BOARD MEETING

**Current Achievement Index Data &
2010-11 Graduation Rates**

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Research Analyst*

Policy Focus

Revising the Achievement Index

- What does statewide school performance look like in the current Index?
- How might cohort and/or extended graduation rate calculations be included in the index?

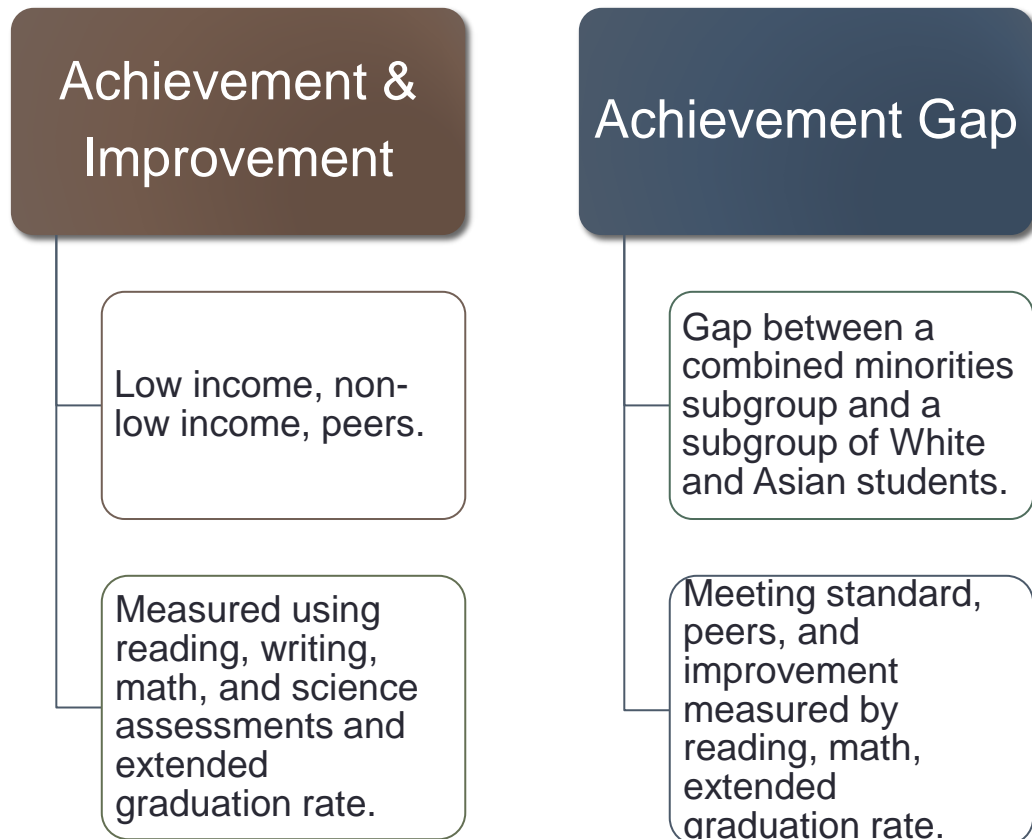
2007-2012 Achievement Index Data Rollup

- Review the change in exemplary, very good, good, fair, and struggling schools over the last 5 years.
- See trends for elementary, middle, high, and comprehensive* schools.

*Comprehensive schools combine elementary, middle, and/or high school grades.

Brief Index Overview

The current Index assigns a composite score which corresponds to a rating. The composite score is based on the following:

