U.S. Chamber of Commerce Foundation

Rapidly evolving, skills-based talent markets are creating extraordinary opportunities for learners and workers, and better data is the key to unlocking them. Yet too many people lack access to the data they need to take advantage of those opportunities. Employers and education, training, and credentialing providers are equally eager to align job and learning opportunities but are limited by the same data gaps. And public and private sector leaders ready to respond boldly to transformative forces like artificial intelligence (AI) are missing the data infrastructure to act at the speed and scale that the moment demands.

Existing government data systems have laid a valuable foundation for tracking employment and education trends and guiding federal and state policy development. But they were built for a different era. Imagine a future where unprecedented public-private collaboration and data sharing, powered by modern, AI-ready infrastructure, puts actionable data in the hands of every learner, worker, employer, service provider, and community leader. That future is within reach. What is needed is a shift to a bold new public-private paradigm for collecting, managing, and utilizing data built to truly empower learners and workers and transform skills-based talent markets.

Talent
Technology
Transformation

What is the New Data Paradigm?

The U.S. Chamber of Commerce Foundation and the T3 Innovation Network have launched the New Data Paradigm (NDP), an ambitious initiative to pioneer a new public-private approach to collecting, managing, and using standardized education and work-related data to meet the most pressing needs of learners, workers, employers, providers, and communities.

The Current Government-Focused Data Paradigm: Built for a Different Era

The current data paradigm serves important purposes:

- Developing and maintaining federal statistics and related federal/state education and labor market information programs.
- Developing federal and state government evidence-based education and workforce policies.
- Administering federal and state government programs and improving the performance of government-funded service providers.
- Conducting government-led education and workforce planning and systems-building and other interventions; and
- Promoting government policy-related academic research.

These use cases still matter, but this government-centered model was not designed to meet the full range of data needs that learners, workers, and private sector innovators face in today's dynamic talent marketplace.

The New Public-Private Data Paradigm: A Transformative Leap Forward

NDP proposes to build innovative public-private, state and multi-state data utilities capable of addressing the existing government-focused use cases while also enabling a broader range of workforce, education, and economic development applications such as:

- Empowering learners and workers to use data including their own Learning and Employment Records (LERs) to pursue education and career opportunities;
- Unlocking access and use of data by employers, learners and workers, and public and private service providers and intermediaries to improve decision making, connections and transparency in rapidly changing skills-based talent markets;
- Providing access and use of data on national, state and local talent markets for both public and private sector-led initiatives;
- Expanding and improving data access and use through an open public and private AI-powered applications marketplace while protecting privacy and providing data security; and
- Improving data access and use for current data paradigm use case applications (e.g., improving postsecondary outcome data).

NDP is different from the existing government-centered paradigm because it proposes a more balanced public-private governance framework for state and multi-state data utilities that develop and manage AI-ready data and technology infrastructures for both public sector and private sector data applications.

Why Now?

Here's why the New Data Paradigm is essential to drive a new era of economic mobility:

– **A Shift in Federal Priorities Creates a Historic Opening.** Over the past decade, the federal government's role and funding in data systems have evolved, and with that change comes a rare and powerful opportunity to reimagine what a modern data infrastructure looks like. Rather than waiting for uncertainty to resolve itself, NDP steps forward with a bold, proactive vision for what comes next.

– **The Limitations of the Current Paradigm Are Impossible to Ignore.** There is growing recognition that the current government data paradigm simply cannot keep pace with today's demands. From emerging challenges like work verification requirements for benefit programs (e.g., Medicaid and SNAP) to the full spectrum of modern talent marketplace needs, the gaps have become clear.

– **Innovative Use Cases Are Ready and Waiting.** A new generation of high-impact applications is emerging that current government systems were never built to support. These include:

1. Putting real, actionable data directly in the hands of learners and workers;
2. Dramatically improving talent market transparency, connectivity, and skills data interoperability; and
3. Enabling both public and private sector actors to intervene effectively and improve talent market performance.

– **Unprecedented Data Sharing Is Now Within Reach.** For the first time, the incentives for broad public-private data sharing are genuinely compelling. By offering employers, education and training providers, credentialing organizations, learners, workers, and other stakeholders rich and meaningful data, along with reduced data sharing costs, expanded data access, and robust privacy and security protections, NDP proposes a framework where sharing data isn't just possible, it's mutually beneficial.

