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State Approaches to Short-term Credentials:
**Lessons (So Far) From Lumina
Foundation's FutureReady
States Initiative**

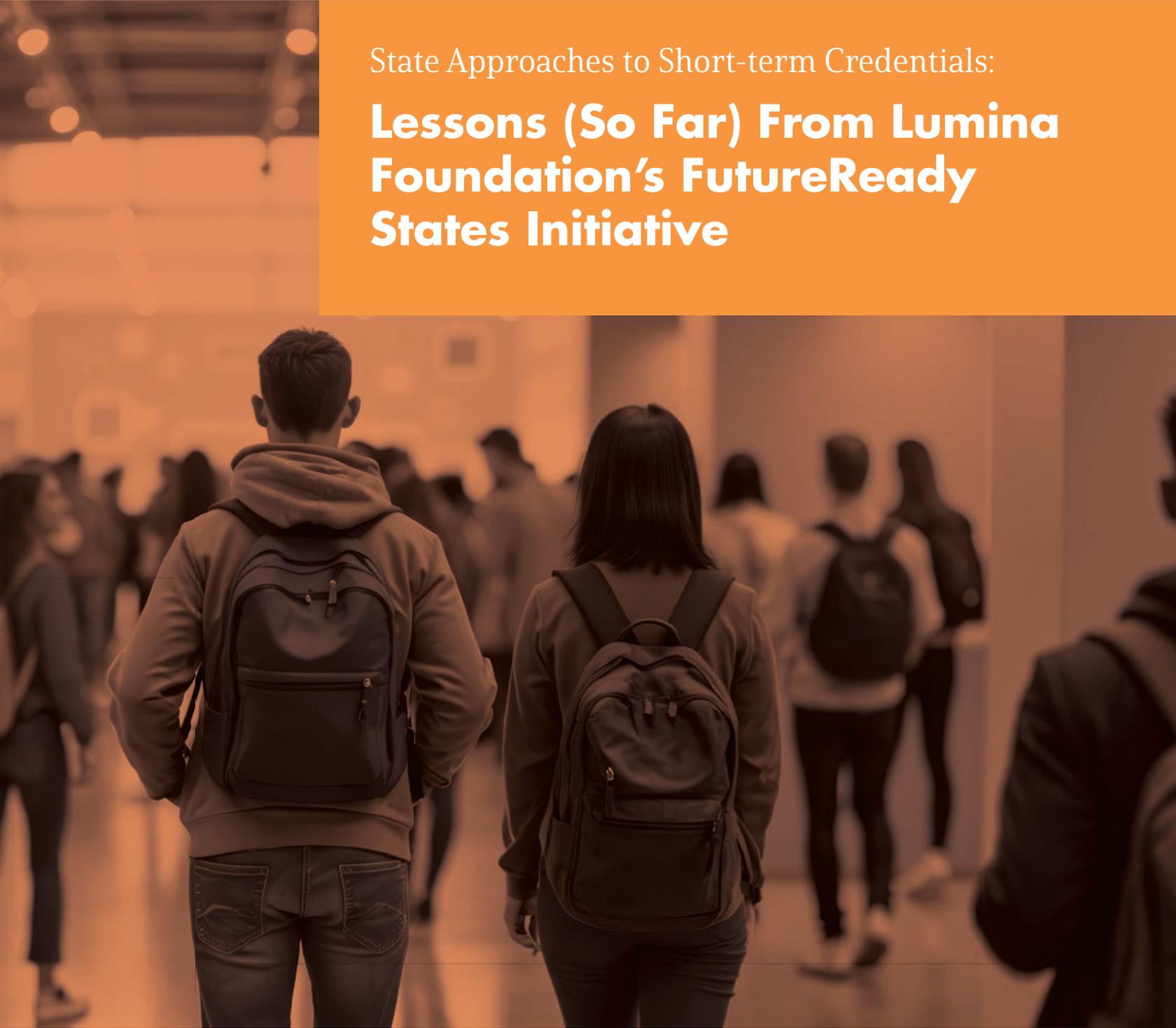


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Executive Summary

Across Lumina Foundation's [FutureReady States](#) (FRS) initiative, a cohort of states is taking coordinated action to strengthen their short-term credential ecosystems; they aim to ensure that state investments in nondegree credentials (NDCs) produce clear economic and social returns for their residents. This multi-state analysis synthesizes findings from state landscape assessments developed by the FRS states and their intermediary partners by drawing out cross-cutting themes, persistent challenges, and emerging opportunities to help inform the next phase of planning and implementation.

