



How States Can Encourage Economic Mobility by Improving How They Measure College and Career Readiness

A Summary of Current Measurement Challenges and How to Solve Them

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States heavily invest in education budgets for good reason.¹ Ensuring high-quality education is part of a state's commitment to a robust economy, thriving communities, and civic well-being. The current emphasis on state and local authority in federal education policy conversations underscores the critical role states play in shaping strong education policy. To fulfill this charge, states must ensure all students have opportunities that add value to their trajectories and are able to build the skills needed to find and seize those opportunities.² Although state education leaders use college and career metrics for state accountability purposes, governors and state legislators will likely benefit from a clearer view of high schoolers' readiness to succeed as workers, taxpayers, and community members. An evidence-based and comprehensive set of indicators—what we dub the State Student Readiness Index—could allow them to better understand the outcomes of the state's investment in PK–12 education, set goals and priorities, and make and monitor strategic policy choices and investments.

States have worked hard to establish clear sets of college and career indicators used for accountability and school improvement that they can build from (Hyslop 2025). But relying on school accountability metrics is insufficient to inform governors' and state legislators' budgeting and planning, their efforts to improve alignment between PK–12 education, workforce and economic development, and postsecondary education, and their ability to evaluate how investments are boosting students' economic mobility in adulthood. By refining and using new metrics and data, state leaders gain a more forward-looking perspective and stronger insights into how the choices of interventions and resource allocations they make earlier in PK–12 education and youth have long-term benefits to their state's populace.

To know whether a state's high school students are ready to contribute to thriving economies and communities, policymakers need to track measures that are linked to adult success, update their data systems to easily monitor these data points, and adopt more skill-based measures and data collections

as the field develops those. This is not an overnight process, and we break our guidance into steps that states can jump into depending on what education-to-workforce data they have.

Drawing from a review of a 50-state scan of the college and career readiness measures used in education accountability systems as well as a review of the evidence connecting those measures to long-term outcomes, this summary provides actionable steps state leaders can take toward a State Student Readiness Index. The index will complement existing resources by honing in on some indicators of foundational tools such as the Education-to-Workforce Indicator Framework and leveraging the current readiness of states for new data collections from the State Opportunity Index.³ In the short term, governors can ensure they are monitoring the key measures that evidence says are most predictive of future success. States can also implement targeted policies and investments that are known to improve these metrics. In the long term, states can improve their data systems to directly measure students' long-term success. Additionally, as the education research and development field continues to develop new skill-based measures that are both predictive of adult success and more informative for designing education programming, policy, interventions, and investments, states can monitor those, too, including them in a State Student Readiness Index.

First, we provide a short list of college and career readiness measures that are collected in most states, which are linked to positive adult outcomes, and can be nearly immediately monitored to guide targeted investments. We also provide policy recommendations related to these metrics. We provide reminders about how these metrics can be interpreted. Next, we push states to improve their data systems to be able to monitor actual student outcomes in adulthood—strengthening states' confidence in the link between these measures and adult outcomes, allowing states to be more specific based on their economies, and allowing research partners to study the impact of youth and education interventions. Finally, we note current work in the field to develop metrics that are more comprehensive and skill-based. Together, these are steps state policymakers can take in the short and long term to improve their ability to monitor students' readiness for adult success and ensure today's students have the skills they need to thrive as future workers, taxpayers, and community members.

BOX 1

Key Highlights

- Governors, legislators, and other state leaders need a clearer view of high schoolers' readiness to succeed as workers, taxpayers, and community members—what we dub the State Student Readiness Index—to be able to monitor, plan, and set goals for their students.
- State and local education budgets are among the largest and most direct investments in a thriving citizenry. With a more informed view about the readiness of a state's students for adult success, a state can make targeted investments and upstream improvements designed for immediate tracking and to ensure a healthy economy and flourishing communities.
- In the short term, governors can ensure they are using evidence-based college and career readiness measures, and governors and state legislators can use available data to monitor key measures that are most predictive of future success. States can also implement targeted policies and investments that are known to improve these metrics and the experiences they capture.

- In the long term, states can improve their data systems to directly measure students' long-term success and earlier education innovations. As the education research and development field continues to develop additional skill-based measures that are predictive of adult success, states can monitor those, too, including them in a State Student Readiness Index.

