

U.S. DEPARTMENT OF EDUCATION

OPEN DATA PLAN

September 2024

Contents

Purpose	1
Executive Summary	1
Background	2
The OPEN Government Data Act	2
Additional Resources	2
Department's Open Data Plan Key Actions	3
KEY ACTION 1: Improve usability of all public data assets	4
Task 1.1: Utilize open formats and open APIs for data distribution	4
Task 1.2: Describe the structure and encoding of public data assets to facilitate reu	
Task 1.3: Use relevant standards for structuring and encoding distributed data asse	ets
KEY ACTION 2: Develop key requirements for the expansion and maintenance of the CDI to enhance data discovery and utilization)
Task 2.1: Gain insight into data usage	7
Task 2.2: Establish and execute a strategy to prioritize data assets for public acces	s 7
KEY ACTION 3: Enhance the quality of education data through open data principles and processes	9
Task 3.1: Incorporate user feedback in data quality improvements	9
Task 3.2: Enhance data quality documentation	10
KEY ACTION 4: Ensure ED's Data Assets Are Appropriately Safeguarded Consistent with Privacy Requirements	
Task 4.1: Identify data assets that contain PII	.12
Appendix A: Key Actions Crosswalk	14
Appendix B: Terms and Acronyms	.15
Credits	18

PURPOSE

The following document satisfies §3506(b)(2)(B) of the Federal Information Policy (44 U.S.C. § 3506) which specifies the requirements for an Agency's Open Data Plan. It also meets the requirements of Objective 4.1 in the <u>Department of Education Data</u> Strategy.

EXECUTIVE SUMMARY

The U.S. Department of Education (the Department or ED) recognizes the value of open data to improve student outcomes and government accountability as well as benefits and opportunities for the public. As summarized in its 2014 Open Government Plan, the Department considers principles of open government vital to effectively communicating and interacting with the general public, students, parents, teachers, and all stakeholders engaged in education. The Department embraces the principles of increased transparency, participation, and collaboration as essential to its work. By focusing on open practices and increasing access to data, we anticipate the creation of new information and knowledge that will help accomplish the Department's mission to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.

The Federal Council of Chief Data Officers (Federal CDO) describes the affordance of open data through <u>six business cases</u>. The Council advocates for making data open and accessible in a standard, machine-readable format by default to realize significant increases in productivity and cost savings for agencies. Facilitating access to existing data helps reduce the risk of duplicative data collection efforts and is key to being able to incorporate data into an agency's everyday decision-making processes.

In recognition of the principles and affordances of open data, the Department frequently publishes to Data.gov. To date, more than 800 datasets can be publicly downloaded there. With the regular releases to Data.gov and multiple Department efforts to share data, more than 10,000 individual data files are currently available to help a broad audience explore and better understand education data. Accordingly, the logical next step in the evolution of the Department's data maturity is to define key actions and tasks in its continued support of open data.

This Open Data Plan not only addresses key components of the OPEN Government Data Act but also meets the requirements of Goal 4 in the <u>Department of Education</u> <u>Data Strategy</u> and focuses on addressing gaps in the Department's current open data practices, including the following:

- providing a centralized, searchable index of the thousands of data files the Department publishes;
- sufficiently describing data files with metadata to include them in the <u>Federal</u> <u>Data Catalog</u>; and
- establishing a uniform point of contact for handling issues with the data the

Department makes available for public use.

BACKGROUND

The OPEN Government Data Act

Title II of the Foundations for Evidence-Based Policymaking Act of 2018 contains the Open, Public, Electronic, and Necessary Government Data Act or the OPEN Government Data Act. This law requires federal agencies to develop an Open Data Plan. As codified in Title 44, Section 3506 of the United States Code (44 U.S.C. § 3506), the Open Data Plan addresses the following:

- processes for ensuring data acquired or created use open (non-proprietary) formats;
- processes for collaborating with entities external to the agency to understand the value and use of government data;
- methods for tracking data asset usage;
- processes for evaluating and improving the timeliness, completeness, consistency, accuracy, usefulness, and availability of open government data;
- plans for meeting open data goals, through such things as technology acquisition and training;
- a list of priority data assets to make open; and
- plans for compiling and maintaining a comprehensive data inventory.

Additional Resources

Additional federal- and agency-level data governance strategies and policies inform the Department's coherent approach to developing its Open Data Plan. These include the following strategic documents and statute.

