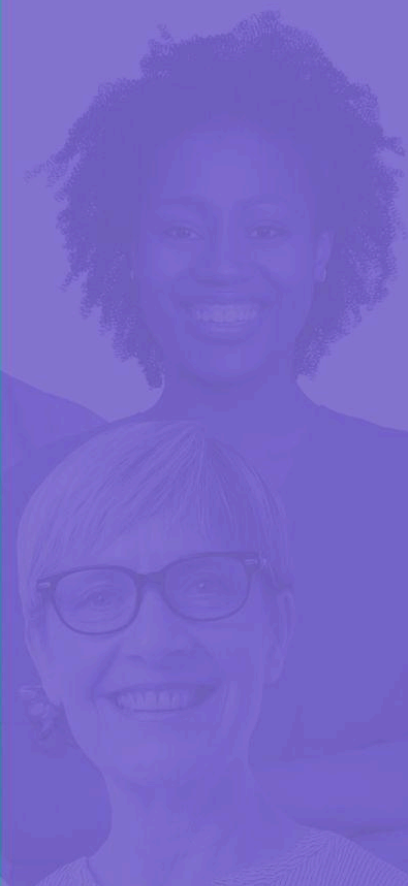
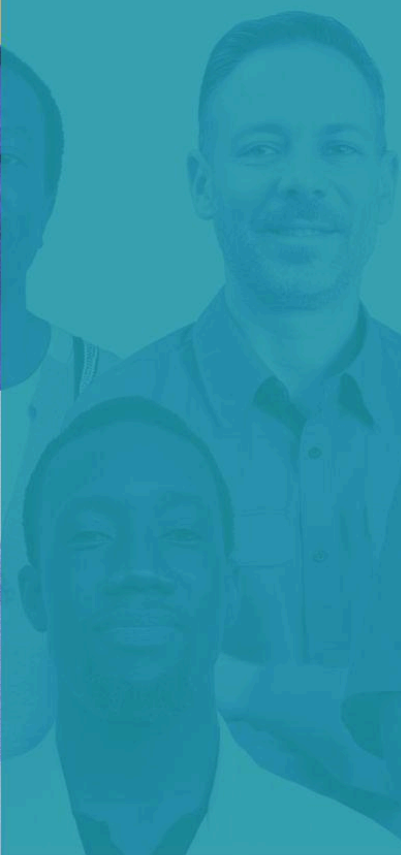


America's Trusted Talent System (Attest)

An Action Plan



Lumina[™]
FOUNDATION



intentional futures

Copyright 2026 Lumina Foundation

Suggested citation: Mullin, C., & Intentional Futures. (2026). *America's Trusted Talent System: An Action Plan*. Lumina Foundation.



Lumina Foundation is an independent, private foundation in Indianapolis that is committed to making opportunities for learning beyond high school available to all. We envision higher learning that is easy to navigate, delivers fair results, and meets the nation's talent needs through a broad range of credentials. We work toward a system that prepares people for informed citizenship and success in a global economy.

Christopher (Chris) Mullin, Ph.D., is strategy director of data and measurement for Lumina. Previously, he served as director of Strong Start to Finish at the Education Commission of the States, executive vice chancellor of the Florida College System, and assistant vice chancellor for policy and research at the State University System of Florida's Board of Governors. He also served as program director for policy analysis at the American Association of Community Colleges (AACC), and as a postdoctoral fellow at the Illinois Education Research Council.

iF intentional futures

Intentional Futures (iF) is a strategy and design consultancy based in Seattle that serves clients worldwide. We are proud to be a certified B Corp that has pledged to hold high standards across transparency, equitability, and sustainability efforts. The Education practice at iF has supported Lumina in this work through its expertise in higher education, workforce development, and above all, centering the learner as they navigate education and work.

Executive Summary

The United States is entering a decisive moment in workforce development.

Rapid advances in artificial intelligence, automation, and sector transformation are reshaping skill demands across industries. At the same time, millions of capable American workers are seeking clear pathways to adapt, reskill, and advance while industry is in need of a clear picture of where talent is available. The federal government has made historic investments in workforce training and education to meet this moment. Yet one foundational challenge remains unresolved: we cannot clearly see, at a national level, where and how talent is being developed, nor how those investments connect to emerging workforce needs.

In effect, we are investing at scale without a coherent view of the system we are funding.

Today, education and workforce data systems operate largely in parallel. Workforce programs, higher education institutions, apprenticeship systems, and career and technical education programs each collect substantial data under distinct statutory authorities. These collections, including IPEDS, WIOA, RAPIDS, and Perkins V, are strong within their individual domains but they were not designed to work together. As a result, policymakers, employers, and the public must piece together fragmented information to understand the nation's talent pipeline. Meanwhile, institutions and training providers shoulder duplicative reporting requirements across multiple federal systems.

This fragmentation is not the result of failure, it is the natural consequence of decades of incremental program growth under different legislative mandates. But in a rapidly changing labor market, fragmentation has become a strategic constraint. It limits the government's ability to lead with clarity, measure return on investment, and align education and training with national economic priorities.