Our review reveals a national landscape in motion. States are experimenting with new governance models, data systems, and funding mechanisms to bridge the gap between education and work. Nearly all have adopted some definition of credential quality and value, though few have yet to operationalize those definitions through systematic outcomes data tracking or stronger funding incentives. The greatest progress is occurring where states integrate their credential strategies into broader workforce and economic development agendas by embedding quality assurance, data infrastructure, and employer engagement into unified systems.

Key findings include:



Governance and Coordination

Fragmentation remains a significant obstacle in several states. To address this issue, some states have created statutory coordinating bodies or executive mandates (e.g., Alabama’s Committee on Credentialing and Career Pathways, Colorado’s Talent Development executive order) to strengthen alignment across education, workforce, and economic development entities. It is important to note, however, that dividing governance responsibility across agencies (as is the case in North Carolina) is not inherently problematic and can be advantageous when complementary expertise is leveraged in the right places, provided there are strong coordination processes to ensure shared understanding, strategy, and accountability across entities.



Funding and Incentives

FRS states are investing billions collectively in short-term credentials, but few believe they have the right mechanisms to tie funding to value or return on investment. Most rely on short-term appropriations, federal funds, or one-time Covid-era grants. Long-term sustainability will depend on embedding quality-linked funding formulas, incentives, and other investments.



Data Systems

Every FRS state identifies lack of data and/or inadequate data systems as a central barrier. While some states have developed strong longitudinal data systems (e.g., Alabama’s ATLAS, Connecticut’s DataLinkCT, Colorado’s statewide longitudinal data system), even these systems face challenges linking noncredit and workforce data, particularly for short-term credentials outside the traditional higher education structure.



Quality and Value

Definitions of quality are converging around common elements (e.g., labor market demand, wage outcomes, stackability, and transparency), but implementation remains uneven. Most frameworks rely on lists of “credentials of value” or eligibility criteria, with limited enforcement or outcomes evaluation.



Employer Engagement

Employer participation in the design and validation of credentials is robust, but translating engagement into widespread employer *use* of credentials in hiring and promotion remains elusive.

Collectively, these findings suggest that the next phase of work for the FRS states should focus on moving from architecture to execution: operationalizing definitions, institutionalizing data-sharing, aligning incentives with quality, and ensuring governance structures endure beyond political cycles.

Introduction

This multi-state analysis synthesizes insights from landscape assessments submitted by participating states in Lumina Foundation's [FutureReady States \(FRS\) initiative](#). FRS brings together leaders in 12 states to strengthen short-term credential programs through technical assistance, policy support, and data-driven strategies to improve access, employment, and economic mobility for learners. The assessments document each state's current short-term credential policy, funding, and data environment, as well as governance structures, quality assurance mechanisms, and alignment with labor market needs. The purpose of this report is to identify cross-state patterns, shared challenges, and promising practices that can inform the FRS initiative and shape collective strategies for improving credential quality and value.

The cohort of FRS participants includes states at different stages of maturity in developing coherent short-term credential systems, ranging from early-stage efforts to define credentials of value to advanced models of statewide data systems and cross-agency coordination. A group of five intermediary organizations is supporting the FRS states in this work (see chart). Each one brings deep expertise in data systems, workforce alignment, and credential quality frameworks. Collectively, the cohort represents diverse geographies and governance contexts but shares a common commitment to ensuring that short-term credentials yield meaningful economic mobility

and meet employer demand.