Federal Data Strategy

Consistent with the *OPEN Government Data Act*, the 2021 <u>Federal Data Strategy</u> specifies key actions – Action 5: Publish agency open data plans and Action 6: Improve data inventories – that are instructive in the development and publication of an Open Data Plan. This document aligns with these requirements.

Department of Education Data Strategy

Similarly, the 2023 <u>Department of Education Data Strategy</u> includes as part of its Goal 4 objectives to improve data access, transparency, and privacy, including the explicit objective to publish an Open Data Plan describing agency effort to make its data open to the public.

Information Resources Management (IRM) Strategic Plan

The <u>IRM Strategic Plan</u> aligns with and supports the Department's Strategic Plan, the President's Management Agenda (PMA), Cross Agency Priority (CAP) goals related to federal information technology (IT) initiatives, and the Department's Data Strategy. The plan highlights the Department's goals for fiscal

years 2022 to 2026 to improve overall IT service delivery and increase protection of government systems and the data within.

Evidence Act

The <u>Foundations for Evidence-Based Policymaking Act of 2018</u> (Evidence Act) introduced several key actions related to promoting data that is open, well managed, and useful for policymaking. Agencies are required to do the following:

- make as much data available for public use as possible, given the resources and the requirements to avoid disclosure of personally identifiable information
- maintain comprehensive data inventories published as open data in standardized, machine-readable formats; and
- collaborate with entities external to the agency to understand how data users value and utilize government data.

DEPARTMENT'S OPEN DATA PLAN KEY ACTIONS

The Department's Open Data Plan is built upon four key actions and related tasks to improve existing open data practices. The beginning of this document shows how the Department's key actions align with requirements of the *OPEN Data Act* and with related concepts from foundational documents already identified. The following key actions are inspired by the FAIR (Findability, Accessibility, Interoperability, and Reusability) data principles, which are guidelines to improve findability, accessibility, interoperability, and reuse of digital assets.

- **Key Action 1:** Improve usability of all public data assets.
- Key Action 2: Develop key requirements for the expansion and maintenance of the Comprehensive Data Inventory (CDI) to enhance data discovery and utilization.
- **Key Action 3:** Enhance the quality of education data through open data principles and processes.
- **Key Action 4:** Ensure ED's data assets are appropriately safeguarded consistent with privacy requirements.

Key actions are followed by related tasks and include a brief description of the approach for how each task will be implemented. Each task identifies short-term subtasks intended to be taken within the next two years (2025-2027) and measurable benchmarks that will be reviewed at least annually to determine impact and document completion. As this is the Department's inaugural Open Data Plan, we are piloting these tasks and benchmarks during these first two years to help identify an improved and more effective path forward, if appropriate. During those two years, if appropriate after the two years and when available, improvements and longer-term actions will be included to map out future work for consideration as this Open Data Plan is revised.

To facilitate the implementation of this plan, the Department will release a resource

document with essential resources and guidance. This document will help ED offices navigate the key actions and access the tools necessary for successful execution.

KEY ACTION 1: IMPROVE USABILITY OF ALL PUBLIC DATA ASSETS

Task 1.1: Utilize open formats and open APIs for data distribution Approach

Open formats and application programming interfaces (APIs) makes the data more easily interoperable with other datasets and can be more easily reused. Closed formats or APIs may limit access due to proprietary software requirements or registration fees.

The Department prioritizes open formats for data assets and open APIs. In the CDI, approximately 30 percent of included data assets provide files in open formats. Towards achievement of Task 1.1, the Department will take the following actions.

Short-Term Subtasks

- 1. Compile and publish a registry of open formats. This will be implemented as an online reference tool and includes plans to provide format conversion tools to facilitate preparing open data assets for public release.
- 2. Establish a policy for using open formats and open APIs to distribute open data assets.
- 3. Implement performance measures for the CDI of the percentage of open data assets released in open formats.

- 1. Compile and publish a registry of open formats:
 - o **Count:** Measure the number of open formats listed in the registry.
 - o **Updates:** Track the frequency of updates or additions to the registry.
- 2. Establish a policy for using open formats and open APIs to distribute open data assets:
 - o **Policy Development:** Draft policy document for Department leadership to review and revise upon publishing and implementation.
 - Compliance Rate: Calculate the percentage of new data assets distributed using open formats and APIs. Distribution of a data asset refers to a file containing the data, encoded in some format.
 - Feedback: Gather feedback from users or stakeholders about the ease of use and effectiveness of the data assets distributed using open formats and APIs.

