Examples of State Progress towards Quality Non-Degree Credentials

Many states around the country are progressing towards expanding their investments in and capacity for data collection, analysis, and reporting related to NDC quality and learner outcomes. The examples summarized in the main report and in this appendix provide a sampling of what twelve states are doing and are informed by NSC's engagement with states through its QNDC state technical assistance academies and convenings, interviews and email correspondence with state representatives (including review of state examples), a review of published state documents and online resources, and the reference of several resources by both NSC and partner organizations that review elements of states' NDC data ecosystems.

NSC publications from which the authors sourced state examples include The Non-Degree Credential Quality Imperative, Measuring Non-Degree Credential Attainment: A 50-State Scan, Expanding Opportunities: Defining Quality Non-Degree Credentials for States, and Creating An Impact with Credential Quality and Transparency: A State Policy Toolkit.

Partner resources which informed NSC's compilation of state examples include Strada Education Foundation's State Opportunity Index, information shared by Credential Engine connected to its state partnerships, and published resources related to the NDC quality market and state noncredit project at the Education and Employment Research Center at Rutgers University's School of Management and Labor Relations.

While NSC recognizes that the examples below do not represent the full extent of the work these states and others are doing to develop their NDC data ecosystems, they do provide a sense of how states are approaching this work, providing a model for others which are interested in taking steps towards a more systematized and transparent NDC ecosystem.

1. **Make The Case for Investing in Quality Non-Degree Credentials and the Data Ecosystem**
   - **Alabama**: In 2019, the Alabama legislature passed the Alabama Industry Recognized and Registered Apprenticeship Program Act (Act 2019-506) which created the Alabama Committee on Credentialing and Career Pathways (ACCCP). The ACCCP, a committee of the Alabama Workforce Council, is co-chaired by the Alabama State Superintendent of Education and the Chancellor of the Alabama Community College System. Other members include the governor, the leadership of state higher education and workforce development agencies and systems, the Deputy Secretary of Commerce, and seven regional

gubernatorial appointees. Leadership from the governor's office has been critical to empowering and bringing focus to the work of the ACCCP to coordinate across agencies and systems. Early codification of the ACCCP and its mission provided an essential backbone for the state's work to engage employers in developing a sector- and competency-based learning and hiring ecosystem. This is also the foundation on which the Alabama Credential Registry has been developed and is being used for quality assurance and governance, in particular establishing quality standards and assuring the quality of programs and credentials offered in the state using a mix of information that providers agree to publish to the registry.

- **Arkansas**: The Arkansas Division of Higher Education (ADHE) is preparing to implement more robust noncredit data collection starting in September 2024. Key stakeholders across the state have been working to build a case for noncredit data collection over the last two years in light of gaps identified in existing noncredit data, which were hampering the state's ability to understand its noncredit education and training system. The lack of comprehensive noncredit data made it particularly difficult to understand the programs and students eligible for a state grant program called the Arkansas Workforce Challenge (AWC) Scholarship, which provides grants of up to $800 to students pursuing eligible credit- and noncredit programs in health care, information technology, and manufacturing. Initial efforts to gain legislative support for increasing the scholarship award amount were deterred by the inability to fully describe award recipients pursuing noncredit programs. In response, ADHE, ARData, Arkansas Community Colleges, and individual institutional leaders have been working together to improve statewide noncredit data collection.

- **Colorado**: The Colorado Workforce Development Council (CWDC) collaborated with the Colorado Department of Higher Education (CDHE), Colorado Community College System, Colorado Department of Education, and Colorado Succeeds to develop a quality assurance framework for evaluating NDCs. Recognition of the lack of consistency in definitions and data availability across agencies, organizations, and institutions instigated this effort to develop a central framework for assessing the quality of NDCs in the state. It was also necessitated by legislation. In 2022, Colorado's state legislature passed the Opportunities for Credential Attainment (SB22-192), which requires the Colorado Department of Higher Education (CDHE) to work with higher education institutions and industry representatives to identify opportunities for and build stackable credential pathways that lead to employment and/or additional education. As part of the legislation, signed into law in May 2022, CDHE is required to evaluate the quality of NDCs that lead to in-demand living wage jobs as identified the Colorado Talent Pipeline Report, with the quality framework and process being informed by standards developed by national organizations. To fulfill this requirement, the state established a Stackable Credentials Taskforce

to develop a quality assurance framework that can be used to identify quality stackable credential pathways. The resulting Quality and In-Demand Non-Degree Credential Evaluation Framework was launched in 2023 by the CWDC and includes four signals of credential quality: demand, evidence of skills, employment outcomes, and stackability.

