Informing Evidence-Building Capacity Among State, Local, Territorial, and Tribal Governments Within a National Secure Data Service

Final Summative Report on the Engagement Strategy

August 2026

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America's DataHub Consortium (ADC), a public-private partnership, implements research opportunities that support the strategic objectives of the National Center for Science and Engineering Statistics (NCSES) within the U.S. National Science Foundation (NSF). These results document research funded through ADC and are being shared to inform interested parties of ongoing activities and to encourage further discussion. Any opinions, findings, conclusions, or recommendations expressed above do not necessarily reflect the views of NCSES or NSF. Please send questions to ncsesweb@nsf.gov. NCSES has reviewed this product for unauthorized disclosure of confidential information and approved its release (NCSES-DRN26-074).

Executive Summary

A National Secure Data Service (NSDS), led by the Interagency Council on Statistical Policy and managed by the National Center for Science and Engineering Statistics (NCSES), is intended to improve access to federal data, reduce burden on data users, support responsible data linkage and analysis, and strengthen evidence building. The Informing Evidence-Building Capacity Among State, Local, Territorial, and Tribal Governments within an NSDS (IEBC) project was designed to help NCSES understand how an NSDS could better support the evidence-building needs of state, local, territorial, and Tribal governments. As these governments are both users and providers of data, their perspectives are essential to ensuring that a future NSDS is useful, trusted, and responsive to varied governance and capacity contexts.

In response to changes in federal priorities, we revised the project's strategy for engaging state, local, territorial, and Tribal governments to rely on a range of complementary qualitative methods. These methods included expanded expert panel engagement, structured conversations with federal staff and expert panel members, in-person conferences, a public webinar series, and a structured landscape review of publicly available materials. Across these activities, the project team synthesized themes related to data access and use, governance, infrastructure, privacy and security, workforce capacity, Tribal Data Sovereignty, and opportunities for an NSDS to support evidence-building capacity at all levels of government (Milless et al. 2026).

The project generated several lessons for future NSDS engagement efforts. First, trusted networks and intermediary organizations are essential for identifying knowledgeable participants, building credibility, and reaching stakeholders who may not otherwise engage with a federal data initiative. Second, communication about an NSDS should be grounded in concrete use cases and plain-language examples. Stakeholders were better able to provide meaningful input when they could see how an NSDS might help answer practical questions about education, workforce, health, funding, service access, and community outcomes. Third, expert panels can play a valuable role throughout a project by advising on outreach, interpreting findings, validating themes, and identifying additional participants. Fourth, no single engagement mode is sufficient; public webinars, interviews, expert panels, conferences, and document review each provide a different form of insight and should be used in combination.

The project also underscored that Tribal engagement requires dedicated attention, sufficient time, and a foundation of trust. Engagement with Tribal governments and Tribal-serving organizations should be grounded in respect for Tribal sovereignty and Indigenous Data Governance and should clearly demonstrate how an NSDS would provide tangible value to Tribal communities. Future engagement efforts should address Tribal data governance from the outset and pair improved data access with investments in Tribal data capacity, infrastructure, and technical assistance.

Overall, the IEBC project offers a replicable framework for future engagement related to an NSDS: engage trusted intermediaries and expert advisors early; communicate through plain-language materials that emphasize use cases; collect input through multiple modes; and provide ongoing feedback to stakeholders about how their input is shaping the work. Applied iteratively, this approach can help ensure that an NSDS develops as a responsive national resource that strengthens evidence-building capacity across federal, state, local, territorial, and Tribal governments.

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I. Project Background and Objectives

The National Secure Data Service (NSDS) is an effort led by the Interagency Council on Statistical Policy and managed by National Center for Science and Engineering Statistics (NCSES) to establish a shared federal service intended to improve data access, reduce burden on agencies and data users, support responsible data linkage and analysis, and strengthen evidence building. To guide the development of an NSDS, Mathematica conducted the Informing Evidence-Building Capacity Among State, Local, Territorial, and Tribal Governments Within an NSDS (IEBC) project with Advanced Technology International under the America's Datahub Consortium. As part of its contract, Mathematica conducted a study on behalf of NCSES to explore how an NSDS could improve the evidence-building capacity and use of federal and nonfederal data among state, local, territorial, and Tribal governments. The study examined these users' needs for data access and identified capacity gaps that could be filled by an NSDS or other technical assistance efforts. The findings are intended to inform capacity building, the design of features available through an NSDS, and recommendations for NCSES as it continues to develop and refine NSDS services. They are documented in two separate reports submitted to NCSES, one covering the needs and gaps identified for various stakeholders and another offering recommendations for an NSDS (see Box 1). This report summarizes project activities, accomplishments, and lessons learned from the project's engagement strategy to inform future engagement efforts.

A. Why state, local, territory, and Tribal engagement matters for NSDS

The study was designed to address recommendations of the Advisory Committee on Data for Evidence Building (ACDEB), which was established by the Evidence Act of 2018 to offer strategies for promoting the use of federal data. ACDEB's Year 2 report highlighted the important role that state, local, territory, and Tribal governments play in the federal data ecosystem as both data users and data providers. It recommended that an NSDS strengthen capacity for evidence use, and that state, local, territory, and Tribal governments be engaged in the design of the NSDS platform. The study addressed this recommendation by collecting information from government data experts on their existing capacity for data use and needs for additional capacity building. We then synthesized findings across different sectors and levels of government in two reports.

Box 1. Findings from the IEBC study

Findings from the IEBC study are presented in two reports:

- **Building Capacity for a National Secure Data Service: Needs, Gaps, and Considerations for State, Local, Territorial, and Tribal Governments** presents findings on the evidence-building needs of different stakeholders and the gaps in existing capacity to support those needs. The report contains several appendices that document the data collection approaches, protocols, and tools used and the experts engaged for the study (Milless et al. 2026).
- **Building Capacity for a National Secure Data Service: Recommendations for Strengthening Implementation, Adoption, and Trusted Data Use**, presents the study team's recommendations for expanding evidence-building capacity and engaging stakeholders through an NSDS, as informed by the needs and gaps assessment (Hassoun Ayoub 2026).

B. Overview of approach

The study used a qualitative approach including conducting interviews with government data users, publicly accessible webinars on an NSDS, two expert panels, Tribal listening sessions, and a landscape scan of publicly available materials. In addition, Mathematica engaged several partners with expertise in engaging state, local, territorial, and Tribal governments. These partners provided guidance throughout the study and drew on their networks to help connect the project team with relevant stakeholders. The team included the Council of State Governments (CSG); the National Association of Counties (NACo); the National Governors Association (NGA); Research, Policy and Government Relations at the Pacific Resources for Education and Learning; the National Indian Health Board (NIHB); and an NIHB consultant from the Colorado School of Public Health.

C. Road map for report

In the remainder of this report, we provide more detail on our approach to engaging state, local, territorial, and Tribal governments, including areas where the project team pivoted from original plans and lessons that emerged on how to engage stakeholders and understand their capacity-building needs. The report ends with suggestions on how these lessons could inform the design of similar engagements in the future.

