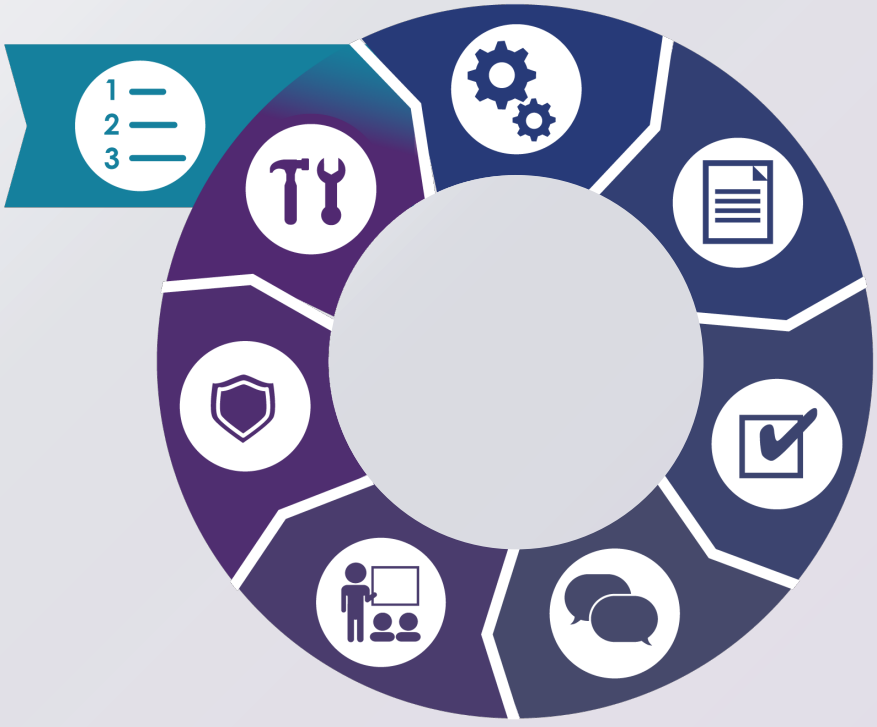
SLDS GUIDE

Developing Effective Data Policies and Processes



December 2019

Contents

This product of the Institute of Education Sciences (IES) SLDS Grant Program was developed with the help of knowledgeable staff from state education agencies and partner organizations. The content was derived from an SLDS regional workshop held in September 2019. The information presented does not necessarily represent the opinions of the IES SLDS Grant Program. We thank the following people for their valuable contributions:

Corey Chatis
Kathy Gosa
SLDS Grant Program, State Support Team

For more information on the IES SLDS Grant Program or for support with system development, please visit http://nces.ed.gov/programs/SLDS.

About This Guide

Effective data governance depends on well-developed, documented, and fully implemented policies and processes. Data policies and processes direct all aspects of information asset management throughout the information lifecycle, from data collection and storage to access, use, and security. Effective policies and processes are understood and used by the organization's staff members and data users, and they help sustain data systems by preserving essential rules and procedures through leadership and staff transitions.

This guide describes the differences between data policies and processes, their role in data governance, and common content areas for policies and processes. It also outlines steps for developing strong data policies and for implementing them effectively. The guide will be expanded in 2020 to address the development and implementation of data processes.

The guidance in this document can be applied to single-agency data governance programs or to interagency or P-20W+ (early childhood through workforce) data governance. Although the individuals involved in developing and implementing policies and processes will differ between single-agency and P-20W+ data governance programs, the overall approaches will be similar. Policies and processes for a P-20W+ data system should be created with consideration and alignment to the policies and processes of its data-contributing agencies.

What Are Data Policies and Processes?

Data policies and data processes are directly related to one another, but they serve different purposes.

Data policies

A policy is a set of guiding principles or rules that establish a general direction for tasks and decisionmaking on a given topic. Policies describe what actions will be taken and why in broad terms. They often require approval by executives or senior leaders, and once created they are binding and infrequently changed. Data policies support effective information management by

- creating a framework for decisionmaking about and accountability for how data are collected, used, and managed across the organization or across agencies;
- codifying a common understanding and definitions for related data processes;
- ensuring compliance with relevant state and federal laws and regulations; and
- communicating with and managing expectations of internal and external stakeholders.

In some organizations, "policy" refers to a high-level directive that requires agency-wide approval beyond what is typically expected for data topics. For example, state education agency policies might require approval by the state board of education. Such organizations may choose to use another term, such as "protocols," for the guiding documents referred to as policies in this guide.