Immediate Steps toward a State Student Readiness Index

Ensure Education and Workforce Agencies Analyze Metrics That Are Proven Indicators of Students' Long-Term Success

We first focus on research-backed metrics associated with improved postsecondary outcomes or adult wages. This is intentional to give state leaders a view into how students will thrive after high school. Seven categories of measures that are more strongly linked to higher education enrollment and attainment as well as employment and earnings are below (Blagg 2025).

- enrollment in Advanced Placement (AP) or International Baccalaureate (IB) classes
- academic early college or dual enrollment participation
- career and technical education (CTE) pathway completion or dual enrollment
- industry-recognized credential or dual enrollment CTE credential
- military enlistment
- mandatory ACT or SAT testing
- mandatory Free Application for Federal Student Aid (FAFSA) completion

While these metrics are all positively associated with higher education and better employment outcomes, it is important to interpret these findings with nuance. First, for any given category of measure, the strength of its association with the different types of long-term outcomes is not the same across the board. For instance, early college or dual enrollment participation is positively associated with all three outcomes, but effects are relatively larger, compared with other metrics, on higher education enrollment and completion than on employment and earnings. Second, some of these metrics represent a wide range of student experiences, and evidence of long-term effects for one implementation of a given metric might not translate into evidence for implementation in a different context. For example, there are innumerable industry-recognized credentials, which might vary from a truly desired credential by industry to a brief skill-based course and exam that has unclear bearing in the market. Third, the positive relationship between these metrics is not the same for every type of student. As an example, girls disproportionately enroll in traditionally low-earning CTE pathways (Carruthers et al. 2025). Finally, not all high school students will have access to all these opportunities based on their school design. For instance, students at one high school might gain college credit through

dual enrollment at a nearby community college, while students farther from local college options might take AP courses and exams to gain college credit.

Even with these caveats, states have an opportunity to carefully examine these metrics to start understanding whether students are on track for mobility-boosting outcomes and can most responsibly do so by building school-, district-, and state-level metrics from student-level data. Because states already collect data on most measures tied to adult success in their high school accountability indicators, we believe state leaders can prioritize the following recommendations in the short term to understand the readiness of their high school students, set goals and priorities, and make strategic policy choices and investments.⁴

To make the most of the data they already collect, **governors and state legislators can work with their state education and workforce agencies to do the following:**

- Use individual-level data from state education data systems to track the metrics that are associated with postsecondary success and are aligned with the state's goals. Research-backed measures include enrollment in AP or IB classes, early college or dual enrollment participation, CTE pathway completion, an industry-recognized credential or other CTE credential, and military enlistment (Blagg 2025). Also, track the implementation of evidence-based policies—mandatory FAFSA completion and mandatory SAT or ACT testing at the school or district level.
- Add granularity in the data and analysis of CTE pathways and industry-recognized credentials to acknowledge the wide range of programs offered and the associated breadth of long-term outcomes (Ecton and Dougherty 2022).
- Increase understanding of the degree to which all students have access to pathways and credentials by disaggregating each metric by students' family income, gender, race, English language status, and disability status.⁵
- Ensure indicators are contextualized with other evidence-based metrics known to promote positive long-term outcomes, such as district-level per pupil student funding, availability of advanced coursework, condition of school facilities, and proximity to community and technical colleges (Acton et al. 2024; Blagg, Terrones, and Nelson 2023; Jackson and Mackevicius 2021).⁶
- Build metrics into public-facing State Student Readiness Index dashboards at the school, district, and state levels, ensuring student privacy is maintained. Set goals and embed those into the State Student Readiness Index dashboards, similar to the Indiana Graduates Prepared to Succeed dashboard.⁷
- Analyze the relationships between these metrics and economic self-sufficiency measures using state data, forge research-practice partnerships to identify and better understand schools that appear to be performing better or worse than expected in these relationships (e.g., school-based value-add), and carry out research to understand local policies and practices that appear to be differentially successful (Mbekeani et al. 2023).