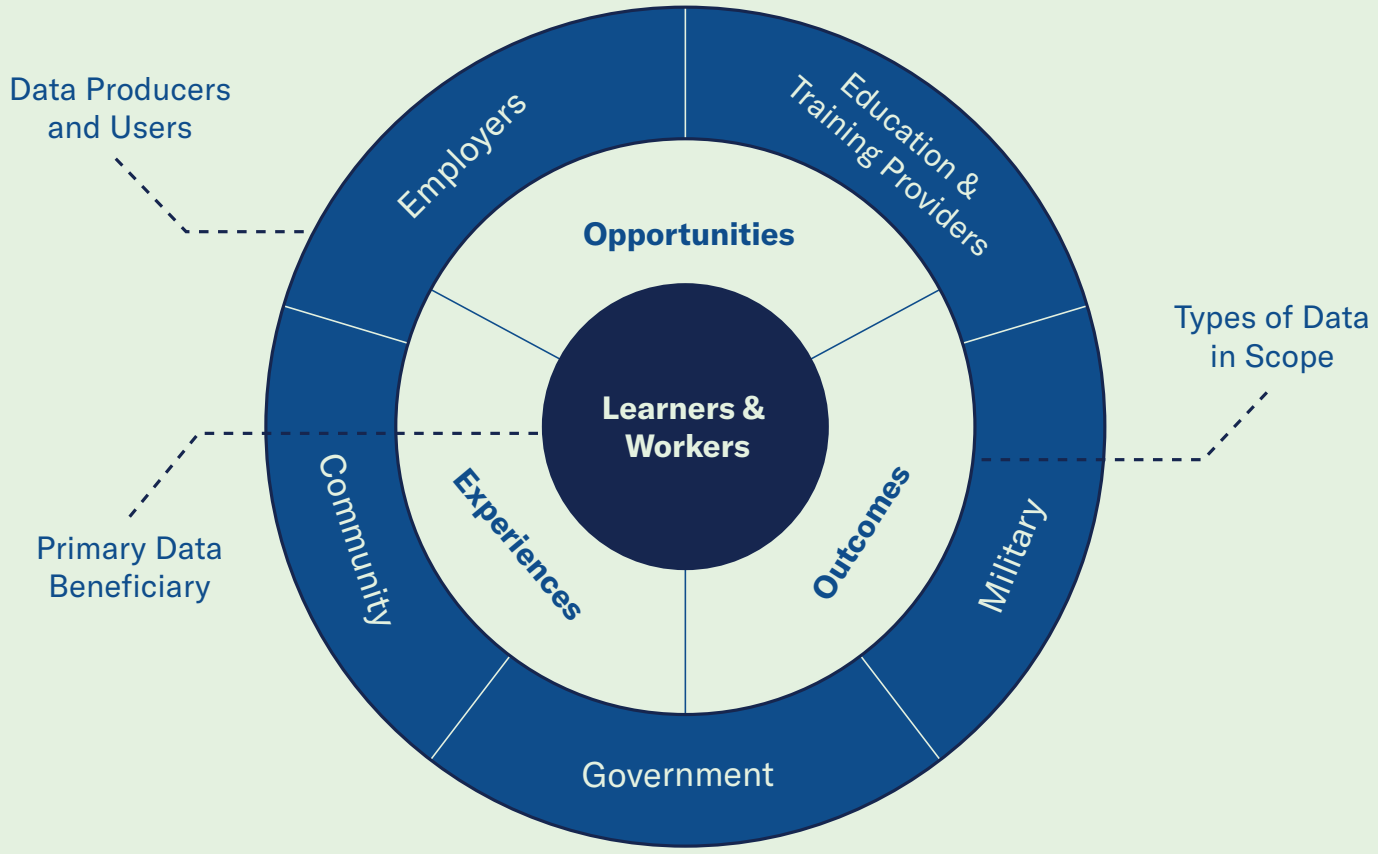
– **AI Is Poised to Revolutionize Talent Markets if Built on the Right Foundation.** The transformative potential of AI-powered applications in talent markets is enormous but realizing that potential requires AI-ready data and a technology infrastructure that modernizes how data is collected, dramatically expands access, and upholds the highest standards of privacy and security. NDP is that foundation.

NDP Initiative: What Has Been Done?

NDP Brief: August 2025

The U.S. Chamber of Commerce Foundation and the T3 Innovation Network launched the NDP initiative in August 2025 with a brief that presented the need for a new paradigm and new priorities (see Fig. 1), and major stakeholder use case applications compared to the existing government-centered paradigm. This brief also proposed key design features of a new public-private data and technology infrastructure that would be necessary to empower learners and workers and other stakeholders such as employers, government, and education, training and credentialing providers with better data. Finally, the brief proposed an NDP initiative planning phase to further explore the NDP vision and the key design features of this infrastructure.

Figure 1: Orienting the New Data Paradigm with Learners and Workers at the Center



NDP Planning Phase and Report: September 2025 to July 2026

The NDP planning phase further explored the vision of the new design of a data and technology infrastructure. Initial efforts focused on aligning and coordinating promising initiatives to improve the collection and use of education and work-related administrative data and the issuing and use of LERs. The work then examined how a new infrastructure could improve the development and use of skills data through the use of skills ontologies. Finally, it produced a high-level functional design of the infrastructure for collecting, managing and using work-related and education data.