The findings in this analysis are intended to guide the next phase of the initiative: the development of state action plans by each FRS state that articulate clear goals, quality frameworks, data strategies, and implementation priorities. This synthesis highlights where states can learn from each other's experiences in terms of what structures enable progress, what challenges persist across contexts, and where shared investment or technical assistance could accelerate results.

FUTUREREADY STATES

Intermediary Organizations	States
	Connecticut, New Jersey, Texas
	Michigan, Tennessee, Virginia
	Colorado, Alabama
	Illinois, North Carolina
	Louisiana, Mississippi



HCM Strategists is proud to partner with Lumina Foundation on the FutureReady States initiative, which brings together five intermediary organizations. Through this collaboration, HCM is helping to assess how states define and measure credential value, track employment outcomes, and align programs with workforce demand. The goal is to build smarter, data-informed strategies that connect adult learners to credentials of value and ensure public investments translate into genuine economic opportunity.

The Current Short-term Credential Landscape in FRS States

Cross-state Patterns & Themes

Across all participating states, several structural and operational challenges have emerged:

- **Fragmented Governance and Siloed Funding:** *Responsibility for credential policy is often divided* among higher education agencies, workforce boards, labor departments, and economic development offices. This fragmentation has led to overlapping programs and unclear accountability. Even in states with cross-agency councils, *decision-making authority is often advisory rather than directive*.
- **Data Gaps and Limited Interoperability:** Few states can reliably connect data on noncredit credentials to labor market outcomes. Many lack mechanisms for tracking students who transition between noncredit and credit pathways, or for evaluating credential outcomes. Even where longitudinal systems exist, *workforce and education data often reside in separate silos*.
- **Inconsistent Definitions of Quality and Value:** Most FRS states have developed definitions or frameworks for “credentials of value,” but these vary widely in rigor and application. Some are codified in statute or through state agency action (e.g., Texas, Tennessee), while others remain more conceptual or limited to specific programs (e.g., Michigan). Enforcement mechanisms are rare, and *few states tie funding or program eligibility to credential outcomes*.
- **Uneven Employer Engagement:** While employer advisory boards and sector

partnerships are common, their influence on credential recognition and hiring practices remains limited. In many states, *employers serve as validators of credentials but not consistent users of them*.

- **Sustainability of Funding:** Many successful pilot programs launched with federal ARPA funds or other one-time appropriations are now *at risk as these temporary funding sources sunset*. FRS states are seeking ways to institutionalize effective funding models through recurring appropriations or performance-based funding formulas.

Despite these challenges, the landscape reflects notable progress:

- **Policy Foundations:** Nearly all FRS states now *recognize short-term credentials as a formal component of their postsecondary and workforce ecosystems*. Several have enacted statutes defining credentials of value or establishing statewide goals tied to credential attainment that include short-term credentials (e.g., Texas, Tennessee).
- **Cross-sector Collaboration:** FRS states, such as Alabama and Colorado, demonstrate that structured collaboration among education, workforce, and economic development entities can accelerate alignment and enable the creation of shared metrics and frameworks.
- **Data Modernization Momentum:** Multiple FRS states are investing in modernizing their longitudinal data systems to include noncredit credentials and enable wage

outcomes analysis. This momentum offers an opportunity to establish shared data collection and reporting standards, as well as to improve transparency.

The pathways toward reform in the FRS states vary based on governance structures and political dynamics.

- **Executive vs. Legislative Mandates:** Some states (e.g., Alabama, Colorado) rely primarily on statutory frameworks, while others (e.g., Connecticut) have advanced through executive coordination or agency-led reforms. Each model offers distinct advantages for sustainability and agility.
- **Degree of Local Control:** Decentralized systems pose coordination challenges but can provide greater latitude for innovation. Centralized systems can act more decisively but risk top-down mandates that are disconnected from local needs.
- **Labor Market and Demographic Variation:** The economies in each FRS state shape

their credential priorities. Manufacturing and energy-driven states tend to emphasize technical credentials, while others prioritize healthcare, IT, and education.

