

ON TRACK OR FALLING BEHIND? HOW STATES INCLUDE MEASURES OF 9TH GRADE PERFORMANCE IN THEIR ESSA PLANS



When a student starts showing signs of struggling in high school – falling behind, failing classes, or missing school – are schools and teachers able to quickly identify these as early warning signs that the student could be at risk of dropping out? Do they have data systems that help them pinpoint these warning signals? Do they have a rapid response strategy in place to help kids before they lose too much ground in crucial high school years? For over a decade, researchers and policymakers alike have been making the case for Early Warning Systems (EWS) that can serve this very purpose.

The Every Student Succeeds Act (ESSA) provides states an opportunity to rethink their accountability and data systems, and states now have an opportunity to incorporate other measures of student achievement, including those that are traditionally part of state early warning systems. Some states have taken the lead in considering early warning systems as they have developed their ESSA plans, and are including on track to graduation as an accountability indicator. Another small group of states collects on-track data, and publicly reports it, but stops short of including it in the federal accountability system. This brief summarizes where states are in using these indicators and incorporating them into their new accountability systems.

A 9th grade on-track indicator

There is a growing body of research that suggests the first year of high school is a critical transition point for students. It also finds course-taking and successful completion of those courses in 9th grade to be valuable predictors of students' success in high school. The University of Chicago Consortium on School Research has deemed 9th grade the 'Make-it or Break-it Year.' Their research found students who attend school regularly and complete the required 9th grade credits are more likely to graduate high school than those who do not.¹ In developing early warning indicators for students who are at risk for dropping out of high school, the Everyone Graduates Center at Johns Hopkins University cites course performance as leading indicator of student engagement, or disengagement, alongside attendance and behavior.² Failure to complete required coursework or earning failing grades in 9th grade both signal that a student is at risk for dropping out and not graduating high school. Furthermore, research from Harvard University's Strategic Data Project (SDP) suggests that students who are off track at the end of 9th grade are more likely than their peers to be off

What indicators make an Early Warning System?

Researchers have identified two key categories of risk factors/ indicators for inclusion into Early Warning Systems:

Academic performance: Students who struggle in the classroom and fall behind academically are more likely to drop out. Low grades, low test scores, Fs in English and math, falling behind in course credits, and being held back one or more times all have been linked to lower chances for graduation.

Educational engagement: Students who become disengaged from school and develop disciplinary problems are more likely to drop out. High rates of absenteeism or truancy, poor classroom behavior, less participation in extracurricular activities, and bad relationships with teachers and peers all have been linked to lower chances for graduation.

¹ Allensworth, A.M. & Easton, J.Q. (2007). What Matters for Staying On-Track and Graduating in Chicago Public High Schools. Consortium on Chicago School Research at the University of Chicago. <https://consortium.uchicago.edu/publications/what-matters-staying-track-and-graduating-chicago-public-schools>

² Balfanz, R. & Fox, J.H. (2011). The Use of Early Warning Indicator and Intervention Systems to Build a Grad Nation. The Everyone Graduates Center at Johns Hopkins University. http://new.every1graduates.org/wp-content/uploads/2012/03/on_track_for_success.pdf

track at end of 10th grade.³ There is compelling research that states must consider including both indicators of academic performance and of educational engagement in their Early Warning Systems. This brief focuses on indicators of academic performance that signal whether a student is on track in 9th grade.

Achieve has long held that states must monitor if students in 9th grade are on track to graduate from high school based on timely credit accumulation.⁴ This information is critical because it allows for early identification of and intervention for struggling students. The specifics of how timely credit accumulation is defined vary widely across states and districts. In fact, less than a third of states have defined a statewide on-track indicator and collect/report data for it. Given that there is an undeniable body of research that has established the importance of monitoring and responding to this data, it is important that states develop a clear definition for what it means to be on track to earn a high school diploma in the state, and take steps to track and report this information in a timely and actionable way. In doing so, states must ask some key questions about whether students are on pace to succeed in high school:

- *Are students enrolling in, and completing, an adequate number of courses in high school?*
- *Are the courses students are taking aligned with the requirements for earning a high school diploma?*
- *How successful are students in the courses they have taken in 9th grade?*

Researchers and state education agencies alike have reached a consensus that answers to these questions provide actionable insights at the student level to the school community and parents, and can trigger timely interventions to help students graduate.

