

Attachment 1 – Project Topic

The Federal Data Usage Platform (DUP): a Shared Federal Asset

Key Objective

The key objective of this project is to develop an easy-to-maintain, user-friendly platform showing the usage of federal data assets. The Federal Data Usage Platform (DUP) will provide access to federal data usage statistics promoting transparency through a single shared service. Federal data assets may include administrative data and statistical data.

Currently, there is no shared resource for federal agencies to track the usage of their data assets. Related works include the [Democratizing Data Initiative](#) and the [Federated Data Usage Platform Projects](#). This project seeks solutions to create and maintain a shared data usage tracking platform as part of the [National Secure Data Service](#) (NSDS). The solution will provide information on the timely and relevant usage of federal data assets and will contribute to demonstrating the value of federal data.

Background

The [Foundations for Evidence-Based Policymaking Act of 2018](#) (Evidence Act) statutorily mandated federal evidence-building activities, open government data, and confidential information protection and statistical efficiency. NSDS aims to advance the accessibility of objective information in the United States. This effort includes increased collaboration within the national data ecosystem, adopting common frameworks for protecting data, and disseminating data securely and equitably in accordance with both Title II and Title III of the Evidence Act. With authorization under Section 10375 of the [2022 CHIPS and Science Act](#), The National Center for Science and Engineering Statistics (NCSES) established the NSDS demonstration project to develop, refine, and test models to inform the full implementation of the NSDS.

In alignment with the [vision for a future NSDS](#), this project aims to meet the needs of the national data ecosystem by creating and maintaining a shared resource that allows open access to users – including federal agencies, policymakers, researchers and the general public – to inform about timely and relevant use of federal data assets in an user-friendly way. The DUP is a component of the NSDS that addresses one of the [recommendations from the Advisory Committee on Data for Evidence Building](#) to harness usage metrics of federal data. Understanding the timely and relevant uses of federal data can support collaboration across various research and policy communities and promote cross-disciplinary approaches to research and evidence-based policymaking. Highlighting the timely and relevant use and application of federal data can also support agencies' business needs and decision making related to stakeholder requirements, stakeholder engagement, and supporting investments in data programs and other efforts.

The DUP can be the starting and landing point in a data user's evidence-building journey within the NSDS. For example, a centralized NSDS data concierge that supports the use of statistical data may use the DUP themselves or direct a data user to the DUP to answer their questions about the timely and

relevant usage of federal data to topics of interest. Or the DUP may showcase federal data assets or potential collaborators that were unknown to the data user. This may lead a data user to apply for access to a participating agency's restricted-use data by seamlessly directing them to the [Standard Application Process](#) (SAP).

Information Gaps

Leveraging the findings and lessons learned from existing publicly accessible resources (including but not limited to the [Democratizing Data Initiative](#), the [DUP-N02](#), and the [DUP-N04](#) prototypes of the Federated Data Usage Platform), this project will inform the following questions:

- What frequency – or cadence - of data refreshing and resource updates balances timeliness with system integrity, scalability, and sustainability?
- What methods allow for federal agencies to provide data for usage metric calculations and refreshing?
- What platforms and tools can seamlessly interact with other resources that [NSDS services](#) may leverage in the future, like a NSDS website, NSDS data concierge, SAP portal, the Federal Statistical Research Data Center Program (FSRDC), the Federal Data Catalog (data.gov), and other data services?
- What features can be built into the DUP that allows it to easily scale up and meet new user needs?

Objectives

The objectives for the Federal Data Usage Platform (DUP) include:

- Provide users easy-to-understand visualizations of federal data usage statistics.
- Propose long-term solutions for scaling utility while maximizing data quality.
- Engage with users through the DUP for feedback on user experience.
- Allow users to discover and learn about federal data usage through the DUP.
- Interactive features such as search and filter capabilities, animated data visualizations, chatbot integration, feedback forms, user forums, etc.
- Integrate the DUP and tools with the NSDS-D and possible future NSDS.

Deliverables

At a minimum, offerors will provide the following if selected for the award. Additional deliverables may be required.

- Lessons learned pertaining to the current effort of developing a platform showing the utilization of federal data.
- Monthly status reports on progress towards project objectives.
- Quarterly lessons learned that will inform future enhancements, highlighting what has been learned thus far, challenges with potential solutions, and any best practices.
- Development plan for the DUP.
- UX testing results of the DUP.

- All code and documentation supporting the project in a publicly accessible open-source software repository and provided under an open-license or public-domain equivalent; including all code used in the project provided in a reproducible open-source format (R, python, etc.). All technical components should propose using open-source software and open-source software development principles wherever feasible.
- Maintenance plan for continued servicing of the DUP such as data ingestion, refreshes, and other enhancements.
- Communication and adoption plan for deployment across federal agencies.
- Training data (if applicable), and any other data created under this award.
- Evaluation plan that includes methods for evaluating the DUP, including metrics. Collection and delivery of quarterly metrics after DUP deployment.