- 3. Implement performance measures for the CDI of the percentage of open data assets released in open formats:
 - Coverage: Calculate the percentage of open data assets in the inventory available in open formats.

Task 1.2: Describe the structure and encoding of public data assets to facilitate reuse

Approach

Task 1.2 aims to facilitate the reuse of public data assets by describing their structure and encoding. The approach involves developing a support document that details what data dictionaries should include and assessing the number of open data assets with data dictionaries. The success of these actions will be measured through peer reviews, usability tests, inventory checks, and calculating the percentage of data assets with associated data dictionaries.

Short-Term Subtasks

- Create a support document describing what information a data dictionary should include.
- 2. Assess how many open data assets currently have data dictionaries and make revisions consistent with the support document.

Benchmarks for Short-Term Subtasks

- 1. Create a support document for data dictionaries:
 - Peer Review: Gather feedback from subject matter experts that captures observations, recommendations, and any identified issues. Analyze feedback to identify common themes and concerns.
 - Usability Test: Track the number of users (i.e., cross-functional team of data owners, including data stewards and data governance personnel) and their ability to create a data dictionary using the support document.
- 2. Assess open data assets with data dictionaries:
 - Inventory Check: Identify open data assets within the CDI that contain a data dictionary and assess for accuracy.
 - Percentage Calculation: Calculate the percentage of data assets that have associated data dictionaries.

Task 1.3: Use relevant standards for structuring and encoding distributed data assets

Approach

While Task 1.2 addresses making data reusable and understandable for general use, Task 1.3 focuses on using relevant standards for structuring and encoding distributed

data assets to ensure compatibility and consistency. Both approaches aim to improve the usability and effectiveness of data, with different tasks tailored to their respective contexts. Examples of relevant standards include Statistical Policy Directive 15 (SPD-15), which governs the collections and reporting of race/ethnicity data, and standards promulgated by the Common Education Data Standards (CEDS) to develop a training plan, establish a compliance metric, and initiate a pilot project to implement data standards. The effectiveness of these actions will be measured through various benchmarks, such as plan completion, baseline alignment, and the success of data standard implementation in the pilot project.

Short-Term Subtasks

- 1. Work with CEDS team to develop a comprehensive training and implementation plan on CEDS for data stewards.
- 2. Establish a quantifiable metric for assessing data asset alignment with CEDS and establishing a baseline.
- 3. Develop a reporting mechanism to track the percentage of data asset distributions that align with CEDS.
- 4. Integrate CEDS Connect tool in data preparation processes.

- 1. Work with CEDS team to develop a comprehensive training and implementation plan on CEDS for data stewards:
 - o Plan Completion: Monitor completion status of training.
 - Training Effectiveness: Assess training effectiveness by analyzing datasteward performance on CEDS-related tasks.
- 2. Establish a quantifiable metric for assessing alignment with CEDS and establish a baseline:
 - Baseline Alignment: Measure against the baseline, set as the level of compliance when tracking begins.
 - Compliance Measurement: Measure the percentage compliant at set intervals and compare that to the percentage compliant at baseline to track progress.
- 3. Develop a reporting mechanism to track the percentage of data asset distributions that align with CEDS:
 - o **Reporting Development:** Track the development progress (i.e., initial design, pilot testing, and monitor/update) of the reporting mechanism.
- 4. Integrate CEDS Connect tool in data preparation processes:

- o **Integration Completion:** Monitor the progress of the integration process.
- o **Integration Effectiveness:** Evaluate the effectiveness of the integration by measuring improvements in data preparation processes.

KEY ACTION 2: DEVELOP KEY REQUIREMENTS FOR THE EXPANSION AND MAINTENANCE OF THE CDI TO ENHANCE DATA DISCOVERY AND UTILIZATION

Task 2.1: Gain insight into data usage Approach

To support Task 2.2, there should be periodic coordination with chief executive offices (CXO) to better understand what data may be requested through the Freedom of Information Act (FOIA) process and what data has already been cleared for release to the public. To document historical data, work will start with easily accessible data and continue with other analytics sources from which to gain insights.