Across the current FRS cohort, several critical gaps remain:

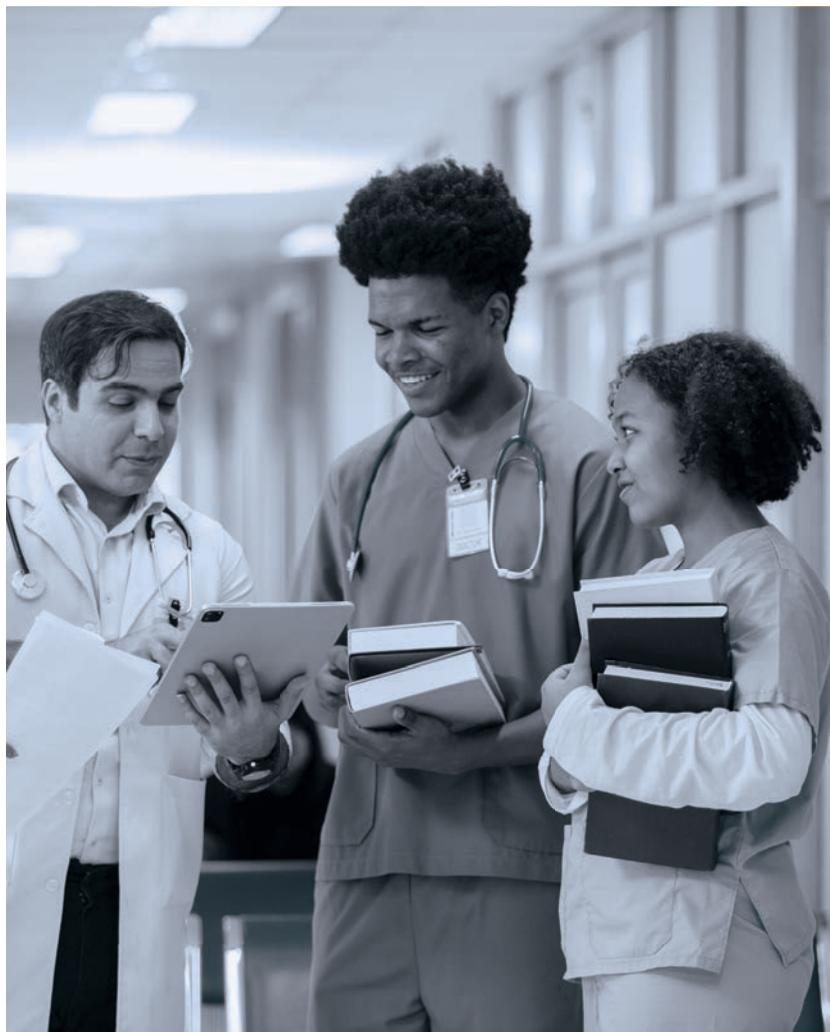
- **ROI and Longitudinal Outcomes:** States lack consistent mechanisms to measure long-term employment and wage outcomes for all credential earners.
- **Stackability and Articulation:** Noncredit-to-credit articulation is widely cited but rarely realized in practice.
- **Durable Skills and Equity Measures:** Few states systematically incorporate transferable skills or equity metrics into their credential frameworks.
- **Consumer Navigation:** Most learners still lack a single, trusted portal to compare credential options, costs, and outcomes.