Data processes

Processes support the implementation of policies by documenting detailed, step-by-step tasks to operationalize the rules established in policies. Processes identify specific tasks, individuals or roles responsible for those tasks, dependencies between tasks, and any necessary timeframes for their completion. They are updated regularly and do not necessarily require approval from senior leaders. A well-developed process should allow someone new to the work to execute it correctly.

Data processes help

- ensure that tasks are carried out in compliance with established policies;
- promote consistent and efficient operations by clarifying and standardizing how work is done across staff members;
- support timely completion of core data functions by establishing when each step should be completed;

- clarify job duties and interdependencies among staff members; and
- reduce risk by enabling knowledge management and transfer across staff members.

Data polices and their supporting processes can be combined into a single document or recorded in separate documents that reference one another. The documents should be available to all stakeholders within and outside the organization whose work is affected by a given policy or process.

Content Areas for Data Policies and Processes

The data content areas in this section represent some of the most frequent subjects of policies and processes. Individual organizations might combine, further separate, identify others, or use different terminology for these content areas in their policies and processes.

Data governance operations

Policies and processes in this area define the data governance program's approach to critical data issues, documentation, and development and maintenance of the data governance manual.

Critical data issues
Policies and processes in this area identify the criteria for what constitutes a critical data issue and describe how the data governance program identifies, prioritizes, escalates, and resolves issues that have a negative effect on data quality and use.

Documentation
Policies and processes in this area describe and link to the location where all data governance program decisions, issues, resolutions, and notes are recorded and stored. This location should be accessible to all data governance members.

Data governance manual development and maintenance
Policies and processes in this area describe management of the data governance manual, including such things as how frequently the data governance manual will be reviewed and updated and how version control will be handled.

Adding new participating entities or programs

Policies and processes in this area establish how to invite, review, approve or deny, and onboard new participating entities into an interagency data system and new programs into a single-agency data system, including criteria for eligibility.

Metadata maintenance

Policies and processes in this area cover how metadata are maintained and made available, including through a data dictionary and a data collection calendar.

Master data management

Policies and processes in this area describe how the data governance program determines and documents the source of record for enterprise data elements contained in more than one source.

Data matching

Policies and processes in this area document the guidelines and procedure for matching data from different source systems, including quality controls to reduce over- and under-matching.

Data collection

Polices and processes in this area describe how data are prepared and submitted to the data system, including the timeline and resources required. In the case of an interagency data system, the data collection guidelines

and procedures for contributions from all participating agencies must be included. These procedures also will include the process for requesting, approving, and implementing additions or changes to data collections, including communications, documentation, and training.

Data retention and destruction

Policies and processes in this area cover maintaining, archiving, and destroying data to meet legal and business requirements, including compliance by internal and external data requesters.

Data quality

Policies and processes in this area establish how the organization will ensure that data are accurate, complete, timely, and relevant to stakeholder needs, including error reporting and data validation.

Data use priorities

Policies and processes in this area document the organization's research or data use agenda that is used to prioritize the creation of data products (e.g., dashboards, reports, and infographics) and the response to external data requests.

Data access

Policies and processes in this area describe which user roles can view which types of data from specified systems and the level of detail of the data they can see.

Data requests

Policies and processes in this area cover submitting, reviewing, approving or denying, and fulfilling, and concluding internal and external data requests.

Data sharing agreements

Policies and processes in this area describe how the organization establishes, maintains, and enforces data sharing agreements.

Data release and reporting

Policies and processes in this area ensure that data and data products released by the organization to external stakeholders have been validated and approved by the appropriate staff and created in accordance with reporting standards to ensure data privacy, quality, and consistency over time.

Data privacy and confidentiality

Policies and processes in this area cover guidelines, procedures, and training to ensure that all relevant federal and state privacy and confidentiality laws and regulations are followed by the organization and external data requesters.

Data security

Policies and processes in this area help ensure that data are securely transmitted, stored, and released in compliance with all applicable state laws, policies, and regulations throughout the information lifecycle.

Data incident response

Policies and processes in this area define security incidents, such as data breaches, and outline actions the organization will take if an incident occurs. They cover key personnel who must be involved and their roles. They also describe required reporting, remediation steps, and feedback mechanisms for data incidents.