Short-Term Subtasks

- 1. Analyze usage data from the U.S. General Services Administration's Digital Analytics Program (DAP) to determine what is most frequently viewed and used on the CDI.
- 2. Assess usage data quarterly to determine what is of regular interest to stakeholders.

Benchmarks for Short-Term Subtasks

- 1. Analyze usage data from the DAP to determine what is most frequently viewed and used on the CDI:
 - Frequency Analysis: Measure the number of times each item on the CDI is viewed or used.
 - User Segmentation: If possible, analyze the usage data based on different user segments (e.g., by role or location) to understand the preferences of different user groups.
 - Trend Analysis: Compare the statistics quarter over quarter to identify trends and patterns.
 - Stakeholder Feedback: Conduct surveys or feedback sessions with stakeholders to validate the findings from the statistical analysis and gain qualitative insights.
 - Usage: Track the usage statistics of the open data assets along with any set targets.

Task 2.2: Establish and execute a strategy to prioritize data assets for public access

Approach

Due to workforce capacity constraints, there is a need to prioritize the sequence in

which the Department makes data assets publicly accessible. Task 2.2 aims to identify assets of highest priority for offices and data most impactful for users. The Department will prioritize data assets for publication as follows:

- 1. **Data assets collected externally** Data assets produced by ED with information collected from entities external to the Department.
- 2. **Data assets produced internally** These assets do not need approval of a corresponding Information Collection Request (ICR) and thus need a different process for identifying their creation.
- 3. **Data assets with high demand** These assets are identified based on usage information from the Open Data Platform. Short-Term Subtasks

For New Data Assets:

- Identify new data assets produced within ED from the information collected via the ICR process, along with their associated data stewards, and ensure plans are in place for data release upon collection or there is a justification for not releasing data assets collected.
- 2. Formulate a process to identify and prioritize new data assets that are produced by ED but do not result from information collections.

For Existing Data Assets:

- 3. Develop criteria for offices to identify their highest priority data assets.
- 4. Request offices to identify their highest priority data assets.

- 1. Identify new data assets collected externally via the ICR process, along with their associated data stewards, and ensure plans are in place for data release upon collection:
 - Asset Identification: Track the number of new data assets identified through the ICR process.
 - Plan Implementation: Track the progress of the data release plans for each identified data asset.
- 2. Formulate a process to identify new data assets produced internally that will not go through the ICR process:
 - Asset Identification: Once the process is in place, track the number of new data assets identified that did not go through the ICR process.
- 3. Develop criteria for offices to identify their highest priority data assets:
 - Criteria Development: Determine milestones to ensure structured progress and accountability.

- Criteria Application: Once the criteria are developed, measure their effectiveness by tracking how many offices successfully use them to identify their highest priority data assets.
- 4. Request offices to identify their highest priority data assets:
 - Response Rate: Measure the percentage of offices that respond to the request.
 - Quality of Identification: Assess asset alignment with the developed criteria for high-priority data assets.

KEY ACTION 3: ENHANCE THE QUALITY OF EDUCATION DATA THROUGH OPEN DATA PRINCIPLES AND PROCESSES

Task 3.1: Incorporate user feedback in data quality improvements Approach

The Department and the federal government, as outlined in Office of Management and Budget (OMB) Memorandum M-23-22 "Delivering a Digital-First Public Experience," place significant importance on understanding how users utilize and value data assets. It is therefore crucial to align the Department's education data assets with user needs to ensure their relevance.

Appropriate data usage is vital for informed decision-making in our nation's education sector. By clearly stating limitations of the Department's data assets' quality, it is our goal that appropriate data usage will also increase.

The Department seeks to establish processes to identify various communication channels with stakeholders and share communications with Principal Operating Components (POCs) to assess and incorporate feedback. We will utilize this feedback to help identify underrepresented users. It is also beneficial to inform the public about changes resulting from user feedback. Additionally, the Department seeks to better understand documentation needs from the user's perspective. The approach to Task 3.1 will look to ensure meaningful feedback mechanisms are in place for the users of open data regarding data quality.

Short-Term Subtasks

- 1. Develop channels for user feedback. This includes the following:
 - Leverage existing key data user conferences and data feedback mechanisms to expand outreach to and develop focus groups with attention to historically underrepresented users (which could include users that are "hard to identify" if our data has reached them; if we have

- received feedback from them; and/or if they have had access).
- o Create an assigned e-mail address for user questions.
- o Develop an online survey to track user feedback/satisfaction.
- 2. Implement processes for organizing, prioritizing, and sharing feedback with POCs in a timely manner.
- 3. Share changes that were implemented based on user feedback.
- 4. Collaborate with POCs to address user feedback.