The Funding Environment

States are investing substantial resources in short-term credentials through a mix of *state appropriations, federal funds, and philanthropic support*. The most common funding mechanisms include:

- **Direct Student Aid and Last-dollar Grants:** Programs such as Louisiana’s *MJ Foster Promise* and Alabama’s *Pathways to Prosperity Scholarship* provide tuition support directly to learners who are pursuing in-demand credentials. However, some states (e.g., Louisiana, North Carolina) report that aid funds are insufficient to meet student demand.
- **Institutional Capacity-building Funds:** States like Alabama and Colorado fund community colleges to rapidly develop or expand programs aligned to priority industries (e.g., Alabama’s *Skills for Success* and Colorado’s *Opportunity Now*). Mississippi partners closely with employers through its *Workforce Enhancement Training (WET) Fund*, which supports community college and industry-led training programs designed to strengthen the state’s workforce and meet employer demands in key industry sectors. These funds often emphasize responsiveness and speed to market but lack evaluation mechanisms to assess effectiveness.
- **Employer Incentives and Public-private Partnerships:** Incentives such as Alabama’s *Apprenticeship Expansion Incentive Program* encourage employer investments in upskilling. However, employer participation tends to be concentrated among large or established companies that have greater administrative capacity.
- **Competitive or Regional Grant Programs:** Several FRS states use competitive grants to promote regional collaboration and foster greater innovation (e.g., Colorado’s *Opportunity Now*, Connecticut’s *Tech Talent Accelerator*).
- **Federal and Philanthropic Braiding:** States commonly braid WIOA, Perkins, and ARPA funds with philanthropic support from organizations such as Lumina Foundation and College Futures Foundation. This strategy expands capacity but complicates sustainability when grant cycles end.



Data Systems Landscape: Collection and Tracking Capabilities

Across the FRS cohort, all participating states recognize that *robust data systems are the backbone of effective credential policy*. Yet no FRS state has achieved a fully integrated system that captures noncredit, credit, and workforce outcomes in one place. Instead, most FRS states currently rely on *parallel or partially linked systems*: postsecondary longitudinal data systems on one side, and workforce or economic development databases on the other.

Nevertheless, several FRS states are making notable progress.

- **Alabama's ATLAS (Alabama Terminal on Linking and Analyzing Statistics):** A statewide longitudinal data system codified in statute, ATLAS is designed to connect P-20W+ data and support performance tracking across education and workforce programs. It currently captures information on credential attainment and earnings, though gaps remain for noncredit credentials and UI wage record coverage.
- **Colorado's Statewide Longitudinal Data System (SLDS):** Established under HB24-1364, Colorado's SLDS Governance Board brings together all major state education and workforce entities under a unified data governance policy. While the system is still under construction, its design emphasizes interoperability and shared standards, and it could serve as a promising model for cross-agency collaboration.
- **Connecticut's DataLinkCT (formerly P20 WIN):** Recent legislation expands data submission requirements to include noncredit programs at public higher education institutions and workforce development programs, while also strengthening existing reporting expectations.
- **New Jersey's Statewide Data System (NJSDS):** A centralized longitudinal data system for public administrative data from the NJ Department of Education, NJ Department of Labor and Workforce Development, Office of the Secretary of Higher Education, and the Higher Education Student Assistance Authority. The data system aims to help stakeholders make data-informed decisions by providing research, statistical data, and reports. It includes data from K-12, postsecondary, and workforce programs, including student demographics, program participation, assessments, performance, financial aid, degrees and certificates, wages, and industry.
- **Texas' Advancements in Workforce Data and Labor Market Intelligence:** Senate Bill 1786 (89th R) signals Texas's intent to modernize workforce data by strengthening employer wage reporting and statewide labor market analysis. The legislation directs the state workforce agency to work with employers to enhance wage filings with federally compliant data elements, including industry, occupation, wages, work status, geography, and remote work. Building on this foundation, the bill establishes a biennial, regionally focused labor demand assessment that analyzes current and projected workforce needs over a ten-year horizon and identifies occupations associated with self-sufficient wages. Together, these provisions aim to better integrate workforce and education data and equip policymakers and institutions with actionable, forward-looking insight.

Other states are investing in enhancing their data tracking of nondegree credentials for specific state-funded financial aid programs.