- **Iowa**: The Iowa Department of Education has collected data on students pursuing noncredit education and training at Iowa community colleges since 1999. Following the initial collection of data, the state placed an emphasis on data validation, accuracy, and use. Since then, the state has made great strides towards making the data meaningful through the cleaning, organizing, and matching the data to other source data once collected. To make systematized noncredit data collection a reality at the institutional and state level required helping community colleges understand that the more and better data they could report on noncredit students and programs, the more successful they would be at getting funding for those programs and services. Iowa's community college funding formula includes noncredit courses and programs that have value to the state.[i] The state has a number of other programs that help fund noncredit education and training, such as the state-funded Gap Tuition Assistance Program and both state and federal funds tied to Integrated Education and Training. Fostering a sense of friendly competition as well as transparency across Iowa colleges helped garner support for and action to build the data practices and infrastructure needed to collect and report noncredit data with regularity.

- **Minnesota**: The Minnesota P-20 Education Partnership was established in 2009 via legislation with a goal of streamlining education systems in the state to maximize student achievement from early childhood through postsecondary education and promote efficient use of resources. The Partnership's 2022 annual report to the legislature shared recommendations for improving transitions for students between high school and postsecondary education, including through the development of a single, shared definition for and identification of credentials of value. Short-term recommended actions included convening a work group across Pre-K-12, postsecondary education, and workforce to develop that definition, with a long-term goal of codifying it into legislation to incentivize providers to focus on credentials of value. In May 2023, Minnesota passed legislation that makes NDCs eligible to count towards the state educational attainment goal of seventy percent of adults ages twenty-five to forty-four by 2025. This inclusion of NDCs coincides with the state's hopes to invest more in these credentials through state financial aid, implementing the state's quality assurance framework, and leveraging state longitudinal data system funds to conduct related research on credentials of value.

- **Virginia**: Chapter 665 of Virginia's 2015 Appropriation Act (HB 1400) directed the Virginia Community College System (VCCS) to develop a specific plan for

increasing attainment of workforce training credentials and certifications to meet employer demands. A subsequent VCCS report published in 2015 articulated the demand for postsecondary credentials below a bachelor's degree and a plan for meeting workforce demands in the state, including expanding need-based aid for people pursuing in-demand and high-demand credentials. The recommendations proposed in the report directly led to the development of the New Economy Workforce Credential Grant, also known as the FastForward program, which provides financial aid to students pursuing eligible noncredit training programs that lead to careers in in-demand occupations in the state. Eligible programs/providers must regularly report data to the State Council for Higher Education of Virginia, which then conducts analyses related to education and labor market outcomes and reports annually to the General Assembly.

2. **Develop a Strategic Vision and Plan for Expanding Non-Degree Credential Data Access and Use**

Arkansas: The state of Arkansas has developed a data-driven strategic plan to inform workforce development and career education goals. These goals are outlined in Executive Order 23-16, signed by Governor Sarah Huckabee Sanders, and coordinated by the Governor's Workforce Cabinet and the chief workforce officer. The Chief Data Officer's Office (ARData) has responsibility in state statute to maintain a longitudinal data system to link information for education-to-workforce outcomes to help state leaders and service providers develop an improved understanding of individual outcomes resulting from education-to-workforce pipelines, identify opportunities for improvement by using real-time information, and continuously align programs and resources to the evolving economy of the state. The goal of improving the collection and management of noncredit student data is aligned with broader state goals to expand the State Longitudinal Data System to include noncredit and other nontraditional postsecondary education data, so that all postsecondary pathways are fully represented, and to enable greater research and consumer data access via publishing to a credential registry. It is also motivated by the desire for changes to the state community college funding formula, which currently does not account for noncredit education and training.