II. Approach to Engaging State, Local, Territorial, and Tribal Governments

The study team designed a differentiated, participatory engagement strategy to gather data and feedback on the needs, priorities, and challenges of state, local, territorial, and Tribal governments and to inform the development of an NSDS. The original design included multiple opportunities for stakeholders to contribute through surveys, semi-structured interviews, expert panels, and other engagement activities. Recognizing that state, local, territorial, and Tribal governments operate within distinct governance structures and data environments, the study team planned tailored outreach strategies to ensure that each group's unique perspective was represented.

To support outreach, engagement, and exploration of findings, Mathematica partnered with organizations that have established relationships with government data leaders, including CSG, NACo, NGA, and NIHB. We selected these partners because of their expertise, trusted relationships with government agencies, and ability to network with diverse jurisdictions.

The original data collection plan included conducting a large-scale web survey and semi-structured interviews with state, local, territorial, Tribal, and federal stakeholders (Exhibit II.1). Together, these activities were intended to provide both broad and in-depth perspectives on the opportunities and challenges associated with building capacity for using an NSDS. The survey was intended to gather broad input from government data users, while interviews were designed to collect more detailed information about stakeholders' experiences, priorities, and recommendations for the development of an NSDS.

Exhibit II.1. Original respondents and sample sizes for study data sources

Data source	Respondent	Type of sample	Sample size
Web survey	Government (state, local, and territorial) administrators	Representative	10,000
Government interviews	Federal, state, local (county- and city-level), and territorial government employees and federal work group members	Purposeful	350
Tribal government interviews and Talking Circles	Tribal government employees; national, regional, or local organizations serving Tribes; and federal work group members	Purposeful	94

To support this effort, the study team developed a 30-minute web survey, respondent outreach materials, and 60-minute semi-structured protocols for government interviews and Tribal government interviews. The survey was pre-tested with four participants representing territorial, state, and county governments to ensure questions were clear and relevant, and to assess respondent burden before submitting the materials to NCSES as part of an Office of Management and Budget (OMB) clearance package. The protocol for Tribal government interviews was similarly pre-tested with five participants representing Tribal governments.

In December 2025, NCSES decided not to submit a clearance package for the study due to concerns about respondent burden. Without OMB clearance, the study team could not proceed with the planned survey or interview more than nine nonfederal respondents. As a result, the following activities were discontinued:

- Survey of state, local, and territorial government data users and providers
- Semi-structured interviews with state, local, and territorial government data users and providers
- Interviews and Talking Circles with Tribal government data users and providers

Although these changes reduced opportunities to systematically collect feedback from a broad cross-section of stakeholders, NCSES approved a revised engagement strategy to meet the study's objectives, including by conducting a landscape scan of multiple data sources and convening expert panels. Specifically, the revised approach included the following activities:

- Expanding and engaging the Government Expert Panel (GEP) and the Tribal Expert Panel (TEP) through meetings and one-on-one discussions with members
- Conducting structured conversations with federal chief data officers and other federal staff participating in relevant technical working groups, such as ACDEB
- Working with project partners to identify and attend conferences and forums where state, local, territorial, and Tribal data issues were being discussed
- Hosting public webinars featuring government leaders and subject matter experts
- Conducting a structured review of publicly available literature, conference materials, recorded webinars, and related resources

Collectively, these activities enabled the study team to identify common needs, implementation challenges, and opportunities relevant to evidence-building capacity despite the reduced opportunities for direct stakeholder engagement.

A. Expert panels

The GEP and TEP became central components of the revised engagement strategy. Beyond providing substantive expertise, panel members advised the study team on outreach strategies and data collection protocols, identified emerging issues related to data governance and evidence building, recommended additional participants, and provided ongoing feedback throughout the project.

The GEP initially consisted of five representatives from state, local, and territorial government agencies and coordinating organizations with expertise in data governance, data systems, and evidence building. The TEP, convened by NIHB, originally included 10 active members representing Tribal governments, Tribes that are not federally recognized, and national Tribal organizations, including the National Congress of American Indians, the American Indian Science and Engineering Society, and the American Indian Higher Education Consortium.

After revising the engagement strategy, the study team expanded the GEP by four members and the TEP by six members to increase the range of expertise informing the study. In addition to two rounds of meetings at the beginning and end of the project, panel members participated in individual structured conversations, reviewed project materials, contributed to webinar design, and provided recommendations for additional experts. Appendix A lists the people who contributed to each panel, as well as the two consultants that the study team engaged to add additional expertise and capacity.

B. Structured conversations

Semi-structured interviews were an important source of information for gauging stakeholders' priorities and gathering their perspectives on the development of an NSDS. However, the revised engagement strategy no longer included interviews. Instead, the project team conducted information gathering sessions or structured conversations with 10 federal workers, including those overseeing engagement with Tribes; 15 members of both expert panels; and one consultant.

The study team conducted structured conversations with federal chief data officers and other federal staff involved in data governance and evidence-building activities, including those working with Tribes. Participants were selected based on their expertise in data management, governance, interoperability, and evidence-building initiatives. These conversations provided valuable insights into cross-agency collaboration, legal and privacy considerations, and opportunities to strengthen data sharing and access across the federal government.

The study team also conducted structured conversations with members of the expert panels, enabling them to expand on issues discussed during panel meetings and provide detailed recommendations based on their professional experience. Participants represented a range of sectors and levels of government, with substantial expertise in data governance, evidence building, Indigenous Data Sovereignty, and government data systems.

C. Relevant in-person conferences

Conferences and other forums for government and adjacent data users offered opportunities to hear how stakeholders are thinking about evidence building and the data-sharing challenges they face at the state, local, territorial, and Tribal levels. The study team consulted with project partners for recommendations on conferences and forums that are commonly attended by stakeholders of interest and that were likely to feature discussions related to data access and use.

The team attended 14 conferences in 2025 and 2026 across various cities and hosted by a variety of state, local, and Tribal-focused organizations, including NIHB, NACo, NGA, the Coleridge Initiative, and other organizations (Exhibit II.2). Team members collected and analyzed conference agendas and session materials, and took notes on discussions across sessions using a standardized template.

Exhibit II.2. Conferences attended by study team members

Conference name	Conference sponsor	Month and year attended
NGA summit	NGA	November 2025
Coleridge 5th Annual National Convening	Coleridge Initiative	March 2026
Elastic Public Sector Summit	FedScoop	March 2026
National League of Cities City Summit	National League of Cities	March 2026
Developing Data Analytics Capabilities Conference	University of Georgia Carl Vinson Institute of Government	March 2026
AI Week/AI Talks	FedScoop	April 2026
MongoDB Public Sector Summit: Innovating Government Applications for AI	MongoDB	April 2026

AI = artificial intelligence; NGA = National Governors Association; NLC = National League of Cities.

D. Public webinars

To supplement other data, the study team organized a series of project-hosted webinars featuring government leaders, practitioners, and subject matter experts. Unlike traditional dissemination webinars, these sessions were designed to promote discussion and enable peers to share perspectives on issues emerging from expert panel meetings, structured conversations, and the landscape review. Mathematica and NIHB advertised the webinars using their official outreach channels, such as social media and newsletters, and provided materials to webinar panelists and study partners to share with their networks.