This paper proposes establishing a unified federal education and workforce data system that organizes this fragmented data around a shared national inventory of providers, programs, and credentials (the Hub) and connects all other data from existing reporting systems (the Spokes) to that inventory: a Hub-and-Spoke model. The Hub and Spokes are connected through a crosswalk layer that aligns system-specific identifiers and terminology to a shared set of stable reference points. This creates the foundation for a coherent, accountable national talent ecosystem.

The Hub is intentionally limited in scope and designed to preserve existing data systems, rather than redesign them. It does not alter statutory reporting requirements, centralize program authority, or collect new student-level data. Instead, it defines stable identifiers and core data structures that existing systems can reference. In effect, it standardizes the map without forcing agencies or programs onto the same road.

The Spokes remain intact. Workforce, education, apprenticeship, and other systems continue to collect program-specific data as required by law. But through shared reference structures and data connectors, those systems become legible to one another. Data collected for different purposes can be understood together, transforming fragmented reporting into useful insights that can inform improvements.

For the **government, education and learning providers**, this approach offers immediate strategic value:

- A clear, national inventory of workforce training providers, programs, and credentials.
- Direct visibility into how federal training investments align with labor market demand.
- Reduced duplicative reporting burden for providers.
- Stronger ability to assess outcomes across programs without expanding data collection authority.

Just as importantly, the benefits cascade outward.

For **employers**, a coherent view of the training landscape means clearer signals about where relevant skills are being developed and stronger alignment between training supply and industry demand. It enables more effective public-private partnerships and gives employers greater confidence that federal investments are producing talent aligned to real economic needs.

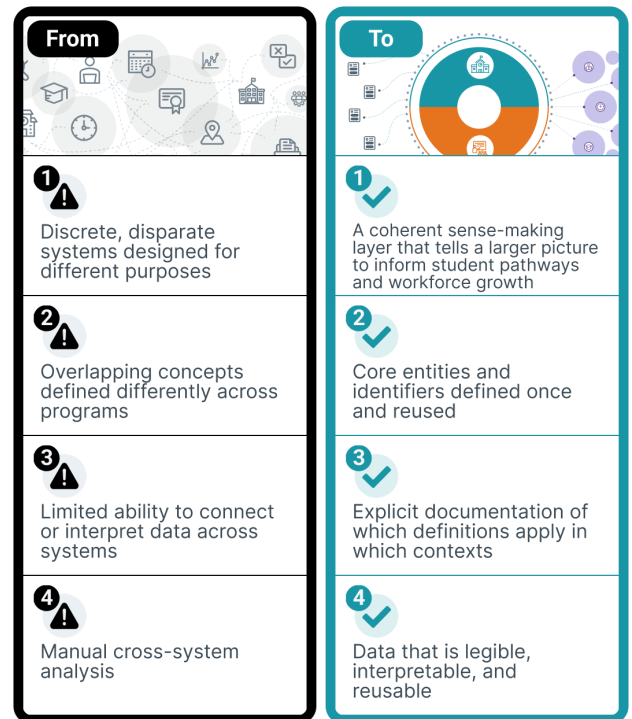
For **learners and workers**, coherence translates into clarity. When providers, programs, and credentials can be understood in relation to one another and to labor market demand, individuals can more confidently navigate options, identify valuable credentials, and pursue pathways that lead to opportunity. Over time, this shared infrastructure enables innovation in tools and services that help learners and workers see not just what education and training exists, but how it connects to employment outcomes.

This model is deliberately pragmatic, by:

- focusing on aligning overlapping data elements already collected across systems and establishing unified provider and credential inventories,
- avoiding statutory change as well as the complexity and risk of student-level data integration,
- preserving agency ownership while improving interoperability, and
- leveraging existing data and authorities so implementation requires modest infrastructure investment.

This is not a call to build a new federal super-system. It is a targeted, high-leverage modernization step. One that strengthens accountability, reduces administrative burden, and equips the Departments of Labor, Education, and Commerce to lead in a rapidly evolving workforce landscape.

At a moment when workforce transformation is accelerating, the ability to see the system clearly is no longer optional. It is essential infrastructure for governing effectively and ensuring America's talent strategy delivers on its promise.



America's Trusted Talent System (ATTEST): An Action Plan

Aligned Federal Education and Workforce Data

Introduction

Each year, the federal government invests tens of billions of dollars in education and workforce development,¹ funding higher education, workforce training, apprenticeship programs, and career and technical education. The shared goal of these investments is to develop the talent that powers American businesses and economic growth. Today, however, the extent and effectiveness of these investments cannot be clearly understood.

The story of talent development in America is already embedded in the data collected by federal education and workforce systems, each built to serve distinct and necessary purposes. Individually, they represent significant public investment, articulate institutional accountability, and inform decision-making across education and workforce policy. Yet, because they each evolved in response to specific legislation, programmatic needs, and institutional constraints, this unintentionally created a “fragmented web of duplicative programs.”² Without alignment, the system lacks a coherent view of what’s possible, leaving policymakers, the public, workers, and learners without a full picture of which pathways lead to opportunity.

If interwoven and streamlined, these systems could tell a far richer and more actionable story: how participants progress from education to work, the breadth and depth of human capital within communities, and where policy and investment best support both people and the economy.