Benchmarks for Short-Term Subtasks

- 1. Develop channels for user feedback (i.e., user outreach and focus groups):
 - Feedback Volume: Track the number of interactions across all channels (conferences, inbox, surveys, etc.).
 - Trend Analysis: Analyze the content of the feedback received. This can be done through sentiment analysis or by categorizing feedback into themes and tracking the frequency of each theme.
- 2. Implement processes for organizing, prioritizing, and sharing feedback with POCs:
 - o **Feedback Response Time:** Measure the time taken from when feedback is received to when it is shared and addressed with the relevant POCs.
 - Feedback Resolution Rate: Track the percentage of feedback that has been addressed or resolved over a certain period.
- 3. Share changes that were implemented based on user feedback:
 - Change Implementation Rate: Measure the number of changes implemented based on user feedback.
 - User Satisfaction: Conduct follow-up surveys or interviews to assess user satisfaction with the changes made.
- 4. Collaborate with POCs to address user feedback:
 - Feedback Implementation: Evaluate how often user feedback leads to actionable changes or improvements.

Task 3.2: Enhance data quality documentation Approach

The Department's approach promotes data use through data quality documentation and by developing greater engagement with end data users to better understand them and their quality documentation needs. The Department also has experience communicating with stakeholders through a variety of means and in the cognitive testing of instruments; therefore, the cognitive testing of documentation should be similarly attainable. Also, the Department's Data Governance Board working groups could be used to steer the user testing of data quality documentation from a centralized position.

The intent is to measure the success of Task 3.2 by monitoring the following with support of the CDI:

- Develop standard operating procedures to document data quality for open data users.
- Conduct a sample test of data quality documentation (i.e., data notes) for relevance, understanding, and ease of use.
- The percentage of users who take the online survey who communicate satisfaction with the documentation of our datasets.
- The number of publicly available data assets that are accompanied by a data quality plan.

Short-Term Subtasks

- 1. Create documentation that effectively communicates the quality of the data and its limitations. This includes the following:
 - Publishing selected information from the data quality plans for publicly available data assets.
 - Providing documentation for context on data quality that aligns with the Federal Committee on Statistical Methodology (<u>FCSM</u>) <u>Data Quality</u> <u>Framework</u> and meets the needs of the three audiences (data program manager, data analysts, and decision-makers) described in the <u>FCSM</u> <u>presentation</u> on data quality framework.
- 2. Determine the working group under the Department's Data Governance Board that will segment data quality documentation into areas of focus and then track how many of these areas have been tested for understanding by users. This will allow for Department-wide cognitive testing to maximize our resources/time without focusing on each data asset.

- 1. Create documentation that effectively communicates the quality of the data and its limitations:
 - Documentation Coverage: Measure the percentage of publicly available data assets that have associated data quality plans and include data documentation that provides clear context on the data that meets the needs of the data program manager, data analysts, and decision-makers.

- User Satisfaction: Survey the three audiences described in the FCSM presentation to gauge their satisfaction with the data quality context provided.
- 2. Determine the working group under the Department's Data Governance Board:
 - Areas of Focus Coverage: Track the number of areas of focus (e.g., missing data, proxy measurements, sample vs. universe, completeness) that have been addressed by the working group.
 - User Understanding: Conduct cognitive testing to assess user understanding of the segmented data quality documentation.

KEY ACTION 4: ENSURE ED'S DATA ASSETS ARE APPROPRIATELY SAFEGUARDED CONSISTENT WITH PRIVACY REQUIREMENTS

The Department is committed to protecting privacy across the full data management lifecycle for all data assets it maintains. The Department complies with all applicable privacy requirements in law, regulation, and policy, and incorporates privacy best practices to ensure that individuals have access to their information and that data assets are protected. This commitment extends to protecting individuals from the risk of re-identification in publicly released information, such as statistical reports, interactive data tools, and data files.