- **Louisiana's MJ Foster Promise Program:** From a statewide coordination perspective, the MJ Foster Promise Program has highlighted the importance of consistent data tracking for nondegree credentials across higher education systems. While participating college systems use different student information systems, the Louisiana Community and Technical College System (LCTCS) has taken a lead role by integrating noncredit data into its Banner student information system. Previously, noncredit data were siloed and lacked standardization, which limited the state's ability to track participation and outcomes. Through a two-year collaborative effort, LCTCS created a unified platform for tracking both credit and noncredit programs, significantly strengthening the state's capacity to monitor enrollment and credential attainment and informing broader statewide data alignment efforts.
- **Virginia's New Economy Workforce Credential Grant:** Virginia's 2016 codification of the New Economy Workforce Credential Grant Program (branded as FastForward by the Virginia Community College System (VCCS)) formalized state expectations for data quality and accountability in noncredit workforce programs. As a condition of receiving grant funds, participating credential providers are required to submit detailed documentation on student participation and program performance through VCCS to the State Council of Higher Education for Virginia (SCHEV). These reporting requirements closely mirror those applied to credit-bearing programs, including the use of labor market

information to demonstrate alignment between credentials and workforce demand.

Despite these advances, several shared limitations persist across the FRS states.

- **Incomplete Noncredit Data:** Most data systems struggle to capture noncredit enrollment, completions, and outcomes because these programs fall outside standard IPEDS reporting and institutional data infrastructures. For instance, New Jersey faces significant challenges in capturing data on noncredit enrollment, completions, and outcomes, as these programs fall outside the state's standard data systems, leaving most short-term credential activity untracked at the state level.
- **Limited Wage and Employment Data:** Even where wage record matching is possible, coverage is inconsistent for self-employed workers, small businesses, or sectors outside unemployment insurance systems.
- **Delayed or Infrequent Reporting:** Data reporting cycles often lag by one or two years, which impedes real-time analysis and agile responsiveness to labor market shifts.
- **Restricted Access and Use:** Privacy and governance concerns limit access to linked data sets. Few states have formal mechanisms for policymakers or practitioners to use data for continuous improvement.
- **Lack of Shared Definitions:** Variations in how states define credentials, programs, and outcomes make cross-state comparisons and benchmarking difficult.

Technical interoperability remains a major obstacle in FRS states. States often face incompatible data schemas, differing unique identifier systems, and siloed IT architectures

that make linking data cumbersome. Organizational barriers compound the problem: inconsistent leadership buy-in, competing agency priorities, and unclear authority for cross-agency data sharing slow progress.

Some states are starting to mitigate these issues by developing *data-sharing agreements and governance councils* with defined membership and voting rights (e.g., Colorado's SLDS Board, Alabama's P-20W Council). Others are investing in *data lakes or APIs* to allow agencies to upload and query data in flexible formats without full system integration.

A few promising trends are emerging:

- **Wage Outcomes Reporting:** Colorado's Wage Outcomes Results Coalition and Alabama's ETPL consumer tools illustrate how states can begin publishing wage and employment outcomes by program or provider to increase transparency for learners and policymakers.
- **Linking Data to Quality Frameworks:** Some FRS states are tying data systems directly to quality criteria. The Alabama Committee on Credentialing and Career Pathways (ACCCP) and Colorado's Quality and In-demand Nondegree Credentials Framework both use labor market and earnings data to inform what credentials get included on high-value credentials lists.
- **Expanding Public Access and Navigation Tools:** Credential Registries in Alabama and Connecticut signal a growing commitment by states to transparency. And the NJ Career Navigator, developed by the New Jersey Department of Labor and Workforce Development, is an online tool that uses individual's skills and work history to generate personalized career recommendations and connect them to high-value training programs and job opportunities. These tools are most effective when paired with intuitive design and strong career navigation supports.

To fully leverage data for decision-making, states will need to consider:

- Establishing *common taxonomies and data standards* for credential types and outcomes.
- Building *staff capacity* for data analysis and cross-agency coordination.
- Developing *automated wage record matching* and standard privacy protocols.
- Embedding *equity metrics* (e.g., disaggregated outcomes by race, region, or income) into reporting systems.
- Ensuring *real-time feedback loops* so that institutions and policymakers can adjust programs based on outcomes.