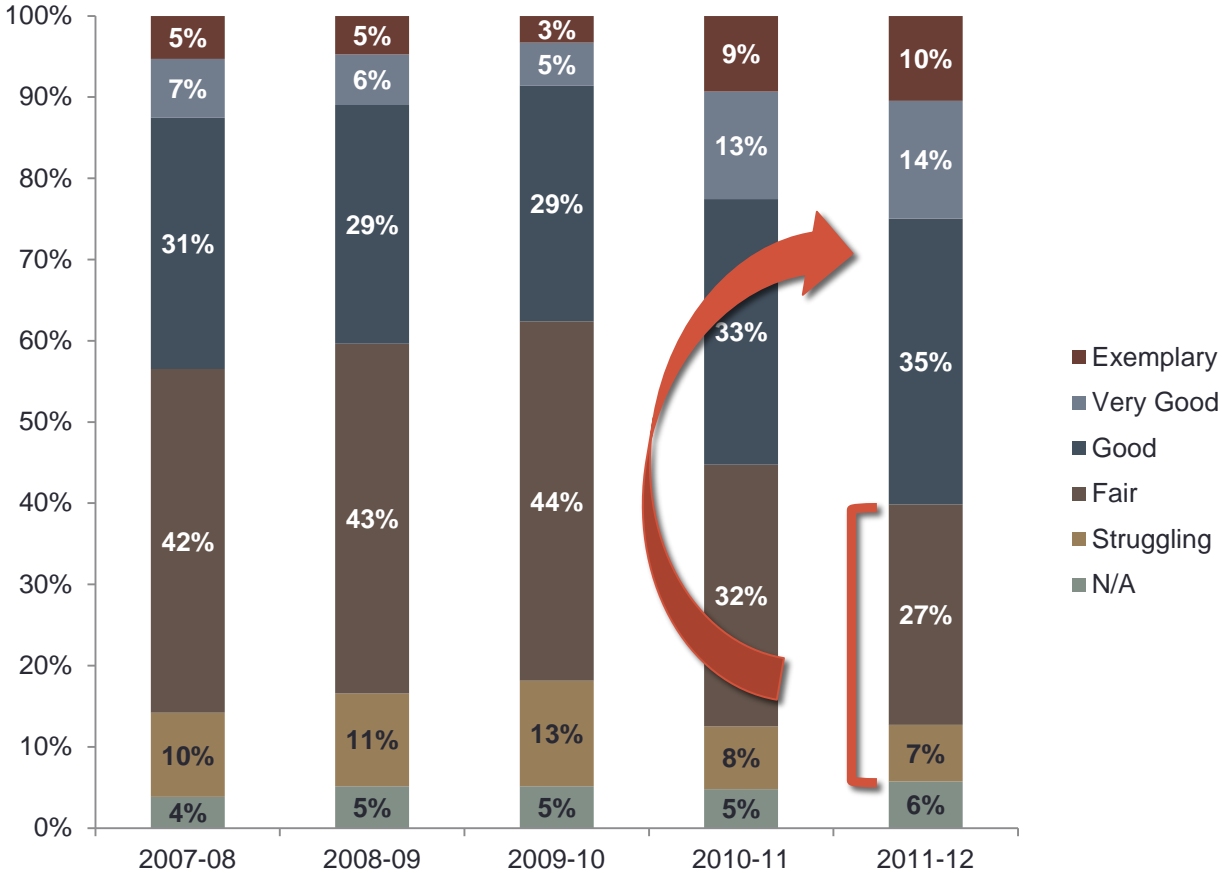


All Schools

Analysis & Detail

The overall number of schools rated struggling and fair has decreased since 2007-08 while the number of very good and exemplary schools has more than doubled.

Rating	All % change
Struggling	-30%
Fair	-33%
Good	19%
Very Good	109%
Exemplary	106%

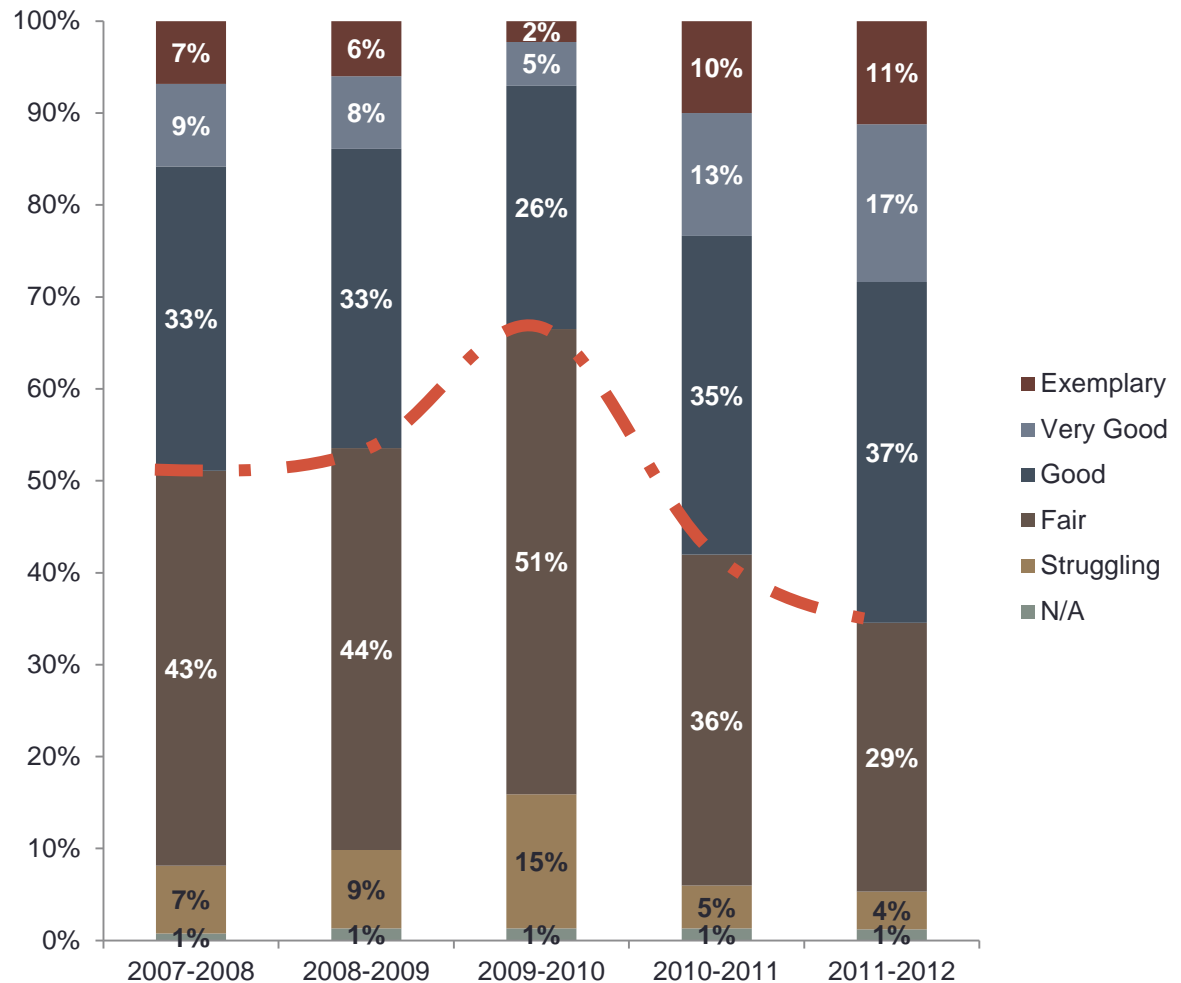


Elementary Schools

Analysis & Detail

In 2009-10 there was a small spike in the percent of schools rated fair and struggling.

