

ALASKA HIGH SCHOOL GRADUATION RATE TRENDS

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A high school diploma is not the sole predictor of educational achievement and career readiness, but it does mark an essential step toward adult success. High school graduates are more likely to be employed, earn a higher income, and enjoy better health. Conversely, lack of a high school diploma is correlated with crime and welfare dependency. Between 2010 and 2016, Alaska's graduation rate grew faster than the national average, increasing 8 percentage points and among the top 10 rate increases in the country. All demographic groups improved, with Native, low-income and rural student rates growing the most. Additionally, the gap between high and low achieving groups decreased significantly. Still, Alaska's graduation rate remained well below the national average in 2016. And, due to Alaska's shrinking student population, the total number of graduates decreased.

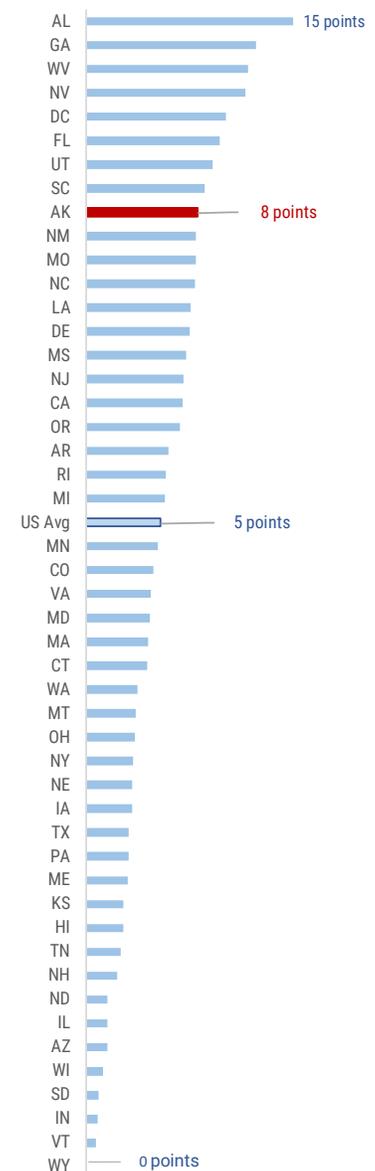
This paper examines trends in Alaska public high school graduation rates from academic year 2010-11 to 2015-16 and explores differences across demographic groups. We focus specifically on students from public neighborhood high schools. These are publicly-funded schools run by district or Regional Educational Attendance Area school boards serving all residents within school attendance boundaries. These schools represent about 88% of Alaska's high school students.¹ We use the Adjusted Cohort Graduation Rate, as defined by the US Department of Education (see Box 2, back page) for all rates.

Graduation rate increased

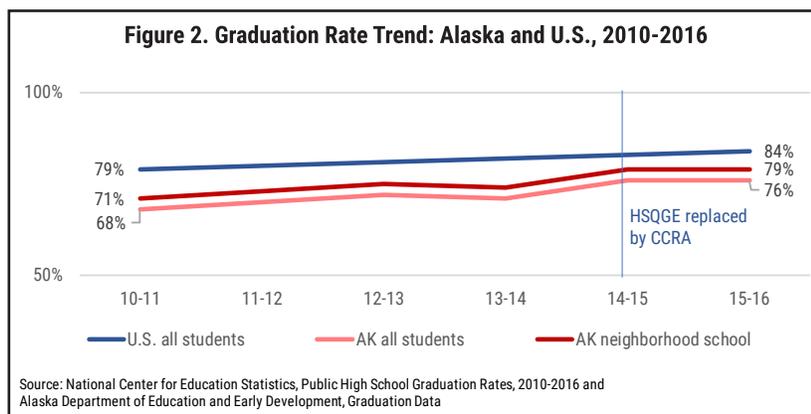
Between 2010-11 and 2015-16, the Alaska overall public high school graduation rate increased 8 percentage points, the 9th highest growth rate in the country (Figure 1). This is the same growth experienced by Alaska neighborhood schools. The national average for growth during this period was 5 percentage points. Despite the increase, Alaska high school graduation rate ranked 47th in the country in 2015-2016.

