
Key Considerations for Initiating and Planning for a New Part C or Part B 619 Data System or Major Data System Enhancement¹

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Planning for the development of a new data system or a major data system enhancement? This guidance is for program and agency staff who have identified the *need* to develop a new data system or make major enhancements to an existing system. Key considerations are presented as questions to help guide you through the initiation and planning process. The system initiation phase² requires a broad team with the expertise and knowledge to gather information, plan, and explore various options based on these considerations. The key considerations are designed for group discussion and group planning.

The phases of developing a new data system or enhancing an existing one are commonly referred to as a system development life cycle (SDLC). While there are minor variations across different SDLC models, almost all begin with *initiation*. The initiation phase covered in this brief requires creating a team, gathering information planning to propose a high-level solution, and developing a path to that solution. This initiation work supports the SLDC phases that will come later: *requirement analysis, design, development, acceptance testing*, and finally *deployment*.



The [DaSy Data System Framework](#) is an excellent resource when considering a new data system or enhancement. While the entire framework will be helpful, the [System Design and Development](#) subcomponent of the framework will be particularly helpful when initiating and planning. Section 1 of the subcomponent, “Initiation of New System/Enhancement and Requirements Analysis,” supports the initiation phase.

Determine available resources

Early in the initiation phase, it is critical to **determine the resources available** for a new system or major enhancement. Without the assurance of available and adequate resources, planning may not be worth the time and effort.

- What is the estimated budget range for the system or enhancement?
- What is the estimated budget for ongoing support and maintenance of the proposed solution?
- How will the agency fund the solution, including ongoing maintenance?
- What is needed to prepare and approve a budget or resource allocation plan to fund the solution?
- Do the program and agency have staff with the time and capacity for managing the development of the system or enhancement? If not, what additional personnel resources are needed?

¹ This brief is an updated rework of the 2015, *Key Considerations for Initiating and Planning a New Data System or Major Data System Enhancement* by Laura Hudson, Nancy Copa, Jamie Kilpatrick, Robin Nelson, and Bruce Bull.

² The initiation activities described in this document are described in an uncomplicated, sequential fashion. However, state agency processes differ so your sequence may vary. The initiation process usually takes an extended period. It often takes a year or more to develop a high-quality request for proposal. Therefore, early in this initiation phase, we recommend finding and working closely with someone experienced with getting similar efforts through your agency and procurement processes as efficiently as possible.

Assemble a project team

Identify a project team responsible for planning and managing the system development or enhancement. The exact expertise and membership of team members will vary depending on agency requirements, program needs, and the nature of the system or enhancement. Consider having team representation of the roles listed below—and other roles if required. In some cases, *one person may act in more than one role*. It is important that each team member have sufficient time to actively participate in this process.

- Who will be the **project sponsor**? This team member has the authority to make key decisions about the system or enhancement and enact the changes necessary to move the overall effort forward. This person typically is able to commit both budget and personnel resources to a project. Often, the project sponsor is at a director or commissioner level.
- Who will be the **project manager**? This team member is responsible, from the agency or program perspective, for managing the overall project timeline and the day-to-day tasks relating to the system development or enhancement. This member has the authority to make day-to-day decisions and must have access to the project sponsor when higher-level decisions or investments are needed. The project manager may be the primary communication liaison to the local programs regarding progress on the data system or enhancement. Where applicable, this team member is often the primary liaison with an external vendor or in-house developers. (If the data system development or enhancement is vendor built, the vendor will have their own internal project manager.)
- Who will be the **business analyst**? This team member is charged with gathering and documenting needed data system functions and requirements. Tasks may include leading user groups through information gathering sessions, documenting policy and procedural issues, writing data system functions, developing data system requirements, and writing system documentation.
- Who will be the **data lead**? This team member understands the data schema vis-a-vis the data collection and reporting processes and ensures system requirements and all needed data elements correctly support program processes. The data lead, often the data manager, will drive the “business side” of data reporting from the system.
- Who will be the **program lead**? This team member understands program processes, practices, and functions. Though this person may not be an expert in every process the data system will support, the program lead knows who to contact at the state and/or local level for that expertise.
- Who will be the **information technology lead**? This team member represents the agency’s information technology department. This person will provide technical support and knowledge relating to existing data systems, internal processes that support data systems, and agency technical requirements for data systems.
- Who will be the **developer/programmer**? When an internally developed system is anticipated, this team member(s) develops the code (e.g., software) for the system or enhancement.
- Who will be the **procurement officer**? When an externally developed (i.e., vendor) system is anticipated, this team member assists with navigating the procurement processes to secure vendor services and/or the purchase of the solution.