Rating	All 5 yr. % change	Elementary 5 yr. % change
Struggling	-30%	-44%
Fair	-33%	-31%
Good	19%	14%
Very Good	109%	94%
Exemplary	106%	67%



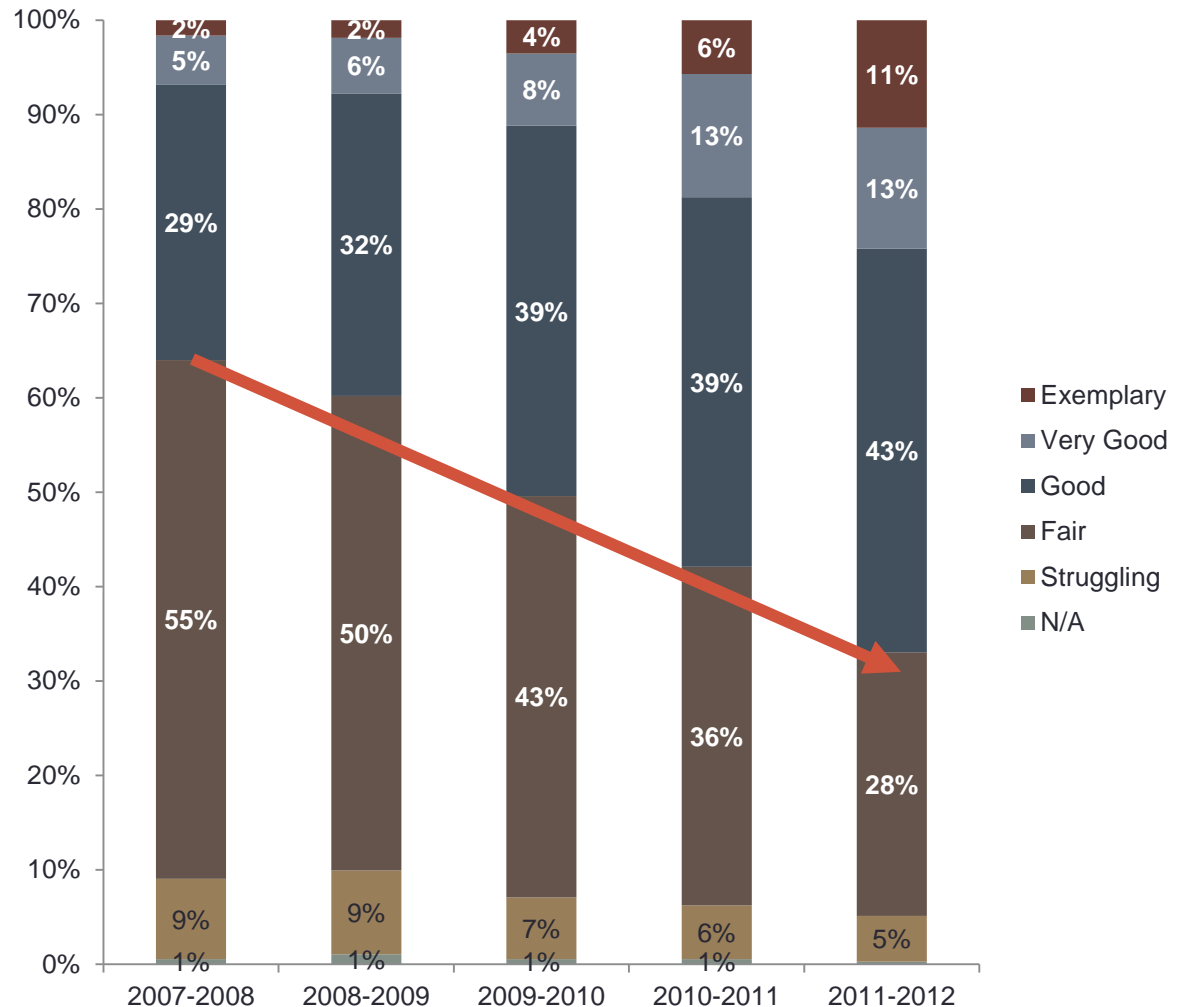
Analysis & Detail

Middle schools have the most linear decrease in struggling and fair schools, and corresponding increase in good, very good, and exemplary schools.

The 5 year percent change in exemplary middle schools looks extreme, but the number of exemplary middle schools is relatively small; increased from 6 to 40.

Rating	All 5 yr. % change	Middle 5 yr. % change
Struggling	-30%	-45%
Fair	-33%	-51%
Good	19%	42%
Very Good	109%	127%
Exemplary	106%	567%

