DATA SYSTEM CHANGES

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Data System Changes

Overview

State Part C and Part B 619 programs will encounter the need for changes in their data system(s). Many changes to an existing data system can affect work conducted at the state, local/district, and/or provider levels. Even the addition of a single response option to just one established data element could have significant and far- reaching implications to business rules, data collection screens, supported forms, post-collection analysis, reports, data dictionary, trainings, and the like.

Therefore, while Part C and Part B 619 staff may not be directly involved in the technical changes made to data systems that directly affect their work, the state should establish a process for Part C and Part B 619 program staff to be actively involved in partnering with information technology (IT) staff when considering data system changes that will affect their data and work. This section of the toolkit aids in the development of comprehensive data governance policies to support Part C or Part B 619 consideration of potential data system changes and when and how to make such changes.

Recommendations or requirements to make changes to a Part C or Part B 619 data system(s) may emanate from many different sources. New or modified federal and/or state data collection or reporting requirements, changes to internal program data needs (e.g., monitoring, new reports),recommendations from stakeholders in the field, agency or cross-agency data integration efforts, technical architecture changes, updates to security, new requirements from information technology—many sources can trigger a request to change the content, functionality, technical aspects, or reports associated with an existing data system. Regardless of where the recommendations for change come from, data governance policies should reflect the involvement of Part C or Part B 619 program representatives in considering and deciding data system changes affecting their programs. In many cases considering a data system change will require Part C or Part B 619 program staff work closely with agency information

Considering a New Data System?
This section of the Data Governance Toolkit focuses exclusively on policies for change(s) to existing data systems, not new data systems. Adding a new Part C or Part B 619 data system or replacing an old system is a decision predicated on factors external to established Part C and Part B 619 data governance.

Records that have a re-identification code and have enough personally identifiable information (PII) removed or obscured so that the remaining information does not identify an individual and there is no reasonable basis to believe that the information can be used to identify an individual. The re-identification code may allow the recipient to match information received from the same source.

A decision that a new system is decidedly better than enhancing an existing system is based on many considerations. Such a conclusion is supported by: availability of funds (immediate and sustaining), political climate supportive of both state agency and local-level changes required with a new data system, technology alignment, internal and external agency data integration efforts, etcetera.

technology (IT) staff so all will understand the overall impact of the requested change.

It is important to consider the scope and identify the potential impact(s) of any proposed system change. A proposed system change can be small and quick to implement such as addressing a minor bug or spelling error. It can be scheduled and routine, such as an annual update to a list of active agencies. Or it can be complex and long term, such as a multiphase enhancement over an extended period to collect more data and develop more complex reports. While a *request to change* should detail what is desired to be changed and why, *a decision to change* focuses on the impact the change will have. It is important that Part C and Part B 619 staff with content knowledge, as well as IT staff with data system knowledge, share perspectives on the change impact. Logically, not all change requests necessitate the same level of consideration. For example, correcting a misspelled word might require no additional input and has little (or no) system impact. In contrast, significant consideration would be required to decide on proposing a data system change to add a new data element such as medical diagnosis or updating service delivery codes.

Part C and Part B 619 programs operate within the state agency in which they are housed. Thus, the structure and content of any data governance *already within an agency* is of particular importance. Before developing a data system change policy, Part C and Part B 619 programs should review policies regarding data system changes developed by the agency in which their program resides. Existing policies might need to be updated with specific references or provisions related to Part C or Part B 619, in which case the considerations and the template below may be helpful in proposing language.

Where no policy on data system change exists or a separate policy related to Part C or Part B 619 is needed, the template following the Considerations section is fully editable and prepopulated with language to expedite writing new data system change policies for this purpose.

> The *DaSy Data System Framework* describes all major aspects of developing a new and enhancing an existing data system in the System Design and Development section, Quality Indicators SD1 through SD9, in the **Data Governance** section, Quality Indicator DG3, and in the Sustainability section, Quality Indicator SU1.

Considerations

Use the questions below to discuss, consider, and develop a data system change policy. Where appropriate, procedures and operational manuals that detail specific actions supporting implementation of this policy should be created.