Project management

Policies and processes in this area ensure that the data and technical needs of projects of significant scope are reviewed and identified by data governance and information technology (IT) personnel and are addressed in alignment with data governance principles and IT standards.

Procurement

Policies and processes in this area ensure that the data and technical components of procurements of significant scope are reviewed and identified by data governance and IT and are addressed in alignment with data governance principles and IT standards.

Data scope

Policies and processes in this area outline the data that will be included in the data system based on the system's intended users and uses.

Data submitter support

Data submitters are organizations and programs that contribute data to the data system. Policies and processes in this area cover the organization's communication with, training of, and support for data submitters to ensure that they understand data procedures and can submit high-quality, timely data.

Data refresh

Policies and processes in this area govern how and how often data are updated in the data system.

Implementing Data Policies and Processes

Data policies and processes should be prioritized, drafted, enacted, managed, and reviewed in an ongoing cycle to ensure that they remain relevant to the organization's or interagency data system's needs and operations as well as accessible to stakeholders. This section describes considerations for prioritization of the work, as well as the principal phases of this cycle (see figure 1) as it applies to data policies. The guide will be expanded in 2020 to address implementing data processes.

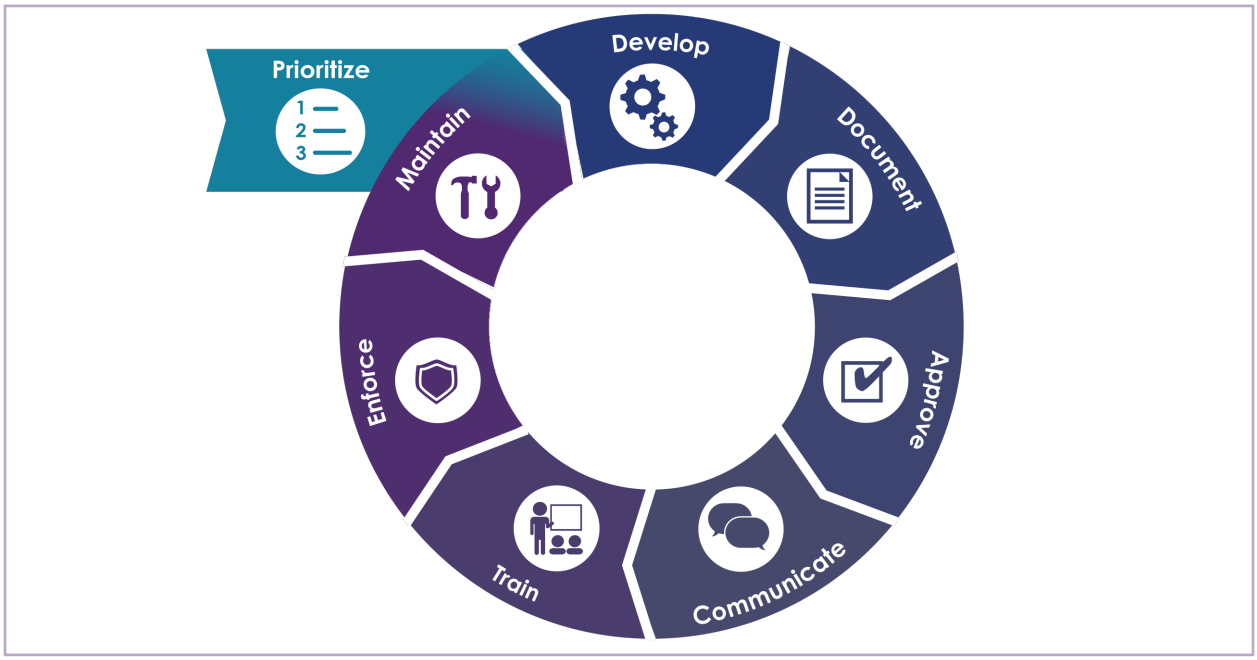


Figure 1. Phases of implementing data policies and processes

Prioritize

If few or no data policies and processes have been established and documented to date, it can be a challenge to determine where to begin. A good place to start is identifying the current status of the organization's data policies and processes (see **Appendix A. Data Policy and Process Self-Assessment** for guidance). After determining which policies and processes exist and which are still needed, consider establishing criteria for prioritizing the development of policies and processes. Criteria might include

- the topic's importance to data system operations;
- the ease and speed with which the policy or process can be established and the need for a "quick win;"
- the visibility of the topic to key stakeholders;
- the availability of existing documentation that could be translated to policy and/or process format;
- the risk associated with not having the policy and/or process in place; and
- the availability of personnel who need to be involved in policy and/or process development.