The vertical line in Figure 2 shows that Alaska dropped the High School Graduation Qualifying Examination as a graduation requirement in 2014-15 (graduation requirements available in Box 1 on page 4). That year, students who had received a Certificate of Achievement in 2013-14 were added in the count of graduates, which at least partially accounts for the rate increase from 74% (2013-14) to 79% (2014-15).

Figure 1. Public High School Graduation Rate Growth by State from 2010 to 2016



Source: National Center for Education Statistics, Public High School Graduation Rates, 2010-2016

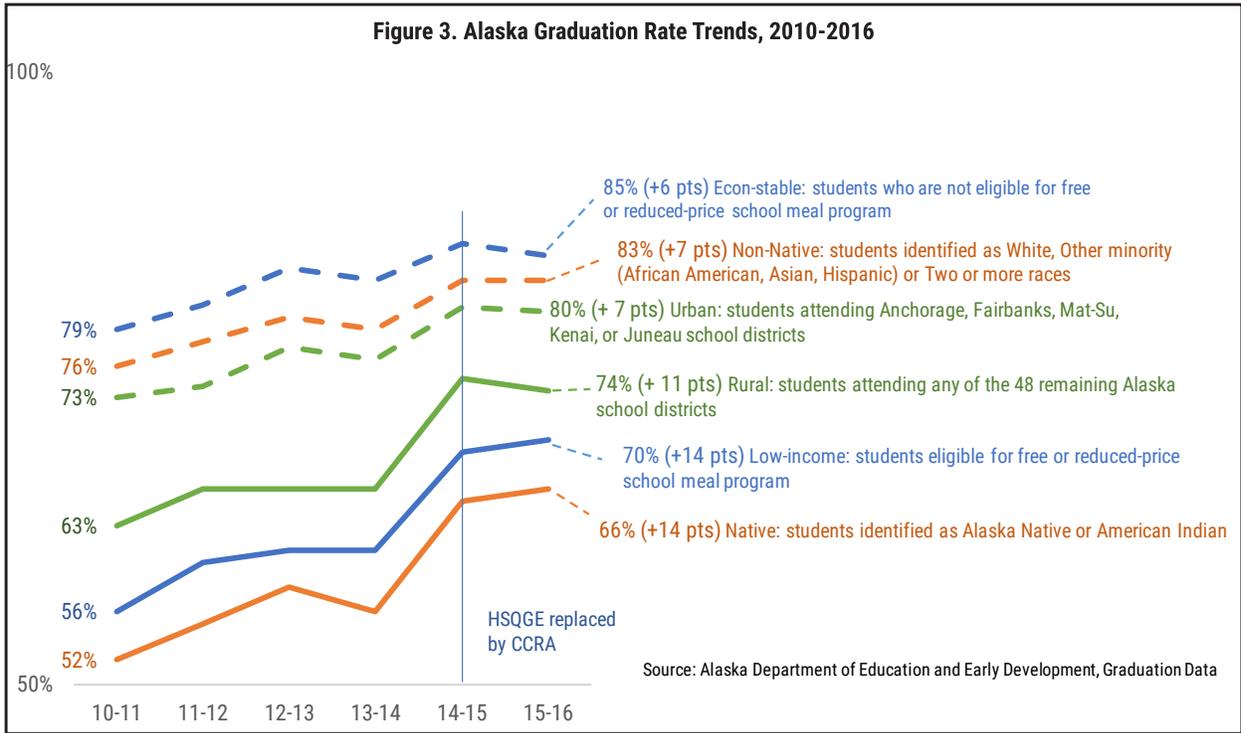


Source: National Center for Education Statistics, Public High School Graduation Rates, 2010-2016 and Alaska Department of Education and Early Development, Graduation Data

1 This analysis excludes students who graduated from homeschools, boarding schools, correspondence schools, charter schools, and private schools.