1. **Data System Change: General Provisions**

   a. Are there state agency policies related to data system changes that apply to the Part C or Part B 619 program? If yes, what are they?

   b. What specific Part C or Part B 619 data system change policies or procedures, if any, exist and apply?

   c. Which role, within what agency/program should be contacted with questions about this policy?

   d. Which role, within what agency/program is responsible for ensuring adherence to this policy?

e. Which role, within what agency/program is responsible for monitoring adherence to this policy, and how will the monitoring be conducted?
f. Which role, within what agency/program is responsible for managing the implementation of this policy including provision of training and technical assistance?
g. What consequences, if any, will apply when this policy is not followed?
h. How often will this policy be reviewed for necessary revisions?
i. How will the public be informed about this policy? Where will it be posted on the state's website?

Data System Change: Initiation of Request

a. What is the standardized request process for suggesting changes (e.g., a paper/online form to complete, an individual to contact)?

b. Which role, within what agency/program, should receive data system change requests, and how are these requests communicated to the Part C or Part B 619 program?
c. What is the process for acknowledging receipt and responding to a data system change requester?
d. How are data system users informed of the process for suggesting data system changes?

Data System Change: Request Required Information[1]

a. What information is required to request a change? Shall a requestor (internal or external to an agency) specify exactly what they would like changed with respect to Part C and Part B 619 data system(s)? For example, requested change details might be associated with:

    i. New (or removed) item/field
    ii. Item response options
    iii. Descriptive text (e.g., item, response option, element definition, application instructions, documentation)
    iv. Business logic (validations)
    v. User interface
    vi. Dashboards
    vii. User permissions
    viii. Data exports
    ix. Embedded reports, system reports, tools
    x. System speed/capacity/scalability
b. Shall a requestor (internal or external) provide a rationale for the change request? That is, shall the requestor justify why the change is being requested?
c. What additional information on the impact of the requested change on affected items will be gathered? (Much of this information will be provided by IT staff with Part C and Part B 619 staff providing content knowledge.) For example, what will be the change impact on:
    i. Business logic (validations)
    ii. User interface
    iii. Dashboards
    iv. User permissions
    v. Data exports

      vi.   Embedded reports, system reports, tools
      vii.   Data analysis
     viii.   Continuity of pre-change data with post-change data
      ix.   Technology (hardware, software, hosting, security, performance, system speed/capacity/scalability)
       x.   Agency staffing needs to design, develop, test, deploy, support
      xi.   Internal agency functionality and processes
     xii.   Budgets (short term, mid-term, long term, maintenance)
    xiii.   Local agency: systems, processes, staffing, etc.
    xiv.   Training (internal and external) to inform stakeholders of the change and ramifications of the change
     xv.   Timeline to support and implement the change (communicating with stakeholders about upcoming change, scheduling change, implementing change)

d. In what circumstances will Part C or Part B 619 collect information from stakeholders to inform the decision(s)? What stakeholders, (e.g. local IT staff, content staff)? How will stakeholder information be collected and processed (e.g., surveys, focus groups, rank order priority changes)?

e. In what circumstances will a cost/benefit analysis be needed to address issues related to costs (local and state agency impact, vendor, technology, etc.)? Which role, within what agency/program, will decide if a cost/benefit analysis is required?

Data System Change: Evaluation of Request

a. Which role, within what agency/program, is familiar with the data system targeted for change and therefore shall review the request for completeness, benefits, and redundancy?

b. Which role, within what agency/program, is familiar with relevant technical aspects of the request and therefore shall review the request and determine the technical feasibility?

c. Which role, within what agency/program, shall review the impact of the request on costs, expected time to implement, training, etc.?

d. Which role(s), within what agency/program, will review the request and all associated information and approve or deny the request? What role do Part C and Part B 619 programs play in this process?

e. What is the process for communicating a content decision or recommendation to all interested parties (e.g. requestor, administration, IT)?

f. Within what time frame shall the decision regarding the change request be communicated to the requestor?

g. What role do Part C and Part B 619 programs play in processes supporting the evaluation of the change request?