It is important that the individuals developing the policies and processes discuss the criteria and agree on which to develop and in what order.

Data Policy or Data Process: Which Comes First?

For most content areas, organizations ideally would first create a guiding data policy and shortly afterward implement data processes to operationalize the policy. However, it is common to implement data policies and processes at different times in response to the agency's or P-20W+ SLDS's needs.

When little formal documentation exists and personnel across the organization have very different understandings of data collections and their use, the organization might start by implementing a data policy to get everyone on the same page about the foundational rules and parameters for managing and using information assets. In P-20W+ data systems or large organizations with many divisions, or when the new policy represents a significant shift in practices, it can be helpful to give all stakeholders time to adjust to a new policy before implementing related data processes.

Conversely, data processes might be prioritized in cases of imminent security risks or to preserve institutional knowledge before a key staff member leaves the organization. In these cases organizations might decide to document essential processes before a guiding policy has been established.

Develop

The data governance coordinator should convene data governance members and other key stakeholders whose perspective and input are needed for the policy. Members of policy development groups will vary depending on the content area and might include organization leaders, data stewards, subject matter experts, and chief information and security officers. Consider including staff members with varying views on the topic so that differences can be discussed and so that the resulting policy is acceptable to a broad audience. These content area experts should identify the essential content for the policy. Take advantage of any informal documentation or staff knowledge that already exist when deciding what should be covered by formal policies.

Document

Formally record the policy developed by the content area experts and key stakeholders. See **Appendix B. Data Policy Template** for guidance on the structure and types of information that should be documented for each policy. Data policies tend to be relatively short and outline the organization's rules of order for a given content area. The data governance coordinator, with support from the data governance committee, typically takes the lead on documentation.

Approve

The data governance committee should determine the role that it and leadership will play in approving new data policies. Some policies may require only data governance committee approval, while other—or, in some agencies, all—policies may require executive leadership approval. The data governance coordinator should review the draft policy with those identified to approve it and facilitate the approval process. The approval process can include verbal discussion and consent or require a formal signoff. Executive leaders should be made aware of all data policies being finalized even if the data governance committee determines that their formal approval is not required.

Communicate

Identify the stakeholders within and outside the organization who are affected by the policy and should be informed about it. Communications with these stakeholders should include the policy's purpose and how they can access it. Communicate the policy multiple times via different mechanisms (e.g., email, website, newsletter) over time to ensure that the information is received and becomes institutionalized. Be sure that the communication includes an opportunity for stakeholders to respond and ask clarifying questions.

Train

Make sure that individuals within and outside the organization who must carry out and abide by the policy understand its purpose and their responsibilities in its implementation. This effort might take the form of in-person training sessions, webinars, and printed or digital materials that users can reference as needed. Consider the timing for training so that individuals involved have adequate opportunity to absorb the policy and integrate it into their work.

Enforce

Determine who will be responsible for enforcing each policy, and put in place mechanisms for monitoring compliance and addressing any problems with its implementation. Determine how to identify situations in which the policy is not followed, address issues directly with relevant staff members, and inform executive leaders only if additional intervention is needed. Designate an implementation lead to be responsible for ensuring that the policy is implemented as intended, and give stakeholders a way to provide feedback about any potentially problematic or unexpected consequences of the policy so that it can be revised accordingly.

Maintain

Establish a practice for periodically reviewing the policy to evaluate its effectiveness and continued relevance, identify areas for improvement, and make any necessary changes. Revisions to the policy may pass through some or all of the phases outlined in this section. An annual review is recommended to ensure that data policies remain relevant to the organization's needs.

Conclusion

Data policies and processes govern all facets of information management and use, from collecting and storing data to reporting and incorporating data into work processes. Given the wide range of content areas to be covered by policies and processes, it is important to be purposeful in prioritizing the most critical areas to address and to expand the topics addressed over time. Creating, implementing, and maintaining effective data policies and processes require a thorough and sustained effort on the part of data governance programs. Once polices and processes are in place, they must be continuously monitored for compliance and revised to reflect the organization's or state's current needs and context.