Quality and Value Considerations

Every participating state has taken steps to define what constitutes a “*quality*” or “*high-value*” credential; yet implementation varies from state to state in maturity and scope. These value frameworks generally rest on four pillars:

- **Labor Market Demand:** Credentials should align with in-demand occupations or sectors as determined by labor market data.
 - **Example:** Alabama’s Five-star Demand Rubric quantifies occupational demand using wage thresholds, projected growth, and credential requirements.
 - **Example:** North Carolina is seeking to align education and training with labor market needs through the NC Workforce Credentials Advisory Council, which brings together state agencies and partners to coordinate workforce strategies and expand access to high-quality, in-demand nondegree credentials.
- **Earnings and Employment Outcomes:** Quality is often linked to wage gains or employment in a learner’s field of study.
 - **Example:** Colorado’s framework specifies that a quality nondegree credential must lead directly to a living-wage job or stack toward one.
 - **Example:** Texas tracks extensive data for publicly funded programs, including short-term credentials, through its outcomes-based funding model: enrollment, completion, employment, and earnings outcomes. However, outcomes data remain limited for certain credential types, such as Occupational Skills Awards, Institutional Credentials Leading to Licensure or Certification, and Level 1 and Level 2 certificates.
- **Skill and Competency Transparency:** States increasingly require clear documentation of the competencies each credential represents, sometimes through partnership with Credential Engine or LER systems.
- **Stackability and Progression:** Stackable credentials are viewed as both a quality and equity measure to ensure that learners can build toward higher-level credentials without dead ends.
 - **Example:** Michigan Reconnect, which provides financial aid for adults seeking a postsecondary education, includes portability as part of its consideration of a credential’s quality. Michigan’s Reconnect Short-term Training Program, eligibility requires that programs “include institutional credit articulation for a student in a noncredit job training program.” And Michigan Reconnect incentivizes community colleges to award credit for prior learning by providing \$80 per credit hour, promoting credential stackability and smoother progression into longer-term education and training pathways.

While these elements are widely recognized, operationalization across the FRS states is inconsistent. Some states have codified these definitions in statute (Texas, Tennessee), while others have adopted them through administrative policy or cross-agency agreements (Illinois).

The concept of *credential value* (i.e., whether a program delivers economic mobility to learners) is central to current state work but remains methodologically underdeveloped. FRS states are experimenting with various approaches to develop this concept.

- **Minimum Value Thresholds (MVT):** Colorado’s model quantifies ROI by comparing incremental earnings of graduates to educational costs.
- **Living-wage Benchmarks:** Some frameworks tie value to local living wage metrics (e.g., MIT calculator benchmarks). Others, like Virginia, define value in terms of a credential’s ability to provide a strong return on investment for students, resulting in a substantial increase in wages that advances them toward or above the state’s median wage.
- **Employment-in-Field Metrics:** States increasingly emphasize employment in related occupations rather than employment broadly defined.
- **Stacked Value:** Recognition that cumulative credentials can achieve living-wage outcomes even when individual components do not.
- **Alignment with Workforce Demand:** Texas defines credential quality, in part, by assessing alignment with employer demand. Through HB 8 and SB 1786, the state has established a framework in which “credentials of value” are those that are affordable, lead to strong career and earnings outcomes, and correspond to high-demand jobs in the Texas labor market.
- **Cost-benefit Threshold:** Texas also incorporates a cost-benefit threshold into its assessment of credential value; it requires that a typical student who completes a credential achieves sufficient earnings within a set number of years to recoup their educational costs and exceed the earnings of a typical high school graduate.

Despite progress, most states still face limited data to calculate these indicators reliably, particularly for noncredit credentials, which often fall outside standard wage reporting systems.