Make Targeted Investments to Improve Access to the Experiences Underlying Key Metrics Linked to Adult Success

Governors, state legislators, and state education agencies can make targeted investments using evidence-based strategies to improve access to the experiences captured by leading metrics:

- Support access to college entrance exams such as the ACT or SAT by, for example, administering the tests on-site during the school day.
- Invest in supports for students to apply for state and federal financial aid for college, such as providing training for guidance counselors and supporting schools and community-based organizations in tracking FAFSA applications.⁸
- Ensure that students who are enrolled in AP or IB courses can take the corresponding exams through supports such as fee waivers and improved professional development for AP instructors (Bloem et al. 2023).
- Explore opportunities for additional partnerships with local community colleges, public technical schools, and local employers to provide access to coursework that prepares students for college and career, and subsidize tuition, fees, and other costs for low-income students.
- Invest in statewide credit transfer policies to ensure that AP and IB exams and dual enrollment credits transfer to higher education and are accepted for nonelective credit.

Ensure Integrated Data Systems Allow States to See the Progress They Invest In

By using linked data across PK–12 and postsecondary and workforce systems, states can go beyond the metrics collected above to make the data more specific to their states, see long-term student outcomes, and monitor the impact of upstream innovations and investments on high school students and adult outcomes. States are on a continuum of development and can jump to the steps they have not already accomplished.⁹ **Governors, state legislators, and state education agencies can do the following:**

- Link each high school readiness measure to wage and postsecondary education outcomes to directly see long-term outcomes and be able to disaggregate the metrics and outcomes.
- Create clear and transparent dashboards that include information about each offered CTE pathway's average wages at 5 and 10 years after high school for students with a high school diploma only, a two-year degree, a four-year degree, or a graduate degree.
- Strengthen definitions and data systems to capture the range of work-based learning experiences, so that researchers can strengthen the evidence base on these topics.¹⁰
- Create clearer definitions for industry-recognized credentials that prize ones that boost mobility (Sigelman et al. 2025).
- Strengthen unemployment insurance data systems to include Standard Occupational Classification codes so states can gather more information from the wage numbers often used

as outcomes (Data Quality Campaign 2025). Do wages come from a full-time job? Is the person working in a high-cost area? Are they in a job with a pathway toward higher wages?

- Ensure integrated data systems include not only postsecondary enrollment, persistence, and degree information but nondegree credentials, such as employer-aligned certificates built to support local industries in partnerships with a state's technical college system.¹¹ These data are already collected, and the credentials are a high priority for states' economic development purposes but are not included as part of a state's education strategy and cannot be used to measure students' pathways into adulthood.
- Partner with the state's revenue agency to allow for state-level data sharing of tax data for a more comprehensive view of adult economic success for more people and across more dimensions (e.g., marital status, household size, and asset profiles). Or partner with the Internal Revenue Service and Census Bureau to also be able to track the outcomes of those who work out of state, are in the gig economy, or are enlisted in the military.¹² Alternatively, work through multistate collaboratives to understand out-of-state employment.¹³
- Ensure research partners can use these data to ensure upstream innovations, and ensure targeted investments have the intended effects.

Longer Term, Move toward Metrics That Capture the Skills Students Need to Thrive

While the seven categories of metrics we identify above are predictive of long-term success and therefore useful for accountability purposes, their usefulness for other planning, investment, and alignment purposes is limited because they tend to be blunt markers and not measures of students' specific abilities. They are necessary but not sufficient. Many of the skills employers, students, parents, and educators agree are needed—such as analytical and critical thinking, clear communication, the ability to work collaboratively, problem solving, adapting, and self-awareness—are not currently measured at scale, if at all.¹⁴ Even within frequently assessed areas, such as mathematics, we do not yet know if certain skills are more key to success than others. Furthermore, popular activities such as youth apprenticeships and work-based learning need a stronger evidence base to strengthen our understanding of how these relate to long-term outcomes. Yet, these metrics could be important for state leaders, such as governors and legislators, to understand as they seek to build systems that support all students on a pathway to lifelong success. Better understanding the skills that drive success could also be incredibly important as governors make hard decisions about the use of interventions and investments.