- **Minnesota**: Minnesota's Office of Higher Education (OHE) intends to use the state's quality assurance rubric to create opportunities for non-Title IV postsecondary education and training providers who are not eligible for the Minnesota State Grant Program to become so. Currently, many students pursuing noncredit and very short-term education and training (less than 300 clock hours or eight weeks) are not eligible for this state financial aid program.[ii] Non-Title IV providers and programs that are currently ineligible for the Minnesota State Grant Program would be approved for participation based on meeting a set of to-be-determined thresholds aligned with the state's quality rubric, which outlines metrics separately for credentials, programs, and providers. Next steps for OHE and the other members of the P-20 Education

Partnership Credentials of Value work group will be to gather data to inform the development of appropriate quality thresholds and enable sustained assessments according to the quality rubric, for which OHE has received a federal grant to support. In addition, they will work to determine whether additional criteria are needed, work with programs/providers to identify barriers and meet the thresholds, and propose a legislative rule change for enactment, including a funding request to support implementation and administration.

- **Tennessee**: The Tennessee Higher Education Commission (THEC) and Tennessee Student Assistance Corporation (TSAC) worked with the Tennessee General Assembly over two years to codify quality criteria for NDCs. In April 2024, the Tennessee General Assembly passed HB0869/SB0833, which has been transmitted to Governor Bill Lee for signing as of the writing of this report. The definition codified by the legislation is the result of a cross-state collaborative taskforce and consultation with NSC. It provides greater standardization for the administration of state-based financial aid programs under the Tennessee Promise Scholarship and the Wilder-Naifeh Technical Skills Grant. Under the Tennessee Promise Scholarship, the new law also expands the scholarship to include eligible QNDCs conferred by Tennessee colleges of applied technology.

- **Texas**: The Texas Higher Education Coordinating Board's (THECB) 2022-2030 strategic plan, *Building a Talent Strong Texas*, outlines steps the state should take to meet the state's attainment goal, including centering the need to incentivize the attainment of credentials of value—including NDCs of value. *Building a Talent Strong Texas* established a goal of making Texas the first state in the country to tie the state attainment goal to the wage premiums students earn as a result of earning their credential, including degrees, certificates, and short-term NDCs. This vision was translated into law with the passage of HB 8 in 2023, which has since instigated efforts by THECB, in collaboration with other state agencies, to define NDCs of value and high-demand occupations, and gather the data needed to identify these credentials for the purposes of the new performance-based funding formula.

- **Virginia**: The codification of the New Economy Workforce Credential Grant Program (WCG), also known as FastForward as branded by Virginia Community College System (VCCS), in 2016 sharpened Virginia's focus on noncredit data collection and quality, given the reporting requirements attached to grant funds for participating community college programs. Community colleges must provide documentation describing students receiving the WCG/FastForward to the State Council of Higher Education for Virginia (SCHEV) via VCCS. Data collected and reported are similar to credit-bearing program reviews, including having to

produce labor market information for particular credentials.

3. **Develop Data-Backed Quality and Equity Frameworks for Investing in Non-Degree Credentials**
   - **Colorado:** The Quality and In-Demand Non-Degree Credential Evaluation Framework is a tool developed by the Colorado Workforce Development Council (CWDC) with the Colorado Department of Higher education (CDHE) with a goal of helping state leaders and staff, education and workforce providers, and others clarify and incentivize key elements of quality credentials. The framework is hosted online and can be embedded into state agency websites as desired. It includes a rubric for easy use when screening credential quality for specific use cases and integrates considerations of local and regional demand and elements of value. Potential use cases for the framework and rubric include assessing the quality of stackable credential pathways according to SB22-192, including whether they lead to top jobs and critical occupations; identifying new credentials for the Career Development Incentive Program, which requires the development of a list of credentials for K-12 students; evaluating credentials for inclusion on the state's Eligible Training Provider List (ETPL); and publishing quality ratings on the state's credential registry. In its current state, the framework is qualitative in nature; however, eventually the state intends to use data to produce disaggregated outcomes—including estimates of return on investment for Coloradans— that can inform quality assessments using the rubric.