Data System Change: Planning for Change

a. What is the process for implementing an approved data system change? For example, is a project manager assigned to large enhancement efforts (that may contain many changes)? Are smaller changes overseen by content or technical staff? Will there be a plan and schedule to support proposed changes? If so, how will plans and schedules accommodate stakeholder input and support local agency lead time to accommodate changes?

b. How will stakeholders be kept apprised of upcoming planned system changes (e.g., newsletter, webinar, newsletter, trainings)?
c. Which role, within what agency/program, will make changes, and how, to program and technical documentation based on the data system change (e.g., collection forms, data dictionaries, report titles, support manuals, system service documentation)?
d. What role do Part C and Part B 619 programs play in supporting the plan to change?

Data System Change: Implementation, Management, Confirmation, and Communication

a. Which role, within what agency/program, will oversee the design, development, testing, and deployment of the data system change?

b. Which role, within what agency/program, will test and review that implemented system changes work as designed? How will tests be conducted? Will it include local stakeholders?
c. Which role, within what agency/program, will distribute change details to all relevant parties (e.g., programs, participating agencies, vendors)? How?
d. Which role, within what agency/program, will determine that no further actions are needed relevant to the change (close out the request)?
e. What role will determine if, and if so when, any follow up review shall be scheduled?
f. Which role, within what agency/program, will confirm (if warranted) that the data system change is supported (e.g., maintenance budget)?
g. What role do Part C and Part B 619 programs play in implementation, management, confirmation, and communication processes?

Footnotes

1. Many possible data system change areas are listed. Though content may be helpful for classifying and reviewing data change requests, each specific area does not need to be included within a Part C or Part B 619 data system change policy.

Data System Change Policy Template

Use, and modify as needed, the template linked below for developing a data system change policy. Select the highlighted text and replace with your state/program information. We recommend that you consult with relevant staff and stakeholders when developing these policies. Upon completing the template, be sure to follow your state's processes for finalizing and enacting policy.

Download Template for Data Governance Data System Change Policy

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Data Systems Change Policy Template

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![DaSy - The Center for IDEA Early Childhood Data Systems]

Data Systems Change Policy Template

<mark>NAME OF PART C/PART B 619 PROGRAM</mark>

PURPOSE

The purpose of this data systems change policy is to establish authority and processes for considering requests to make changes to data systems and managing any approved changes to those data systems that support the <mark>PART C/PART B 619 PROGRAM NAME</mark>.

DEFINITIONS

A *data system change* is any change to an existing data system. A data system change includes any change including but not limited to: data items, response options, business rules/logic, system analysis of data, system generated reports, user interface, support documentation, technology, etc.

AUTHORITY

<mark>NAME OF STATE</mark> is federally required to collect and report Part C/Part B 619 data and collects such data through the data systems noted in the table below. Ramifications of any proposed data system change must be thoughtfully considered by weighing the local and state effort, impact and cost of the proposed change against the state and local benefits of the proposed change.

RESPONSIBILITY

It is the responsibility of <mark>AGENCY, PROGRAM, ROLE, ETC</mark>. overseeing the data for the <mark>PART C/PART B 619 PROGRAM NAME</mark> to establish and carry out processes associated with considering and overseeing any approved changes to <mark>PART C/PART B 619 PROGRAM</mark> data systems. It is understood that agency IT staff will be instrumental partners in considering and overseeing any approved changes. The following <mark>PART C/PART B 619 PROGRAM NAME</mark> data systems are covered by this data system change policy.