To privacy protect data assets and implement privacy best practices, the Department maintains processes and procedures for evaluating data assets for potential public release. The processes and procedures include identifying data assets that contain personally identifiable information (PII), implementing data protections, and ensuring the review of the data assets by the Department's Disclosure Review Board (DRB) prior to release. The DRB reviews data assets that contain PII and data assets that have been de-identified but were derived from data containing PII. Data assets in these categories must be reviewed by the DRB prior to release through the Open Data Platform or through other release modalities, subject to limited exceptions.

Task 4.1: Identify data assets that contain PII Approach

The Department's approach includes identifying data assets in POCs that contain PII (or were derived from data containing PII) and are in scope for disclosure review in accordance with the Department's DRB Charter and associated documents. POCs identify these data assets during Phase I (Business Need) or Phase II (Definition and Planning) of the data management lifecycle. It is critical that POC staff who know their data best have the requisite knowledge and skills to be able to identify data assets that

are in-scope for disclosure review through the DRB.

Short-Term Subtasks

- The DRB Steering Committee develops and provides training and technical assistance to support Department staff in identifying data assets that are in scope for the DRB.
- The DRB Steering Committee reaches out to Department staff to ensure POCs are aware of opportunities for training and understand how to schedule such training.

- 1. The DRB Steering Committee develops and provides individualized one-on-one training and technical assistance to support Department staff in identifying data assets that are in scope for the DRB.
 - Training and Technical Assistance: Track the number of training requests from POCs and how many people participate in training. Assess the quality and effectiveness of the one-on-one training through feedback from participants.
- The DRB Steering Committee reaches out to Department staff to ensure POCs are aware of opportunities for training and understand how to schedule such training.
 - POC Contact: Track the number of contacts that the DRB Steering Committee makes to present, offer, and schedule one-on-one training.

APPENDIX A: KEY ACTIONS CROSSWALK

The table below provides a visual crosswalk of this Open Data Plan's Key Actions with other relevant mandates and requirements to show how the work aligns coherently.

OPEN Data Act Requirements	ED Key Actions			
	1	2	3	4
Ensure data acquired or created use open formats.	✓			
Collaborate with non-government entities to understand the value and use of government data.			✓	
Track data asset usage.		✓		✓
Evaluate and improve the timeliness, completeness, consistency, accuracy, usefulness, and availability of open government data.			√	
Plan to meet open data goals through technology acquisition and training.	✓			
List priority data assets to make open.	✓	✓		
Compile and maintain a comprehensive data inventory.		✓		

The Department's Open Data Plan Key Actions

- 1. Improve usability of all public data assets.
- 2. Develop key requirements for the expansion and maintenance of the Comprehensive Data Inventory to enhance data discovery and utilization.
- 3. Enhance the quality of education data through open data principles and processes.
- 4. Ensure the Department's data assets are appropriately safeguarded consistent with privacy requirements.

APPENDIX B: TERMS AND ACRONYMS

CDI: The Comprehensive Data Inventory is a combined agency data listing that accounts for all data assets created by, collected by, under the control or direction of, or maintained by the agency within ED's Open Data Platform.

CEDS: The <u>Common Education Data Standards</u> collectively refer to an education data management initiative whose purpose is to streamline the understanding of data within and across Preschool-to-Grade-20-to-Workforce institutions and sectors. The CEDS initiative includes a common vocabulary, data models that reflect that vocabulary, tools to help education stakeholders understand and use education data, an assembly of metadata from other education data initiatives, and a community of education stakeholders who discuss the uses of CEDS and the development of the standard.

DAP: Federal agencies are required to participate in the <u>Digital Analytics Program</u> (<u>DAP</u>). DAP offers a web analytics tool, training, and support to federal agencies.

Data Asset: The OPEN Government Data Act (<u>Title II of the Foundations for Evidence-Based Policymaking Act of 2018, Public Law 115-435)</u> defines data asset as:

[A] collection of data elements or data sets that may be grouped together (page 7).

<u>Supplemental Guidance on the Implementation of M-13-13</u> furthers defines data asset as:

A collection of data elements or datasets that make sense to group together. Each community of interest identifies the Data Assets specific to supporting the needs of their respective mission or business functions. Notably, a Data Asset is a deliberately abstract concept. A given Data Asset may represent an entire database consisting of multiple distinct entity classes or may represent a single entity class (footnote 1).

Complementing these definitions for the purposes of this planning document, one further specification to add to the definition of data asset is:

[T]he Department has determined it has value or expects to generate value from it in the future.