   - **Louisiana**; Louisiana's Quality Postsecondary Credentials of Value definition and criteria regulate which NDCs can be counted towards the state attainment goal, which aims to reach sixty percent degree or credential of value attainment among working adults by 2030. Louisiana's quality definition was formally adopted and is governed by the Louisiana Board of Regents. The fact that the Board can maintain and/or modify the existing definition as desired or needed, without having to propose changes to the legislature, is seen as a benefit to the framework not living in legislation.

   - **Minnesota:** Minnesota's P-20 Education Partnership Credentials of Value work group developed a quality framework for both degrees and NDCs, to ensure both sets of credentials are held to the same standards. To avoid duplicating existing postsecondary quality assurance processes, such as accreditation for institutions of higher education or the requirements associated with the Eligible Training Provider List (ETPL), the state's quality assurance rubric defines a set of distinct elements of quality for credentials, programs, and providers within its quality assurance rubric. This distinction also allows for easier adaptation to different applications between the higher education and workforce systems. For example, the rubric requires that credentials and programs both meet certain demand, wage, and knowledge and competency criteria, but the evidence used to

measure quality for each differs depending on whether it is being measured for credentials or programs. Providers are assessed according to criteria that include, for example, accreditation status or approval by Minnesota's Office of Higher Education or another third-party vetting authority and whether they provide wraparound supports for student success. Ultimately, the state work group intends to develop specific thresholds for assessing elements outlined in the rubric, which will vary according to specific policy goals and applications.

- **New Jersey**: The New Jersey Department of Labor and Workforce Development (NJDOL-with approval from the state's Credential Review Board, developed and adopted a quality assurance model for assessing ETPL program outcomes. State statutes provide the authority for NJDOL to require all providers on the ETPL to report participant information, including Social Security Numbers and other demographic information. As such, the quality assurance framework not only includes programs listed on the ETPL whose participants receive WIOA Title I funds, but private pay program participants, as well. The quality assurance model includes indicators of labor market demand, employment and wage outcomes, educational outcomes, financial impact, and equity in outcomes for historically underserved sub-groups.[iii] It intentionally considers the composition of and barriers facing people enrolled in each program to produce reasonable estimates of key outcome measures. Programs with results that continuously fall well below expectations will have to develop corrective action plans and then have two years to improve their status or be removed from the ETPL.

- **North Carolina**: The North Carolina Workforce Credentials Advisory Council was established to identify NDCs with the most value to employers that also help put people on a path to a living wage and career advancement. The framework for categorizing credentials includes four designations: essential credentials (those that are highly valued by employers, tied to jobs with family-sustaining wages, and pathways for career advancement), career credentials (associated with a wage boost in jobs that have family-sustaining wages), foundation credentials (ones that convey the basic skillsets demanded by employers but not associated with jobs that pay family-sustaining wages), and advanced credentials (credentials that enable someone to advance in their existing career). To be included on the list and to receive one of the four designations, credential issuers must submit credentials for consideration by the Council. So far, the Council has assigned classifications to over 150 credentials issued by eighty-six issuers. The state is also working to gather data connected to the credentials on the list. Four of the identified in-state issuers are participating in a cross-agency pilot effort to develop a licenses and credentials data warehouse, with a goal of eventually housing data from all identified issuers; part of that effort includes developing options for efficiently collecting data from identified national issuers. Though optimistic, the state anticipates that overcoming data availability and

consistency challenges across issuers may be problematic.

- **Texas**: In 2023, Texas state lawmakers passed a bill to establish a new performance-based funding system for community colleges that incentivizes the conferment of credentials of value, including QNDCs. The bill makes a historic $682 million investment in Texas' community colleges, which will allow the state to fund the full range of institutions' education and training activities, including noncredit programming that leads to the attainment of credentials of value. In response to the new funding model, the Texas Higher Education Coordinating Board (THECB) set out to develop rules defining credentials of value for both degrees and NDCs, which will be refined over time. The credentials of value framework assesses whether students recoup the costs of earning their credential and surpass the earnings of a typical high school graduate within ten years of completion. THECB has worked to understand the data community colleges have that can be used to identify NDCs of value, knowing that many colleges have not collected Social Security Numbers for noncredit program enrollments in the past, among other data gaps related to the fact that colleges have not been previously required to report data on noncredit student enrollment and outcomes.[iv]