The opportunity today isn’t an overhaul of education and workforce data systems to force interoperability; it is a structure that enables coherence between existing systems. Instead of enforcing uniformity or redesigning existing platforms, we propose a shift to a Hub-and-Spoke model: establishing a shared reference layer (the Hub) for core entities such as providers and programs, that allows the rest of the data in existing systems (the Spokes) to remain purpose-built while being understood and used together. The model preserves the individual systems’ goals while allowing them to function as parts of a coherent whole. The result: better data quality for agencies and a clearer line of sight for policymakers to determine whether federal investments are developing the talent pipeline that fuels America’s future.

¹ USASpending.gov, *Education, Training, Employment, and Social Services*. <https://www.usaspending.gov>

² U.S. Department of Labor, *America’s Talent Strategy: Building the Workforce for the Golden Age*, August 2025, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2025/08/Americas-Talent-Strategy-Building-the-Workforce-for-the-Golden-Age.pdf>

Why Now

The case for a unified education and workforce data system is widely recognized: reporting is confusing, time-consuming, duplicative, and fails to provide an actionable view of American education and workforce outcomes. Now, a set of converging pressures has made the limitations of fragmentation harder to ignore.

The current system is under strain.

Agencies and providers of learning (e.g., schools, colleges/universities, vocational/apprenticeship programs) are reaching the limits of their capacity given the duplicative reporting and manual reconciliation required by current systems. The Departments of Labor, Education, and Commerce 2025 report *America's Talent Strategy: Building the Workforce for the Golden Age* outlined a vision for a streamlined workforce ecosystem that through five pillars, among other efforts, seeks to “reform administrative processes to enhance efficiency and reduce burdens.”³ Learning providers are asked to report the same core information across multiple federal systems, often on different timelines and using slightly different definitions. State and local entities and institutional researchers spend significant financial resources and human capacity translating data for compliance rather than using it to improve programs or guide learners.

In the *2025 Administrative Burden Survey Report*,⁴ taxpayer-funded institutional financial aid offices attributed “greater regulatory/compliance workload in general” as one of the main factors contributing to resource challenges, with 80% reporting that it had a *major* impact and another 17% reporting a *minor* impact. When asked the extent to which resource challenges impacted the financial aid office’s mission and ability to support students, 28% of respondents reported a *significant* impact and an additional 48% reported *some* impact.

Moreover, the strain is not evenly distributed. Smaller institutions, local workforce boards, rural communities, and under-resourced states feel it most acutely. As demands for accountability and transparency grow, the financial and human cost of data fragmentation continues to rise.

The demand for cross-sector insight is growing.

Education and workforce systems are being asked to respond to rapid structural shifts: technological change, ever-evolving job requirements, declining college enrollment, and growing interest in non-degree and competency-based pathways are overwhelming a system built on 20th-century economic assumptions. Understanding the connection between education, training, and employment—and being able to act on it—is a growing practical concern for states, employers, and policymakers.

The call for action is gaining broad traction across the political spectrum. The Bipartisan Policy Center’s Commission on the American Workforce, co-chaired by former Republican Governor Bill Haslam and former Democratic Governor Deval Patrick, concluded that the nation lacks a strong, coherent strategy

³ U.S. Department of Labor, U.S. Department of Commerce, & U.S. Department of Education. *America's Talent Strategy: Building the Workforce for the Golden Age*, 2025, <https://www.dol.gov/sites/dolgov/files/OPA/newsreleases/2025/08/Americas-Talent-Strategy-Building-the-Workforce-for-the-Golden-Age.pdf>

⁴ National Association of Student Financial Aid Administrators, *2025 Administrative Burden Survey Report*, 2025, https://www.nasfaa.org/uploads/documents/2025_Administrative_Burden_Survey_Report.pdf

linking individuals to opportunity and called explicitly for a unified talent data system to coordinate federal education and workforce data, strengthen longitudinal data systems, and give all stakeholders the information they need to act.⁵

The recent expansion of Pell Grant eligibility to short-term workforce programs is one of the most significant investments in accessible job training in decades, and its success will depend heavily on states' ability to track and report outcomes across program types.⁶ Yet, training programs at the same institution often operate in separate data systems with different definitions and reporting structures, making that tracking far harder than it should be.

The recently released *Reimagining the Institute of Education Sciences*⁷ report also echoes this urgency. Stakeholders have called on the National Center for Education Statistics to facilitate cross-agency data alignment with the Departments of Labor, Health and Human Services, and Commerce, forging connections between education, workforce, health, and demographic records to better understand the "national education-to-employment ecosystem." Federal efforts to act on this vision are already underway. The National Secure Data Service Demonstration (NSDS-D) project, slated to launch in 2027, aims to create a platform that streamlines cross-agency data access for researchers and decision-makers at all levels of government.

The Hub-and-Spoke model proposed in this brief is essential to these efforts, establishing the shared provider, program, and credential infrastructure that cross-agency data initiatives will need to function effectively.

The window for foundational alignment is open.

Periods of policy change and administrative transition expose the limits of rigid and fragmented data systems. When systems do not align, institutions struggle to respond quickly, explain impact clearly, or maintain continuity across shifts in priorities. Establishing common reference points allows existing systems to remain stable while supporting a wide range of future policy directions.

Federal initiatives to streamline reporting, such as those highlighted in a recent joint news release from the Department of Labor (DOL) and the Education Department,⁸ demonstrate a commitment to reducing system fragmentation. These efforts aim to harmonize education and workforce systems, specifically by aligning reporting timelines and processes.