The study team hosted a series of five webinars that were open to the public:

- Three webinars focused on capacity-building needs and gaps from state, local, and territorial government perspectives, respectively. They included a presentation on the NSDS vision, as well as a facilitated conversation among a small group of panelists that represented each stakeholder type, followed by a question-and-answer period with the audience. Panelists discussed topics including data governance, evidence building, workforce capacity, data sharing, and potential NSDS offerings. These discussions highlighted similarities and differences in data needs across jurisdictions while providing additional context for interpreting findings from other data sources. There were 228 registrants and 109 attendees across the three webinars.
- Two webinars were Tribal-focused and featured Tribal leaders, service providers, subject matter experts, and members of the TEP. The discussions explored many of the same topics as the other three webinars while placing additional emphasis on Indigenous Data Sovereignty, Tribal governance, and federal–Tribal partnerships. The Tribal-focused webinars provided an important opportunity to broaden participation beyond individual respondents and to validate themes emerging across other study activities. There were 520 registrants and 347 attendees across these two webinars.

A detailed list of webinars and topics covered is available in the appendix of the needs and gaps report (Milless et al. 2026).

E. Landscape scan

The study team conducted a structured review of publicly available resources to identify recurring priorities, implementation challenges, and emerging practices relevant to evidence-building capacity. The landscape review also provided broader context for interpreting findings from expert panel discussions, structured conversations, and webinars, enabling the study team to compare stakeholders' perspectives with broader trends, identify recurring implementation challenges, and better understand the policy and operational context surrounding NSDS development.

State, local, and territorial resources. The study team reviewed publicly available materials from conferences (n = 44), webinars (n = 20), and publications (n = 64), including peer-reviewed literature, government reports, policy briefs, guidance documents, organizational publications, and other gray literature[1]. Materials were gathered from conferences and webinars that the study team could not attend

[1] Grey literature is research and information produced outside of traditional commercial or academic publishing channels. Key examples of grey literature used for this study include government reports, technical briefs, white papers, conference proceedings, and working papers.

in person or that took place before the study data collection. The review focused on issues central to the study objectives, including data sharing, data integration, governance, infrastructure, privacy and security, legal and compliance requirements, workforce capacity, artificial intelligence (AI), and evidence building. Selection criteria varied by source type. Peer-reviewed and gray literature were limited to publications from 2010 or later that focused on U.S. state, local, and territorial governments. Government reports and policy briefs were generally limited to documents published within the previous five years. Conference materials included agendas, session descriptions, presentations, working papers, and related materials from selected 2025 and 2026 conferences. The study team also reviewed the recordings for publicly available webinars addressing data modernization, evidence building, and data management for government agencies.

Tribal resources. The study team also reviewed materials from Tribal-focused conferences (n = 6), consultations and listening sessions (n = 11), as well as peer-reviewed literature and gray literature addressing Indigenous Data Sovereignty, Tribal governance, evidence building, data modernization, and federal–Tribal data relationships (n = 33). Selection criteria varied by source type. Peer-reviewed and gray literature, including Tribal literature, were generally limited to the previous 15 years. Conference materials included agendas, session descriptions, and related materials from conferences in 2025 and 2026.

F. Analytic approach

The study team revised its analytic approach to reflect the study's updated engagement strategy and the increased reliance on qualitative data sources. Although the revised design differed from the original plan, it retained a systematic approach to organizing, analyzing, and synthesizing evidence across multiple complementary sources.

Notes from structured conversations were reviewed and coded using a structured thematic framework aligned with the study objectives. Coding focused on identifying recurring needs, implementation challenges, opportunities, and considerations related to data governance, data sharing, evidence building, workforce capacity, infrastructure, privacy and security, and cross-sector collaboration.

The landscape review was analyzed using a structured coding template that documented recurring themes, implementation supports, capacity-building strategies, governance considerations, and areas for future exploration. For Tribal-focused materials, the thematic framework also incorporated concepts related to Indigenous Data Sovereignty, Tribal governance, intergovernmental coordination, funding, and community-driven approaches.

Insights from conferences, project-hosted webinars, and expert panel discussions were generated for analysis alongside other data to provide additional context, clarify emerging themes, and identify areas of convergence across stakeholder groups.

Finally, the study team synthesized findings across data sources to identify themes that were supported across multiple sources of evidence. The revised approach emphasized convergence across complementary sources to strengthen confidence in the study findings, given the reduced opportunities for direct stakeholder engagement. Rather than treating each engagement activity independently, the study team used these complementary sources to corroborate interpretation of the findings and better

understand where perspectives aligned or differed. Codebooks and data-extraction tools used by the study team are available in the appendix of the needs and gaps report (Milless et al. 2026).

The study team used the themes that emerged across multiple stakeholder groups and evidence sources to develop two companion reports on (1) needs and gaps (Milless et al. 2026), and (2) recommendations (Hassoun Ayoub et al. 2026). These reports also included the perspectives of specific stakeholder groups that provided important context for understanding their needs. This triangulation enabled the study team to develop practical guidance for NCSES on designing and implementing evidence-building capacity within an NSDS.

III. Lessons Learned from Implementing the Engagement Strategy with State, Local, Territorial, and Tribal Governments

Implementing the study's engagement strategy yielded important lessons for designing future stakeholder engagement efforts. Many of these lessons extend beyond the specific context of this study and may inform future efforts to engage diverse government stakeholders in the development of national data initiatives. This chapter summarizes key lessons related to recruitment, communication, expert panels, methodological flexibility, and stakeholder engagement. For each lesson, the chapter discusses the strategies the study team found useful, challenges encountered, and recommendations for future efforts of a similar nature.

A. Reaching and recruiting participants

Recruiting participants was a key part of the strategy for the study's expert panels, structured conversations, and webinars. The approach focused on gathering perspectives from a diverse pool of stakeholders that represented different levels of governments as well as different sectors and types of users. It required thoughtful consideration about who to recruit and how to recruit them.

1. Useful strategies

- **Drawing on existing networks and intermediary organizations.** The team drew on its existing partner organizations and their networks to identify potential participants for the two expert panels and webinar panelists. These organizations also recommended conferences the study team could attend to identify additional participants with expertise that could help the team better understand user needs related to an NSDS. This network-based approach expanded the pool of potential participants while increasing the credibility of recruitment efforts.
- **Peer referrals.** Once recruited, members of the expert panels were also an effective source of additional participant referrals. Panel members recommended additional experts who could contribute diverse perspectives and, when needed, identify replacements to maintain representation on the panels despite participant turnover. Panel members also provided referrals for experts who could serve as panelists on the project-hosted public webinars.