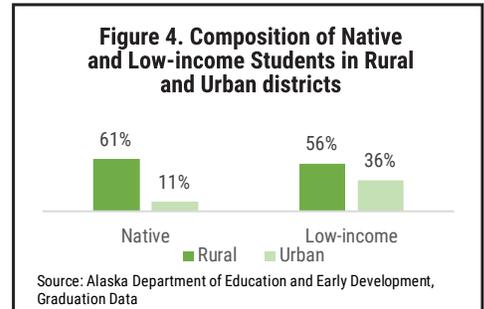
Native, low-income, and rural student graduation increased the most

While all demographic groups experienced increased graduation rates, Native, low-income, and rural students had the most significant growth by 14, 14, and 11 points, respectively. Meanwhile, rates for urban, non-Native, and economically-stable students grew by 6 to 7 points (Figure 3).

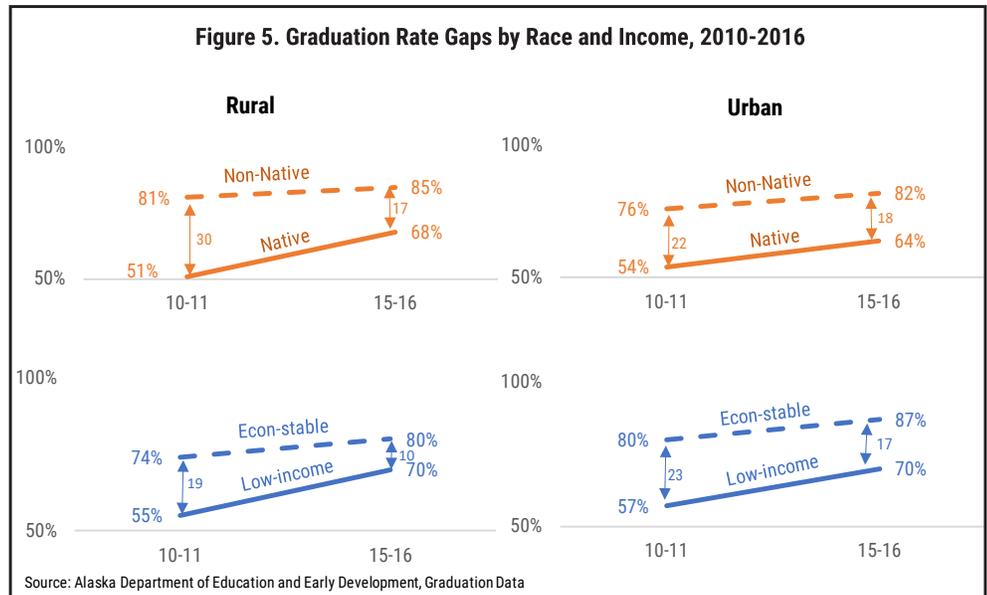


Race and income gaps declined the most in rural areas, but still exist

Students' demographic and economic characteristics differ greatly between rural and urban school districts. Rural districts are much smaller (2015-16 graduating cohort from 2 to 244) and rural students are predominantly Native and low-income (Figure 4). Urban districts served more students (2015-16 cohort from 1,133 to 3,294 students), and the majority of urban students are non-Native and economically-stable.