The planning phase technical report proposes that public-private state and multi-state data utilities should develop and manage a modernized, standardized, and AI-ready distributed data and technology infrastructure to:

– Improve the Development and Sharing of Work-Related and Education Data. Improve how employers and education, training and credentialing providers use source data systems (e.g., Human Resource Information Systems, Student Information Systems) to share higher quality and more standardized and timely data at lower cost. This includes:

Job and Learning Opportunity Data Publishing	Assisting employers and providers in publishing data on their websites and distributing this data to public and private platforms (e.g., job boards) and registries (e.g., credential registries).
Government Administrative Data Reporting	Assisting employers, providers, and government agencies in improving the reporting of government administrative data using modernized reporting systems that can be linked with more detailed job and learning opportunity data and support the issuing of LERs.
LER Issuing	Assisting employers and providers in issuing LERs as verifiable credentials and working with government agencies to use government administrative data to issue LERs when not provided directly by employers and providers.
Improve Data Access and Use	Improve existing government-centered data uses including federal statistics, government program administration, and academic research relevant to public policy. Also, expand both public and private sector data access and use through distributed analytics applications provided by an open marketplace of AI-powered applications and tools that empower learners and workers and improve talent markets.

These public-private state and multi-state data utilities should improve data sharing and use by providing key data infrastructure services including:

Data Standards

Providing a unified data model and schema to align and enhance work-related and education data standards and providing access to data standard tools and services to improve the effective utilization of these unified data standards.

Job and Learning Opportunity Classification Taxonomies

Providing access to public and private sector taxonomies for the classification of job and learning opportunities and tools and resources to improve their use.

Skills Ontologies

Providing skills ontology services that improve access to and use of public and private standards-based skills ontologies that (1) function as dynamic and fluid skills data graphs and make connections between skills, jobs, and learning and credentialing opportunities in talent markets; (2) improve the mapping and translation between these skills ontologies using reference ontologies and the validation of skill matches using work-related administrative data; and (3) promote the development of open applications that demonstrate the use of skills ontologies and how these applications can provide the data necessary for the continuous updating of skills ontologies to reflect skill changes in talent markets.

Privacy and Security

Promoting and ensuring the use of privacy and security guidelines and best practices for the sharing, management and use of data that expand access while protecting privacy and ensuring data security.

Governance

Providing governance services based on a public-private governance framework for managing the development and use of the data and technology infrastructure.

The NDP planning phase technical report proposes a three-phase work plan moving from design to pilot-testing to scaled implementation from 2026 to 2029. During the design phase, the report recommends that the NDP initiative:

- Collaborate with data standards organizations to develop a unified data model and schema to align and enhance work-related and education data standards and LER standards to support the proposed data infrastructure;
- Promote the development and use of public and private sector skills ontologies and mapping and translation services that provide the basis for a common or comparable language for skills data;
- Advance privacy and security standards and practices including the use of AI-ready privacy obligation frameworks;
- Further develop strategies and pilot-test plans for: (1) improving, coordinating and standardizing the publishing of job and learning opportunities, administrative data reporting to government, and issuing LERs; (2) building on and strengthening the LER ecosystem; and (3) exploring distributed data analytics applications; and
- Further explore the design and pilot-testing of public-private state and multi-state data utilities for developing and managing the proposed infrastructure.

What Are the Next Steps?

The U.S. Chamber Foundation and the T3 Innovation Network will launch the NDP design phase through three key projects:

1 **Developing a Unified Data Model and Schema to Align and Enhance Work-Related and Education Data Standards and Provide NDP Infrastructure Services**

This NDP initiative will collaborate with leading standards organizations and initiatives to develop a unified data model and schema to align and enhance work-related and education data standards and provide the necessary semantic backbone for the proposed NDP infrastructure and the AI applications it supports. This initiative will explore the unified model approach and its implications for updating and aligning the Jobs and Employment Data Exchange (JEDx) data model and dictionary in collaboration with the HR Open Standards Consortium. It also will explore the development of NDP data standards infrastructure services including tools and services for utilizing these unified data standards.

2 **Developing and Supporting Open Skills Ontology Ecosystems through Standards, Best Practices, Use of Reference Ontologies, and Providing Usage and Validation Data**

This NDP initiative will collaborate with leading standards organizations and initiatives to further develop and promote wide-scale adoption of standards and recommended practices and guidance for the development and use of interoperable and machine-actionable skills ontologies that function as dynamic and fluid skills data graphs that make connections between skills, jobs, and learning and credentialing opportunities in talent markets. This initiative also will explore the development and use of AI tools to map and translate between skills ontologies and the potential use of open reference ontologies or metaontologies that could be supported by the NDP infrastructure. In addition, this initiative will explore the development and use of AI-powered applications such as JobSIDE that demonstrate the use of skills ontologies and how these applications can provide the data (e.g., provenance data) necessary for the continuous updating of skills ontologies to reflect skill changes in talent markets. Finally, this initiative will explore the use of enhanced administrative data to validate matches between employer skill requirements and applicant skills.

3 **Exploring the Design and Pilot-testing of Public-Private, State and Multi-State Data Utilities for Talent Markets**

The NDP initiative will explore the design and pilot-testing of public-private state and multi-state data utilities for managing the proposed NDP data and technology infrastructure for talent marketplaces. These data utilities will be designed based on: (1) leading public-private governance frameworks and utility models (e.g., health data utility models); and (2) the design of the proposed data and technology infrastructure that can support both public and private use case applications. This planning will propose the development and pilot-testing of one or more state or regional multi-state utilities, which will demonstrate the role of these utilities in improving data sharing and use for both public and private use case applications in talent markets.

Learn More and Get Engaged

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