2. Challenges

- **Limited response from initial outreach to federal participants.** Federal staff have many competing demands on their time. Recruiting them for structured conversations required persistent engagement over several months. The study team identified 33 people responsible for managing or using data within key federal agencies and reached out to them by email and telephone to encourage participation, resulting in 10 structured conversations. Many participants who agreed to participate were already familiar with the NSDS concept through their involvement with the Federal Chief Data Officers Council or ACDEB. One federal worker noted that direct recruitment might be difficult because federal staff often receive a high volume of external requests and have limited time to respond.
- **Shifting policy and fiscal priorities under a new administration.** Federal participants noted that federal staff more broadly were facing shifting priorities during the time of study recruitment. The federal landscape was experiencing significant change in 2025 when the study team was conducting

recruitment, and this change could have prevented many staff from considering participation in an structured conversations or agency leadership from allowing them to participate.

- **Uneven representation of stakeholders.** The study engagement strategy was driven by existing partnerships and networks, which meant that we were more likely to include the perspectives of participants in those networks. Identifying users that represented U.S. territories was particularly difficult because of limited referrals from networks and limited response to outreach. Therefore, those users are relatively less represented in this study's findings. Factors other than study networks could include differences in time zones or lack of capacity.
- **Limited familiarity with NSDS concepts among nonfederal users.** Many nonfederal participants had limited familiarity with the NSDS initiative and its potential applications, making it more difficult for them to provide practical feedback. Instead, discussions often focused on their existing data systems, resource constraints, and the costs associated with upgrading technology.

3. Recommendations

- **Leverage networks.** Future outreach efforts should continue to draw on expert panels and partner organizations to support network- and referral-based ("snowball") recruitment. Organizations that regularly engage and convene groups of stakeholders can be trusted partners in identifying knowledgeable participants, encouraging participation among their members, and increasing the credibility of recruitment efforts. Engaging these organizations early in the project is essential, as multiple rounds of outreach may be needed to recruit a sufficiently diverse pool of participants.
- **Recruit different types of users.** Future studies should also use focused recruitment strategies that reflect participants' expertise and roles. Recruiting people who have experience managing data systems, developing data policy, and using data for decision making will help ensure that a broad range of perspectives informs NSDS development. It could also improve representation of stakeholders, such as those from territories, if staff at different levels have more or less capacity to engage.
- **Show that there is leadership support.** Maintaining federal sponsorship and leadership support is also critical. Support from agency leaders could encourage participation in federal studies and reinforce the importance of the project. Support from key leaders at the state, local, territorial, and Tribal levels could also encourage engagement. Regular communication with leaders throughout the project could help demonstrate how participants' input is being incorporated and sustain the engagement over time.
- **Communicate regularly.** Finally, maintaining regular communication with study partner organizations about the project's progress can strengthen engagement. Providing updates on study activities, acknowledging stakeholders' contributions, and explaining how feedback informs project decisions helps build trust and encourages continued participation and support throughout the study.

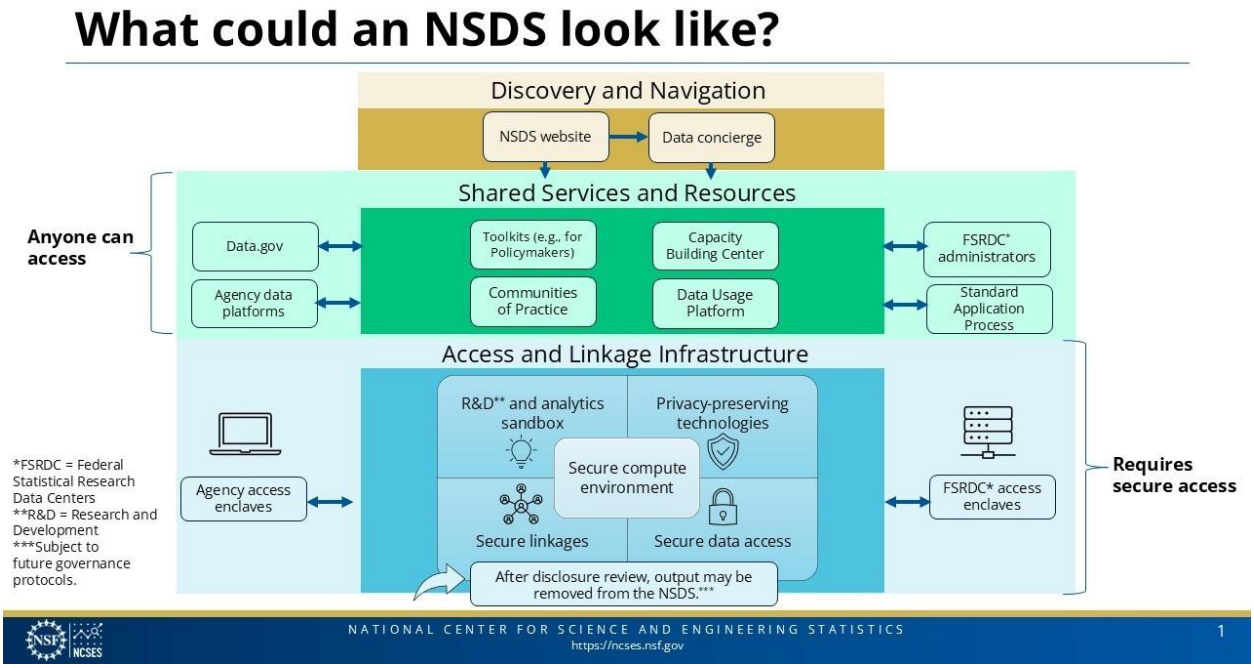
B. Communicating about an NSDS

An NSDS has the potential to become a central resource for federal and nonfederal users with and without specialized technical expertise in data analysis and management. To ensure that study reports captured a broad range of needs, the recruitment strategy sought out people who did not necessarily have any familiarity with the NSDS concept or with other federal data platforms. Communications with this group required foundational content to explain an NSDS and the purpose of the study.

1. Useful strategies

- **Frame questions around concrete use cases rather than data access.** Across webinars, conferences, and conversations, stakeholders discussed practical needs related to student outcomes, workforce outcomes, public health, resource allocation, and community decision making. Stakeholders wanted to understand how an NSDS could address those topics, rather than focusing on the details of data access and infrastructure. This was especially true for stakeholders outside of the federal government. Including references and framing around how an NSDS could address real evidence-use challenges in both preparatory materials and during discussions seemed to enable richer discussions and perspectives from study participants.
- **Use plain language and visuals that emphasize use cases.** Using plain language and visuals to describe what an NSDS can provide seemed to improve the relevance and specificity of perspectives shared by stakeholders, especially those who were less familiar with the NSDS concept. During pre-testing of the study's data collection instruments, participants from state, county, and Tribal governments indicated that the materials and graphics used to provide context about an NSDS were too technical and would benefit from simplification and more illustrative examples. Exhibit III.1 depicts the original graphic used to explain the NSDS. Although it details the potential components of an NSDS (such as a data concierge, communities of practice, a capacity-building center, and an analytics sandbox), it does not describe the purpose of each component. Therefore, the image raised more questions than it answered.