- A series of studies published by the University of Chicago Consortium on School Research⁵ has narrowed down the myriad factors contributing to dropping out to a single, manageable intervention point—the *9th grade transition*.
- In an earlier body of research, University of Chicago Consortium on School Research found that passing *all courses* in 9th grade is strongly associated with graduating. “Research shows that between 70 and 80 percent of students who fail (any course) in the first year will not graduate from high school.”⁶
- Harvard University’s Strategic Data Project suggests that students who are off track at the end of 9th grade are more likely fail to regain on-track status by the end of 10th grade than their peers.⁷
- A 2014-15 data analysis⁴ by the Oregon Department of Education showed that students who had not met the requirements for on-track status dropped out at a rate more than 16 times higher than their peers who had met the district credit requirements.

³ Strategic Data Project. (2012). Are students who are off track to graduate in the ninth grade able to get back on track?. Center for Education Policy Research at Harvard University. <https://sdp.cepr.harvard.edu/files/cepr-sdp/files/sdp-spi-v2-off-track-infographic.pdf>

⁴ Jerald, C.G. (2006). Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System. Achieve Inc. <https://www.achieve.org/publications/identifying-potential-dropouts-key-lessons-building-early-warning-data-system>. Achieve Inc. and The Education Trust. (2008). Measures that Matter: Making College and Career Readiness the Mission for High Schools: A Guide for State Policymakers. <https://www.achieve.org/publications/making-college-and-career-readiness-mission-high-school-guide-state-policy-makers>

⁵ Roderick, M., Kelley-Kemple T., Johnson, D.W. & Beechum, N.O. (2014). Preventable Failure: Improvements in Long-Term Outcomes When High Schools Focused on the Ninth Grade Year: Research Summary. Consortium on Chicago School Research at the University of Chicago. <https://consortium.uchicago.edu/publications/preventable-failure-improvements-long-term-outcomes-when-high-schools-focused-ninth>

⁶ Allensworth, A.M. & Easton, J.Q. (2005). The On-Track Indicator as a Predictor of High School Graduation. Consortium on Chicago School Research at the University of Chicago. <https://consortium.uchicago.edu/sites/default/files/publications/p78.pdf>

⁷ Strategic Data Project. (2012). Are students who are off track to graduate in the ninth grade able to get back on track? Center for Education Policy Research at Harvard University. <https://sdp.cepr.harvard.edu/files/cepr-sdp/files/sdp-spi-v2-off-track-memo.pdf>