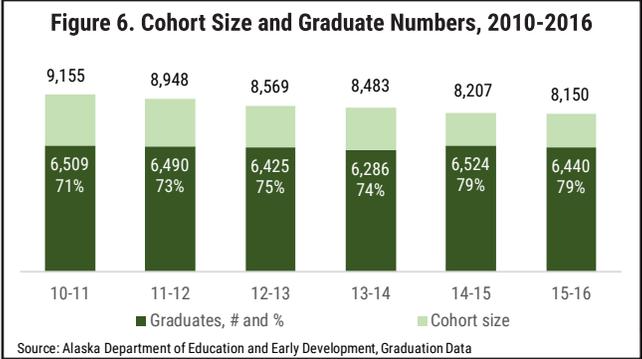


As shown in Figure 5, regardless of whether they attended school in rural or urban districts, graduation rates of Native and low-income students were lower than their counterparts. But these performance gaps have been reduced, and in rural areas, the reduction was noticeably larger. In rural districts, the gap between Native and non-Native student graduation rates decreased by 13 points, compared to 4 points in urban districts. The gap between low-income and economically-stable students decreased by 9 points in rural districts, compared to 6 points in urban districts.



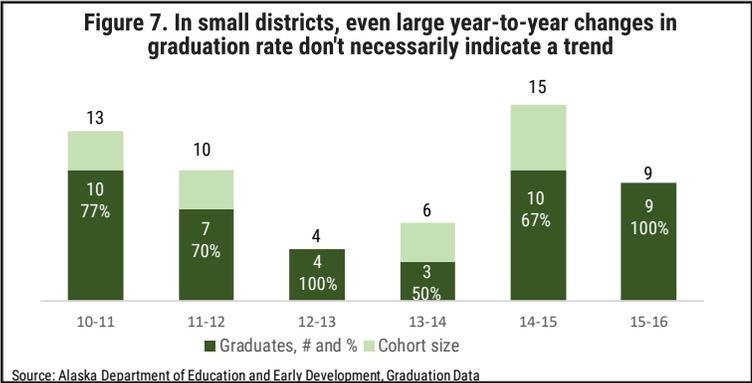
Graduating cohort size and number of high school graduates decreased

Between 2010 and 2016, the number of students in the graduating cohort decreased by 11% or 1,005 students (Figure 6). This means that while the graduation rate increased by 8 percentage points, Alaska produced 69 fewer graduates in 2015-16 than 2010-11. All demographic groups decreased in size except for low-income students in urban areas, which increased from 2,048 to 2,232. The decreasing number of graduates is important for a number of reasons, including employer needs for skilled workers and post-secondary enrollment.



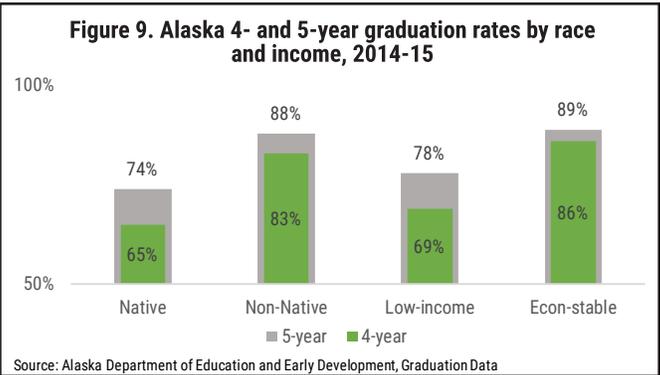
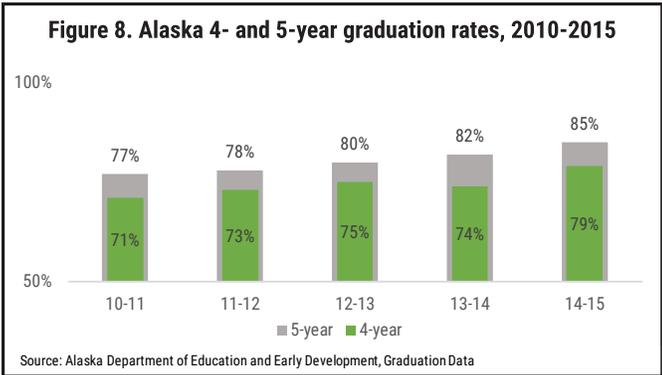
Graduation rate varied greatly in small districts