Additionally, while employer involvement in defining and validating credentials is widespread, *employer adoption remains limited. Employers still view many credentials as supply-side signals.* That is, they see them as important for education planning but not consistently trusted indicators for hiring.

FRS states have begun using several mechanisms to strengthen the link between quality assurance and labor market utility.

- **Advisory Councils and Technical Committees:** Alabama’s 16 Technical Advisory Committees and Connecticut’s Regional Sector Partnerships seek to gather employer input on credential lists and frameworks.
- **Skills-based Hiring Initiatives:** Alabama’s Talent Triad integrates verified skills data to encourage employers to recognize credentials in recruitment and promotion.
- **Public-private Collaborations:** States are increasingly collaborating with industry consortia (e.g., healthcare, IT, manufacturing) to design scalable models for credential validation and use.

Equity remains an implicit rather than explicit component of most quality frameworks. While many states disaggregate data by demographic group in workforce or education reports, few apply equity metrics directly to credential eligibility or funding. Exceptions include targeted programs like Illinois’s *Workforce Empowerment Initiative* (formerly the Workforce Equity Initiative), which ties quality and access to broader talent participation goals.

Implications for the Next Stages of FRS

We recommend five strategic imperatives to guide state planning and the next stages of the FRS initiative. We see these imperatives as interdependent, and progress in one area reinforces success in others.

1. **Work Toward Building Unified Governance and Durable Infrastructure:**

According to the FRS states, fragmentation remains the single greatest barrier to a coherent statewide credential strategy. States should formalize governance structures (via statute, executive order, or interagency agreements) that grant clear authority to convene, align, and direct action across education, workforce, and economic development systems. Governance must be designed for durability in order to survive leadership transitions and administrative turnover.

2. **Align Funding with Quality and Value:**

States are investing billions in short-term credentials, often without systematic evidence of return on investment or credential quality. A phased or tiered funding approach could help states align public dollars with programs that demonstrably advance student economic mobility. As a first phase, states can consider prioritizing funding for credentials with clear evidence of strong labor-market value, such as those aligned with high-skill, high-wage, and in-demand occupations, including for historically underserved learners. Building on this foundation, states can also consider expanding eligibility in a second phase to additional programs that show promising outcomes as new evidence emerges. A tiered strategy would allow states to start narrow, test outcomes, and scale responsibly, while avoiding premature investments in

credentials that lack empirical support. Implementing this kind of approach requires a robust data infrastructure, shared metrics for credential value, and intentional equity incentives (e.g., funding weights for underrepresented learners) to ensure that public investments support inclusive and durable economic growth.

3. **Enhance Data Systems for Decision-making:**

Data modernization is going to be essential for states to effectively link credentials, learners, and outcomes. States should prioritize shared taxonomies, accelerate noncredit data integration, and establish regular wage record matching. Beyond technical fixes, states must also build their analytic capacity and promote data use in policy and practice.

4. **Institutionalize Quality Assurance:**

Definitions of “credentials of value” must



evolve from conceptual frameworks to enforceable standards. FRS states can embed quality metrics into program approval, funding eligibility, and reporting requirements.

5. **Strengthen Employer Engagement Beyond Design:** Employers play a pivotal role in validating credentials, but their engagement must extend to adoption. FRS states should encourage the public-sector and major private employers to integrate credentials of value into hiring and promotion practices. Incentives, such as tax credits, could be used to reinforce the demand-side value of these credentials.

While the current FRS cohort shares common challenges, their support needs vary.

- Early-stage states need guidance on *establishing quality frameworks, mapping*

funding streams, and building baseline data infrastructure.

- Mid-stage states should focus on *aligning governance and embedding outcomes reporting into funding and approval processes.*
- Advanced states can *pilot performance-based funding and shared ROI frameworks* to serve as models for replication.

The FRS network offers a unique platform for peer learning. Opportunities include:

- *Exchanging data-sharing templates* and governance agreements.
- Comparing approaches to *operationalizing credential value.*
- Sharing *employer engagement models* that successfully link credentials to hiring practices.