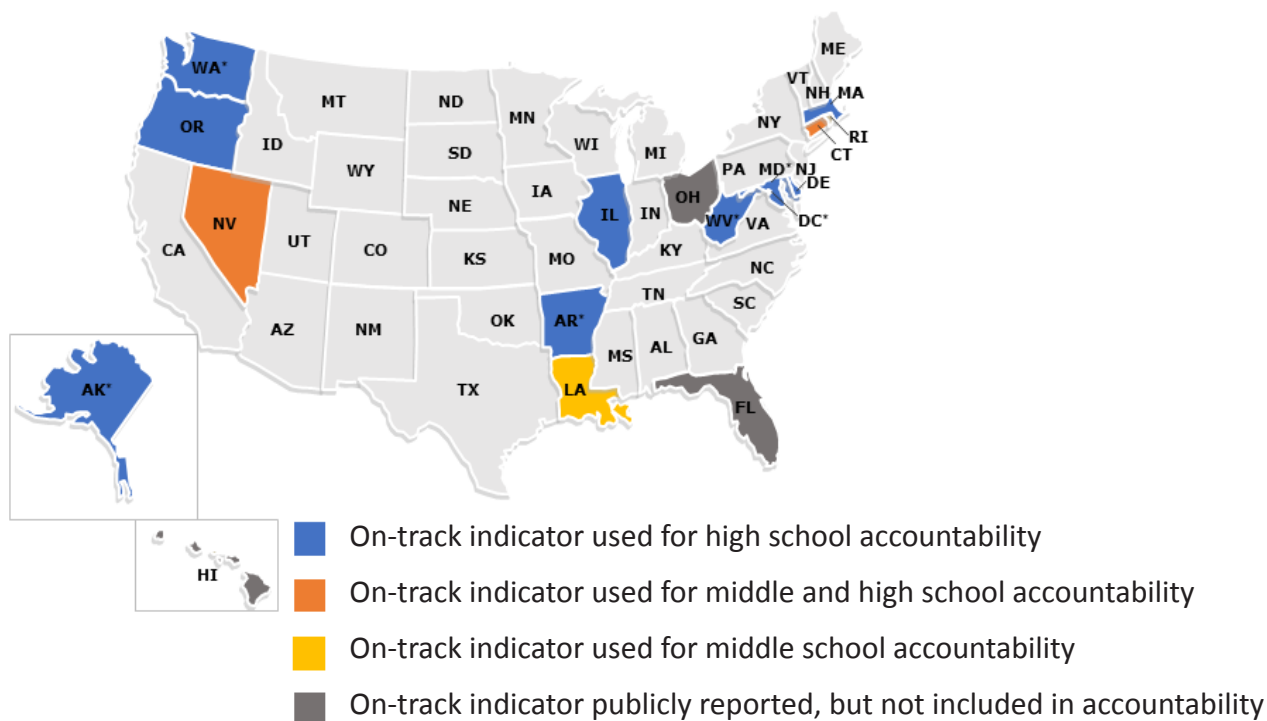
- According to the most recent data available in Massachusetts (2015)⁸, students that failed any courses in 9th grade were four times more likely to drop out of school than those students that did not.

State data and reporting systems should provide the right information to the right people at the right time, and include a continuum of college- and career-ready indicators to monitor students' progress over time. Including an on-track indicator grounded in credit accumulation provides a strong signal to schools about the importance of monitoring this data, identifying students who are at risk of dropping out, and designing and implementing timely interventions for these students.

Which states have included this indicator in their accountability and data systems?

In the fall of 2017, Achieve reviewed states' ESSA plans and found that some states are including an on-track indicator in their proposed accountability systems under ESSA. States including this indicator in their accountability and/or reporting systems are providing a strong signal to middle and high schools to focus on the 9th grade transition and keep students on a path to graduation.

How are states using the on-track indicator



* State includes on-track indicator for accountability, but does not publicly report this indicator

- Eleven states are including an on-track measure in their high school accountability system (AK, AR, CT, DE, IL, MD, MA, NV, OR, WA, and WV). Two of these states (CT, NV) are also including an on-track indicator in their middle school accountability system.
- Three states (FL, HI, and OH) publicly report the percentage of students who are on track to graduate, but do not include it as an accountability indicator.
- One additional state (LA) is including an on-track indicator only for middle school accountability.

⁸ Massachusetts Consolidated State Plan Under ESSA. (2017). Massachusetts Department of Elementary and Secondary Education. <http://www.doe.mass.edu/titlei/essa/state-plan.docx>

⁴Data Brief – Dropout Indicators. (2016). Oregon Department of Education. http://www.oregon.gov/ode/reports-and-data/Documents/databrief_ontrack_dropout.pdf

How are states including on-track indicators in accountability systems?

All states including an on-track measure are doing so in the School Quality or Student Success indicator. In each case, the on-track indicator is one of multiple measures of School Quality or Student Success. However, states have taken different approaches to how this indicator defined and how it is weighted in the overall accountability rating. Table 1 on page 6 provides details about how each state's indicator is defined and weighted.

How are states defining on-track indicators?

Achieve's review of states' ESSA plans showed that there is wide variation in how states are defining the on-track indicator. Timely credit accumulation remains the centerpiece of the definition for all states that are using this indicator. In 2012, the Harvard University's Strategic Data Project examined a sampling of on-track definitions in use by SDP partner districts and found a similar trend – while there were varying expectations for credit attainment and course grades, timely credit attainment remained the crux for each on-track indicator.

Since state and local high school diploma requirements will vary given each state's unique context, it only follows that what it means to be “on track” in 9th grade should align with the state's high school graduation requirements. States must give close consideration to this alignment when defining the on track indicator.