Exhibit III.1. Original graphic for overview of NSDS in study outreach materials

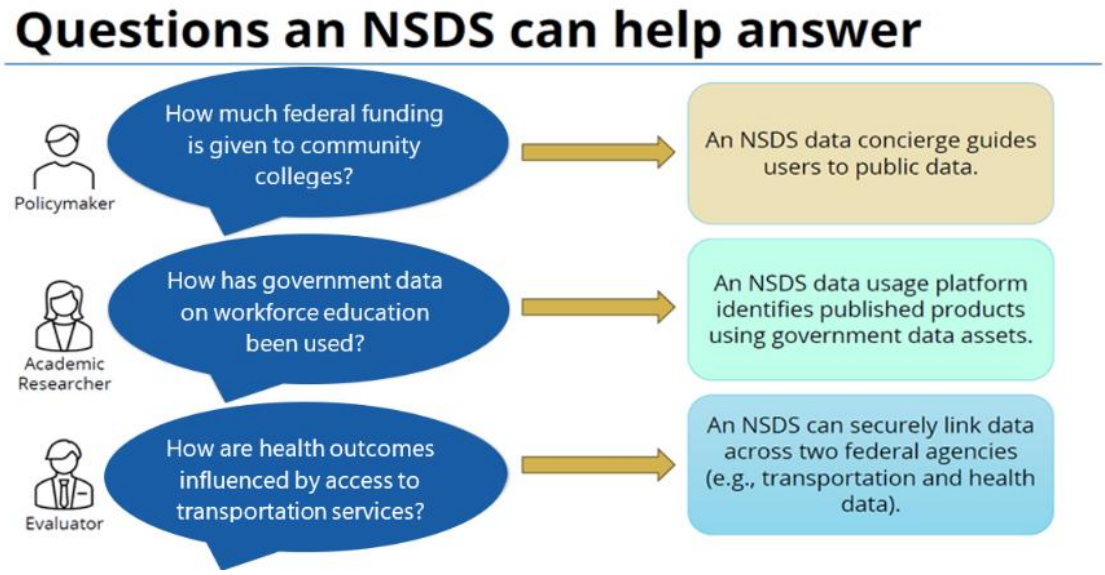


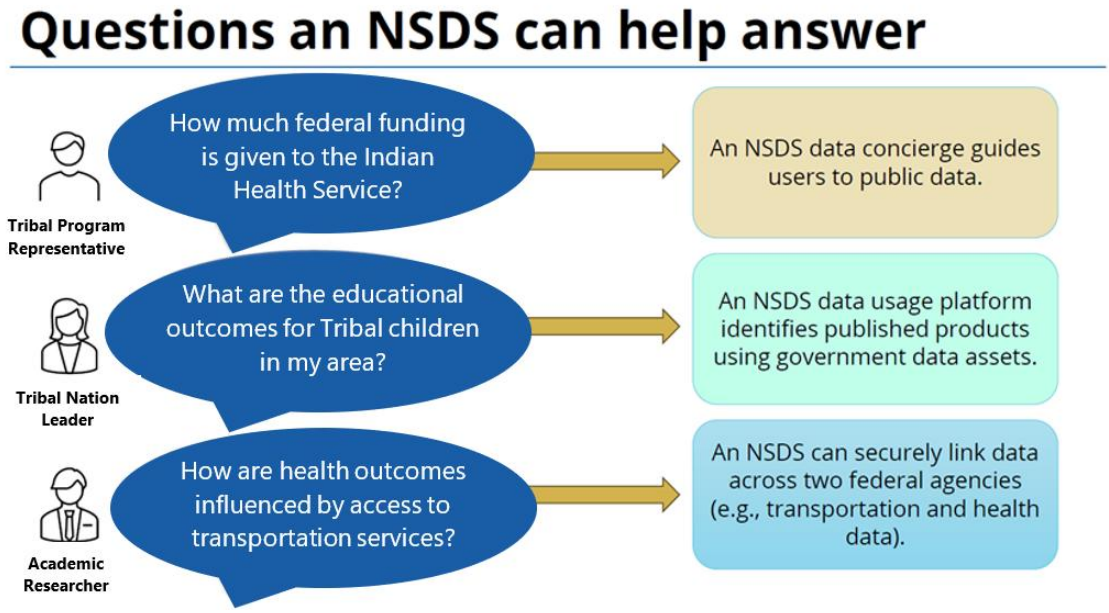
Source: https://www.americasdatahub.org/wp-content/uploads/2025/01/ADC-Resources-for-Success-Webinar-Slides.pdf.

Participants recommended we use a simpler, less technical graphic (or set of graphics). In response, the study team collaborated with NCSES on revised outreach materials that included use cases and examples tailored for different audiences.

Two graphics (Exhibit III.2) provided concrete examples of the types of questions an NSDS could help answer, how those questions would vary by user, and how different questions may require different levels of access to data or support from the NSDS data concierge or administrators of Federal Statistical Research Data Centers. Based on feedback from Tribal experts, the team created a version of the graphic with specific examples related to Tribal governments.

Exhibit III.2. Revised graphics used to explain an NSDS in study outreach materials

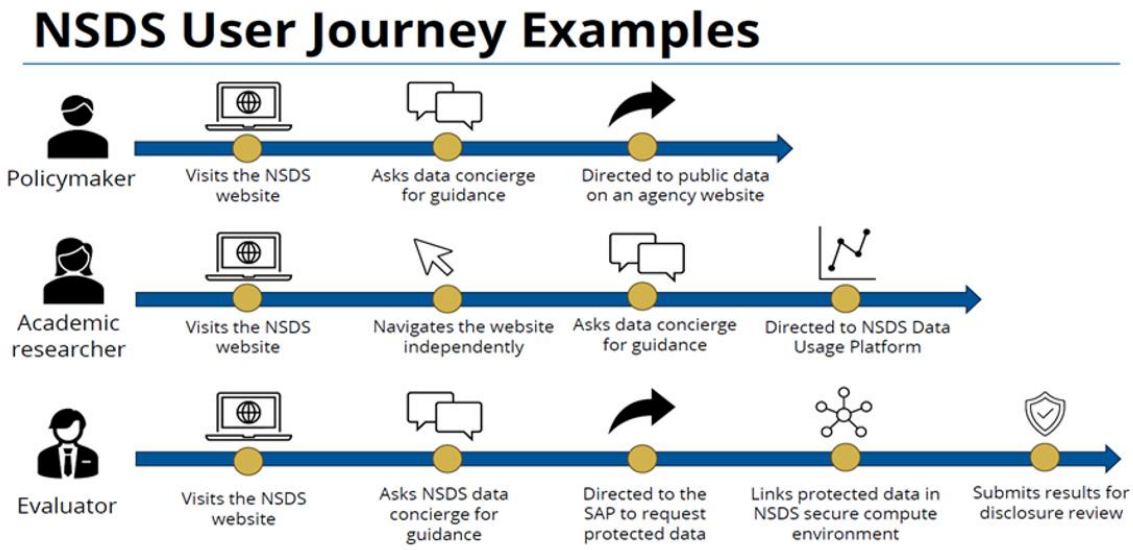




Source: Adapted from NCSES presentation on NSDS.