Middle Schools

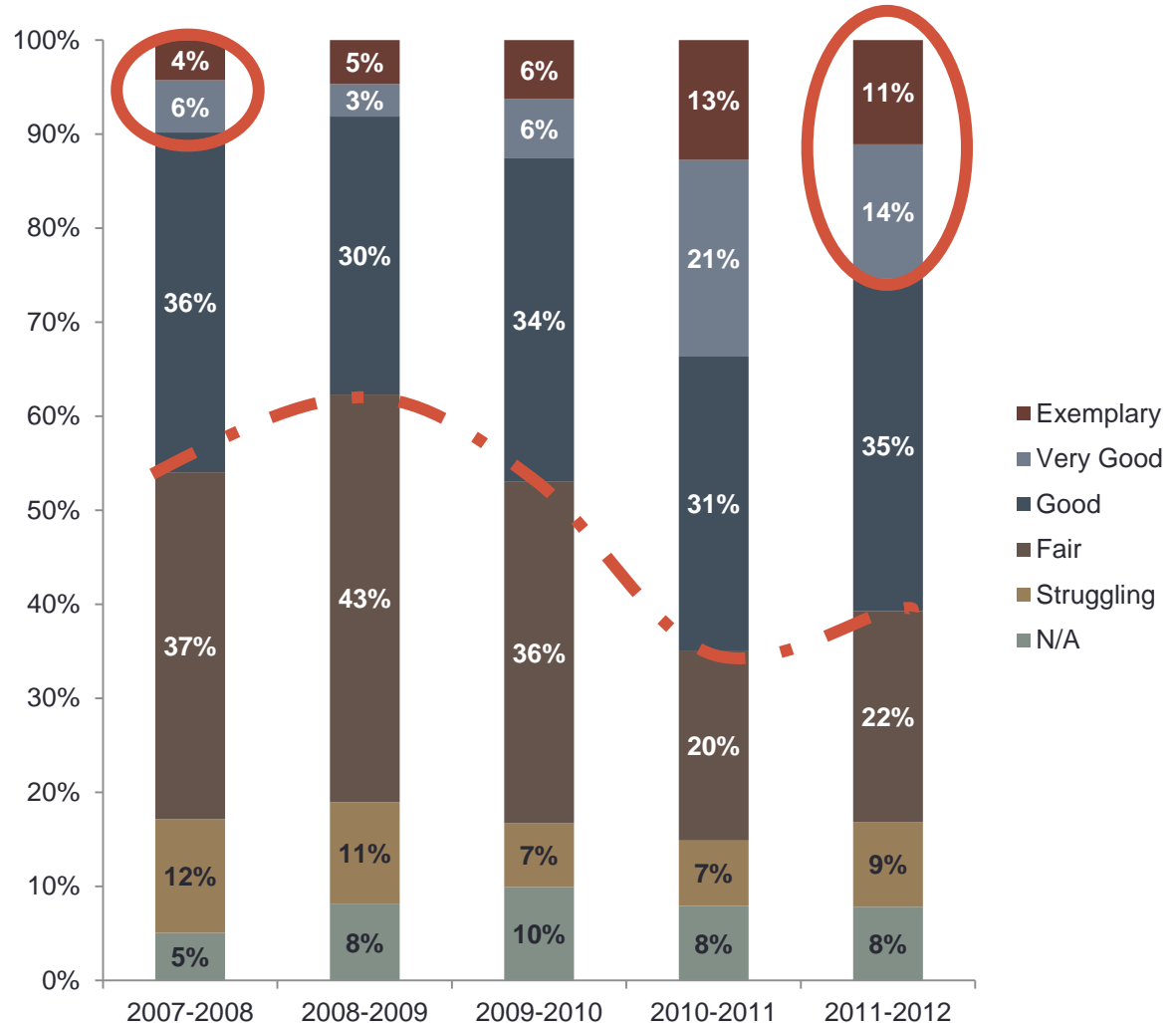


Analysis & Detail

Although there is a decreasing trend in the percent of struggling and fair schools, these numbers fluctuate more for high schools. The number of very good and exemplary high schools increased in excess of 70 percentage points more than for all very good and exemplary schools.

Rating	All 5 yr. % change	High 5 yr. % change
Struggling	-30%	-19%
Fair	-33%	-34%
Good	19%	7%
Very Good	109%	182%
Exemplary	106%	182%

High Schools

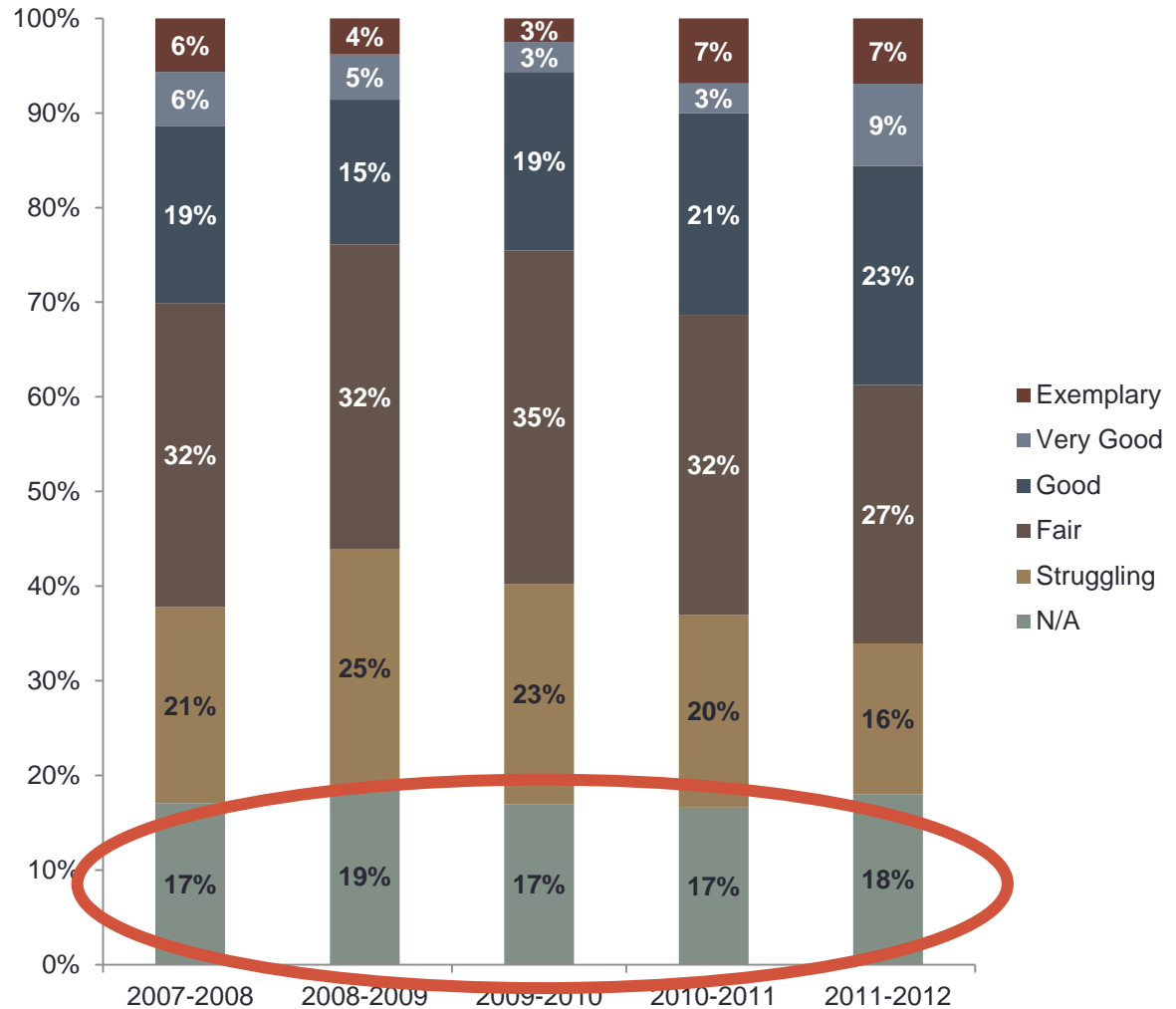


Comprehensive Schools

Analysis & Detail

The numbers are fairly consistent. The percent of comprehensive schools where a rating is not applicable is higher due to the number of schools with an “N size” of students smaller than 20.