Graduation rate can be a useful tool to assess performance. And changes in graduation rate over time are often used to assess district improvement. For large districts, with hundreds of students graduating each year, the performance of just a few students doesn't affect the overall rate. For small districts, just a few students can make a big difference. Consider one small rural Alaska district (Figure 7): over six years, the graduation rate varied, ranging from 50% and 100%. The cohort size varied from 4 to 15 students. Just three students who didn't graduate in 2013-14, dropped the rate from 100% to 50%. Thus for this analysis, we combine all rural districts into one group to have enough students to calculate meaningful change over time.



5-year graduation rate is an important measure

This paper, so far, has looked at *on-time* graduation (in four years). Some students need more time to finish high school. When students who graduate in five years are included, overall, the rate increased by 6 points (Figure 8). Again, race and income gaps are evident. About 9% more Native students graduate (compared to 5% non-Native) and about 9% low-income (compared to 3% economically-stable) graduate after a 5th year. But our comparison of 5-year versus 4-year graduation rates by subgroup (Figure 9) indicates reduced demographic and economic graduation gaps in the 5th year. This suggests that providing additional support to students who have not graduated after four years could help address persistent graduation rate gaps.



Conclusion

Between 2010 and 2016, the Alaska public neighborhood high school graduation rate paralleled the national upward trend. Graduation rates increased for all demographic groups, with growth most pronounced for Native students, students in low-income families, and those living in rural areas. Performance gaps between race and income subgroups, though still apparent, narrowed considerably. This report presents a descriptive analysis with no attempt to determine causes. We encourage further research to build a more comprehensive understanding of Alaska students, their demographic differences, unique needs, and the strategies and interventions that support their success.

Box 1. Alaska high school graduation requirements from 2010-11 to 2015-16*

	2010-2014	2014-2016
Coursework	Language Arts - 4 credits; Social Studies - 3 credits (including 0.5 in Alaska history); Science – 2 credits; Health/PE – 1 credit; Mathematics – 2 credits; Electives – 9 credits;	
Test	High School Graduation Qualifying Examination (HSGQE)	College- or Career-Ready Assessments (ACT, SAT, or WorkKeys) (<i>requirement removed, June 2016</i>).

*District requirements vary across the state and may exceed state-mandated core requirements.
 Source: Alaska Department of Education and Early Development, *Report to the Public (2010-11 to 2015-16)*

Box 2. What is a cohort? How is it used to calculate graduation rates?

The National Center for Education Statistics defines the Adjusted Cohort Graduation Rate (ACGR) as follows:

The ACGR was first collected for 2010-11. To calculate the ACGR*, states identify the “cohort” of first-time 9th graders in a particular school year, and adjust this number by adding any students who transfer into the cohort after 9th grade and subtracting any students who transfer out, emigrate to another country, or pass away. The ACGR is the percentage of the students in this cohort who graduate within four years. States calculate the ACGR for individual schools, districts, as well as for the state as a whole using detailed data that track each student over time. As an example, the ACGR formula for 2012-13 was calculated like below:

$$\frac{\text{Number of cohort members who earned a regular high school diploma by the end of 2012-13 school year}}{\text{Number of first time 9th graders in fall 2009 (starting cohort) PLUS students who transferred in MINUS students who transferred out, emigrated, or died during school years 2009-10, 2010-11, 2011-12 and 2012-13}}$$

***GED recipients are not included as graduates in the ACGR calculations**

Source: National Center for Education Statistics, *What is the difference between the ACGR and the AFGR?*
<https://nces.ed.gov/blogs/nces/post/what-is-the-difference-between-the-acgr-and-the-afgr>

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The authors are solely responsible for the content of this summary. Trang Tran is an ISER research professional, Alexandra Hill is associate director of ISER.