Proposals for a National Secure Data Service, in Context

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On June 28, 2021, the House passed H.R. 2225, the National Science Foundation for the Future Act, which would authorize appropriations and certain activities. One provision would establish a “National Secure Data Service” (NSDS) demonstration project. The proposal relates to a recommendation from an earlier Commission on Evidence-Based Policymaking (CEP).

Among other things, CEP was charged with considering whether a federal government “clearinghouse” for program and survey data should be established. CEP interpreted clearinghouse to mean “a data storage facility that permanently stores records from multiple databases from multiple agencies and, therefore, grows with each new data linkage.” CEP rejected the clearinghouse model, however, citing "well-founded concerns about the potential privacy harm such a clearinghouse could raise.” Instead, it recommended establishment of an NSDS, which would “temporarily link existing data and provide secure access to those data for exclusively statistical purposes in connection with approved projects” and “do this without creating a data clearinghouse or warehouse.”

This Insight discusses NSDS proposals, related background, and potential issues for Congress.

Legislation

The House-passed version of H.R. 2225 would provide for an NSDS demonstration project within the National Science Foundation (NSF). If the bill is enacted, the NSF director would be authorized to operate the project directly or award a contract to another entity.

The proposed NSDS project would be directed to “align” with a particular advisory committee’s recommendations “to the extent feasible.” The Foundations for Evidence-Based Policymaking Act of 2018 (FEBPA) had established this advisory committee to assist the Office of Management and Budget (OMB) in carrying out certain interagency data-sharing provisions. These data-sharing provisions were included within FEBPA as Part D of the Confidential Information Protection and Statistical Efficiency Act of 2018 (CIPSEA). Part D newly required an agency to share its data assets—upon request and “to the extent practicable”—with any requesting statistical agency or unit for developing evidence for statistical purposes, unless such sharing is specifically prohibited. CIPSEA is silent regarding the ultimate disposition or destruction of the shared data.
If enacted, H.R. 2225 would require the NSF director to “consider … use of systems and technologies” in this project that “reasonably ensure confidential data and statistical products are protected.” The project would maintain a public website on supported projects and would submit a report to Congress, including descriptions of data protection policies and all completed or active data linkage projects and an assessment of the project’s effectiveness and risks. The bill would authorize $9 million annually for the project for FY2022-FY2026.

Background

Since the advent of the computing era, policymakers have intermittently considered the creation of a centralized clearinghouse to combine government data, variously noting promise and peril. Proponents suggested it could provide access to agencies and researchers to foster learning, improve programs, and reduce the cost of studies. Critics, on the other hand, suggested that such access could come at the cost of individual privacy or allow the government or malicious actors to target individuals or groups. Ultimately, such concerns prevented the creation of a clearinghouse. The concerns led to enactment of the Privacy Act of 1974, which restricts how agencies may share data that identifies individuals in the absence of consent, with certain exceptions. Agencies also oftentimes took restrictive views on data sharing for statistical purposes because of an absence of specific statutory authorization or concerns about public acceptance.

Subsequently, some efforts to promote data sharing were undertaken on a case-by-case basis, such as limited sharing authorized in an earlier version of CIPSEA in 2002. Additional CIPSEA 2002 provisions—still current law—sought to ensure that data provided to federal agencies under a pledge of confidentiality would be “subject to uniform and rigorous statutory provisions against their unauthorized use,” instead of the situation at the time, in which confidentiality regimes varied among agencies and were often “not based in law.”

In 2016, Congress established CEP to consider whether “a data clearinghouse should be established to ensure federal data is available to policymakers, and also study how best to protect the privacy rights of individuals who interact with federal agencies.” CEP’s 2017 report suggested that advances in technology could support creation of an NSDS, which could combine data without risking individual privacy or warehousing data. CEP highlighted a complex legal environment surrounding data sharing, noting that many statutes govern data collection, management, privacy, and confidentiality in particular contexts. CEP observed “that some variation in the laws that govern the protection of data is sensible given the contextual nature of privacy. It is unclear, however, that all of the variation in the legal structure is intentional.” For its part, OMB had earlier sought to encourage agency data sharing administratively.

After publication of CEP’s report, CEP’s co-chairs moved to the Bipartisan Policy Center (BPC), and companion bills were introduced. BPC characterized the bills as including some of CEP’s recommendations. In January 2019, FEBPA became law but did not establish an NSDS. Nevertheless, Title III of FEBPA modified CIPSEA to (1) allow OMB to designate statistical agencies or units at any executive agency and (2) require agencies to make data available upon request to any designated statistical agency or unit. CIPSEA does not specify how long the shared data may exist. FEBPA requires OMB to issue regulations regarding Title III implementation, but none have yet been issued.

Potential Issues for Congress

Observers have noted potential benefits and risks of data sharing. In addition, uncertainties remain about FEBPA implementation and how an NSDS could operate and be structured. In evaluating policy options, Congress might consider multiple questions:
In the absence of OMB regulations and formal recommendations from the advisory committee, are there implications for legislation?

Would placement of NSDS in a non-federal entity help or hinder data access and security?

Has CIPSEA’s Part D data sharing authority been used to date? Does it enable the creation of data clearinghouses?

Who should decide how long combined data sets exist?

What technologies are available to facilitate data sharing and privacy protection?

How can the government ensure data is used transparently and only for desired purposes?

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