Data Governance Board: The Department's Data Governance Board (DGB) is responsible for setting and enforcing sound data governance policies for the agency. Chaired by the Chief Data Officer and composed of senior leaders from across the Department, including the Department's Statistical Official, the DGB meets regularly to implement the Department's Data Strategy to improve education outcomes and lead the nation through evidence-based policy and data-driven decisions.

Data Quality Plans: Data quality plans document data quality activities and controls as they relate to the domains of quality as defined by OMB. OMB defines "quality" as

encompassing "utility, objectivity, and integrity" in the *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 FR 8452* (February 22, 2002). In accordance with the Department's *Information Quality Act* Guidelines, all publicly disseminated data assets should have a documented data quality plan, with the exception of emergency information collections that require a data quality plan at the point of the 6-month submission. Data quality plans enable the Department to substantiate the quality of the information it disseminates through documentation and other means appropriate to the information. A data quality plan template was developed to help ensure that the quality of a Department data asset is planned for, documented, and addressed throughout the data management lifecycle.

Data Standard: A data standard is a technical specification that describes how data should be stored or exchanged to ensure consistent collection and interoperability of that data across different systems, sources, and users. It is an assembled collection of data components that uniformly describe data according to the expectations of all data users.

FAIR Data Principles: These are guidelines to improve the findability, accessibility, interoperability, and reuse of digital assets. Important actions focus on organizing and documenting metadata through a framework informed by these principles.

FOIA: Since 1967, the <u>Freedom of Information Act</u> (FOIA) has provided the public the right to request access to records from any federal agency. It is often described as the law that keeps citizens in the know about their government. Federal agencies are required to disclose any information requested under the FOIA unless it falls under one of nine exemptions that protect interests such as personal privacy, national security, and law enforcement.

ICRAS: The Information Collection Request and Renewal Automation System (ICRAS) is how Information Collection Requests (ICRs) are submitted for review and approval.

ICR: Any information collected from parties external to the federal government must be formally approved by preparing an Information Collection Request (ICR) that defines the information to be collected, from whom it will be collected, and the estimated time it will take each participant to provide the requested information. The ICR is formally approved through the Paperwork Reduction Act (PRA) process that includes obtaining public comment on the proposed collection and independent review from OMB.

Interoperability: This refers to the ability of data or tools from non-cooperating resources to integrate or work together with minimal effort.

Open APIs: An open Application Programming Interface (API) (e.g., College Scorecard, the Education Stabilization Fund) allows software applications to programmatically access data assets without restrictions. While open APIs are less formally governed than open formats, clear documentation is essential. Key points about open APIs include the following:

- **Usability:** Accessible from any general-purpose programming language.
- Documentation: Clearly documented for user understanding.
- No Fees or Restrictions: No payment barriers.

Open Data: Data that can be freely used, re-used, and redistributed by anyone. Open data is data anyone can access, download, and use. There are three categories of data assets described in the CDI:

- Public: Data asset is or could be made publicly available to all without restrictions. Public data assets are open data assets.
- Restricted-Public: Data asset is available under certain use restrictions.
- Non-Public: Data asset is not available to the public.

Open Formats: An open format is a file format that stores digital data and can be freely used and implemented by anyone without restrictions. These formats adhere to published specifications, often maintained by standards organizations. Key characteristics include the following:

- Accessibility: Available for use by anyone.
- No Fees or Restrictions: No associated costs or usage limitations.
- Published Specification: Publicly documented format.

POC: A Principal Operating Component represents any primary organization unit within the Department, such as the Office of Planning, Evaluation and Policy Development (OPEPD) or Office of Postsecondary Education (OPE).

Quality: OMB defines "quality" as encompassing "utility, objectivity, and integrity" in its Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 FR 8452 (Feb. 22, 2002).

CREDITS

U.S. Department of Education
Office of Planning Evaluation and Policy Development
Office of the Chief Data Officer

September 2024

This report is in the public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should be U.S. Department of Education, Chief Data Officer, Office of Planning Evaluation and Policy Development, *U.S. Department of Education Open Data Plan*, Washington, D.C., 2024. This report is available on the Department's website at https://www.ed.gov/data.

On request, this publication is available in alternate formats, such as braille, large print, or audiotape. For more information, please contact the Department's Alternate Format Center at 202-260-0852 or by emailing alternateformatcenter@ed.gov.

Content Contact: data@ed.gov