Together, these pressures create a rare moment in which alignment is both necessary and politically viable.

⁵ Bipartisan Policy Center, *A Nation at Risk to a Nation at Work: The Case for a National Talent Strategy*, 2025, <https://bipartisanpolicy.org/wp-content/uploads/2026/04/A-Nation-at-Risk-to-a-National-at-Work-The-Case-for-a-National-Talent-Strategy.pdf>

⁶ Katie Spiker and Kate Tromble, "Workforce Pell Success Will Require Data Alignment — Here's What That Means and What to Do Next," National Skills Coalition, March 5, 2026, <https://nationalskillscoalition.org/blog/workforce-pell-quality-credentials/workforce-pell-success-will-require-data-alignment/>

⁷ Institute of Education Sciences, *Reimagining the Institute of Education Sciences: A Strategy for Relevance and Renewal*, February 2026, <https://ies.ed.gov/ies/2026/02/reimagining-ies>

⁸ U.S. Department of Labor, "U.S. Departments of Labor and Education Announce Streamlined State Plan Timelines to Strengthen Workforce Alignment," January 26, 2026, <https://www.dol.gov/newsroom/releases/eta/eta20260126>

A Constructive Approach to System Improvement

Past efforts to modernize education and workforce data have often taken longer than anticipated and underestimated the effort required. For example, the Interagency GI Bill Data Linkage Project, designed to link data across the Departments of Veteran Affairs, Defence, Education as well as other agencies to better understand veteran education and workforce outcomes, faced years of delay due to challenges that extended well beyond technical integration.⁹ Reconciling policy definitions, redesigning reporting systems, introducing learner-level data, and changing governance structures are each major endeavors in their own right, let alone combined. While grounded in important goals, these efforts stall because the scope overwhelms the system's legal, political, cultural, and operational capacity to absorb change.

Decisions related to improving the federal education and workforce data systems must balance urgency with trust, feasibility with ambition, and alignment with autonomy. A Hub-and-Spoke solution and data structure will align stakeholders and accelerate system-wide improvements while keeping in mind the realities of the current system:

1. **The system is governed by multiple statutes and political commitments.** Attempting to resolve all differences at once would likely trigger resistance from several directions, increasing the risk of derailment.
2. **Capacity across many learning and training providers is limited,** particularly among smaller Eligible Training Providers. Large changes to reporting structures or expectations would add burden to an already strained system.
3. **Entities (and individuals) are cautious about data reforms** that could be perceived as altering accountability, inhibiting autonomy, or raising privacy concerns. Requiring major changes without first building trust would jeopardize adoption and stall progress.

⁹ Veterans Education Success, *Lessons Learned from the Interagency GI Bill Data Linkage Project*, <https://vetsedsuccess.org/lessons-learned-from-the-interagency-gi-bill-data-linkage-project/>

Establishing a Shared Foundation

The Hub-and-Spoke Model

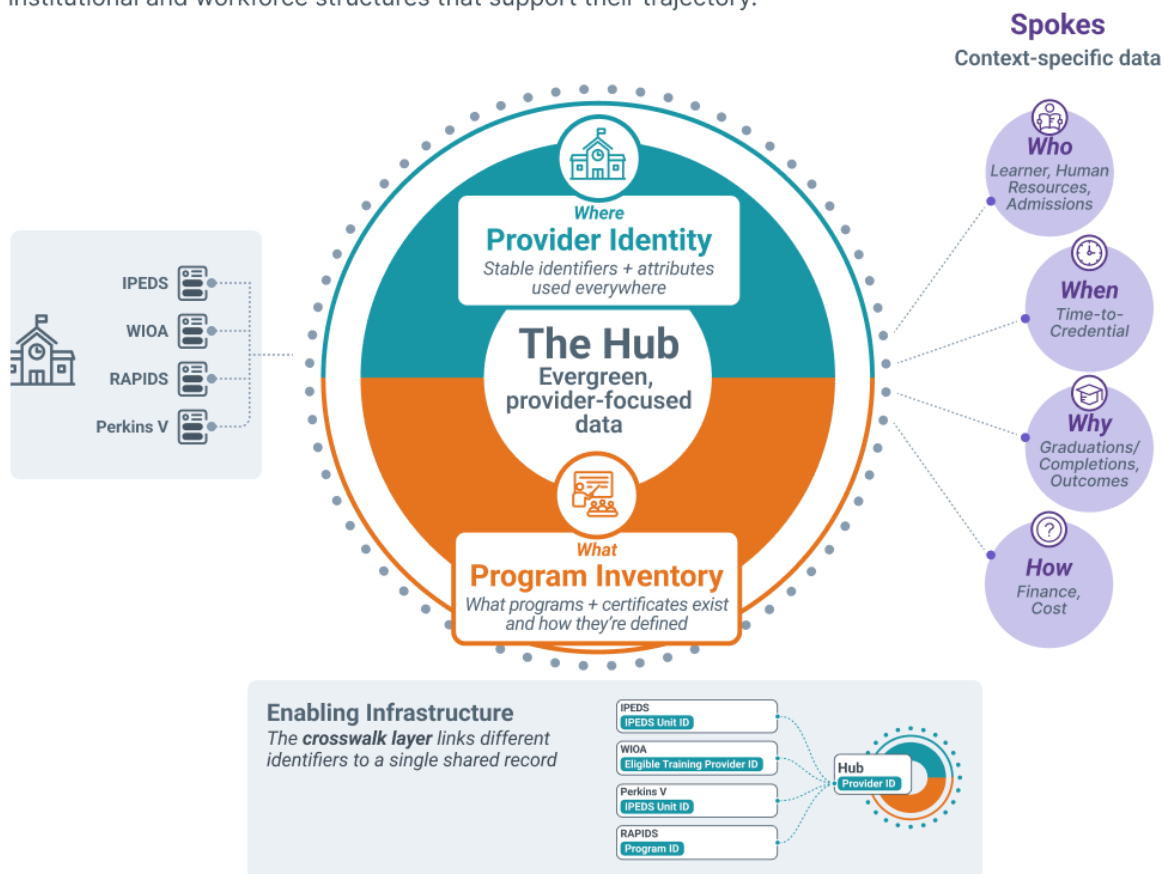
The proposed Hub-and-Spoke model is a structural framework for organizing federal talent data that prioritizes alignment around a core set of shared, foundational definitions while allowing secondary and tertiary definitions, along with program-specific concepts, to remain distinct in Spoke databases that can evolve over time. It answers core questions any layperson would ask:

- Who is participating and providing the instruction?
- What training programs or academic majors are being offered?
- Where does the learning take place?
- When can a learner expect to complete the program?
- Why should a learner participate in the training program or academic major?
- How will this be paid for by students and taxpayers?

The Vision

A structural framework for organizing federal talent data

Providing a more nuanced story of student readiness, interest, and the institutional and workforce structures that support their trajectory.



Fundamentally, the model differentiates between core learning and workforce training data (representing the stable "what and where"), and context-specific data (representing the "who, when, why and how"), which varies according to statute and program. The Hub and Spokes are connected through a crosswalk layer that aligns system-specific identifiers and terminology to a shared set of stable reference points. In practice, this allows each reporting system to produce its required outputs without re-collecting the same core information.

- The **Hub** establishes a set of shared core elements (e.g., related to providers and programs), along with common data structures and identifiers that stay consistent across the system. These data elements serve as reference points that multiple federal data systems can use even when those systems collect data for different purposes and under different statutory authorities.
- The **Spokes** include all data from existing federal data systems or state collections that do not fit within the "what" and "where" of learning. Federally mandated data, such as unit-record learner and outcome data through WIOA PIRL, apprenticeship records through RAPIDS, and aggregate institutional reporting through IPEDS are included, as well as data collected for oversight or research purposes such as campus safety reporting. State-based collections, such as State Longitudinal Data Systems, can be implemented as Spokes to document learning and workforce development over time. Each Spoke maintains its existing scope, definitions, and reporting requirements, but references the Hub for shared data instead of redefining them independently.
- The **Crosswalk Layer** is the enabling infrastructure that allows the Hub-and-Spoke model to function across diverse systems. It is maintained in the Hub and resolves "same thing" challenges by linking different identifiers—such as IPEDS UNITIDs, Eligible Training Provider IDs, or RAPIDS sponsor identifiers—to a single shared provider record. It also addresses "same concept" challenges by aligning categories and code sets that vary across statutes and reporting systems, including demographic groupings, credential types, and program classifications. Rather than forcing immediate uniformity, the crosswalk makes differences explicit and interpretable.

This model addresses the immediate need for a common language by establishing a shared data dictionary grounded in the realities of the current system. It introduces a flexible structure that aligns overlapping and duplicative reporting without requiring wholesale redesign. At the model's center is a Hub of verified institutional information, linked to Spoke databases that contain demographic, performance, and financing data.