A third graphic (Exhibit III.3) described user journeys and provided concrete examples of how an NSDS could be used by different groups—such as policymakers, program administrators, and data scientists—with varying levels of data literacy and analytic capacity.

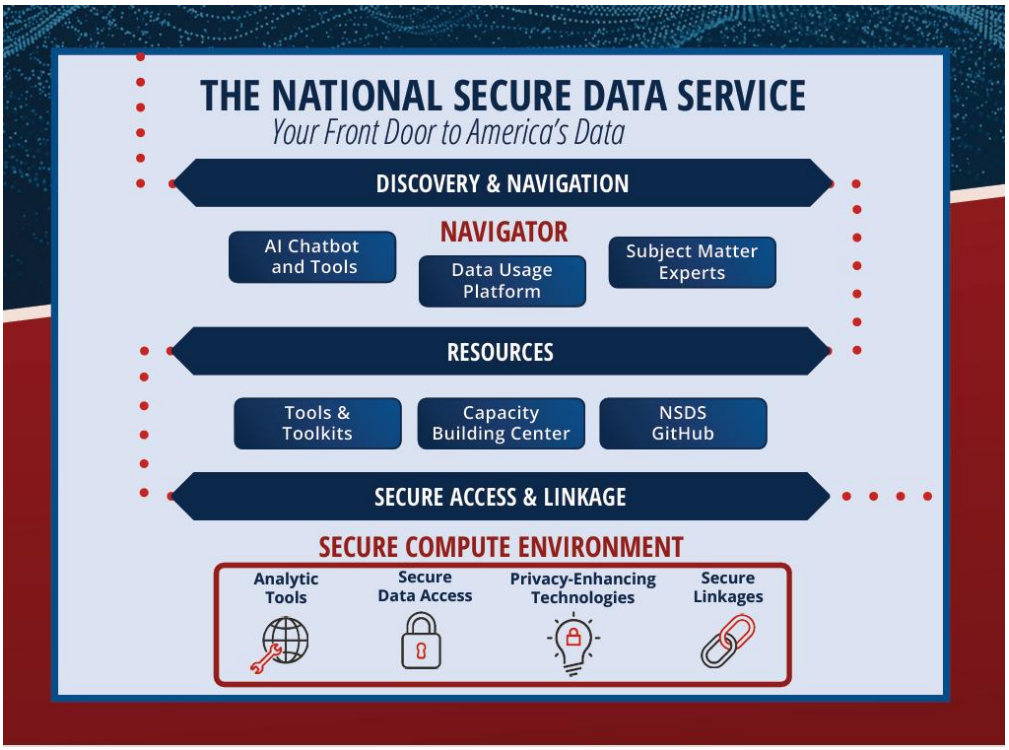
Exhibit III.3. Revised graphic for study outreach materials that highlights example user journeys



Source: Adapted from NCSES presentation on NSDS.

NCSES also revised the original overview graphic of the NSDS to better illustrate the components based on feedback (Exhibit III.4). The new overview graphic was also incorporated into study outreach materials.

Exhibit III.4. Revised graphic for overview of NSDS



Source: https://www.americasdatahub.org/wp-content/uploads/2026/08/NSDS-Overview-One-Pager_July2026_Print-Version.pdf.

Additional pre-testing confirmed that participants felt the new graphics would be effective for people with different levels of data usage knowledge and experience. The team continued to use these graphics in outreach and engagement with different stakeholders throughout the study.

2. Challenges

- **Different levels of technical knowledge across potential users.** Developing an NSDS will require input from a variety of data users across many functions of government and sectors. Participants engaged through the study had different levels of technical knowledge, with conversations ranging from AI governance and interoperability to basic data literacy and available data sources. For some participants, abstract questions about data sharing were difficult to process because these participants did not have the technical expertise in data management to identify the specific features or functions they would find particularly valuable in an NSDS.
- **Concerns about security and confidentiality of NSDS data.** Many participants shared concerns about how data would be accessed or shared within an NSDS while maintaining security and confidentiality at the local, state, territorial and Tribal levels. These included concerns about how data might be analyzed or used outside of their original intent, or accidental disclosure of data and its effect on people whose data were being accessed. Other concerns included potential inaccuracy or completeness of data collected at the federal level, including data collected from Tribes, and the need to de-identify data on communities, cultures, and individuals. These types of concerns focus more on the role of an NSDS rather than capacity building but can be strong enough to prevent more constructive discussion of evidence-building capacity.

3. Recommendations

- **Lead communications with practical use cases tailored to different audiences.** We recommend that communication about an NSDS include practical use cases for stakeholders who come from a wide variety of sectors and levels of data knowledge. It would be beneficial to preemptively address how the data will be secured and privacy maintained. Communication should be organized in user-friendly formats so it is accessible to a wide variety of stakeholders, not just those with experience in data management or analytics. State, local, territorial, and Tribal governments would benefit from communication on the decision-making value of an NSDS rather than technical architecture. Governments with limited resources for managing and analyzing data will be more interested in how they can access useful data that is visually appealing and easy to understand.
- **Engage champions to provide legitimacy.** Because of the prevalence of concerns about data quality and security, trust will be an important factor in any effort to gain traction with government users, especially Tribal communities. For a large federal data project like an NSDS, trust could be enhanced by potential users seeing Tribal and other leaders validating the potential benefits of an NSDS and providing reassurances about data security and privacy.

C. Engaging expert panels

The study engaged two panels of subject matter experts that represented state, local, territorial, and Tribal governments. The panels were designed to provide a broad range of perspectives and guidance including across multiple sectors. As the engagement strategy shifted, the expert panels played an increasing role in supporting the project's goals with their expertise and professional networks.

1. Useful strategies

- **Recruiting a broad group of experts with specific and general knowledge.** The project benefited from panel members who had experience making decisions about data management and use at different levels of government and across sectors. These government officials were able to bring their day-to-day experience as data users to discussions of challenges and opportunities and could reference real-world examples of issues that they faced. The panels also included people who have experience working with or convening government officials across jurisdictions to shape policy and provide technical assistance; these experts were able to provide expertise on the broader challenges facing those groups as a whole. Having both broad and specific perspectives helped highlight what common challenges and opportunities existed, as well as how those issues may vary from place to place.
- **Structuring preparation and materials to minimize burden on experts.** Members of the panels represented leaders in their field and organizations. To maximize the feedback that could be gathered during meetings, the panel members were given as much scheduling notice as possible. Events were spaced out widely across the project period, and panel members were given detailed agendas and materials in advance for each meeting. The meetings were structured so that an advanced review of materials was not required, but discussion topics and questions were included in preview materials so that any panel members who chose to review them in advance could plan accordingly for the discussion.
- **Engaging panels as frequently as possible.** Members of the expert panels shared that the more context they had for the study and what the team was learning, the better they could inform study activities and findings. While the project team was unable to hold expert panel meetings throughout the

entire project period, the meetings held when initial outreach and engagement strategies were being designed enabled the panel members to provide feedback on refining the strategies before they were implemented. In addition, the panels met again after a preliminary analysis of collected data, which enabled the team to conduct sensemaking activities in collaboration with the panel members and to validate findings to inform study reports. Providing the panel members with opportunities to shape the study also helped give them the context to inform other study activities when needed, such as reviewing data collection protocols and helping identify panelists for the public webinar sessions.

