



SLDS Issue Brief

Considerations for Collecting New Data Elements

States may decide to include new types of data in their statewide longitudinal data systems (SLDSs) for a variety of reasons. New state policy priorities, additional agency partnerships, and evolving education research questions might demand information that was not previously available from the SLDS. Additionally, changes in federal or state reporting mandates—such as those introduced in the federal Every Student Succeeds Act passed in 2015—may require states to report data they did not collect in the past, or to report them in different ways.

This brief provides a checklist of important steps and considerations for teams to address when adding and using new data in their data systems. The considerations are presented in the context of collecting data elements that have not been collected in the past, although many of these steps can also be applied to revising existing data collections or incorporating data from new sources. The relevance of each step and consideration depends on the scope of the new data collection, current capacity and infrastructure, risk, political climate, and other factors related to collection of the data in a particular state. The checklist is divided into five categories: Planning, Data Governance Considerations, Technical Considerations, Communications, and Implementation. The order of the considerations in and between each category is not necessarily sequential and will vary depending on each state's needs.

Planning

Considerations in this section focus on initial steps and questions to ask when preparing to add new data elements to an SLDS.

✓ *Are the data already being collected?*

Survey the data collections and elements available to the state to determine whether the needed data are already being collected. Look closely at data elements used by state agencies, programs, and organizations that might use different names for the information you need. Conversely, examine data elements that have the same name as the needed element to make sure the definition and option set align with your needs. Snapshot data collections or optional elements that provide partial information can be a useful starting point for collecting an element more regularly. If relevant data are already available, determine whether they can be used in their present form, or whether changes to the definition, option set, collection process, or timelines can be implemented for the data to be usable for the intended purpose. Establishing or amending a data sharing agreement or modifying an existing data collection to add these data to the SLDS may save considerable time and effort over gathering them separately.

Speak Up

If a new federal law or regulation will require your state to collect data it has not collected in the past, make sure to use the Office of Management and Budget's (OMB) public comment period to share your thoughts and concerns. State comments help federal agencies understand the impact, considerations, and difficulties associated with new reporting mandates.

Information about proposed laws, rules, and public comment notices is available through the Federal Register at <https://www.federalregister.gov>.

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Members of the SLDS Children of Military Workgroup

Corey Chatis
SLDS Grant Program, State Support Team

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>.



✓ *What are the policies for collecting new data?*

Review policies related to new data collections at the program, agency, and state levels. Identify any federal or state directives that require or authorize the collection and use of the data. Many states require that agency leadership, a governing board, or the state legislature approve or at least be notified of new data collections. Single-agency or P-20W+ (early childhood through workforce) data governance groups also may have procedures for proposing, approving, and implementing new data elements. Identify the relevant review and approval process, timeline, and requirements. In addition, determine who needs to be informed of the new data and when, and decide how to approach those stakeholders.

✓ *Prepare a high-level plan and recommendations to share with key stakeholders*

When approaching a data governance board or agency leadership about the need for new data, it can be helpful to prepare talking points and recommendations to which they can respond. Create a high-level plan covering what new data are needed, for what purpose(s), how they will be collected, when, and by whom. Work with state-, district-, and school-level representatives who will be involved in collecting and using the data to incorporate information about the data's impact on stakeholders into the plan.

Keep in mind that modifying or implementing a new collection process to obtain additional data can take many months or even years, depending on the approvals, collection procedures, and quality review periods needed. If there is a deadline for having the new data available and usable—such as for a federally or state-mandated report—plan your implementation timeline backward from that date.

Data Governance Considerations

This section covers considerations when establishing practices and procedures for the collection and use of new data.

✓ *Determine requirements with program area staff*

Whether the new data are being collected for federal reporting, a program evaluation, policy research, or another purpose, begin by talking with staff members in the program area(s) responsible for the new data to determine the specific information they need. Then establish the data element or elements that will best capture that information. For each new data element, thoroughly document the element's definition, the option set of possible data values, and business rules for collecting and using the element. Also establish the dates and frequency when the data will be collected, whether the data is required or not, the population to which it pertains, and how it will need to be reported. Begin these conversations early to avoid misunderstandings and lost time due to poorly defined requirements.