A rubric to determine what fits in the Hub vs. Spoke

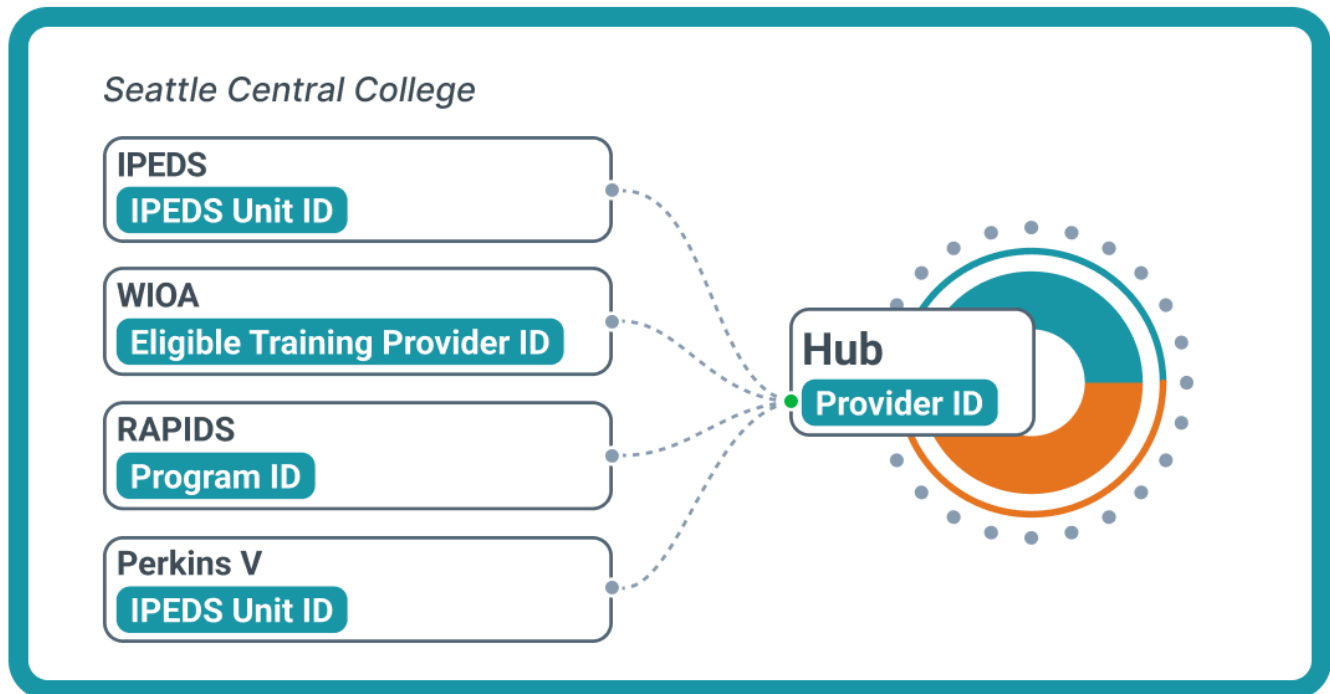
In determining what belongs in the Hub versus a Spoke, each data field across key education and workforce training data systems was interrogated to determine whether it defines what something *is* or describes what something *does* or *produces*. If it describes what something is, the field was assigned to the Hub; fields that describe a function or outcome were assigned to a Spoke. The following criteria operationalize that distinction.

Hub Criteria	Spoke Criteria
A field belongs in the Hub if any of the following is true: Stable descriptive attribute: The field describes what a Provider, Program, or Credential <i>is</i>: its identity, or structure. These values are slow to change and not about performance or results. <i>Example:</i> Provider legal name, physical address Identifier or declared classification: The field supports understanding the provider of education or training program and is an ID, a code, a name, or a declared mapping to a standard taxonomy. <i>Example:</i> IPEDS Unit ID, OPEID, RAPIDS Sponsor ID, Eligible Training Provider ID, CIP code	A field belongs in the Spoke if any of the following is true: Calculated or derived: The field is the result of computation, modeling, or aggregation. <i>Example:</i> Graduation rates, retention rates, earnings medians Subgroup-specific: The field is quantified by, for example, demographic disaggregation. <i>Example:</i> Graduation rate by Pell Grant recipients; enrollment by race/ethnicity Event-based or lifecycle fact: The value is tied to a specific reporting date and changes over time. <i>Example:</i> Fall enrollment headcount; completers in award year Cohort, eligibility, or compliance logic: The field encodes a condition, such as a rule, flag, cohort boundary, or determination of whether a record is in. <i>Example:</i> WIOA eligibility determinations; Perkins V "concentrator" designation Individual learner/participant information: The field contains information about an individual that could be used to identify the individual or the programs in which they participated. <i>Example:</i> PIRL records submitted as part of WIOA



Redundant, similar data can be standardized to simplify reporting: an example

IPEDS identifies institutions using an IPEDS Unit ID, while RAPIDS identifies apprenticeship sponsors using a RAPIDS Sponsor ID, and Perkins V relies on state-determined provider identifiers. No systematic federal crosswalk connects these identifiers, so the same provider can appear as several unconnected entities across systems, obscuring the true scope of what is offered and where gaps exist. Under the Hub-and-Spoke model, all identifiers are retained, but they point to the same underlying entity in the Hub: a *Provider*. The same logic applies to *Programs*, which are currently defined and recorded differently across systems.



Unlike identifiers, some data elements are only reported in specific contexts. Starting Wage, for instance, is critical for workforce analysis and reporting in RAPIDS but not for institutions reporting to IPEDS. In the Hub-and-Spoke model, this information remains in a Spoke. It is connected to the shared entities in the Hub, but not required reporting across all systems.

In this way, the Hub does not force uniform definitions or reporting requirements. Instead, it creates a shared reference layer that makes differences explicit and interpretable. Data collected for different purposes can be connected and analyzed together without requiring agreement on contested policy definitions or changes to statutory reporting requirements.

In the workforce development ecosystem, for example, a Local Workforce Development Board can gain a more comprehensive picture of the types of credentials offered by training programs and institutions. Boards can answer questions like:

- Do we actually have training options for this sector?
- Are we over-investing in one credential type?
- Do we have enough entry-level job opportunities given the investment in training?

Scope and Boundaries

The first step toward a modernized educational and workforce outcomes system is a foundational alignment effort built on a provider and program Hub. This solution focuses on making existing federal education and workforce data systems talk to one another by establishing shared reference points for learning providers without redesigning systems or expanding what they are required to collect.