Rating	All 5 yr. %change	Comprehensive 5 yr. %change
N/A	57%	18%
Struggling	-30%	-15%
Fair	-33%	-5%
Good	19%	38%
Very Good	109%	71%
Exemplary	106%	35%



Achievement Index – Key Takeaways

- School ratings are improving.
- This analysis doesn't identify the specific reasons for improved ratings, but they are likely due, in part, to significantly higher school ratings for math and science achievement.
 - Note: this is a school based analysis that does not correspond with statewide student achievement on a particular assessment.
- School ratings may be impacted over time from awarding additional points for improvement.
 - This can both inflate and deflate a composite score.

Questions?

Old vs. New Graduation Rates

Old Graduation Rates

- Reported nationally 2009-10 and earlier.
- Non-standard calculation methodology.
- Not comparable nationally.
- Washington used estimates to calculate the graduation rates – did not use SSID numbers.
 - On-time (4 years).
 - Extended (4-7 years).

New Graduation Rates

- Reported nationally beginning 2010-11.
- Standardized calculation methodology.
- Comparable nationally.
- All states use student level data. Washington is tracking SSID numbers.
 - 4-yr actual adjusted cohort rate
 - 5-yr actual adjusted cohort rate

Comparing Rates

- WA did two different calculations for 2009-10, one using the old and the other using the new methodology.
- Our 4-yr adjusted cohort rate (new) increased, and our extended rate (old) dropped.

4 Years		
Year	On-time (old state measure)	4-Yr Actual Adjusted (new fed measure)
2009-10	76.5%	75.4%
2010-11	75.0%	76.6%
Change	-1.5 % pts.	+1.2 % pts.

5+ Years		
Year	Extended (old state measure)	5-Year Actual Adjusted (new fed measure)
2009-10	82.6%	78.2%
2010-11	81.0%	n/a*
Change	-1.6 % pts.	n/a*

2010-11 4 yr. Actual Adjusted Cohort Rates

- Washington ranked 32nd in the nation.
 - 31 states had higher graduation rates than WA.

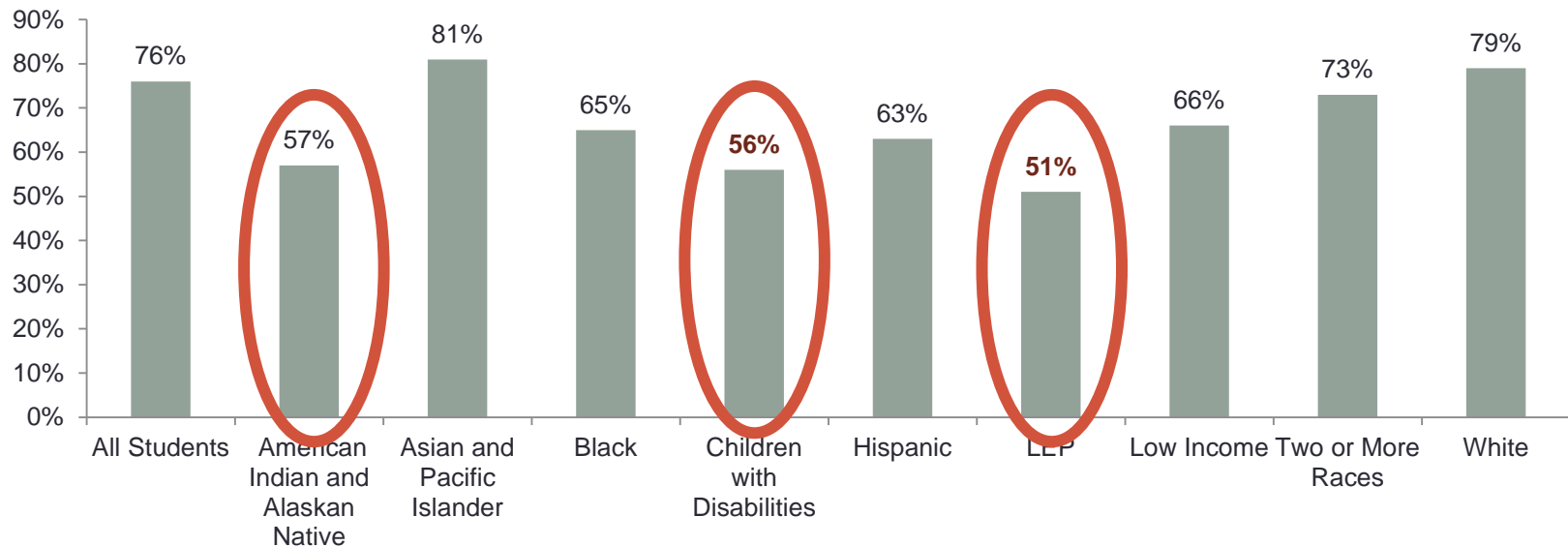
Global Challenge States	Graduation Rate	Median Income*
Massachusetts	83%	\$62,809 (5 th)
New Jersey	83%	\$65,072 (3 rd)
Connecticut	83%	\$67,165 (2 nd)
Maryland	83%	\$67,469 (1 st)
Virginia	82%	\$62,776 (6 th)
North Carolina	78%	\$44,787 (41 st)
Minnesota	77%	\$56,869 (12 th)
Washington (8 th)	76%	\$59,370 (10 th)
California	76%	\$56,074 (14 th)
Colorado	74%	\$59,803 (8 th)

Median Household Income (In 2011 Inflation-adjusted Dollars) by State Ranked from Highest to Lowest Using 3-Year Average: 2009-2011 Source: U.S. Census Bureau, Current Population Survey, 2010, 2011, and 2012 Annual Social and Economic Supplements.