The Student Upward Mobility Initiative is working to fill this gap. Our mission is to support students' economic mobility by establishing a set of skills and competencies in PK–12 education—across academic achievement, “noncognitive” factors, health and well-being, social capital, and career preparation—that educators and policymakers can use to shape practices, programs, interventions, and broader systems change. And we are not alone. Other efforts, such as Skills for the Future, are also

working to build new measures of skills. The research and development in progress will fill the key gaps in the State Student Readiness Index. As new, scalable measures are developed, we encourage states to adopt and track these. For example, Student Upward Mobility Initiative initial grantees are already determining whether commonly collected data (e.g., subscores and item-level data from summative assessments and CTE assessment scores) can provide skills-based insights that are even stronger predictors of adult outcomes.¹⁵ They are also investigating whether already-collected education data can be used to measure important measures of future success, such as students' social networks and their critical thinking skills. We will keep the field informed as we learn about these new measures, and we encourage states to begin tracking these new metrics and add them into the State Student Readiness Index.

Encourage Research Partnerships to Continue Improving the State Student Readiness Index

State policymakers can also encourage the continued evolution of the State Student Readiness Index to ensure they know how ready their students are for success. In the future, **state leaders can do the following:**

- Direct state education and workforce agencies to revise prioritized metrics based on the latest research. Consider using measures that tell us something about skills in lieu of or in addition to experiential and credential-based measures where they are stronger or allow for more direct intervention.
- Identify opportunities to engage in research-practice-policy partnerships that facilitate the development of measures that are scalable and useful for policymaking purposes, such as the Student Upward Mobility Initiative grant opportunities.
- Encourage the federal government to continue to fully fund and administer benchmarked high school exams, such as the 12th-grade NAEP, the long-term NAEP for 17-year-olds, and the Program for International Student Assessment. State policymakers who are particularly interested in their progress relative to other states and across time could consider supporting state-level estimates of 12th-grade NAEP and increased frequency of administration to produce results at the state and national levels (Blagg and Chingos 2016).
- Ensure data system updates integrate updated technology that allows for enhanced privacy protections and more cost-effective data sharing and additions to accommodate new skill-based data collections.

BOX 2

About the Student Upward Mobility Initiative

At the Student Upward Mobility Initiative,^a our mission is to support students' economic mobility by establishing a set of skills and competencies in PK–12 education—across academic achievement, “noncognitive” factors, health and well-being, social capital, and career preparation—that educators and policymakers can use to shape practices, programs, interventions, and broader systems change.

^a See the Student Upward Mobility Initiative website at <https://studentupwardmobility.urban.org/>.

Notes

- ¹ “State and Local Expenditures,” Urban Institute, accessed June 16, 2025, <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/state-and-local-expenditures>.
- ² See “Introducing the Commission on Purposeful Pathways,” Education First blog, March 5, 2025, <https://www.education-first.com/insights/our-blog/introducing-the-commission-on-purposeful-pathways/>; “Upward Mobility Framework,” Urban Institute, accessed June 16, 2025, <https://upward-mobility.urban.org/framework>; and the Student Upward Mobility Initiative website at <https://studentupwardmobility.urban.org/>.
- ³ See the website for the Education-to-Workforce Indicator Framework at <https://educationtoworkforce.org/>; and “State Opportunity Index: Measuring How States Are Connecting Education with Opportunity,” Strada, accessed June 16, 2025, <https://www.strada.org/state-opportunity-index>.
- ⁴ For example, some states' college and career readiness accountability indicators capture these metrics.
- ⁵ Where states already have state longitudinal data systems that allow for linked data, we encourage disaggregating at both the K–12 metric level and the adult outcome (wages) levels. But for states that do not yet have these linked data, we still encourage disaggregation at the K–12 metric level.
- ⁶ See also Ileana Najarro and Gina Tomko, “Equitable Access to AP Courses: How Each State Is Doing,” Education Week, August 22, 2024, <https://www.edweek.org/leadership/equitable-access-to-ap-courses-how-each-state-is-doing/2024/08>.
- ⁷ See the website for Indiana Graduates Prepared to Succeed dashboard at <https://indianagps.doe.in.gov/#skipOverview>.
- ⁸ “Universal FAFSA Completion with Supports,” National College Attainment Network, accessed June 16, 2025, <https://www.ncan.org/page/UniversalFAFSA>.
- ⁹ “State Opportunity Index,” Strada.
- ¹⁰ “Work-Based Learning,” Michigan Department of Education, accessed July 10, 2025, <https://www.michigan.gov/mde/services/octe/educators/work-based-learning>.
- ¹¹ Lauren Bloomquist, “Data Drives Effective Use of Nondegree Credentials,” Education Commission of the States blog, March 26, 2025, <https://www.ecs.org/data-driving-effective-nondegree-credentials/>.
- ¹² “State Data Center,” Portland State University, Population Research Center, accessed July 10, 2025, <https://www.pdx.edu/population-research/state-data-center>.
- ¹³ “Multi-State Data Collaboratives,” Coleridge Initiative, accessed July 10, 2025, <https://coleridgeinitiative.org/multi-state-data-collaboratives>.