In its initial implementation, this solution:

- ✓ Structurally aligns shared core data elements that already exist across federal education and workforce data systems.
- ✓ Documents common data structures and stable identifiers that multiple systems can reference.
- ✓ Operates within current statutory authority and reporting requirements.
- ✓ Reduces duplication and improves data quality by reusing shared information rather than recollecting it.

This solution does not:

- ✗ Comprehensively replace or redesign existing federal data collection systems such as IPEDS, Perkins V, RAPIDS, or WIOA.
- ✗ Force uniform policy definitions where statutes or programs differ.
- ✗ Introduce a national learner record or a student-level data system.
- ✗ Require additional reporting or manual data gathering and entry from states, schools, or providers.

Together, these choices make the initial implementation sufficient to address today's coordination challenges without overextending the system.

Operationalizing the Hub-and-Spoke

Actions that can be taken immediately using existing authorities.

Action: Build a Unified Inventory of Providers and Programs

Create a shared reference of who provides learning and what programs and credentials are offered. Providers from IPEDS, WIOA, Perkins V, and RAPIDS are linked into a single provider inventory using stable identifiers.



Programs and credentials are organized using existing classifications, such as Classification of Instructional Programs (CIP) codes—a national taxonomy used by the Department of Education to categorize fields of study—and linked to credential type (e.g., certificate, degree) and the provider conferring the credential.

This enables CIP codes in IPEDS data to be understood in relation to workforce credentials and providers. It also allows analysts and states to see connections that already exist but are obscured, and it does so without introducing additional reporting burden.

Action plan:

- Create a unified inventory of education and training providers, and a unified inventory of education and training programs and credentials.
- Align existing CIP codes with completion info and with credential types.
- Link programs to providers using consistent identifiers.
- Leverage existing approaches to create common identifiers

Action: Clarify Shared Core Definitions

This action documents and anchors shared definitions without forcing policy alignment. For example, the term *Provider* is used differently across IPEDS, WIOA, and RAPIDS. A shared core definition does not resolve these differences. Instead, it establishes a minimum viable agreement, such as the following (for illustrative purposes only):



A Provider of Learning is any entity that delivers a federally-supported education or training activity and confers or supports the conferral of a credential.

Each system continues to apply its own eligibility rules. The shared definition simply ensures that everyone is talking about the same underlying entity.

Action plan:

- Identify terms that are widely used but not consistently defined.
- Agree on minimum viable definitions that can easily be applied across systems.

Action: Create and Launch a Unified Reporting Intake for Providers of Learning



Provide a single submission pathway for core institutional information that is currently collected duplicatively across federal systems. Instead of providers submitting the same basic information separately to IPEDS, WIOA reporting systems, Perkins V, and RAPIDS, they submit core data once, and the data is prefilled and reused across programs.

Action plan:

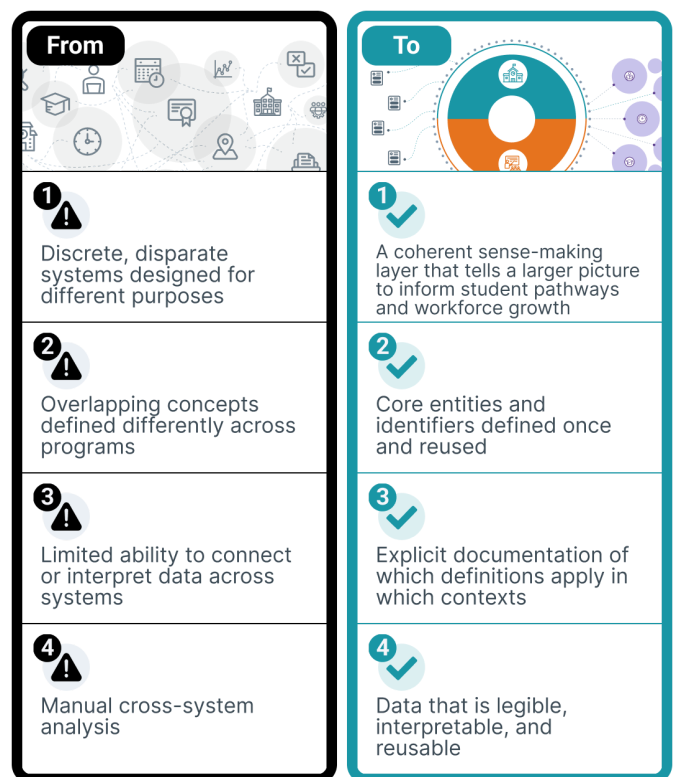
- Identify overlapping data elements across existing federal reporting forms (such as provider name, ownership type, program identifiers).
- Standardize data elements using shared formats and controlled fields.
- Consolidate data elements into a unified intake aligned to Hub definitions and the crosswalk layer data dictionary.

Illustrative example:

Today, a community college that participates in federal student aid, workforce training, and apprenticeship programs may be asked to submit the same basic institutional information multiple times each year through IPEDS, WIOA reporting, Perkins V, and RAPIDS. This includes the institution's legal name, physical location, ownership type, eligibility status, etc.

Under a unified intake, core data elements would be standardized, eliminating the need to enter the same information multiple times under different field names across reporting systems. This reduces duplication, time spent, and corrections needed.

