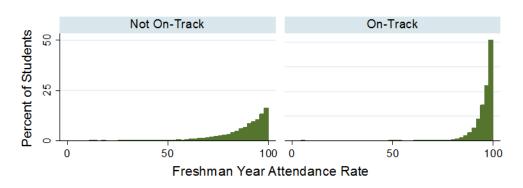
On-Track Status as a Predictor of Graduation

In 2013-14, the Oregon Department of Education (ODE) began collecting an indicator of on-track status for first-time freshmen, defined as the percent who had at least 25% of the credits needed to graduate with a regular diploma by the beginning of their sophomore year. In 2016-17, many of these students graduated, giving us our first opportunity to examine relationships between this indicator and graduation or completion.

Previous work has found a strong relationship between the on-track indicator and likelihood of dropout, performance on standardized assessments, and chronic absenteeism. In general, on-track students attend more of their enrolled days, an effect that begins in freshman year and persists for all four years of enrollment.



ODE collects attendance data only for students who are enrolled in standard instruction types, excluding attendance from alternative (usually part-time) enrollment and college coursework. As students progress through high school, some of them drop out and others transition into non-attendance enrollments, reducing the overall population for whom we have data in a non-random fashion. In 2013-14, we have both on-track and sufficient attendance data for about 43,000 students; by 2016-17, that population is down to about 35,000. Declines are also greater among the off-track population. In 2013-14, 77.6% of the students for whom attendance data was available were on-track; by 2016-17, that rate had increased to 83.8%, a result in part of the higher observed dropout rates for off-track students, as well as a substantially increased likelihood of placement into alternative programs in this group.

Students who were on-track to graduate by the end of their freshman year were more than twice as likely as students who were off-track to graduate within four years of entering high school. Less than half of students (48% of the adjusted cohort) who were not on-track at the end of their freshman year graduated or completed on time.

Contingency Table Rates

Not adjusted for demographics

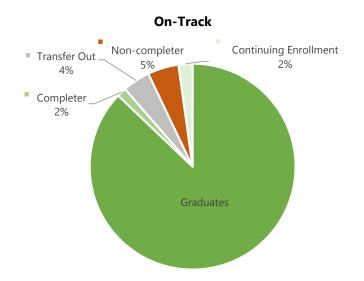
	On-Track		Not On-Track		Missing Status ¹	
	Grad. Rate (%)	% of Cohort	Grad. Rate (%)	% of Cohort	Grad. Rate (%)	% of Cohort
Freshman	91.07	69.45	40.12	20.11	51.05	10.44
	Regular Attenders		Chronically Absent		Missing Status	
	Grad. Rate (%)	% of Cohort	Grad. Rate (%)	% of Cohort	Grad. Rate (%)	% of Cohort
Freshman	86.40	73.15	50.65	14.18	49.46	12.68
Sophomore	89.19	68.18	57.67	19.48	37.31	12.34
Junior	91.80	61.17	68.52	24.64	25.44	14.19
Senior	93.78	50.62	81.79	30.28	23.09	19.10

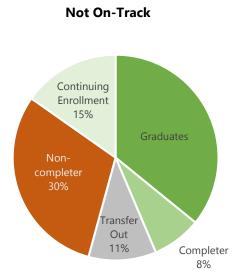
¹ Students who did not have sufficient standard enrollment in the given year to be included in the rate, including those not enrolled on May 1.

Adjusted for demographic factors, on-track status alone was associated with a more than doubled (137% increased) likelihood of graduation (rate ratio: 2.37, 95% CI: 2.20 – 2.55). Regular attendance in freshman year² was associated with a more than 50% increased likelihood of graduation in off-track students (rate ratio: 1.59, 95% CI: 1.48 – 1.71), and a nearly 3-fold (173%) increase in likelihood of graduation when in combination with on-track status (rate ratio: 2.73, 95% CI: 2.56 – 2.90).³

The predictive ability of regular attendance was strongest in freshman year, and decreased in later years, a trend that might be related to the <u>increased likelihood</u> that chronically absent students will drop out before their senior year, compared to regular attenders. By senior year, the difference between chronically absent students and regular attenders was just over 10 percentage points, but absenteeism rates overall were the highest of any grade level (30% of the cohort), as were the rates at which students were not included in the measure (nearly 20% of the cohort, due to alternative placements, college coursework, and/or lack of enrollment).

The most significant demographic effects seen were a 10% increase in graduation likelihood for students who were not economically disadvantaged in their freshman year, a 12% increase for students who were not receiving special education services, a 10% increase for students who were participating in a career and technical education program, and a 16% decrease for students who were homeless. Smaller and/or nonsignificant effects were observed for race/ethnicity, gender, and English learner status.





Completer: Student who earned a GED, Adult High School Diploma, or Extended Diploma Non-completer: Student who did not earn a credential or continue enrollment for a fifth year

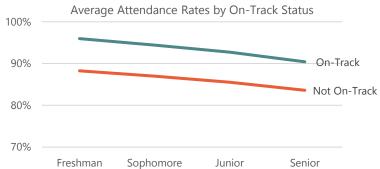
30% of the unadjusted cohort of off-track students were non-completers, meaning that they left high school without any credential, and had not returned for the beginning of a fifth year of enrollment. Off-track students were also substantially more likely to be removed from the adjusted cohort because of transfers out (11% of the unadjusted cohort, compared to 4% for on-track students). They were more likely to transfer to private or home school (34% of transfers, compared to

² Attending 90% or more of enrolled days.

