To: The Institute of Education Sciences (IES)

From: American Public Data Users (APDU)

Date: October 15, 2025

Subject: Recommendations for the Modernization of the Institute of Education Sciences (Docket ID: ED-2025-IES-0844)

APDU commends the U.S. Department of Education for soliciting feedback through this request for information as it identifies how the Institute of Education Sciences (IES) can modernize its programs, processes, and priorities to better serve the needs of the field and American students. Our comments are presented below.

Vision for a Modernized IES

To better serve the nation, the Institute of Education Sciences must become a more agile and responsive producer of high-quality education statistics. The central thesis of our recommendations is that IES can achieve this by implementing a cohesive modernization strategy focused on improving the **timeliness, relevance, and usability** of its data products. This transformation must be rooted in an unwavering commitment to the Education Sciences Reform Act's (ESRA) mandate for the "highest methodological standards," ensuring that all efforts to innovate expand public access to data and strengthen, never compromise, the public trust that is the bedrock of the federal statistical system. This modernization is the essential next step in fulfilling ESRA's original mandate: to ensure the nation's education evidence is defined by rigor and objectivity.

The APDU Position

The Association of Public Data Users (APDU) is a national network that links users, producers, and disseminators of government statistical data. APDU members share a vital concern about the collection, dissemination, preservation, and interpretation of public data.

The goal of this document is to inform the modernization of the Institute of Education Sciences' (IES) data infrastructure and dissemination practices. Our comments are aimed to support a system where federal education statistics are more timely, accessible, and usable for the researchers, practitioners, and policymakers who depend on them to make evidence-based decisions.

Summary of Key Recommendations for Modernization

- **Implement a Cohesive Strategy Built on Governance and Transparency.** IES should publish a time-bounded Modernization Strategic Plan that establishes clear governance

and decision rights for cross-agency priorities. This plan must institutionalize two-way engagement with data users (educators, SEAs/LEAs, researchers) and mandate the publication of accessible, machine-readable documentation for all data products and methods. A transparent strategy ensures accountability and builds the trust needed to sustain modernization.

- **Modernize Data and Methods to Improve Timeliness and Granularity.** Although surveys will continue to be important, the current reliance on traditional surveys is unsustainable. IES must strategically integrate administrative and other data sources to complement surveys, after validating them for fitness-for-use. By adopting proven model-based estimation techniques, IES can deliver more timely preliminary data and the more granular small-area and subgroup estimates that practitioners and local leaders need, all while transparently publishing measures of statistical uncertainty.
- **Build a Collaborative Data Ecosystem through Partnerships and a Skilled Workforce.** Modernization requires breaking down data silos. IES should lead the development of standardized, reusable data-sharing agreements to streamline partnerships with states and other data holders. This effort must be paired with a significant investment in rebuilding IES's in-house technical workforce, providing staff with the data science and statistical skills required to manage a modern, integrated data infrastructure securely and effectively.
- **Strengthen Trust through Modern Safeguards and Continuous Engagement.** To safely leverage integrated data, IES must adopt modern Privacy-Enhancing Technologies (PETs) that protect confidentiality while preserving statistical utility. This technical safeguard must be paired with a human one: establishing formal, continuous user engagement channels to ensure that as IES modernizes, its products remain relevant and responsive to the real-world needs of practitioners.

Additional details are provided in subsequent pages.

Detailed Recommendations

Pillar 1 — Cohesion

Recommendation

The Institute of Education Sciences (IES) should publish a 12–24-month Modernization Strategic Plan that codifies Education Sciences Reform Act (ESRA)-aligned rigor, establishes transparent inter-agency governance, and commits to expanding publicly available data and documentation, aligning research, statistics, evaluation, and dissemination under clear roles and accountability.

Rationale

The current federal education data system is a “loosely connected collection” of surveys and assessments, resulting in duplicative burden, inconsistent concepts, and operational inefficiency. The absence of an agency-level strategic plan diffuses focus, stalling modernization and cross-survey coordination efforts. Concurrently, IES and its National Center for Education Statistics (NCES) face declining cooperation from schools, districts, and individuals, which increases the risk of nonresponse bias and makes siloed, program-by-program fixes ineffective. NCES’s limited autonomy over its priorities further constrains its ability to respond to emerging data needs. A cohesive, time-bounded strategic plan with clear governance is required to provide durable direction, improve relevance and timeliness, manage systemic challenges like nonresponse bias, and protect objectivity.

Implementation

- **Establish a cross-functional governance body** to oversee the modernization strategy, with a charter that defines decision rights and escalation paths for cross-agency priorities.
- **Develop and publish a 12–24-month agency-level Modernization Strategic Plan** that identifies priorities, assigns ownership for key initiatives, and defines trade-offs. The plan should explicitly address how IES will manage the transition from a fragmented survey system toward one with coordinated frames and operations.
- **Mandate the creation of durable transparency artifacts** for all major data collections as part of the plan. This includes public-facing methodology reports, data quality assessments, risk decision logs for data linkage and disclosure control, and series change logs.