¹⁴ Fanny Terrones and Maggie Reeves, “Creating New and Better Ways to Measure the ‘Soft Skills’ Students Need to Succeed,” Student Upward Mobility Initiative blog, March 21, 2025, <https://studentupwardmobility.urban.org/student-upward-mobility-in-focus/creating-new-and-better-ways-measure-soft-skills-students-need>.

¹⁵ “Current Grants,” Student Upward Mobility Initiative, accessed June 16, 2025, <https://studentupwardmobility.urban.org/current-grants>.

References

- Acton, Riley, Kalena E. Cortes, Lois Miller, and Camila Morales. 2024. *Distance to Degrees: How College Proximity Shapes Students' Enrollment Choices and Attainment across Race-Ethnicity and Socioeconomic Status*. Working Paper 24-1057. Providence, RI: Annenberg Institute for School Reform at Brown University.
- Blagg, Kristin. 2025. *Which College and Career Readiness Standards Best Align with Positive Outcomes after High School?* Washington, DC: Urban Institute.
- Blagg, Kristin, and Matthew M. Chingos. 2016. *Varsity Blues: Are High School Students Being Left Behind?* Washington, DC: Urban Institute.
- Blagg, Kristin, Fanny Terrones, and Victoria Nelson. 2023. *Assessing the National Landscape of Capital Expenditures for Public School Districts*. Washington, DC: Urban Institute.
- Bloem, Michael D., Thomas Goldring, Monica Mogollon Plazas, and Jonathan Smith. 2023. “Opportunities to Improve the Pipeline of Students into and through Advanced Placement.” Atlanta: Georgia State University, Georgia Policy Labs.
- Carruthers, Celeste K., Shaun Dougherty, Thomas Goldring, Daniel Kreisman, Roddy Theobald, Carly Urban, and Jesús Villero. 2025. *Who Takes High-Earning CTE Pathways?* Working paper. Atlanta: Georgia State University, Georgia Policy Labs.
- Data Quality Campaign. 2025. “Enhancing Unemployment Insurance Wage Data to Better Understand Education and Employment Outcomes.” Washington, DC: Data Quality Campaign.
- Ecton, Walter G., and Shaun M. Dougherty. 2022. “Heterogeneity in High School Career and Technical Education Outcomes.” *Educational Evaluation and Policy Analysis* 45 (1): 157–81. <https://doi.org/10.3102/01623737221103842>.
- Hyslop, Anne. 2025. *Let's Measure Ready: A 50-State Analysis of College, Career, Military, and Civic Readiness Indicators*. Washington, DC: Urban Institute.
- Jackson, C. Kirabo, and Claire Mackevicius. 2021. *The Distribution of School Spending Impacts*. Working Paper 28517. Cambridge, MA: National Bureau of Economic Research.
- Mbekeani, Preeya P., John Papay, Ann Mantil, and Richard J. Murnane. 2023. *Understanding High Schools' Effects on Longer-Term Outcomes*. Working Paper 23-729. Providence, RI: Annenberg Institute for School Reform at Brown University.
- Sigelman, Matt, Mark Schneider, Shrinidhi Rao, Scott Spitze, and Debbie Wasden. 2025. “Holding New Credentials Accountable for Outcomes: We Need Evidence-Based Funding Models.” Washington, DC: American Enterprise Institute.

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