Achievement & Opportunity Gaps

- The widest opportunity gaps nationwide are for students with disabilities and English Language Learners (ELLs).
- This is true in Washington, where the ELL and students with disabilities subgroup rates are followed closely by American Indian and Alaskan Native students.

4-year Actual Adjusted Cohort Grad Rate – WA 2010-11



Understanding graduation rates for the Index

- 4, 5, 6, and 7 year graduation rates measure different cohorts of students
- It is possible for a 6-yr. rate to be higher than a 7-yr. rate, and a 4-yr rate higher than a 5 yr. rate.

Example: High School A's Grad. Rates

Cohort Graduation Rates						
2006	2007	2008	2009	2010	2011	2012
			9th grade			4 yr. 75%
		9th grade			4 yr. 75%	5 yr. 76%
	9th grade			4 yr. 74%	5 yr. 76%	6 yr. 77%
9th grade			4 yr. 70%	5 yr. 71%	6 yr. 71%	7 yr. 71%

Questions?

Graduation Rates - Key Takeaways

- Old rates used estimates and varied by state.
- New rates use student level data and are nationally comparable.
- 4, 5, 6, and 7 year graduation rates measure different cohorts of students.

Policy Questions

Achievement Index Data

- How might the 2007-2012 Achievement Index data inform our work to revise the achievement and accountability system?

Graduation Rates

- What are possible implications of recent changes to the graduation calculation methodology for the revised Achievement Index?
 - If the revised Index includes anything beyond a 4 year graduation rate, how will it be included?

Provisional Data File: SY2010-11 Four-Year Regulatory Adjusted Cohort Graduation Rates

	All Students	Major Racial and Ethnic Groups							Special Populations			Asian/Pacific Islander Detail ²	
		American Indian / Alaska Native or Native American	Asian / Pacific Islander ¹	Black (not Hispanic) or African American	Hispanic / Latino	Multicultural or Multiethnic or Multiracial	White (not Hispanic) or Caucasian	Children with disabilities (IDEA)	Limited English proficient (LEP) Students	Economically Disadvantaged Students	Asian	Native Hawaiian / Other Pacific Islander or Pacific Islander	
ALABAMA	72%	80%	77%	63%	66%	-	78%	30%	36%	62%	-	-	
ALASKA	68%	51%	74%	63%	62%	65%	75%	40%	41%	56%	79%	59%	
ARIZONA	78%	62%	87%	74%	72%	-	85%	67%	25%	73%	-	-	
ARKANSAS	81%	85%	75%	73%	77%	82%	84%	75%	76%	75%	80%	51%	
BUREAU OF INDIAN EDUCATION	61%	61%	-	-	-	-	-	56%	51%	61%	-	-	
CALIFORNIA	76%	68%	89%	63%	70%	65%	85%	59%	60%	70%	90%	74%	
COLORADO	74%	52%	81%	65%	60%	-	81%	53%	53%	62%	81%	-	
CONNECTICUT	83%	72%	92%	71%	64%	-	89%	61%	59%	62%	-	-	
DELAWARE	78%	78%	90%	73%	71%	93%	82%	56%	65%	71%	‡	‡	
DISTRICT OF COLUMBIA	59%	‡	‡	58%	55%	-	85%	39%	53%	58%	‡	‡	
FLORIDA	71%	70%	86%	59%	69%	-	76%	44%	53%	60%	86%	-	
GEORGIA	67%	68%	79%	60%	58%	69%	76%	30%	32%	59%	-	-	
HAWAII	80%	60%	81%	77%	79%	-	78%	59%	60%	75%	-	-	
IDAHO	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
ILLINOIS	84%	78%	92%	74%	77%	81%	89%	66%	68%	75%	92%	96%	
INDIANA	86%	76%	88%	75%	81%	80%	88%	65%	73%	79%	89%	80%	
IOWA	88%	79%	88%	73%	75%	82%	90%	70%	70%	78%	89%	82%	
KANSAS	83%	72%	88%	72%	73%	81%	86%	73%	70%	73%	88%	79%	
KENTUCKY	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
LOUISIANA	71%	71%	84%	64%	70%	80%	77%	29%	43%	64%	‡	≥80%	
MAINE	84%	82%	90%	77%	87%	86%	84%	66%	78%	73%	‡	‡	
MARYLAND	83%	74%	93%	76%	72%	91%	89%	57%	54%	74%	93%	88%	
MASSACHUSETTS	83%	76%	88%	71%	62%	81%	89%	66%	56%	70%	88%	81%	
MICHIGAN	74%	62%	85%	57%	63%	69%	80%	52%	62%	63%	87%	52%	
MINNESOTA	77%	42%	72%	49%	51%	-	84%	56%	52%	58%	-	-	
MISSISSIPPI	75%	76%	89%	68%	75%	-	82%	23%	67%	69%	89%	-	
MISSOURI	81%	77%	87%	66%	75%	92%	85%	68%	62%	74%	87%	81%	
MONTANA	82%	63%	88%	81%	78%	-	85%	69%	57%	71%	90%	80%	
NEBRASKA	86%	64%	83%	70%	74%	-	90%	70%	52%	78%	83%	-	
NEVADA	62%	52%	74%	43%	53%	80%	71%	23%	29%	53%	73%	80%	
NEW HAMPSHIRE	86%	78%	87%	73%	73%	86%	87%	69%	73%	72%	‡	‡	
NEW JERSEY	83%	87%	93%	69%	73%	84%	90%	73%	68%	71%	93%	88%	
NEW MEXICO	63%	56%	78%	60%	59%	-	73%	47%	56%	56%	-	-	
NEW YORK	77%	64%	86%	64%	63%	79%	86%	48%	46%	69%	-	-	
NORTH CAROLINA	78%	70%	87%	72%	69%	77%	83%	57%	48%	71%	-	-	
NORTH DAKOTA	86%	62%	88%	74%	76%	-	90%	67%	61%	76%	88%	-	
OHIO	80%	71%	88%	59%	66%	71%	85%	67%	53%	65%	-	-	
OKLAHOMA	-	-	-	-	-	-	-	-	-	-	-	-	
OREGON	68%	52%	78%	54%	58%	73%	70%	42%	52%	61%	79%	69%	
PENNSYLVANIA	83%	77%	88%	65%	65%	75%	88%	71%	63%	71%	-	-	
PUERTO RICO	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	‡	
RHODE ISLAND	77%	66%	75%	67%	67%	77%	82%	58%	68%	66%	75%	76%	
SOUTH CAROLINA	74%	67%	84%	70%	69%	-	77%	39%	62%	67%	-	-	
SOUTH DAKOTA	83%	49%	45%	73%	73%	87%	88%	84%	82%	86%	84%	63%	
TENNESSEE	86%	89%	91%	78%	79%	-	89%	67%	71%	80%	91%	91%	
TEXAS	86%	87%	95%	81%	82%	92%	92%	77%	58%	84%	95%	88%	
UTAH	76%	57%	72%	61%	57%	-	80%	59%	45%	65%	72%	69%	
VERMONT	87%	-	-	-	-	-	-	69%	82%	77%	-	-	
VIRGINIA	82%	-	-	73%	71%	-	86%	47%	55%	70%	-	-	
WASHINGTON	76%	57%	81%	65%	63%	73%	79%	56%	51%	66%	‡	‡	
WEST VIRGINIA	76%	‡	91%	72%	71%	‡	77%	57%	79%	68%	-	-	
WISCONSIN	87%	75%	89%	64%	72%	-	91%	67%	66%	74%	-	-	
WYOMING	80%	51%	87%	58%	74%	77%	82%	57%	62%	66%	91%	73%	