<mark>PART C/PART B 619 PROGRAM NAME Data Systems</mark>

1. *(insert name of data system)*
2. *(insert name of data system)*
3. *(insert name of data system)*
4. *(insert name of data system)*
5. *(insert name of data system)*
6. *(insert name of data system)*

<mark>AGENCY, PROGRAM, ROLE, ETC.</mark> is responsible for ensuring adherence to this policy in <mark>PART C/PART B 619 PROGRAM</mark> data systems. <mark>AGENCY, PROGRAM, ROLE, ETC.</mark> is responsible for monitoring adherence to this policy. Any questions regarding the data system change policy will be addressed by <mark>AGENCY, PROGRAM, ROLE, ETC.</mark>. <mark>AGENCY, PROGRAM, ROLE, ETC.</mark> who will also secure or provide training and technical assistance on data system changes when requested. This policy will be reviewed <mark>ANNUALLY, BI-ANNUALLY, AS NEEDED</mark> by <mark>AGENCY, PROGRAM, ROLE, ETC.</mark> and they will address failures to adhere to this policy. <mark>AGENCY, PROGRAM, ROLE, ETC.</mark> and <mark>AGENCY DIRECTOR</mark> shall consider and determine what, if any, sanctions or consequences are to be levied on those responsible for violations of this policy.

The public will be informed about this policy through <mark>AGENCY WEBSITE, MANUAL, ETC.</mark>.

INITIATION OF REQUEST

Requests to change an above listed Part C/Part B 619 data system shall be submitted on a completed *Data System Change Request Form*. (See sample *Data System Change Request Form*.) The *Data System Change Request Form* is to be publicly available at INSERT URL. In addition, each data system used by <mark>PART C/PART B 619 PROGRAM NAME</mark> shall inform users of the process for requesting a data system change. (Users may be informed about requesting data system changes through: SOURCE OF COMMUNICATION ABOUT CHANGES (E.g., DATA <mark>SYSTEM MANUAL, APPLICATION HOME PAGE, SUPPORT DOCUMENTATION, MEMOS, CORRESPONDENCE TO DATA SYSTEM USERS, ETC</mark>.).

Completed *Data System Change Request Forms* must be submitted to <mark>NAME OF OFFICE/ROLE</mark> <Alternatively: to any member of the AGENCY, PROGRAM, ROLE, ETC>. The recipient of the completed form shall acknowledge receipt by <mark>EMAIL OR OTHER WRITTEN MEDIUM</mark> within <mark>TIME PERIOD</mark>. Written acknowledgement shall include when a decision about the requested change can made and expected date of communication about the decision back to the requester.

REQUEST REQUIRED INFORMATION

A *Data System Change Request Form* shall be completed to initiate a change request. Sample form content areas include:

1. Requester contact information *(Required of requester)*
2. Name of data system *(Required of requester)*
3. Rationale for the requested change including description of the foreseen value of the proposed change and impact of change on local and state work. *(Required of requester)*
4. Details of the specific change desired associated with one or more areas below. All requested additions, deletions, modifications must be described. (R*equired of requester*)
    1. New (or removed) item/field
    2. Item response options
    3. Descriptive text change (e.g., item, response option, element definition, application instructions, documentation)
    4. Business logic (validations)
    5. User interface
    6. Dashboards
    7. User permissions
    8. System reports
    9. Data exports
    10. Embedded report tools and/or tools
    11. System speed/capacity/scalability
    12. Other
5. Form shall include addressee for submitting completed *Data System Change Request Forms*. (Incomplete requests shall be returned to requester for completion.)

GROUP, COMMITTEE, PART C/PART B 619 PROGRAM STAFF WITH SYSTEM AND/OR CONTENT KNOWLEDGE, AND/OR IT STAFF shall review a data system change request for new information to determine if the requested elements are already being collected.

Requested changes that have no impact; (e.g., spelling, grammar, minor user interface updates) can be made without additional information at the direction of the AGENCY, PROGRAM, ROLE, by PART C/PART B 619 PROGRAM STAFF WITH SYSTEM AND/OR CONTENT KNOWLEDGE.

Changes that will have impact require information from sources outside the requester. One or more members of SELECTED MEMBER(S) OF THE AGENCY, PROGRAM, ROLE, ETC. shall review the request and provide an informed estimate of the impact of conducting the requested data system change. The areas below are *examples of areas that should be considered*. All impact shall be written for further review and evaluation by the AGENCY, PROGRAM, ROLE.