Pillar 2 — Stakeholder Needs

Recommendation

Pursuant to 20 U.S. Code § 9575 and 5 CFR 1321.5, IES should institutionalize regular, two-way engagement with practitioners, state education agencies (SEAs)/local education agencies (LEAs), and researchers—backed by an updated stakeholder communication plan and Artificial Intelligence (AI)-supported usage scans—to improve relevance, timeliness, and usability while meeting ESRA's highest methodological standards and expanding public data and documentation.

Rationale

Stakeholders report that IES products have not kept pace with their evolving needs, with insufficient user support for non-technical audiences and limited opportunities to provide feedback before survey redesigns. Unlike other statistical agencies, NCES does not have a standing data user group to provide this continuous feedback. Furthermore, the IES's strategic communication plan is outdated, and stakeholders were not included in its development, leading to poor communication on critical survey changes that disrupted research. Institutionalizing stakeholder engagement and using modern tools to understand revealed user preferences will improve product relevance, support continuous improvement, and rebuild trust.

Implementation

- **Establish standing user advisory groups** with diverse membership from SEAs, LEAs, practitioners, and researchers to create a formal, continuous feedback mechanism.
- **Develop and implement an updated stakeholder communication plan** aligned with a new modernization strategy. This plan must include protocols for proactive notification of survey design changes and series breaks.
- **Invest in user support and product usability**, with a focus on improving accessibility for audiences without dedicated analysis resources.
- **Use modern analytic tools, including AI,** to conduct scans of dataset usage to identify real-world applications, surface pain points, and discover new user communities. Privacy review protocols for this usage analysis.

Pillar 3 — Timeliness & Accessibility

Recommendation

The Department of Education should mandate that NCES publish preliminary estimates on a defined schedule and adopt validated model-based estimation—with public uncertainty measures and accessible, machine-readable documentation—to reduce cycle time and improve data granularity and usability while meeting ESRA's highest-standards mandate. Concurrently, NCES must establish a unit focused on statistical methodology research to develop and integrate these advanced methods.

Rationale

A primary stakeholder need is for more timely and granular data. Currently, IES products are often out of date upon release, diminishing their relevance for policy and practice. Large national surveys frequently lack the power to produce reliable small-area or subgroup estimates needed by SEAs and LEAs for local planning. This forces practitioners to face delayed, insufficiently granular information, resulting in missed windows for action. Unlike other federal statistical agencies, NCES lacks a dedicated unit to advance statistical methodology, which creates skill gaps in blending data and implementing techniques like small-area estimation. Adopting model-based approaches and releasing preliminary data would directly address the need for fresher, fit-for-use information.

Implementation

- **Establish a formal policy for the release of preliminary data** on a predictable, public schedule, accompanied by transparent uncertainty reporting templates, as prescribed by the Office Management and Budget's Statistical Policy Directives.
- **Adopt and scale the use of model-based estimation** to produce more granular small-area and subgroup estimates, combining survey data with complementary sources to improve timeliness.
- **Charter and staff a new statistical methodology unit within NCES** tasked with research and development of modern methods, including data blending, small-area estimation, and privacy-enhancing technologies (PETs).
- **Publish accessible, machine-readable documentation for all models,** including assumptions, inputs, uncertainty measures, and known limitations, to ensure transparency and allow users to assess fitness-for-use.

Pillar 4 — Evaluation Utility

Recommendation

IES should strengthen “what works” evidence by establishing a dedicated administrative data and record linkage unit. This unit would facilitate the integration of survey and administrative data after conducting rigorous fitness-for-use assessments, publish uncertainty for all small-area and subgroup estimates, and—where feasible—increase subpopulation samples, in strict adherence to ESRA’s highest-standards mandate and public-data expansion.

Rationale

The declining viability of traditional surveys, marked by falling response rates and rising costs, necessitates blending survey data with other sources. However, administrative and private data often have incomplete population coverage and were collected for non-statistical purposes, creating risks to reliability and consistency. Furthermore, record linkage itself can introduce errors that are not random, with higher error rates for low-income, minority, and recent immigrant populations. This can lead to data errors and produce biased estimates that degrade analyses. A dedicated unit is needed to develop and enforce rigorous standards for data integration, including fitness-for-use screening and transparent linkage evaluation, to ensure the resulting evidence is trustworthy and usable for translation to practice.

Implementation

- **Develop and mandate a robust quality framework** for assessing the fitness-for-use of all non-survey data sources prior to integration, including evaluations of coverage, timeliness, and concept alignment.
- **Require and publish audits of linkage quality** that assess false-match and missed-match rates, with a specific focus on evaluating accuracy across demographic subgroups to mitigate bias.
- **Routinely publish measures of uncertainty** alongside all estimates derived from blended data, particularly for small-area and subgroup estimates, to enable responsible use by practitioners and SEAs/LEAs.
- **Prioritize linking administrative data with existing surveys** as a strategic method to augment survey data, evaluate measurement quality, and improve the utility of existing information collections.

Pillar 5 — Partnerships

Recommendation

The Statistical Official for the Department of Education, in consultation with the Chief Data Officer, should coordinate Department acquisition of private-sector data and formalize federal–state partnerships modeled on proven systems to expand the availability of standardized, linkable public data, while maintaining ESRA-level rigor and confidentiality. IES and NCES should also establish value-exchange programs that provide analytic services and technical assistance to state and local partners in return for sharing administrative data.