Common Education Data Standards (CEDs)

CEDs is a national collaborative effort to develop voluntary, common data standards for a key set of education data elements, and it can be a useful starting point for identifying and defining new data elements for state collections. The standards contain definitions, option sets, alternative names, and technical specifications for hundreds of frequently used data elements, as well as user-contributed notes about how the elements are used in different states.

Learn more at <https://ceds.ed.gov>.

✓ *Solidify requirements via data governance*

Work with relevant data governance groups to formally approve the requirements and specifications for the new data element(s) and to establish ownership and stewardship responsibilities. Data governance ensures that all SLDS partners are informed about the data. It can also help identify indirect relationships and unexpected impacts that could delay or derail the collection if not addressed early on.

Technical Considerations

This section covers information technology (IT) needs related to collecting new data elements.

✓ *Establish the data collection mechanism*

Involve IT staff members in identifying requirements and enhancements needed for the mechanisms to collect the new data and integrate them into the SLDS. Decide whether the new data will be added to an existing data collection—such as school enrollment information collected prior to each school year—or whether a new collection will be required. Update the collection calendar to reflect the new data.

✓ *Set up the technical architecture*

Identify the application(s) and data system(s) that will collect and house the new data. Work with system managers—whether within the agency or at vendor companies—to add the new data element(s) to the relevant systems. Make sure that data definitions, option sets, and business rules are consistent with the requirements previously established with agency staff members and data governance groups. Allow adequate time and resources to test the collection and ensure that the new data do not cause unexpected problems to existing collections or systems.

Communications

This section includes considerations related to documenting and sharing information about the new data and its collection, management, and use.

✓ *Develop a stakeholder engagement and communications plan*

Create a stakeholder engagement and communications plan that is designed to support implementation of the new data element(s) or data collection. The plan will help the SLDS team ensure that all users at the state and local levels who are affected by the new data are aware and involved in implementation. The plan will identify stakeholders, their responsibilities related to the new data, any potential impact they will experience from the new data, and how and when they will be involved.

The specific stakeholders and communications activities covered by the plan will vary depending on the type of data being collected. Stakeholders might include representatives from schools, programs at the district and state levels, education agency leaders, IT personnel, student information system vendors, lawmakers, and the public. Determine when input and support from each stakeholder is needed to plan for, collect, manage, and use the new data. Document the primary contacts and methods of engaging each stakeholder role when their involvement is needed. For example, if new data need to be added to local education agency student information systems, the plan should identify the local staff members responsible for communicating with the vendors of those systems.

✓ *Formalize and share new policies and procedures*

Make sure that formal policies about the purpose, collection process, and use of the new data are documented and available for everyone who needs them. The policies and related documentation should be based on input gathered from individuals who will collect, manage, and use the new data. For example, for a new education data element collected at the school level, these stakeholders might include the school- and district-level staff members who record and enter the data into the appropriate data systems, IT representatives responsible for the data systems, and local or state education agency staff members who will report the data.

✓ *Organize public communications and outreach*

The type and scope of new data being collected will inform the content, timeline, and methods of public communications about the data. Potentially sensitive student data might require early and detailed outreach to school communities, parents, advocacy groups, and the general public to answer questions and dispel misconceptions. On the other hand, lower stakes administrative data might not require extensive public communications. If the data

will be used in public reports, provide information about their impact on program funding, policy decisions, and comparability to previous reports.

The communications plan should detail the types of public communications needed, when they will be made, and by whom. For example, district offices may be responsible for communicating with school administrators and parents about a new student data element. The state education agency can provide guidance, talking points, and templates to support district outreach to ensure consistent communications across the state. For a P-20W+ SLDS team, communications efforts might focus on responding to questions from lawmakers and policymakers.