Achieve found that less than a third of the states have defined a statewide on-track indicator (See Table 1). States that have included it in their accountability systems do focus on credit attainment, but their definitions vary in terms of a) how many credits are required to be considered on track, b) how 9th grade “success” is defined, and c) what core subjects are included. Definitions primarily fall into the following categories.

- **On track based on number of credits:** The majority of states including an on-track indicator in their accountability systems specify how many credits students must earn to demonstrate that they are on track to graduate. For example, Oregon expects students to earn at least a quarter of their required graduation credits in 9th grade to be considered on track. Arkansas applies interesting variation of this approach by defining timely credit accumulation not only in 9th grade, but through the first three years of high school. Schools receive points for students who continue on a trajectory of high school credit accumulation in grades 9-11. Ten of the 12 states including this indicator (AK, AR, CT, DE, IL, LA, MD, NV, OR, and WV) consider the number of credits accumulated.
- **On track based on 9th grade success:** Some states do not specify how many credits a student must earn; rather, they base their indicators on success in 9th grade coursework. For example, in Illinois, the on-track indicator includes students earning at least five full-year course credits and no more than one semester F in a core course in their first year of high school. This indicator in Illinois aligns with the research put forth by the Consortium on Chicago School Research that suggests that failing grades in high school are among the top four high school risk factors, alongside attendance, GPA, and credits earned. Three states, (IL, MA, and WA), account for 9th grade success in their on-track indicator.
- **Considering core subjects to define on track:** Some states also specify in which subjects students must earn credits to satisfy the requirements for this indicator. This helps ensure that students remain on track with the graduation requirements in core content areas in their freshman year and establishes a strong coursework foundation even as they begin high school. Alaska, for example, bases its on-track indicator on the percentage of first-time 9th graders who earn at least five credits by the end of their first year in high school with at least four credits from the content areas of language arts, social studies, mathematics, or science. Five states, (AK, DE, MD, and NV), specify which subjects students must earn credit in to satisfy this indicator.

Public reporting of the on-track indicator

In 2016, Achieve reported that nine states were publicly reporting on-track data. All but two of these states have built the on-track measure into their ESSA plans. Additionally, Florida, Hawaii, and Ohio have reported student outcomes data outside of the state's formal accountability system. States should monitor and report the percentage of students who are on track to graduate based on the number of credits earned by the end of a particular grade and disaggregate these data by subgroup.

Recommendations and action steps for states

Early warning indicators need to be at the heart of a systemic approach for continuous improvement of graduation rates. As states are redesigning systems under ESSA, they have a real opportunity for just this kind of systemic change, and to develop high-quality systems and reevaluate the indicators they are monitoring. States should create systems that allow for longitudinal data collection, analysis, and public reporting for all key indicators they are including in their accountability systems and/or publicly reporting.

To operationalize the on-track indicator, states should consider the following:

- **Provide support for local development of Early Warning Systems:**
 - Early warning indicator data originates at, and often resides at the school and district level. This data is also most impactful when used to spur timely interventions at the local level. In fact, a 2014 report by the Chicago Consortium showed that 9th grade on-track rates improved most when schools acted on real time data about student absences and course performance.⁹ States must recognize this potential for local action and provide financial and technical support to local districts to implement high functioning data and reporting systems that provide school and district personnel with real time access to key early warning indicators such as on-track measures. States should also support the professional and leadership development of educators and school leaders, and consider creating and supporting networks of districts to promote the optimal use of early warning indicators.
- **Goal setting and monitoring:**
 - States should set meaningful and ambitious goals about how many students will remain on track to graduate in 9th grade. States should be mindful of how their goals for the 9th grade on-track indicator with align with their high school graduation goals.
 - States should develop processes to routinely monitor their early warning indicators, and assess progress against the statewide goals for the on-track indicator.
- **Developing a high-quality Early Warning System:**
 - States should establish a high functioning and easily accessible EWS that includes a comprehensive set of early warning indicators including credit accumulation and course completion in 9th grade, and course performance in middle grades.
 - Indicators in the EWS should use an appropriate denominator that is inclusive of all students. For high schools, this should include all students in 9th grade, and for middle schools it should include all enrolled students in a particular grade.
 - Core coursework completion must be a key component of the on-track indicator. Completing core course content should account for and encourage a college- and career-ready course of study that includes at least four years of English and three years of mathematics.