4. **Collect Key Data to Enable Comprehensive Quality and Equity Analyses**
   - **Indiana**: The Workforce Ready Grant (WRG), established to advance the state's postsecondary attainment goal, provides financial aid to students pursuing eligible credit- and noncredit programs. Program level data are collected for students enrolled in WRG programs on both the credit and noncredit side, however at this stage, the state cannot look at outcomes of just WRG recipients. It is notable that data are collected for students in noncredit programs, including Social Security Number, demographic information, credentials earned, and completion rates. DWD intends to implement further collection of data on wages for noncredit students. Indiana utilizes data to review and inform WRG program eligibility. Completion rate, credential attainment rate, regional wages, and employer demand all factor into these eligibility metrics.

   - **Iowa**: Noncredit data collected by the Iowa Department of Education include information on field of study (including CIP code), type of course or program, type of NDC earned, program length, delivery method, some financing information, and student outcomes (including completion, pre-, during, and post-program employment and earnings, and whether a student transfers from noncredit education and training to credit-bearing pathways). Data are collected on students and course levels with major demographics flagged for each student, including race/ethnicity, date of birth, and gender. Student identifiers include names, college-supported identification numbers, and Social Security Number. Noncredit data are published in consumer-facing dashboards that allows people to look at outcomes connected to noncredit programs and

credentials. The Department of Education also produces annual reports to the state about outcomes connected to programs and students eligible for the Gap Tuition Assistance Program, which provides financial aid to students in qualifying noncredit and credit short-term programs. Beyond consumer information, these data help support the validity of state investment in noncredit programs and illustrate how investments like Gap have helped the local economy, met demand of employers, and supported strong employment outcomes.

- **Minnesota**: In 2022, Minnesota's Office of Higher Education (OHE) launched new data collection from ETPL programs, including eligible noncredit programs at community colleges, to comply with new WIOA reporting requirements. OHE is now collecting and integrating data on all ETPL programs into the State Longitudinal Education Data System (SLEDS) which will allow it to assess labor market outcomes for all participants enrolled in ETPL programs regardless of their receipt of Individual Training Accounts. As more data are collected and reported by providers, the state's ability to understand the educational and labor market outcomes of skills training participants, identify equity gaps and poor performing providers, and build insight around areas for enhancement of services and connections to additional education and training opportunities will grow dramatically. In addition, a new student record system launched in 2021, which integrates data for students in for-credit and noncredit education pathways, meaning eventually the system will have the same data on noncredit students enrolled in programs on the ETPL as it does on students pursuing for-credit programs.

- **Virginia**: Institutions and programs participating in Virginia's Workforce Credential Grant (WCG)—also known as FastForward—must comply with mandatory reporting requirements, which include providing student-level data to the State Council of Higher Education of Virginia (SCHEV). WCG/FastForward provides financial aid to people pursuing eligible noncredit workforce education and training programs. Data on these programs reported to SCHEV include student enrollment, program name, program completion, and credential attainment for students receiving the FastForward grant, including by industry sector and credential name. Student-level data also include demographics, allowing the state to report on outcomes measures by race, ethnicity, gender, and other variables. SCHEV annually reports to the General Assembly on program outcomes, including students' labor market outcomes. SCHEV matches data on WCG/FastForward participants with Virginia Employment Commission wage records, which are shared directly with SCHEV through the Virginia Longitudinal Data System. SCHEV's annual reports provide breakdowns of enrollment and success rates, as well as average and median wages and pre- and post-program

wage comparisons overall, by industry, by race/ethnicity, and by income bracket.

5. **Develop Data Infrastructure, Systems, and Policies that Support Transparency**
   - **Alabama**: The Alabama Committee on Credentialing and Career Pathways (ACCCP) includes sixteen Technical Advisory Committees (TACs), composed of gubernatorially appointed members from business and industry who also represent each workforce development region. The ACCCP is responsible for creating a list of in-demand occupations regionally and statewide, including identifying competency models and career pathways linked to those in-demand occupations. The Committee is also tasked with creating an annual Compendium of Valuable Credentials which lists credentials of value mapped to regional and state lists of in-demand occupations. The Compendium informs elements of Alabama's Talent Triad, which includes the Alabama Credential Registry, an online resource that enables Alabama education and training providers to register the credentials they issue, including NDCs, creating a real-time outlook for the full array of credentials available to learners in the state. The registry is being developed to include the designation as an Alabama Credential of Value on the Compendium of Valuable Credentials.