Even if extensive public outreach efforts are not deemed necessary or possible, it is important to document key messages about the new data for internal use. These messages should describe the new data collection, its purpose, and its expected impact on policies and programs so that SLDS and agency leaders can respond quickly and consistently to questions from partners and external stakeholders.

✓ *Create communications tools*

Fact sheets, lists of frequently asked questions, presentation slides, letters to stakeholders, and other communications materials can be adapted to different agencies and their audiences. All these materials should include consistent messages about the purpose of and processes to manage the new data.

Implementation

This section covers important steps for carrying out plans for the collection, integration, and use of new data.

✓ *Develop a detailed timeline*

Draw on information gathered in the planning stages of the process to create a formal timeline for establishing, collecting, validating, and using the new data element(s). The timeline should take into account

- deadlines for state or federal reports that will require the new data;
- the availability, approval processes, and timelines of data governance groups, district and state leadership, and/or legislators who need to be informed of or approve the new data;
- collection calendars for new or existing data collections that will gather the data;
- time needed to update, test, and approve changes to the collection mechanisms and data systems that will store the new data, including timelines that may be established for vendor product enhancements;
- time for updating user documentation and manuals, and for training helpdesk and user staff;

- tasks and deliverables outlined in the communication plan;
- adequate time to test the data collection process, review the new data, and address any data quality issues before including the new data in reports.

✓ *Train data collectors and users*

Identify the individuals who will be responsible for supporting the collection and for collecting, managing, and using the new data. Create support and training materials to help all groups understand their roles. Training methods might include in-person meetings, webinars, or online modules depending on the needs of staff members and the resources available.

✓ *Review the new data*

If possible, designate a pilot period during which the new data will be gathered and reviewed but not used for official reporting and analysis. Such time will allow the SLDS team to test the data collection and integration processes and identify data quality issues before the new data are used for decisionmaking. Regardless of whether a pilot period is used, ensure that data submitters and data stewards have a user-friendly method of reviewing and validating

data submissions for quality. Incorporate this validation processing into training activities for data collectors.

In addition to training, encourage data quality by communicating and demonstrating to data collectors the value of the new data to their own work as well as to the state as a whole. For P-20W+ systems where individual agencies or programs lack processes or resources for improving data quality, it may be necessary to establish data-cleaning procedures and business rules at the SLDS level. Keep each partner program informed about these procedures and any significant quality issues, and be prepared to update practices as the programs' individual business rules change.

✓ *Update processes and documentation*

Make sure that all technical designs, data dictionaries, user manuals, metadata repositories, data governance documents, and publicly available information about the source system and the SLDS are updated to reflect the new data being collected. If the state legislature or other key stakeholders require notification after new data are collected, inform them about the new data in accordance with the communication plan.

Data Collection Challenge: Federal Race and Ethnicity Categories

Although it was not a new data collection, the implementation of updated federal race and ethnicity categories presented state and local education agencies with challenges similar to those encountered when instituting new data elements. In 2006, the U.S. Department of Education announced that schools would be required to align the race and ethnicity data they collect for students and school staff members with the categories used by the U.S. Census.

States had about four years between the department's announcement and the first required submission of updated data to implement the new categories. In that time, states were tasked with communicating with parents, education administrators, and state officials about the changes, modifying data systems, training educators to re-code or newly record individuals' race and ethnicity data, testing new processes for validity, and reviewing results for accuracy before the start of the 2010-2011 school year.

The National Forum on Education Statistics publication *Managing an Identity Crisis: Forum Guide to Implementing New Federal Race and Ethnicity Categories* provides additional information about the technical, administrative, and communications challenges of modifying state data collections to meet the new federal requirements, as well as sample timelines for implementing the changes.

Additional Resources

Common Education Data Standards (CEDS)
<https://ceds.ed.gov/>

Managing an Identity Crisis: Forum Guide to Implementing New Federal Race and Ethnicity Categories
http://nces.ed.gov/forum/pub_2008802.asp

Stakeholder Engagement Plan for Statewide Longitudinal Data Systems Guide & Template
<https://slds.grads360.org/#communities/pdc/documents/3083>