³ Excluding 4,800 students without sufficient consistent freshman-year enrollment to generate both on-track and attendance data points. ODE plans to publish a data brief with more information on students with interrupted or mobile enrollment patterns.

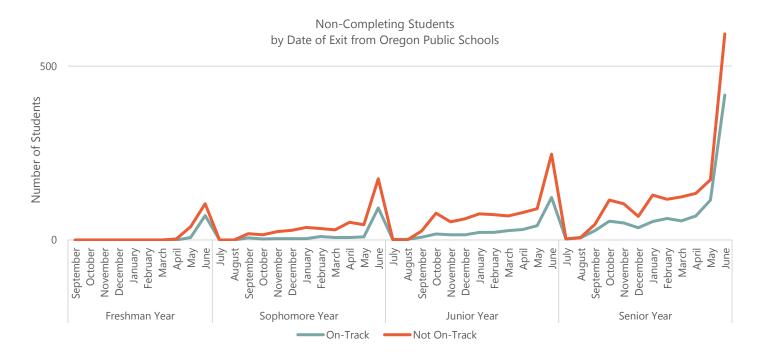
21% of on-track students), and less likely to move to another state or country (64% of transfers, compared to 77% of ontrack students).

On-track status was strongly predictive of attendance rates. After adjusting for relevant demographic factors, being on-track as a freshman was associated with a significant increase of about 7.4 percentage points in freshman year attendance rates, narrowing steadily in later years to a still-substantial 5.3 percentage point premium in senior year.



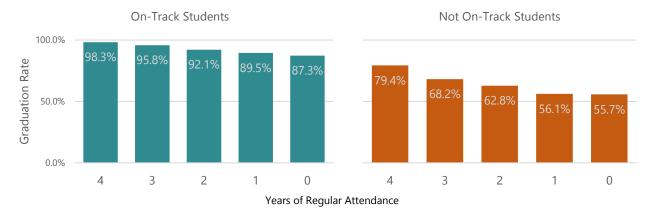
The marginal effect on attendance of being on-track in the freshman year was strongest for Hispanic and Native Hawaiian/Pacific Islander groups, although it declined for later years, as it did for all racial and ethnic groups.

Although off-track students were a minority of the adjusted cohort (about 20%), more than half of Oregon's non-completers were off-track as freshmen. Off-track students followed a similar enrollment and dropout pattern as has <u>previously been seen</u> in the cohort as a whole, with a majority of students remaining enrolled until their senior year, and a plurality remaining enrolled until *the end* of their senior year, before leaving school with no credential and not returning.



Of the 9,300 students in the cohort who were not on-track at the end of their freshman year, nearly half (4,500 students) had standard enrollment in all four years sufficient to determine chronic absenteeism status. For these students, regular attendance in all four years was correlated with increased likelihood of graduation. Students who were regular attenders in all four years were more than 10 percentage points more likely to graduate than students who had even one year of chronic absenteeism.

Students who were off-track, but remained steadily enrolled and regular attenders for all four years of high school graduated at a rate of 79%, slightly higher than the average for all students⁴. This measure is subject to some substantial selection bias relative to the cohort as a whole, but still indicates promising results for students who remain enrolled in standard instruction and keep showing up.



The difference in graduation rates based on on-track status varied slightly between student groups, but was high across the board. More than 80% of on-track students graduated on time in all student groups apart from students with

disabilities. On-track students in all groups graduated at more than twice the rate of off-track students, with the exception of Asian students (a group where more than 90% of students are on-track to begin with, and more than half of the small number of off-track students graduate on time).

Achievement gaps are also substantially reduced after considering on-track status. Ontrack Hispanic students graduate at a rate less than one percentage point lower than the rate for white students, while off-track Hispanic students are nearly five percentage points *more* likely than white students to graduate on time.

4-year Cohort Graduation Rates	On- track	Not On- track	Rate Ratio
Total	91.1%	40.1%	2.27
American Indian/Alaska Native	82.9%	30.5%	2.72
Asian	95.6%	59.7%	1.60
Black/African American	89.6%	39.9%	2.24
Hispanic/Latino	90.2%	43.4%	2.08
Multi-Racial	91.8%	38.5%	2.38
Native Hawaiian/Pacific Islander	92.3%	37.3%	2.47
White	91.1%	38.7%	2.35
Male	89.9%	38.2%	2.35
Female	92.2%	42.9%	2.15
Economically Disadvantaged	86.2%	37.3%	2.31
Students with Disabilities	78.9%	34.9%	2.26
English Learners	81.6%	38.6%	2.11

⁴ Excludes about 8,700 students, both on and off-track, with insufficient attendance to determine a chronic absenteeism status. These groups had low graduation rates overall, and include any students who withdrew prior to their senior year, as well as many students placed into alternative settings that do not report attendance data to ODE.