2. Challenges

- **Maintaining engagement over time.** The study was a multiyear project that engaged panel members mainly at limited planned junctures. There were also unplanned gaps in the engagement of the panel that required the team to proactively reconnect with panel members. When gaps were long, some members were no longer able to continue their participation in the panel. This required additional recruitment to ensure sufficient representation across panel members.
- **Translating feedback from the panel into action.** Having many panel members with different experiences and perspectives meant a potentially large variety of opinions. Because of existing plans and constraints with federal project timelines, the team could not always translate all the recommendations and feedback from the panel into changes to the study or study materials. When possible, panel members were given updates on whether and how their recommendations influenced the study design.

3. Recommendations

- **Engage a broad range of stakeholders that represent potential end users.** Expert panels provide a wealth of knowledge that can be used for study design, participant recruitment, data analysis, and interpretation of findings. Engaging a wide range of experts will ensure study findings reflect a multitude of perspectives and minimize blind spots in the practical information that comes out of a study.
- **Plan for turnover of panel members.** Particularly in multiyear studies, some turnover of the panel members is inevitable. Connect with panel members regularly so that any changes in their availability to participate can be communicated in a timely way. Maintaining a list of current, former, and potential experts that could be invited to or are already part of the panel will provide an accessible resource for recruitment when replacement is necessary.
- **Engage expert panels across all phases of a project, from design to dissemination.** Panel roles can change as a study or project progresses, and panel members can provide input and guidance at all phases. The more a panel is engaged, the better members are able to provide relevant and timely advice and guidance to the study team, including on an ad hoc basis as study needs evolve.

D. Exploring modes of engagement

A wide-reaching survey and a purposive interview sample would have enabled the team to collect a broad range of perspectives from the key stakeholder groups of interest. Once the project pivoted away from data collection that would require OMB approval, the strategy was revised to include a greater variety of data sources and methods of engagement that could complement each other to achieve a reasonable

breadth of perspectives on NSDS data access and use. These alternative sources and methods had both advantages and challenges in their implementation that can inform future work.

1. Useful strategies

- **Multiple engagement modes produced complementary insights.** The combination of conversations, expert panel meetings, webinars, conference attendance, and landscape review produced a richer understanding than any single method would have generated. Multiple sources of perspectives also allowed for validation of perspectives that arose from one data source, which supported confirmation of topics that may have been most important to address or most common across the larger stakeholder group.
- **Opportunities for public input to broaden perspectives and validate findings.** The format of the public webinar series enabled questions and concerns to surface that might not have in one-on-one engagements developed through existing networks. This approach allowed for a broader reach, because the events were promoted to the wider public rather than just study partner networks, and with relatively less effort than other more systematic data collection efforts.

2. Challenges

- **Some sources of data required extrapolation.** The study team had to approach the analysis with caution, because several data sources did not directly address the topic of an NSDS, given its relative newness as an initiative. In extrapolating from sources such as conference agendas and webinars, it was necessary to rely on publicly available materials to determine how the information would relate to an NSDS. Publicly disseminated information may over represent initiatives or users who have more representation at the national level, more funding or a wider reach, or a longer history.
- **Representation gaps.** Although the public webinars uncovered important topics and information for the study, attendance was limited and may not be representative of the larger group of stakeholders that the webinar was designed to engage. In particular, attendance from representatives of U.S. territories was low, which limited the study's examination of territory-specific capacity needs. Public discussions alone may not uncover all needs or provide a representative perspective of a particular group; they may be more beneficial in providing an opportunity for peer-to-peer discussion and finding questions and concerns that other forums might miss or that might not be accessible to the broader public. The limited time allotted to virtual events also means that conversations need to stay at a relatively high level and may not be sufficient for exploring more technical questions.
- **Time constraints.** Virtual events can be difficult to schedule when there are many time zones to consider. In particular, the U.S. territories cover a large range of time zones, making it challenging to find a time that falls in typical working hours in all zones.

3. Recommendations

- **Offer multiple opportunities for engagement.** Multiple modes of engagement will increase the potential to hear a range of perspectives, including those that may not typically elevate themselves to more visible forums. This approach addresses the possibility of biased findings and enables greater validation of learning emerging from different sources. A mix of broad engagement activities (such as public forums) with more focused engagement (such as interviews) can provide more comprehensive learning.

- **Use low-burden methods of data collection that can reach more people.** Some stakeholders may have limited capacity to engage, but their perspectives are still important. To reach a wider segment of representative users, the study team recommends using data collection strategies that minimize burden while being accessible to a larger number of potential participants, such as short surveys. With NCSES's oversight, the IEBC study team has already developed a draft package with pre-tested instruments and outreach materials that could be adapted to administer a survey to relevant stakeholders.
- **Engage underrepresented groups to understand their constraints.** Some groups of stakeholders may have unique circumstances that make it challenging for teams to gather their feedback. Find trusted partners within those groups to provide insight into what constraints may exist and potential strategies to remove barriers to engagement.

E. Engaging Tribal governments and Tribal-serving organizations

Woven together, the lessons learned throughout the project point to several principles for engagement that meaningfully supports Tribal Nations: (1) trust and relationship building are foundational to meaningful Tribal engagement; (2) Tribal Nations need a clear understanding of how an NSDS will provide tangible value to Tribal communities; and (3) engagement is most effective when it is reciprocal, sustained, and integrated throughout system design rather than occurring as isolated consultation activities.

As the project progressed, key insights expanded beyond the importance of relationship building and trust to include more concrete strategies for strengthening Tribal participation, such as demonstrating Tribal-specific use cases, establishing Tribal governance structures, and building on existing Tribal data infrastructures rather than creating parallel systems. Federal initiatives involving Tribal data should clearly articulate benefits for Tribes, provide realistic examples of how proposed systems will support Tribal priorities, and demonstrate respect for Tribal Data Sovereignty by complementing—not replacing—existing Tribal consultation processes and governance structures. The insights further underscore that relationship building requires adequate time, continuity, and consistent points of contact, while successful engagement depends on providing value back to Tribal communities through shared learning, technical support, and opportunities for ongoing collaboration.

1. Useful strategies

- **Building relationships through trusted Tribal partners.** Working with Tribal-serving organizations such as our partner NIHB, attending Tribal conferences, engaging the TEP, and conducting dedicated Tribal webinars generated greater interest, stronger participation, and richer insights than direct outreach alone.
- **Maintaining ongoing engagement throughout the project.** Regularly engaging members of the TEP created opportunities to refine findings, test assumptions, validate emerging themes, and incorporate Tribal perspectives throughout the project.
- **Providing sufficient background and context before seeking input.** Participants engaged more meaningfully when they received clear explanations of the NSDS concept, its relationship to Tribal sovereignty and Indigenous Data Governance, and realistic examples of how it could support Tribal priorities.

- **Demonstrating reciprocal value throughout engagement.** Engagement was most successful when discussions provided Tribal participants with practical value by sharing resources, examples, technical information, or opportunities for mutual learning rather than solely requesting input.

