Building Transparent, Future-Ready Credential Systems

A Cross-State Synthesis of Non-Degree Credential Transparency Efforts

Across the country, non-degree credentials such as certificates, certifications, licenses, apprenticeships, badges, and microcredentials have become central to how states prepare learners for high-demand careers. Yet the data describing these credentials is frequently fragmented, inconsistently formatted, and difficult for learners, employers, and policymakers to access or compare. Through Lumina Foundation's FutureReady States Initiative, Credential Engine partnered with Texas, North Carolina, and New Jersey to examine each state's non-degree credential (NDC) landscape, transform priority datasets into structured, open, linked, interoperable, and durable (SOLID) data, and publish that information to the Credential Registry using the Credential Transparency Description Language (CTDL).

This paper synthesizes findings across the three states: New Jersey, North Carolina and Texas. It highlights common progress, shared challenges, and the recommendations most likely to accelerate credential transparency nationally, while also noting where each state's experience diverged based on its governance structure and existing infrastructure.

Shared Foundation Across States

Each state engagement followed the same methodology and was evaluated against the OPEN initiative, Credential Engine's effort to convert publicly available credential, skill, and job information into structured, linked open data. Under OPEN, datasets are assessed against a shared set of criteria for public accessibility, authoritative sourcing, and descriptive completeness. Datasets that met these criteria were mapped to CTDL and published to the Credential Registry; datasets that did not were documented as opportunities for future collaboration. This consistent approach makes the three states' experiences directly comparable and reveals patterns that are likely common to many states pursuing similar transparency goals.

State Landscape Highlights

New Jersey

New Jersey's landscape is multi-layered, with credentials, the training programs that lead to them, and outcome data often residing in separate systems across the Department of Labor, Department of Education, Council of County Colleges, and Division of Consumer Affairs (DCA). Credential Engine published the Eligible Training Provider list, occupational and professional licenses, and industry-recognized credentials to the Registry. Noncredit course and competency

data from the New Jersey Community College System also remains on hold pending internal review by the New Jersey Council of County Colleges (NJCCC), temporarily delaying its availability for CTDL mapping.

North Carolina

North Carolina's credential landscape is broad and mature, anchored by the North Carolina Workforce Credentials list, the Eligible Training Provider list, and extensive occupational licensure data spanning multiple agencies. The state's Workforce Continuing Education (WCE) Reportable Credentials initiative (a data set not publicly available, but shared with Credential Engine) marked a significant step toward transparency for community-college-based non-degree credentials, and this work connects to statewide goals under NC's Workforce Act 2026. Despite this maturity, coverage gaps remain around apprenticeship data managed outside centralized systems, and around smaller or less-visible training providers whose offerings are not yet captured by statewide reporting pathways. Inconsistent naming conventions and unclear distinctions between a credential and the program that leads to it also complicated CTDL alignment.

Texas

Texas is building a statewide Texas Library of credentials (MyTXLibrary) under the Tri-Agency Workforce Initiative, with the goal of surfacing every credential owned, issued, offered, or funded in the state. Credential Engine has published data spanning industry-based certifications, occupational and professional licenses, Adult Education and Literacy (AEL) programs, programs offered by Texas Eligible Training Providers, credit programs for public colleges and universities, and licensed career schools and colleges, totaling more than 23,000 credentials and learning

programs now available as linked open data. The most significant gap identified was the absence of a single authoritative source for non-degree credentials offered by Texas public colleges and universities. Texas also illustrates a recurring theme across all three states: structured data can exist in the Registry without it being consumed by the state's own career-planning tools.

Common Challenges Across States

Several challenges recurred across all three engagements, regardless of each state's governance model or level of existing infrastructure:

- **No single authoritative source.** None of the three states maintain one comprehensive inventory of non-degree credentials; instead, information is spread across multiple agencies, each with its own priorities and reporting practices.
- **Unstructured formats.** PDFs, static webpages, and inconsistently structured spreadsheets limited automated extraction in every state and required substantial manual review before data could be aligned with CTDL.
- **Inconsistent definitions and naming.** Credential and program names, categories, and descriptions vary across agencies, and it is not always clear whether a listing refers to a standalone credential or the training program that leads to one.
- **Limited visibility into employer-issued credentials.** Credentials offered directly by employers, along with those from private training providers and industry associations, remain largely undocumented in all three states. Unlike public agency data, this information is typically never published online in the first place, so there is no source page or dataset to extract, only the credential as it exists inside an individual employer's hiring and training practices. Because employers generally have little incentive to publish this information publicly, it represents one of the hardest gaps to close and is likely to persist unless states actively work to bring employers into the credential transparency ecosystem.

Impact and Common Use Cases

Across all three states, CTDL-aligned credential data supports the same core set of stakeholders and use cases: helping learners and job seekers discover pathways and understand credential value; helping employers and recruiters identify candidates with verified competencies; giving

policymakers reliable information for funding, accountability, and workforce strategy; and giving researchers comparable, machine-readable data for labor market and program analysis. Structured data also enables new capabilities, such as linking credentials to skills, job postings, and outcomes, and integrating credential information into dashboards, advising tools, and career navigation platforms.

Structured machine-readable data also supports digital credentialing efforts, such as Comprehensive Learner Records (CLR), Learning and Employment Records (LERs), or the development or prioritization of federal education and workforce training competitive grant funds encouraging state Talent Marketplaces to better match talent to opportunities. Any CTDL-aligned credential data already published to the Registry provides a ready foundation for this work, since LERs depend on structured, machine-readable, and portable credential records.

Cross-State Recommendations

Building on the individual state recommendations, four strategic actions would meaningfully accelerate credential transparency across Texas, North Carolina, New Jersey, and states facing similar circumstances:

- **Strengthen data quality through consistent provider reporting.** States should establish common reporting expectations for credential and program information, following examples such as Texas' work with AEL providers, so that data is consistently structured regardless of which agency or provider originates it.
- **Close the loop between the Registry and state career tools.** Structured credential data already published to the Credential Registry should be actively consumed by states' own career-planning platforms, dashboards, and advising tools rather than existing as a parallel, disconnected resource.
- **Create incentives for employer participation.** Because employer-issued credentials are rarely published anywhere online, states cannot rely on extraction alone to capture them; states will need to actively engage employers and offer a reason to participate. Without a deliberate incentive strategy, employer-issued credentials are likely to remain the most persistent gap in every state's non-degree credential landscape.

- **Enact state policies that all credentials delivered, funded, or approved by or in the state be published to a statewide credential registry**, and that information about all such credentials include, at a minimum, provider, program, credential, skills, costs, delivery mode, quality assurance indicators, earnings and employment outcomes, and alignment to job skills.

Conclusion

New Jersey, North Carolina, and Texas each demonstrate meaningful, if uneven, progress toward transparent, interoperable non-degree credential data. Their experiences show that the barriers to transparency are less about the value of the underlying credentials and more about the state of the data describing them: inconsistent formats, fragmented ownership, and a persistent gap between publishing structured data and actually using it. Applying SOLID data principles and CTDL standards has given each state a clearer, more actionable foundation. Continued investment in data quality, cross-agency coordination, and integration between the Credential Registry and state career tools will determine how much value that foundation ultimately delivers to learners, employers, and policymakers.

Credential Engine remains ready to support all three states, and others pursuing similar goals, with CTDL mapping, dataset publication, integration guidance, and data governance support as their non-degree credential ecosystems continue to mature.

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For questions about this synthesis, the underlying state reports, or partnership opportunities, please contact Credential Engine at info@credentialengine.org or visit credentialengine.org.