1. Business logic (validations)
2. User interface
3. Dashboards
4. User permissions
5. Data exports
6. Embedded reports, system reports, tools
7. Data analysis
8. Continuity of pre-change data with post-change data
9. Technology (hardware, software, hosting, security, performance, system speed/capacity/scalability)
10. Agency staffing needs to design, develop, test, deploy, support
11. Internal agency functionality and processes
12. Budgets (short term, mid-term, long term, maintenance)
13. Local agency: systems, processes, staffing, etc.
14. Training (internal and external) to inform stakeholders of the change and ramifications of the change
15. Timeline to support and implement the change (communicating with stakeholders about upcoming change, scheduling change, implementing change)

As needed, upon the direction of the AGENCY, PROGRAM, ROLE, ETC., additional perceived impact information may be collected from local representatives (stakeholders) including both local content and local IT staff. Local perceived impact shall be written for further review and evaluation.

As needed, upon the direction of the AGENCY, PROGRAM, ROLE, ETC., a cost-benefit analysis may be conducted regarding the change request. Local, state agency, vendor, technology, and all other costs associated with the proposed change shall be investigated as part of a cost-benefit analysis. Cost-benefit analysis information shall be written for further review and evaluation.

EVALUATION OF REQUEST

The team evaluating the request for a data system change shall be made up primarily of those in the agency or program responsible for funding, overseeing, and supporting and processing the data (IT) based on the change. AGENCY, PROGRAM, ROLE, ETC. shall review the request and all additional information (e.g., impact, stakeholder input, costs) for completeness, benefits, and redundancy (with available data). The evaluation team shall decide to accept the request, deny the request, or table the request (e.g., pending more information) for future consideration.

The decision of the evaluation team shall be communicated back to the requester in a reasonable time depending on the significance of the request (e.g., 4-12 weeks). The response shall be in writing and include the decision made. If the data system change request was accepted the response back shall include the expected time for implementing the change. For all other decisions, a brief explanation shall be provided as to why the request was denied, tabled, or delayed.

PLANNING FOR CHANGE

AGENCY, PROGRAM, ROLE, ETC. shall establish a process for implementing an approved data system change commensurate with the magnitude of the approved change. PART C/PART B 619 PROGRAM STAFF WITH SYSTEM AND/OR CONTENT KNOWLEDGE shall have an established role in that plan to determine successful changes affecting Part C/Part B 619 data. A plan and schedule to support the approved changes will include input from PART C/PART B 619 PROGRAM STAFF WITH SYSTEM AND/OR CONTENT KNOWLEDGE. On large approved changes, Part C/Part B 619 stakeholder input may be sought and included in the plan. Plans that support ll substantial changes must establish and accommodate adequate local agency lead time to accommodate local changes to databases, where applicable. On substantially large approved changes, plans shall detail frequency and process for informing all interested stakeholders of upcoming planned system changes (e.g., newsletter, webinar, newsletter, trainings).

IMPLEMENTATION, MANAGEMENT, CONFIRMATION AND COMMUNICATION

AGENCY, PROGRAM, ROLE, ETC. shall devise a data system change plan commensurate with the approved data system change. Simple rudimentary changes shall be assigned to TECHNICAL STAFF, VENDOR, ETC. and designed, developed, tested and deployed as part of standard work under existing administration oversight or contractual obligations. Substantial data system changes may require a detailed plan, project manager, schedule, budget, etc. In some cases, additional or ongoing stakeholder input from local agencies may be required and sought by the project manager. At a minimum, AGENCY, PROGRAM, ROLE, ETC. or designee, shall inform stakeholders (e.g., newsletter, webinar, newsletter, trainings, etc.) of upcoming planned system changes. Where any state data system change requires local agencies to change their data systems, local agencies shall be provided ample time to make such changes. Such timelines will be determined and communicated to local agencies by AGENCY, PROGRAM, ROLE, ETC..

Once the data system change has occurred, supporting documentation (e.g., collection forms, data dictionaries, report titles, support manuals, system service documentation) shall be reviewed and updated as required to reflect the approved data system change. AGENCY, PROGRAM, ROLE, ETC. shall confirm that documentation changes have been made.