   - **Iowa**: Noncredit data in Iowa are reported to the state through a web-based data collection system that was set up with support from a Workforce Data Quality Initiative grant from the U.S. Department of Labor. The system automatically validates data files on the backend, eliminating the need for manual cleaning. The state collects detailed information about students in noncredit programs, including those who receive grants through a state financial aid program which supports students pursuing eligible NDCs, the Gap Tuition Assistance Program, and braided funding awarded through the Pathways for Academic Career and Employment (PACE) program (for income-eligible students).

   - **Louisiana**: In 2020, the Louisiana Community and Technical College System (LCTCS) began to integrate noncredit data into the LCTCS's main student information system. This integration is intended to, among other things, simplify data entry for students who move between noncredit and credit-bearing programs; create a shared pool of student data for recruiting and eligibility for financial aid; remove siloes in data collection and reporting across departments; and improve and streamline the use of data to inform decision making. This work was important for the launch of the M.J. Foster Promise Program in 2022, which was created to provide student financial aid for the pursuit of both credit-bearing and noncredit short-term programs. To be able to track and report on grant recipients' credential attainment and earnings, as required by legislation, LCTCS needs a data system for both program types. The integrated system will also ultimately allow for more detailed reporting on student outcomes such as credit awarded for prior learning, transition from noncredit to credit, and completion

rates

- **North Carolina**: The North Carolina Longitudinal Data Services (NCLDS) is building a sophisticated data infrastructure to enhance cross-sector data analytics and analysis for public and non-public state data partners. When complete, this infrastructure will be able to accommodate inclusion of data from any source willing to participate. By emphasizing not only cross-sector data availability but also cross-sector strategic partnership, NCLDS is working to create a space that will help the state address complex policy questions only answerable by combining data from education, social, economic, health, and other systems. Founding data partners include: the Common Follow-Up System, which contains longitudinal data on wages, public employment, training, and education programs, maintained by the North Carolina Department of Commerce's Labor and Economic Analysis Division; the North Carolina Early Childhood Integrated Data System, maintained by the Division of Child Development and Early Education at the North Carolina Department of Health and Human Services; NC SchoolWorks, a preschool-postsecondary and workforce data system maintained by the North Carolina Department of Public Instruction; and an under-construction non-public postsecondary data system maintained by the North Carolina Independent Colleges and Universities.

- **Virginia**: The regular data collection conducted by the State Council for Higher Education of Virginia (SCHEV) connected to the Workforce Credentials Grant (WCG)/FastFoward program provides a foundation for the development of new datasets by the Virginia Office of Education Economics (VOEE), whose mission is to inform policy and practice at the intersection of education and the workforce. Developed as a part of its the Virginia Skills Initiative (VSI), VOEE's Non-Credit Skills Dataset includes the skills related to a subset of noncredit programs that are eligible for funding FastForward. VOEE partnered with Lightcast to create this dataset. When available, Lightcast tagged skills based on credential documentation, WCG course descriptions, and/or surveys completed by course instructors. Eventually, this dataset, along with two others developed under the VSI that are intended to reveal insights about the skills and career pathways of Virginia students and workers, will be available through interactive public dashboards.

6. **Use Data to Inform Decision-Making on Non-Degree Credential Programs and Pathways**

Consumer-Facing Tools

- **Alabama**: Alabama's Talent Triad is composed of three segments: 1) the Alabama Credential Registry, 2) The Alabama Skills-Based Job Description Generator, and 3) The Alabama Digital Wallet, which includes multiple tools, such as Learning & Employment Records (LERs) supporting both verified and self-

attested skills credentials, and experiences. The Alabama Credential Registry is an online resource that enables Alabama education and training providers to register the credentials they issue, including certificates, licenses, degrees and NDCs, creating a real-time outlook for the full array of credentials available to learners in the state. It also describes the skills and competencies that learners gain in completing these credentials which is organized through the state's Competency Ontology, and results in what the state calls the "DNA" for in-demand jobs – the skills and knowledge that drive in-demand jobs. The registry also includes associated wage earnings, stackability, as well as the designation as an Alabama Credential of Value on the Compendium of Valuable Credentials and will be used to fulfill Alabama's mandate to ensure credential quality and transparency for all degree and NDCs.