¹ The Asian/Pacific Islander column represents either the value reported by the state to the Department of Education for the major racial and ethnic group "Asian/Pacific Islander" or an aggregation of values reported by the state for the major racial and ethnic groups "Asian," "Native Hawaiian/Other Pacific Islander or Pacific Islander," and "Filipino." Values reported in the Asian/Pacific Islander column which represent the U. S. Department of Education aggregation of other values reported by the state have been presented in Italic type. (California is the only state currently using the major racial and ethnic group "Filipino.")

² Disaggregated reporting for Adjusted Cohort Graduation Rates is done according to the provisions outlined within each state's Accountability Workbook. Accordingly, not every state uses major racial and ethnic groups which enable further disaggregation of Asian American/Pacific Islander (AAPI) populations.

Please refer to the enclosure, "Four-Year Regulatory Adjusted Cohort Graduation Rate, School Year 2010-11, Provisional Release: Data Notes" for an explanation of the symbols in this chart.

Four-Year Regulatory Adjusted Cohort Graduation Rate School Year 2010-11

Provisional Release: Data Notes

Source:

- State submissions to the U.S. Department of Education’s *EDFacts* Reporting System: File Specification 150, Data Group 695 (rates) and File Specification 151, Data Group 696 (cohort counts¹). Details about the file structure can be found at the following location: <http://www2.ed.gov/about/inits/ed/edfacts/sy-10-11-nonxml.html>.
- State-level graduation rate data have been and will continue to be included as a required component of each state’s Consolidated State Performance Report (CSPR). Up to and including the 2010-11 school year, graduation rate data were lagged in the CSPR (e.g., the 2010-11 CSPR contains 2009-10 graduation rate data). Starting with the CSPR on the 2011-12 school year, the adjusted cohort graduation rate data have been aligned, so that the school year 2011-12 CSPR will contain school year 2011-12 adjusted cohort graduation rates. The 2010-11 data are being made available through this special release because they will not be included in the 2011-12 CSPR.
- Data were extracted from the *EDFacts* Data Warehouse on September 20, 2012, and reflect the most recent submissions of data as of September 19, 2012.

Cohort Graduation Rate Definition and Calculation:

- The four-year adjusted cohort graduation rate is the number of students who graduate in four years with a regular high school diploma divided by the number of students who form the adjusted cohort for the graduating class. From the beginning of 9th grade (or the earliest high school grade), students who are entering that grade for the first time form a cohort that is “adjusted” by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate to another country, or die.
- The following formula provides an example of how the four-year adjusted cohort graduation rate would be calculated for the cohort entering 9th grade for the first time in the 2008-09 school year and graduating by the end of the 2011-12 school year:

Number of cohort members who earned a regular high school diploma by the
end of the 2011-12 school year

Number of first-time 9th graders in fall 2008 (starting cohort) plus students
who transferred in, minus students who transferred out, emigrated, or died
during school years 2008-09, 2009-10, 2010-11, and 2011-12

¹ Cohort counts from Data Group 696 were used to determine privacy protection needs and, in some cases, to allow for the aggregation across sub-categories for reporting by larger categories that had not been explicitly reported by the State educational agency. The cohort counts are not included as part of this release.

- Some states have proposed to the Secretary and been approved to calculate five- or six-year adjusted cohort graduation rates, which allow these states to count as graduates students who take longer than four years to graduate. This file includes only the four-year graduation rates.
- Although the regulatory adjusted cohort rates are more comparable across states than were rates submitted in previous years under the Elementary and Secondary Education Act of 1965 (ESEA) as amended, there are still some differences in how states have calculated their rates. These differences include: how students are identified for inclusion in certain subgroups, how the beginning of the cohort is defined, whether summer school students are included, and which diplomas count as a regular high school diploma.
- Detailed information on the adjusted cohort graduation rate can be found in the Department’s 2008 High School Graduation Rate Non-Regulatory Guidance: <http://www2.ed.gov/policy/elsec/guid/hsgrguidance.pdf>.

