

## IT Project Management Guidance for DES December 2011

DES has a lot of IT project ideas but not a lot of IT resources. To get the biggest bang for our IT dollar, IT projects must be managed effectively so we can be as efficient as possible – thus allowing more IT projects to be completed more often on time. Staff from both DoIT and DES share responsibility for managing projects effectively.

Experience has shown that the majority of project issues have centered on a lack of (or poor) communication and unclear expectations of involved staff. This document seeks to solve these issues by defining responsibilities and tasks for each phase of the project.

<b>Scoping the project idea and obtaining approval</b>	
DoIT responsibility	DES responsibility
<p>Provides technical assistance in developing the business plan, answering questions during the IT Project Queue sifting process and with completing the DoIT Project Concept Document when applicable.</p> <ul style="list-style-type: none"> <li>• Checks with other developers to see if similar processes/applications already exist to avoid duplication, create consistency across applications, and speed development (lessen learning curve).</li> <li>• Determines appropriate software/hardware to do the project.</li> <li>• Explores all viable alternative approaches to meeting project objectives.</li> <li>• Where applicable, presents options for reducing complexity/functionality to save time and money.</li> <li>• Develops time and cost estimates for software development phase of project, works with DES contact to incorporate other phases into complete project timeline.</li> <li>• Signs off on business plan which signifies full understanding of what is being requested and the ability to complete the project as described.</li> </ul>	<ul style="list-style-type: none"> <li>• Takes ownership of project and is the driver of it.</li> <li>• Identifies all the appropriate members of the project team, including but not limited to the point person/business analyst, project manager with decision-making authority, and staff involved in defining requirements and testing.</li> <li>• Obtains approval and support from appropriate supervisory and project prioritization mechanisms.</li> <li>• Describe all aspects of current process vs desired future process.</li> <li>• Leads business plan development (whether performs work with existing agency analyst staff or seeks assistance from DoIT analyst).</li> <li>• Defines scope of project and preferably keeps the project small in duration (6 months or less) by breaking up large projects into manageable pieces.</li> <li>• Signs off on business plan signifying that it includes all desired elements, clearly and completely documents current and future expected processes, accurately portrays scope of project (to avoid project creep), and staff resources are available and dedicated to work on the project.</li> </ul>

<b>Project timelines and communication</b>	
DoIT responsibility	DES responsibility
<ul style="list-style-type: none"> <li>• Provides time/cost estimates to do the project.</li> <li>• Provides regularly scheduled, frequent incremental feedback on status of work.</li> <li>• