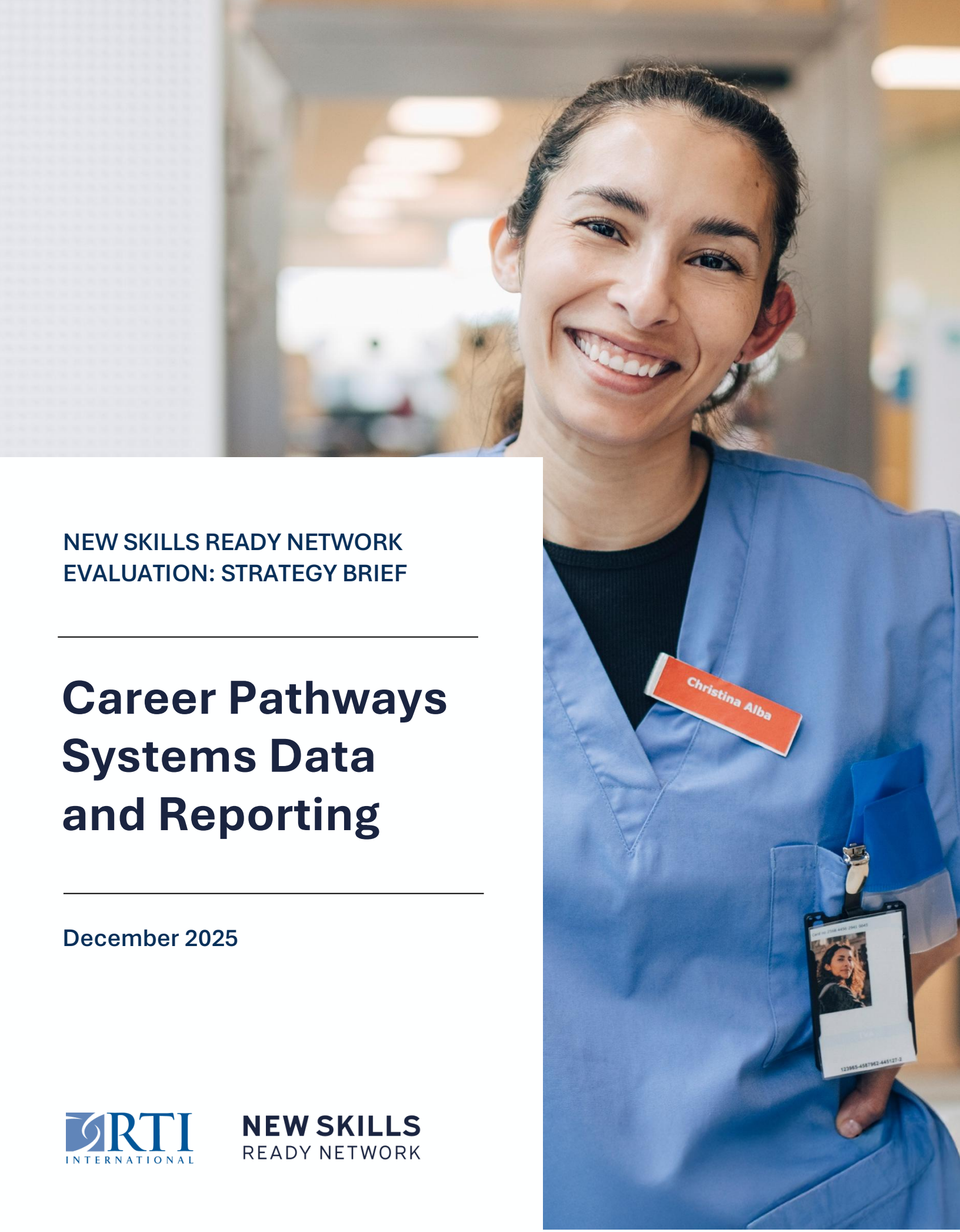

NEW SKILLS READY NETWORK EVALUATION: STRATEGY BRIEF

Career Pathways Systems Data and Reporting

December 2025

RTI INTERNATIONAL

NEW SKILLS READY NETWORK

Tracking students' career pathways experiences and outcomes requires data systems that are aligned across education institutions, state agencies, and partners. Data from these organizations played multiple roles in the *New Skills Ready Network* (NSrn) initiative. First, the NSrn sites reported data on a set of career pathways metrics annually in their initiative reports to JPMorgan Chase. Second, site teams collaboratively reviewed data on career pathways students and programs to identify areas in need of improvement and assess progress. Finally, site teams served as advisors for data systems development, identifying data needs and supporting efforts in their regions and states to align data systems to better track students' pathways outcomes.

New data system capacities would have required investments of time and resources that were beyond the scope of NSrn; however, during the initiative, the sites built on existing data systems to identify data needs and to formulate a more collaborative and purposeful data culture around career pathways. This involved developing trust among state agencies and local partners to improve data access, quality, and sharing, as well as collecting more consistent and timely data on relevant system and student metrics. By making these shifts, the sites laid the groundwork for the strategic use of data to strengthen and expand career pathways opportunities for their students.

This brief provides examples of the changes sites made to their data systems during the initiative, followed by a review of the NSrn metric data that sites reported annually to JPMorgan Chase.

About the NSrn Evaluation

From 2020 to 2025, JPMorganChase supported the *New Skills Ready Network* initiative, led by the Education Strategy Group and Advance CTE. RTI International conducted a mixed-methods evaluation of NSrn to examine changes in career pathways system policies, practices, and student experiences in the six participating U.S. metro areas. The six sites were: Boston, MA; Columbus, OH; Dallas, TX; Denver, Co; Indianapolis, IN; and Nashville, TN.

About the NSrn Briefs

This brief is part of a collection of briefs that highlight findings and examples from the NSrn sites. Five other briefs focus on the following key strategies for systems change that were identified by the evaluation:

- Deepening collaboration
- Designing pathways using a systems perspective
- Strengthening pathway navigation and transitions
- Improving equity and the learner experience
- Amplifying and influencing state policy

These briefs are housed on the **NSrn evaluation website**.

Site Examples

The following are examples of how sites implemented several strategies to enable more relevant and agile reporting on key system and student pathways metrics:

Cultivated data culture through partnerships. Across sites, the initiative brought together diverse perspectives and cross-functional teams to develop and implement shared data governance. In Denver, the team built relationships with multiple state agencies engaged in the collection of pathways-relevant data, including the state's Workforce Development Council, Department of Higher Education, and Community College System. As a result of the team's efforts, members were tapped for their technical expertise to help guide the development and implementation of the newly legislated state longitudinal data system.

Strengthened data systems to inform pathways development. NSrn sites identified inconsistencies across education levels in defining and reporting on pathways metrics and data needs, so they took steps to improve data alignment and comprehensiveness. The Nashville team, for example, built a Power BI report that provided detailed information on students' higher education retention and completion by high school and created a common pathways data experience among schools. The report included dual credit and industry certification metrics to encourage schools to make these opportunities available to all pathways students. The effort to harmonize and analyze previously untapped data sources yielded data disaggregated by pathway and school that could support pathway decision-making.

Advanced data sharing across partners. Several sites noted that the separate data systems maintained by each secondary and postsecondary education partner presented a challenge to data sharing and use. For the Boston team, for example, the lack of a statewide governance system for higher education[1] required the team to develop and institute data sharing and data sharing agreements with each higher education partner.[2] Throughout the extensive process, the team remained committed to data sharing as a foundational goal and focused on securing leadership buy-in to expand data access and move beyond a piecemeal data sharing model. Postsecondary

[1] The Massachusetts Department of Higher Education plays more of a coordinating role.
[2] Overview of the Department of Higher Education Overview of the Department of Higher Education | Mass.gov

partners developed a proposal for an overarching data sharing agreement that would avoid individual Memoranda of Understanding and funnel the student data into a shared data repository while maintaining appropriate levels of security and institutional review board permissions.

NSrn Indicator Findings

Sites submitted annual impact reports to JPMorgan Chase documenting their progress toward a set of student and system outcomes. To support data collection and reporting, sites created detailed appendices, data definitions, and other documentation. Differences in defining and tracking metrics reflect the various contexts and practices across sites and provide information about how the initiative metrics were tracked. Although this variation makes the interpretation of the metrics more complex, it also provides valuable insight into how pathways developed over time.

Access to accurate data is crucial to assessing students' pathways outcomes and determining best practices. NSrn sites navigated multiple data challenges, raising awareness of key strategies, including those below, that can facilitate data quality and completeness in future initiatives:

Leveraging existing data systems. The NSrn sites were able to report on metrics that aligned with their existing education data systems, such as pathway participation and completion. For these indicators, the sites reported data on student participation and completion in career and technical education programs, which states are required to report to the federal government. Using existing data collections will not eliminate all cross-site differences in metric definitions (federal reporting allows a measure of flexibility), but it could help align metrics with site data capacity and increase data consistency.

Providing additional resources, time, and technical assistance for new metrics. For metrics not already collected by grantees, detailed guidance and technical assistance are needed for consistent indicator development and implementation. Not all NSrn sites collected data on students' work-based learning (WBL) participation; among those that did, definitions of WBL indicators varied. The collection of consistent and comprehensive data on WBL would require a development phase to assess data collection feasibility, compare data definitions, and create data collection plans (or data sharing agreements). Implementation would include a pilot phase to collect and review initial data. Although collecting consistent and complete data can take time, the

development process can contribute to data culture development and yield informative data during the pilot phase.

Providing feedback on data quality and findings. The use of templates and detailed guidance is best practice for the collecting of high-quality data. Effective use of these resources, however, requires careful reviews of the reported data followed by feedback to the reporting sites on data quality and consistency. Even well-designed templates cannot anticipate all of the data reporting challenges that may arise across different reporting systems and data specialists. The review process can inform adjustments to the templates, provide guidance to improve future data collections, and address questions that emerge during the data reporting process.

Balancing cross-site standardization and site customization of metrics. Sites recognized the value of reporting on a common set of metrics, but also indicated a need for site-specific metrics that reflect their NSrn priorities, such as advising system development or secondary-to-postsecondary transitions. Additionally, site teams noted that metrics may need to change over time in response to data system changes and site activities, suggesting a need for periodic reviews and updates of metrics to ensure they remain feasible and relevant.

Aligning grant reporting expectations with institutional timelines. NSrn sites were required to submit data for the initiative in March each year. However, the academic institutions—which were the sites of the pathway programs and many NSrn initiative-funded activities—operate on academic years. This timeline mismatch meant that sites had to report on their annual progress prior to completing their activities, and site teams felt that a reporting calendar aligned with the academic year would have produced more complete results.

System Outcome Metrics

Between the 2018–19 and 2022–23 academic years,[3] the sites collectively offered more high-quality and fewer low-quality career pathways (as defined by each site), built stronger cross-sector partnerships, and enacted new institutional, local, and state policies. These metrics provide a

[3] Baseline years for data collection varied across sites and indicators. For example, the first year of data for "the number of high-quality career pathways" indicator ranged from 2018–19 to 2020–21, depending on when sites began reporting that indicator. To account for this variation, changes were calculated relative to each site's baseline year for a particular indicator.

partial accounting of systems change under the initiative. The sites also achieved changes that are more challenging to quantify, in areas such as postsecondary transitions and advising.

The following are some of the key system outcome findings and site variations:

The number of **high-quality career pathways** increased by 31% (+64 pathways). Five of six sites reported increases in the number of high-quality career pathways, ranging from 3% to 433%. With an addition of 29 pathways, Denver accounted for almost half of the increase in the total number of pathways; one site had no change in the number of high-quality career pathways.

High-quality career pathways

↑**31%** (+64 pathways)

The number **of low-quality career pathways** decreased by 59% (-44 pathways). Four of the six sites reported decreases in the number of low-quality career pathways ranging from 4% to 18%. Of those four sites, Indianapolis eliminated the highest percentage of low-quality career pathways, at 100 %; the remaining two sites experienced no change in the number of low-quality career pathways.

Low-quality career pathways

↓**59%** (-44 pathways)

The number of **cross-sector partnerships** increased by 107% (+415 partnerships). Five of the six sites reported increases in the number of cross-sector partnerships ranging from 53% to 266%. Denver accounted for more than half of the total increase with 245 additional partnerships. Three sites indicated that the data they reported for this metric excluded some of the educational institutions participating in the NSrn initiative at their site because of data unavailability.

Cross-sector partnerships

↑**107%** (+415 partnerships)

The number of **pathways-related policies** increased, with more than 20 new policies. Sites reported between 0 and 4 policies enacted at the beginning of the initiative and between 1 and 10 policies during their most recent data collection. Boston accounted for 43% of all policies reported during the most recent data collection, with 10 policies enacted.

Pathway-related policies

↑**20+** new policies

Student Outcome Metrics

Over the 5 years of the initiative, sites developed criteria for identifying high-quality career pathways and tracked student participation and completion in pathways at the secondary and postsecondary levels. Several indicators increased, including overall pathways participation and completion, students' earning of industry credentials and early postsecondary credit, and participation in WBL. However, some sites reported declines in these indicators. In interviews, sites attributed declines to changes in data reporting or policies, as well as to the complexity of building programs and systems that require consistent input from employers and other organizations unused to working with K-12 education. Because pathways systems and pathways data collection processes are still in development, fluctuations in indicator values can be positive or negative. For example, relative to year one, one site reported an increase in pathways participation in years 2-4, followed by a 42% decrease (-809) in year 5 in the number of students enrolled in high-quality career pathways.

The following are some of the key student outcome findings and site variations:

The number of **students participating in high-quality pathways** increased by 81% (+39,174 students). Five of the six sites reported increases in the number of students participating in high-quality pathways, ranging from 22% to 200%. Dallas accounted for half of the increase (+19,583) in the overall number of students pursuing high-quality career pathways.

Participating in high-quality pathways

↑**81%** (+39,174 students)

The number of **students completing high-quality pathways** increased by 70% (+6,569 students). Five of the six sites provided data on the number of students completing high-quality pathways. Those five sites all experienced growth, with increases ranging from 9% to 343%. Nashville contributed 40% of the total increase by adding 2,606 graduates from high-quality career pathways. The sixth site changed criteria for completion during the initiative and, as a result, did not report pathways completion data for 2022-23.

Completing high-quality pathways

↑**70%** (+6,569 students)

The number of **students earning high-value, industry-recognized credentials** increased by 122% (+3,899 students). The four sites that reported data on this number that could be compared across years had increases ranging from 8% to 548%. Nashville accounted for more than half of the total increase, with 2,046 more students earning high-value, industry-recognized credentials; one site reported a 76% decrease (-126 students).

Earning high value industry-recognized credentials

↑**122%** (+3,899 students)

The number of **students earning aligned postsecondary credit** increased by 79% (+6,984 students). Four sites reported increases ranging from 25% to 153%, whereas two sites reported decreases of 13% and 45%. Dallas contributed to more than half of the total increases, with 4,584 more students earning aligned postsecondary credit.

Earning aligned postsecondary credit

↑**79%** (+6,984 students)

The number of **students participating in work-based learning** increased by 7% (181 students). Two sites reported increases of 16% and 54% in the number of students participating in WBL, and two other sites reported decreases of 11% and 16%. Boston gained the most students, with an increase of 244. Data from the remaining two sites that reported on this metric appeared inconsistent across collection years and were excluded from this analysis.

Participating in work-based learning

↑**7%** (181 students)

To learn more about the NSrn evaluation findings, see the other briefs and evaluation reports at **http://nsrn-evaluation.org**.