⁹ Roderick, M., Kelley-Kemple T., Johnson, D.W. & Beechum, N.O. (2014). Preventable Failure: Improvements in Long-Term Outcomes When High Schools Focused on the Ninth Grade Year: Research Summary. Consortium on Chicago School Research at the University of Chicago. <https://www.cityofchicago.org/content/dam/city/depts/mayor/Press%20Room/Press%20Releases/2014/April/04.24.14Preventablefailure.pdf>

- **Timely and Impactful Reporting:**

- Schools and districts should have easy, real-time access to early warning indicators, so teachers, school counselors, and the school community can efficiently track student data and provide timely interventions to struggling students.
- States should publicly report this data in an easily accessible, consistent, and transparent manner. States should consider including it in the state report card system.
- States' reporting must include all students and must be disaggregated by subgroup, including, at a minimum, economically disadvantaged students, students from each major racial and ethnic group, students with disabilities, and English learners.

Table 1: Summary Table: States' On-Track Definitions

State	On-Track Definition	Accountability Weight
Alaska	Percentage of first-time 9th graders who earn at least five credits by the end of their first year in high school with at least four credits from the content areas of language arts, social studies, mathematics, or science.	5%
Arkansas	On-time Credits Grades 9 -11 a. Grade 9 completed ≥ 5.5 credits = 1.0 Point b. Grade 10 completed ≥ 11.0 credits = 1.0 Point c. Grade 11 completed ≥ 16.5 credits = 1.0 Point	15%
Connecticut	Percentage of 9th graders earning at least five full-year credits in the year.	50/1550 points
Delaware	Percentage of 9th graders earning a total of four or more credits in at least four of the following subjects: ELA, mathematics, science, social studies, world languages.	Weighting of measures included in the school quality or student success indicator is not specified.
Illinois	Students earning at least five full-year course credits and no more than one semester F in a core course in their first year of high school.	6.25%
Maryland	Percentage of 9th graders earning at least four credits in any of: mathematics, English language arts, science, social studies, and/or world language	10%
Massachusetts	Success in grade 9 courses	Weighting of measures included in the school quality or student success indicator is not specified.
Nevada	Percentage of students who are credit sufficient by the end of 9th and 10th grade based on the number of 9th grade students who earned at least five credits by the end of their first year of high school and the number of tenth grade students who have earned at least eleven credits by the end of their second year of high school.	5%
Oregon	Percentage of first-time 9th graders who earn at least $\frac{1}{4}$ of their required graduation credits at the end of their first year in high school.	1/9 points

State	On-Track Definition	Accountability Weight
Washington	Percentage of 9th graders who passed all credits they attempted. Students who attain full credit on courses they attempt in 9th grade are considered “on track”.	Weighting of measures included in the school quality or student success indicator is not specified.
West Virginia	<p>This indicator measure applies represents all grade 10 students on track for completing requirements for high school graduation (24 credits) by the following:</p> <ul style="list-style-type: none"> a. Earning at least twelve (12) credits cumulatively across their respective grade 9 and grade 10 years; and b. Earning at least two (2) credits each in the four primary content areas (English, mathematics, science, and social studies) across their respective grade 9 and grade 10 years. 	12.5%
Included in Middle School Accountability		
Connecticut	Percentage of 9th graders earning at least five full-year credits in the year.	50/1000 points
Louisiana	The Dropout/credit accumulation index measures credit accumulation through the end of 9th grade year (used to measure 8th grade schools). It is based on Carnegie credits earned by the end of 9th grade.	5%
Nevada	<p>Percentage of students meeting high school readiness based on the number of students at the end of grade 8 earning at least the following units of credit during the seventh and eighth grades for promotion to high school:</p> <ul style="list-style-type: none"> a. One and one-half units of credit in English with a passing grade; b. One and one-half units of credit in mathematics with a passing grade; c. One unit of credit in science with a passing grade; and d. One unit of credit in social studies with a passing grade. 	3%