Rationale

The current data ecosystem is fragmented, with weak federal coordination and a patchwork of one-off data-use agreements that are burdensome, slow, and unsustainable. This fragmentation degrades statistical comparability and increases the cycle time for integrating data from multiple sources. Further, accessing private-sector data is often difficult and expensive, with risks related to poor documentation and uncertain availability due to business changes. A coordinated strategy for acquiring private data and establishing standardized, National Vital Statistics System (NVSS) -style partnerships with states would reduce duplicative burden on data providers, lower integration costs for IES, and improve the timeliness and usability of data products for SEAs, LEAs, and researchers.

Implementation

- **Develop a Department policy for the coordinated acquisition of private-sector data** to streamline procurement, reduce costs, and ensure consistent standards for quality and documentation.
- **Establish a formal program to create reusable, standardized data-sharing agreements with SEAs and LEAs,** modeling them on successful federal-state systems to enable the flow of linkable data.
- **Design and pilot value-exchange incentives,** such as providing technical assistance or analytic services back to SEAs and LEAs, to encourage participation in data-sharing partnerships.
- **Create a partnership playbook and interagency Memorandum of Understanding (MOU)** to govern shared infrastructure and data-sharing collaborations, defining roles, security controls, and benefits. The specific platform host and funding model.

Pillar 6 — Dissemination & Scaling

Recommendation

IES should launch a transparency initiative that delivers machine-readable methodology and quality documentation, explicit series-change notices, and public-facing safeguards to strengthen trust, preserve objectivity, and expand comprehensive public access to data and methods. All artifacts must adhere to ESRA's highest methodological standards. Furthermore, NCES should establish an office to lead dissemination practices, including those uniquely mandated by regulations such as 5 CFR 1321.

Rationale

Users are often unable to judge the fitness-for-use of IES data because methodology documentation is incomplete, hard to access, or, in some cases, only available upon request. The lack of common metadata standards creates data silos, and inconsistent archiving practices impede reproducibility. This lack of accessible documentation increases the effective latency of data for downstream analysis, slows knowledge mobilization, and increases the risk of misinterpretation by SEAs, LEAs, and researchers. A centralized, machine-readable hub for methods, quality information, and series-change rationales is essential for reducing friction for analysts and improving the translation of data to practice.

Implementation

- **Develop and enforce a system-wide policy for comprehensive, accessible documentation** for every major data product, covering collection, estimation, quality, and data blending methods.
- **Mandate the adoption of cross-agency metadata standards** to improve interoperability and break down data silos between different collections and agencies.
- **Implement a public-facing, machine-readable central repository for all methodology reports,** quality profiles, and change logs to serve as a single source of truth for data users.
- **Revise contracting requirements to mandate that vendors deliver open, reproducible code and processes,** preventing methods from being hidden in proprietary tools and ensuring transparency.

Pillar 7 — Process Modernization

Recommendation

IES should modernize its operational processes by reforming legal access frameworks, implementing a tiered risk-managed data access system, investing in shared infrastructure and a skilled workforce, adopting modern privacy-enhancing technologies (PETs), and requiring reproducible computing and contracting practices to improve timeliness and usability while preserving statistical rigor and public trust.

Rationale

While NCES is rightly seen as the "gold standard" for the rigor of its core data collections, its capacity for modernization is constrained by multiple, interconnected operational failures. Legal and bureaucratic barriers, including a patchwork of regulations and burdensome, one-off data-use agreements, slow or block access to administrative data. At the same time, blending data sources magnifies privacy risks that cannot be addressed by classical disclosure methods alone, yet IES lacks a clear policy for acceptable disclosure risk. This is compounded by severe workforce constraints; even prior to March 2025, NCES had experienced a 30% net loss in statistical staff (2003–2021), cannot hire in-house for key roles, and over-relies on contractors, which leads to a loss of institutional knowledge. These limitations in legal frameworks, risk governance, and human capital collectively undermine the agency's ability to produce timely, trustworthy, and reusable statistics.

Implementation

- **Legal Access:** Reform legal and bureaucratic barriers by developing reusable, standardized data-use agreement templates and pursuing a legislative strategy to streamline access to state and federal administrative data.
- **Tiered Access & Risk Management:** Implement a formal tiered-access framework that matches data access levels to data sensitivity and user need. This requires developing a common lexicon for risk, proactively engaging stakeholders on risk-utility trade-offs, and transparently documenting all risk-acceptance decisions.
- **Workforce Capacity:** Develop a comprehensive workforce plan to address skills gaps in data science, modeling, and cybersecurity. Use direct-hire authority and fellowship programs to rebuild in-house technical capacity and reduce overreliance on contractors.
- **Privacy-Enhancing Technologies:** Adopt and invest in modern PETs, such as differential privacy and secure multiparty computation, to strengthen confidentiality protections for blended data products.
- **Reproducible Computing:** Update all contract requirements to mandate that vendors provide all code, processing workflows, and documentation to the agency, transparent and reproducible.