Additional Resources

Data Governance Manual Rubric
https://slds.grads360.org/#communities/pdc/documents/13499

Data Governance Manual Template: Interagency (P-20W+) Version
https://slds.grads360.org/#communities/pdc/documents/18390

Data Governance Manual Template: Single Agency Version
https://slds.grads360.org/#communities/pdc/documents/17883

Data Governance Policy Guide & Template: Interagency Version
https://slds.grads360.org/#communities/pdc/documents/17561

Data Governance Policy Guide & Template: K12 Version
https://slds.grads360.org/#communities/pdc/documents/3079

Interagency Data Governance: Roles and Responsibilities: SLDS Guide
https://slds.grads360.org/#communities/pdc/documents/17093

The Intersection of Data Governance and IT Responsibilities: Self-Assessment Tool
https://slds.grads360.org/#communities/pdc/documents/18451

Single-Agency Data Governance: Roles and Responsibilities: SLDS Guide
https://slds.grads360.org/#communities/pdc/documents/17092

SLDS Data Governance Toolkit
https://slds.grads360.org/#program/data-governance

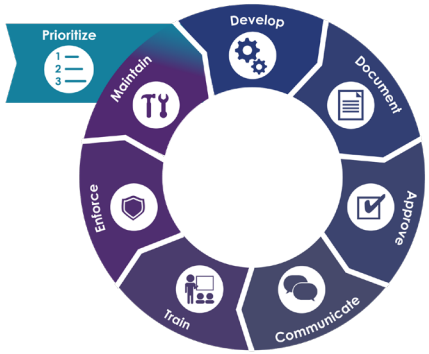
SLDS Process Documentation Best Practices: SLDS Webinar
https://slds.grads360.org/#communities/pdc/documents/18160

Sustaining Core Processes for Data Governance: SLDS Webinar
https://slds.grads360.org/#communities/pdc/documents/12690

Technical and Business Documentation for an SLDS: SLDS Best Practices Brief
https://slds.grads360.org/#communities/pdc/documents/7097

Appendix A. Data Policy and Process Self-Assessment

Instructions



Describe the current status of your organization's or P-20W+ data system's data policy and process for each content area listed in the table below.

- For policies and processes that do not currently exist or are in process, describe the current status (e.g., "Data Governance Committee has complete draft ready for Data Policy Committee approval.").
- For policies and processes that currently exist, identify which of the steps for effective implementation need to be conducted (see figure).

Prioritizing policies and processes

- Determine the criteria you will use to prioritize the creation and implementation of policies and processes. List your primary criteria:
  - _____
  - _____
  - _____
- In the table below, apply the criteria to each content area and assign a number (1-21) to each area indicating the priority for taking action to document and implement it. 1 = highest priority, 21 = lowest priority, NA = already in place and fully implemented.
- Add any additional topics for which your data governance program is developing policies and processes at the end of the table.

Content Area	Status of Policy	Status of Process	Priority Rank Order
Data governance operations			
Adding new participating entities or programs			
Metadata maintenance			
Master data management			
Data matching			

Content Area	Status of Policy	Status of Process	Priority Rank Order
Data collection			
Data retention and destruction			
Data quality			
Data use priorities			
Data access			
Data requests			
Data sharing agreements			
Data release and reporting			
Data privacy and confidentiality			
Data security			
Data incident response			
Project management			
Procurement			
Data scope			
Data submitter support			
Data refresh			

Action Planning

For the content areas you identified as priorities 1-3:

- Identify whether your action plan focuses on creating or further implementing the related policy, the process, or both.
- Determine the concrete tasks that will be completed to create or further implement the policy and/or process.

Priority 1 Topic: _____ **Policy**, **Process**, or **Both** (Select One)

Task	Responsible Party	Timeline	Status / Comments / Resources
1.			
2.			
3.			
4.			
5.			

Priority 2 Topic: _____ **Policy**, **Process**, or **Both** (Select One)

Task	Responsible Party	Timeline	Status / Comments / Resources
1.			
2.			
3.			
4.			
5.			

Priority 3 Topic: _____ **Policy**, **Process**, or **Both** (Select One)

Task	Responsible Party	Timeline	Status / Comments / Resources
1.			
2.			
3.			
4.			
5.			

[Insert Policy Title]

References

- Originator:
- Effective Date:
- Approved By:
- Statutory References(s):

Policy Purpose

Describe the purpose and justification for the policy. Why is it needed, and what does it accomplish?

Policy Statement

Detail the precedents and rules that the policy establishes.

Related Documents

Include document names and URLs. Documents may include other data policies, training materials or other resources, and the related process document.

Revision History

Version Number	Version Date	Description of Change	Point of Contact