- **Arkansas**: The Chief Data Officer's Office (ARData) has responsibility for collecting and reporting on various types of non-degree and noncredit postsecondary education and training data, including through a public interactive reporting tool MyARDashboard. Most of these data are available for disaggregation by race, ethnicity, and gender and the state is working on disaggregation by family/household characteristics and income. ARData has responsibility under the Arkansas Workforce Strategy for the implementation and support of Learning and Employment Records (LERs). Since 2020, Arkansas has been establishing an ecosystem that will support the issuance of LERs, leveraging governance and interoperable data infrastructure foundation, which includes streamlined data-sharing agreements and a Credential Transparency Description Language (CTDL) credential registry.

- **Colorado**: The Colorado Department of Higher Education's (CDHE) Data, Research, Policy (DRP) team generates an annual Return on Investment report, as well as Eligibility Training Provider List-related reporting which provide some data related to NDCs. CDHE also works collaboratively with other state agencies to provide more connection points between all types of education, training, and workforce data via various data-sharing initiatives (outlined in CDHE's report on Colorado's longitudinal data landscape). Colorado has been working to build out with My Colorado Journey, which is powered by a cross-agency, public-private data trust that aims to break down siloes and ensure all Coloradans can connect to learning and work opportunities in just a few clicks via a one-stop portal. Colorado is also working with Credential Engine to use the Credential Registry to catalog all credentials offered in the state, including those on the ETPL and include data on apprenticeships.

- **Iowa**: The Iowa Student Outcomes dashboards compile all public-facing noncredit and credit data together in one place. The Noncredit Program Outcome dashboard provides aggregate, statewide data on noncredit career and technical education program outcomes starting with the 2016 academic year. The

dashboard allows people to view noncredit enrollment across different categories over twenty years, pre-, during, and post- program employment and median wage outcomes, continued enrollment in credit-bearing programs, and other key information.

- **Virginia**: To facilitate credential stacking and credit for prior learning for students receiving WCG/FastForward, VCCS utilizes an advising portal called Credits2Careers that allows students to see how many credits a particular FastForward credential would confer. Information on how much progress an individual student has made towards an associate degree, for example, if they were to convert their noncredit learning to credit, can be tracked using the portal and used by advisors to talk with students about additional educational opportunities, credit for prior learning, and financial aid. In addition, the Virginia Office of Education Economics (VOEE) has developed four dashboards to inform decision making around talent development, including the importance of noncredit programs. The Postsecondary Education Completions Dashboard enables VCCS and education staff and leaders, workforce system stakeholders, and others, to see the production of graduates from academic and Workforce Credential Grant/FastForward-eligible noncredit programs and their alignment to career clusters. This dashboard is intended to support grant writing, the creation of new programs, and other practitioner-focused decisions. VOEE's High Demand Occupations Dashboard also includes information about which high-demand occupations are related to programs eligible for FastForward and the Get a Skill. Get a Job. Get Ahead Initiative (otherwise known as G3), Registered Apprenticeships, and STEM occupations.

Data-Informed Decision Making

- **Alabama**: Alabama collects several types of nondegree and noncredit postsecondary education and training data but does not currently link this information to employment outcomes. Some of data are currently available through the Alabama Terminal on Linking and Analyzing Statistics (ATLAS), an integrated workforce and education data analysis tool that allows state agencies to connect data for the purpose of conducting research on the behalf of Alabama's P20W Council. This council set the research agenda to create data-driven results about Alabama's education to workforce pipeline and to measure progress on Governor Ivey's Success Plus Attainment goal. Alabama is planning to offer interactive dashboards and static reports including integrated postsecondary and employment data through the ATLAS on Career Pathways.