2. Challenges

- **Inflexible timelines limited meaningful Tribal engagement.** Compressed schedules limited opportunities to build relationships, provide sufficient context, and allow Tribal leaders and experts adequate time to review materials and provide thoughtful feedback.
- **Trust and governance concerns outweighed technical considerations.** Discussions consistently highlighted concerns regarding Tribal Data Sovereignty, governance, historical misuse of Tribal data, racial misclassification, and limited access to federal and state data. These concerns were often more significant than questions about technology or system functionality.
- **Consultation fatigue can reduce participation.** Tribal leaders and subject matter experts frequently participate in multiple advisory groups, consultations, and federal initiatives, making it important to coordinate outreach and minimize unnecessary burden.
- **Standard engagement approaches may not align with Tribal priorities.** Conventional stakeholder-engagement methods did not always reflect Tribal values or expectations regarding relationship building, reciprocity, transparency, and decision making.

3. Recommendations

- **Build substantially more time into Tribal engagement activities.** Allow sufficient time to establish relationships, provide background information, conduct meaningful consultation, and incorporate Tribal feedback throughout the project life cycle.
- **Invest in long-term relationships rather than project-specific engagement.** Treat Tribal engagement as an ongoing governance function supported by consistent points of contact, recurring engagement opportunities, and sustained collaboration.
- **Address Tribal Data Governance from the outset.** Clearly communicate how Tribal sovereignty, Indigenous Data Governance, consent, stewardship, and decision-making authority will be recognized and incorporated into data systems, policies, and governance structures.
- **Pair engagement with investments in Tribal capacity.** Efforts to engage Tribes should be accompanied by investments in Tribal workforce development, technical assistance, infrastructure, governance capacity, and long-term support, so that Tribal governments can fully benefit from and govern their participation in data initiatives.

IV. Implications for a Future NSDS

This report offers a practical framework for how the Interagency Council on Statistical Policy, NCSES and future NSDS partners can engage stakeholders to understand their needs and translate those needs into practical design considerations for an NSDS. The study's revised data collection approach demonstrates that meaningful insights can still be generated through methods that vary in depth, breadth, and representation. The experience also underscores that engagement with stakeholders should not be treated as a one-time input-gathering exercise. Rather, it should be a sustained, relationship-based process that helps identify users' needs, test assumptions, build trust, and refine learnings over time.

An NSDS can use this project as a model for replicating stakeholders' engagement in other evidence-building needs. The project used a framework with four core elements: (1) engaging trusted intermediaries and expert advisors early; (2) using plain-language communication with clear use cases; (3) collecting input through multiple modes; and (4) delivering ongoing feedback and progress updates to stakeholders involved. Applied iteratively, this framework can help ensure that NSDS development is informed by the governments and communities that both produce and use data.

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Appendix A. Expert Panel Members

Exhibit A.1. State, local, and territorial expert panel: members and consultant

Name	Affiliation	Representation
Expert panel members		
Milda Aksamitauskas	Fellow, State Chief Data Officers Network, Beeck Center for Social Impact and Innovation at Georgetown University	Nongovernment, state
Mary Craigle	Bureau chief, Research and Information Services Bureau, Montana Department of Commerce	State
Anna Hui	Director, Missouri Department of Labor and Industrial Relations	State
Jeff Lambart	Director of analytics, City of Boston	City
Rizalina Liwag	Senior director, Office of Accountability, Research, and Evaluation, Commonwealth of Northern Mariana Islands Public School System	Territory
Christin Lotz	Director of evidence and impact, Tennessee Department of Finance and Administration	State
David Park	Director of data and business analytics, National League of Cities	Nongovernment, city
James Smith	Budget and policy manager, Vermont Division of Vocational Rehabilitation	State
Kate Tromble	Vice President, Federal Policy, Data Quality Campaign	State (nongovernment)
Consultant		
Melly Wilson	Director, research, policy, and government relations, Pacific Resources for Education and Learning	Territory

Exhibit A.2. Tribal Expert Panel: members and consultant

Name	Tribe	Affiliation	Representation
Expert panel members			
Tanner Amdul-Clark	Citizen Potawatomi	Partner, Sonosky, Chambers, Sachse, Miller & Monkman, LLP	Tribal law
Deana Around-Him	Cherokee	Research scholar, Child Trends	Research and evaluation; research ethics
Lannesse Baker	Anishinaabe	Public health officer, Urban Indian Health Institute	Data user
Gary Burnette	Cheroenhaka (Nottoway)	Chair of the board of directors AISES; chief data officer, Kyndryl; Tribal Council member (term ended 12/31/2024)	State Tribal leader (Tribal Council member – state-recognized Tribe)
Garet Couch	Shawnee	President, National Tribal Geographic Information Support Center	GIS
Leonard Forsman	Suquamish Tribe	Board president, Suquamish Foundation and vice president for the Northwest Region to NCAI	NCAI/Tribal Council member of West coast Tribe

Name	Tribe	Affiliation	Representation
Jessica Imotichey	Chickasaw	Health policy and legislative analyst for the Chickasaw Nation Department of Health; Census Advisory Committee	Census data
Lydia Jennings	Pascua Yaqui Tribe (Yoeme) and Huichol (Wixáritari)	Assistant professor of environmental science, Dartmouth	Environmental data; data sovereignty
Traci Morris	Chickasaw	Executive director, American Indian Policy Institute, Arizona State University	Tribal law; data sovereignty
Vanessa Palmer	NA	Data director, Center for Indian Country Development, Federal Reserve of Minneapolis	Data user; Economic/ Development data; Federal agency
Ahniwake Rose	Cherokee	President and chief executive officer of AIHEC	National Tribal organization; education data; higher Education
Stepanie Russo Carroll	AHTNA/Native Village of Kluti-Kahh	Director, Collaboratory for Indigenous Data Governance, Native Nations Institute, University of Arizona	Data sovereignty and data governance, Alaska Native
Bobby Saunkeah	Kiowa Tribe of Oklahoma	Director, Division of Research and Public Health; Chickasaw Nation Department of Health	Health data
Heather Sauyaq Jean Gordon	Iñupiaq	Sauyaq Solutions	Indigenous sustainability
Desi Small-Rodriguez	North Cheyenne and Chicana	Assistant professor, Sociology and American Indian Studies, University of California, Los Angeles	Data sovereignty; data governance
Victoria Warren-Mears	NA	Director, NPAIHB	Tribal organization - Tribal epidemiology center; Public Health Data
Consultant			
Yvette Roubidoux	Rosebud Sioux	Adjunct professor, Colorado School of Public Health; former director, Policy Research Center, NCAI; former director, IHS	Public health, health data, and research and evaluation

AIHEC = American Indian Higher Education Consortium; AISES = American Indian Science and Engineering Society; GIS = geographic information system; IHS = Indian Health Service; IT = information technology; LLP = limited liability partnership; NA = not applicable; NCAI = National Congress of American Indians; NPAIHB = Northwest Portland Area Indian Health Board.

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