Interpreting the Data File:

- Reporting by race/ethnicity: Under the ESEA, a State educational agency (SEA) has the flexibility to determine the major racial/ethnic groups it will use for reporting on components of its accountability determinations, which include graduation rates. The subgroups that an SEA uses are approved through its Accountability Workbook. As a result, there is some variation in how SEAs report data by race/ethnicity. The absence of a racial/ethnic subgroup for a state may mean that the state is not required to report on that subgroup under its approved accountability plan.
- Asian/Pacific Islander Subgroup and Asian/Pacific Islander Detail: Because of the flexibility allowed for subgroup reporting, some SEAs report on Asian and Pacific Islander students in combination, and some SEAs split students into “Asian” and “Native Hawaiian or Other Pacific Islander” subgroups. The “Asian/Pacific Islander” column in the main table displays either the value that an SEA reported for “Asian/Pacific Islander” or the aggregation of the “Asian” and “Native Hawaiian or Other Pacific Islander” subgroups. Some SEAs (the SEAs for Colorado, Florida, Mississippi, Nebraska, and North Dakota) reported graduation rates only for the subgroup of “Asian” students, so, for those states, the column includes the graduation rates only for Asian students. The Detail table shows the breakout of those categories when the SEA reported those categories separately.
- Notations:

Symbol	Description
‡	Reporting standards not met: Data have been suppressed due to a small number of students in the category, complementary suppression has been applied to protect another small count, or the data have been redacted due

	to anomalies.
-	Data were not reported to the Department in time for inclusion in the file, or the category is not used by the SEA.
≥ N	Data were top coded to protect a student count falling within a certain range of values.
†	Not applicable: Data are not expected to be reported by the SEA for SY2010-11.

State Specific Notes:

- Idaho, Kentucky, and Puerto Rico have received “timeline extensions” from the Department, pursuant to which they are not yet required to use an adjusted cohort graduation rate that meets the regulatory requirements. Accordingly, they will not submit data based on the regulatory requirements for 2010-11. Instead, they will submit data based on their previously approved methodology.
- Oklahoma has a pending request for a timeline extension.
- The Bureau of Indian Education (BIE) reports all students it serves as “American Indian,” even though some non-Indian students are educated in BIE schools.
- California includes a category for Filipino students. The reported graduation rate for that subgroup is 89 percent. Students reported in the Filipino category were included within the aggregation performed by the Department to report California’s data for that subgroup within the “Asian/Pacific Islander” column.

Comparability to Other Graduation Rates:

- For school years prior to 2010-11, graduation rates reported to *EDFacts* and used in public reporting were not required to be calculated using the regulatory adjusted cohort graduation rate. States used any one of a number of methodologies, including a “leaver rate,” a “completer rate,” an average freshman graduation rate, or a non-regulatory cohort rate. Comparisons should not be made to data from prior school years without knowledge of the prior-year methodology.
- The Department’s National Center for Education Statistics (NCES) calculates an Average Freshman Graduation Rate (AFGR). The AFGR is an estimate of the percentage of an entering freshman class graduating within four years. For 2009–10, it equals the total number of diploma recipients in 2009–10 divided by the average membership of the 8th-grade class in 2005–06, the 9th-grade class in 2006–07, and the 10th-grade class in 2007–08. Ungraded students were allocated to individual grades proportionally to the reported enrollments by grade. The adjusted cohort rate may differ from the AFGR for the following reasons:

- AFGR may be lower than the cohort rate due to net out-migration: The AFGR does not account for out-migration after the initial cohort size is set, whereas the adjusted cohort rate does account for such cohort size changes directly. If a state experienced a net out-migration of high school students over the period of time during which a specific graduating class was progressing through high school, this would result in the denominator for AFGR being too large, as the denominator is set at the beginning point of a cohort's progression through high school and is frozen at that number. Diploma counts for the rate are not taken until four years later and would fall in proportion to out-migration. Thus, while the numerator would be correctly adjusted downward for out-migration, the denominator of AFGR would not. Too large of a denominator deflates the graduation rate.
- AFGR may be higher than the cohort rate due to net in-migration: This is the reverse situation from that described above. In the event of net in-migration of high school students over the period of time during which a specific cohort was progressing through high school, the AFGR's cohort size would not increase—resulting in the denominator for AFGR being too small. However, the diploma count would reflect the additional graduates among the students transferring into the state. Thus, while the denominator would not adjust upward to account for the incoming new cohort members, the numerator would be allowed to increase to account for graduates among the additional cohort members. Too small of a denominator inflates the graduation rate.
- AFGR may be higher than the cohort rate due to the inclusion of 5+-year graduates in the numerator, but not the denominator, of AFGR: As defined in the Title I regulations, the adjusted cohort rate assigns graduates who take longer than four years to graduate to their initial cohort. The AFGR does not have a means of adjusting for students who take longer than four years to graduate. As such, students taking $n+1$, $n+2$, etc., years to graduate (where $n = 4$) are included in the “year n ” graduate count for AFGR and inflate the numerator of the rate. However, they are not counted in the AFGR denominator for the n -year cohort. For example, AFGR for 2009-10 has graduates from the class of 2010, plus graduates from the class of 2009, plus graduates from the class of 2008 mixed into the numerator. The denominator, however, is designed to reflect only the class of 2009-10 when it first started 9th grade in 2006-07.
- Averaging enrollments in grades 8-10 may inflate AFGR over the adjusted cohort rate. The AFGR cohort is smaller than the cohort in the adjusted cohort rate due to treatment of 9th-grade dropouts: In particular, the net effect of the 3-year averaging is to reduce the contribution of 9th-grade dropouts, which deflates or underestimates the number of first time freshmen used in the denominator of AFGR. This would then inflate the AFGR relative to the adjusted cohort rate.