- **Virginia**: VCCS is leveraging data from WCG/FastForward to understand patterns and outcomes related to students' economic mobility, with a strategic goal of increasing the share of graduates who achieve upward mobility to fifty percent by 2027. VCCS, for example, matches UI records with student outcomes data for FastForward recipients to see trends and equity gaps tied to race, ethnicity, and

gender, including whether these students are securing good jobs. With this information in mind, VCCS works closely with industry partners and employs career counselors to identify skills needed for open jobs and the wages associated with credentials offered, to ensure students' expectations are realistic and to inform the programs offered by institutions so they are geared towards high-wage opportunities. They are paying particular attention to how VCCS institutions can help students of color make decisions about credentials and employment, so that they are pursuing pathways that lead to high-paying careers.

7. **Establish Continuous Learning and Feedback Loops That Lead to Improvement**
    - **Indiana:** Education and training providers which want to their noncredit programs for to receive approval for the Indiana Workforce Ready Grant (WRG), a state financial aid program benefiting eligible students in eligible credit- and noncredit, short-term programs, must meet a set of quality standards to establish and maintain eligibility. Providers must be approved under Indiana's Eligible Training Provider (ETP) List. Only certificates leading to occupations identified within the top two tiers of the INDemand Jobs list are eligible for WRG. Eligible providers seeking to offer noncredit training programs eligible for a WRG must also be approved under the state's ETP List and maintain a performance standard of at least eighty percent completion rate and seventy percent credential attainment rate. Indiana's Department of Workforce Development (DWD) reviews noncredit programs currently eligible to ensure they continue to meet those standards. Those programs which fail to meet the standards may be placed on a corrective action plan and removed from WRG eligibility.

    - **New Jersey**: The New Jersey Department of Labor and Workforce Development (NJDOL) designed a statistical model within their quality framework for the ETPL that estimates an adjusted outcomes measure based on the enrollment makeup of each program/provider combination. An ultimate score measures the difference between the predicted outcomes adjusted for the specific makeup of the program/provider combination and compares it with its actual outcomes. Programs in the bottom tenth percentile which find themselves below the predicted benchmark must develop and have two years to meet a corrective action plan to improve outcomes; if they are unable to move out of the lowest 10 percent of providers/programs, they will be removed from the ETPL, with the option to reapply in the future. Since the July 1, 2022 implementation, NJDOL has engaged training providers by offering individualized technical assistance to help providers comply with the new quality assurance data requirements; facilitating a bi-monthly provider working group that offers providers a platform for continued and open communication; and incorporating feedback and input into the development of quality assurance resources and toolkit that will benefit the broader training provider community.

- **Virginia**: The robust data collection and reporting associated with Workforce Credential Grant/FastForward-eligible noncredit programs and students enables both the state and outside researchers to study the effects of the grant and subsequent credentials on students' labor market outcomes. VCCS, for example, matches student-level data to data from the National Student Clearinghouse and wage records to provide regular reports to their leadership, comparing weeks across years. There are also multiple ongoing economic impact studies of both WCG/FastForward and G3, another state financial aid program supporting students in stackable degree and non-degree pathways, including one published in December 2023 that is a first-of-its-kind analysis of the returns to industry recognized credentials connected to community college noncredit programs. This study found that FastForward recipients experience a nearly twelve percent increase in quarterly earnings and a 2.4 percent increase in their likelihood of being employed after earning their credential.

[i] One full-time equivalent enrollment is considered equal to 600 contact hours for the purposes of the community college funding formula.

[ii] In order to be eligible for a State Grant, a student must be enrolled at an eligible Minnesota institution in a program leading to a degree, diploma or certificate that is at least eight weeks long and consists of a minimum of 12 credits or 300 clock hours. This falls below the threshold (600 clock hours and 15 weeks) for programmatic eligibility for Pell Grants, enabling some short-term non-Title IV programs to access the State Grant. For more information about the Minnesota State Grant Program, see: Meghan Flores, Joanna Moua, and Shawn Reynolds, "State Financial Aid Manual Minnesota State Grant Program" (Saint Paul, MN: Minnesota Office of Higher Education, 2021), https://www.ohe.state.mn.us/pdf/FAManual/StateGrant22.pdf.

[iii] Unpublished NJDOL report submitted to NSC during the 2020-21 Policy Academy.

[iv] [iv] David Troutman, Texas Higher Education Coordinating Board, Interview, September 14, 2023.