Identify a project team leader

Select a project leader with the time and authority to oversee the work of the project team. Often this is the project manager. The project leader must have the organizational skills to manage the team over an extended period and through the involved process required for securing a new data system or major enhancement. Excellent communication skills are required of the project leader as they will be interacting extensively with the team, procurement, local agencies, agency administration, vendor, etc.

Review existing information

Selected members of the team should **review documents and other input** that may have contributed to identifying the need for developing a new system or major enhancement. The team should document their findings. The following content might be considered for review:

- Purpose and vision of current data system
- Reports, documents, end user feedback, gap analysis, and system-change requests related to the current system, including performance and challenges
- Data system functions, both current and any initially identified for the new system or enhancement
- If there are no restrictions or complications to possible future procurement processes, invite known vendors, or other states using vendor solutions, to virtually demonstrate their solutions to the team
- Other state requests for proposals (RFPs) and conversations with other state Part C or Part B 619 programs about their data systems

The Need to Document

At some point, the team will be asked to *recommend a solution*. Assuming it goes forward, documenting the work as it progress will prove helpful.

In some cases, the recommended solution may not be feasible. Challenges may include changes to technology, changes to reporting requirements, shifts in agency policies, changes to management, inadequate or repurposed funding, inconvenient timing, staff turnover, etc. The project team may need to propose an alternative, adjust the scale of the proposed solution, or table the initiation work until a more opportune time. Even if tabled, the next system initiation effort can build from the documentation work of the team.



The [Purpose and Vision](#) subcomponent of the *DaSy Data System Framework* provides information about purpose and vision statements that articulate the data system's mission, usage, and goals.

[Part C Data System Functions](#) is a list of data system functions for state agencies to consider when developing a new or enhanced Part C data system. Though designed specifically for Part C, the majority of functions are applicable to Part B 619.

Assess possible solutions

Once a project team has been established, and relevant documents and information gathered and reviewed, the team should **consider and discuss different types of application solutions** (customizable off-the-shelf³, fully customized, form-based, etc.). The team should also document this process.

- How likely will each solution type fit anticipated funding?
- How likely will each solution meet expected timelines (e.g., time to deployment, training, integration of legacy data)?
- How likely will each solution match the program/agency/state technology direction—including interfacing where required with existing or other proposed system(s)?
- What are each solution type's long-term maintenance and hosting requirements?
- How will each solution likely impact end users? What will end users need to know or learn to make full use of the solution?
- How likely will each solution support the future needs of the program (adaptability)?

³ The authors are not aware of any fully off-the-shelf solutions.

Determine procurement process

The project team should consider the factors listed below and then **recommend an in-house or external vendor procurement process**. (If an external vendor is to be secured, it is important to connect early and work closely with agency procurement staff.)

In-house considerations

- Do working relationships between staff across departments or divisions support developing and/or maintaining data systems in house?
- Are in-house, or external state staff (through an interagency agreement), expertise, and capacity sufficient to implement a new system or major enhancement? Have similar efforts been completed to satisfaction?
- Are in-house expertise, capacity, and technology sufficient to securely host and maintain a new system or major enhancement for the long term?
- Have recently, ideally similar, in-house developed data systems performed as required?
- Are in-house developed data systems maintained successfully?
- Is in-house support adequately responsive to address bugs and needed changes?

Vendor considerations

- Are there options available to work with a qualified vendor currently under contract with the state?
- Would a request for information (RFI) process be necessary/helpful prior to an RFP?
- Is there justification for a sole source contract based on unique program circumstances or requirements?
- If viable and modifiable solutions exist within another state agency, can an interagency agreement support expanding that existing solution?
- What is a realistic estimate of the time needed to draft, finalize, review, approve, and post an RFP for a new data system?
- What is the proposal review process and what needs to happen to support that process?
- What is the vendor selection process and how long after selecting a vendor is it before a contract is signed (and the vendor can begin)?
- When your state agency works with outside vendors, do existing state staff manage the project or is an outside manager brought in?
- What can the team learn from other agency staff that have gone through similar procurement efforts and vendor selection processes?

What's next?

If the procurement process requires an RFP, the project team should begin working with procurement to learn about and begin this process. And whether the system or enhancement is built in house or through a vendor, the team will work on the next phase of the SDLC: requirements analysis. During the requirements analysis phase, detailed system requirements will be developed and mapped to the previously determined data system functions.

Need assistance?

If your state is considering a new data system or a significant enhancement, DaSy offers technical assistance in this area. [Contact DaSy](#) to schedule a time to talk with our staff about your next steps. Technical assistance may include but is not limited to facilitating team meetings, reviewing draft RFP content, helping establish proposal selection criteria, and considering data system functions.

Resources



DaSy Data System Framework connection: The framework [self-assessment](#) is available to help your state understand and prioritize data system needs including, but not limited to, system design and development.

Axia Consulting. (2015). *Scoring guidelines for RFP responses*. Kent, United Kingdom.

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