Once a provider's core info is submitted through the unified intake, IPEDS, Perkins V, RAPIDS, and WIOA would reference that shared record rather than asking the provider to re-enter the same data. Each system would continue to collect program-specific information as needed, but the foundational provider details would be consistent and reused across multiple forms. For providers, this reduces reporting burden. For agencies, it improves data quality and alignment. Furthermore, it does so without the need to change statutory requirements.



Risks and Mitigation

Any effort to align federal education and workforce data systems raises legitimate concerns and risks that the system will need to be designed to mitigate. This effort is intentionally structured to address the most common risks directly.

Concerns about control are addressed by preserving the autonomy of existing reporting systems and treating the crosswalk layer (the Hub) as a *reference and translation service*, not a replacement. Implementation of the proposed system does not centralize authority, eliminate program-specific data collections, or require agencies to relinquish ownership of their systems or data. Instead, it establishes a shared reference layer—the crosswalk—with which systems interact. The agencies and program offices responsible for those systems retain control over what they collect, how frequently they collect it, and how data are used for policy and accountability purposes. The Hub captures and stores shared meaning; it does not dictate program use or override statutory requirements.

Privacy concerns are mitigated by explicitly avoiding student- or learner-level data in the initial implementation. No new categories of personal data are introduced, and no existing individual-level data are consolidated or linked. By focusing on provider- and credential-level information, the Hub-and-Spoke improves coherence without increasing risk to individuals. This design choice also allows time to build system capacity and constituent trust before addressing more sensitive use cases.

Feasibility risks are resolved by starting with what already exists. The model is built around overlapping data elements already collected across federal systems. It does not require new statutory authority, new reporting mandates, or new data submissions from providers.

Other risks are also acknowledged. Uptake may be uneven if benefits are not clearly felt by providers and agencies. Messaging may fail to convey that this work reduces burden rather than adds it. Early iterations may not immediately produce transformative insights. The initial implementation is designed to surface these challenges early, when they can be addressed through iteration, rather than through immediate changes to a large-scale, long-standing system.

Looking Ahead: How the Solution May Evolve

The Hub-and-Spoke model is intentionally designed to support growth without destabilizing the system. Once shared meaning and reference structures are established, the architecture can support richer insights, more ambitious use cases, and selective changes to reporting and governance.

The next evolution of work will focus on deepening the role of the Spokes, moving beyond basic data connections to analytical and operational extensions of the core system, to provide support for deeper institutional and program performance analysis. Additional Spokes will be added to capture richer information about learning pathways, credentials, and outcomes, at a level of detail that the core Hub is not designed or intended to reconcile.

States are particularly well-positioned to lead this evolution. Their proximity to local labor markets and financial investment in higher education make them natural sites for deeper integration and analysis. In fact, research shows that these are the reasons states are often better positioned to lead accountability

reforms.¹⁰ Within a Hub-and-Spoke model, state-level systems can function as powerful Spokes, becoming vibrant centers of gravity that integrate education, workforce, and economic data in ways that reflect local conditions while still aligning to federal reporting requirements.

Evolved Reporting

With a solid foundation established, reporting systems can begin to improve efficiency and usefulness. For example, as duplication is reduced and shared structures are adopted, systems can support more frequent reporting to deliver more timely data updates and reduce lag between activity and insight.

These shifts are likely to be iterative—some systems may move faster than others toward a more ideal state.

Beginning Deeper Definitional Work

Once the Hub is functional, more consequential definitional questions can be asked and answered. For example, definitions of “completion” vary from one provider type to another. Any changes here require broad consultation and careful analysis. One starting point could be convening a cross-statistical agency workgroup to review existing research and agree on common terminology for credentials.

Similarly, affirming the role of IPEDS as a data collection system for both Title IV and non-Title IV institutions may become increasingly important as nontraditional pathways continue to grow.

Enabling System-Level Insight and Innovation

With shared meaning firmly established and richer Spokes available, system-level insight and innovation are enabled, creating opportunities for:

- stronger policy insight across education and workforce systems,
- more coherent governance and accountability, and
- better learner and worker outcomes.

New analytical possibilities also emerge. For example, the system could more effectively support linkages between credentials and employment outcomes by connecting education data (e.g., CIP codes) with occupational data (e.g., SOC codes). Existing crosswalks are limited in their ability to tie occupations to real educational pathways. A unified, coherent dataset significantly enhances the ability to draw these connections responsibly.

Further, private and other public-sector organizations can build on the data, spurring innovation in guidance tools, labor market analysis, and learner-facing services. And over time, this work could help align grant-making behavior with how learners actually move through education and training.

¹⁰ American Enterprise Institute, *Reimagining Higher Education Accountability*, September 2025, <https://www.aei.org/wp-content/uploads/2025/09/Reimagining-Higher-Education-Accountability.pdf>

Conclusion

This work proposes a durable solution to a persistent problem: fragmentation across federal education and workforce data systems. By aligning shared reference points first, the Hub-and-Spoke architecture delivers immediate value—reducing duplication, improving coherence, and restoring the ability to see the system as a whole.

Equally important, it does so by thoughtfully refining the existing federal system, not by forcing premature consensus, expanding statutory requirements, or centralizing control. It solves today's most pressing coordination challenges while creating space for responsible growth.



The system will evolve. The only question is whether that evolution will be fragmented and reactive, or deliberate and coherent.

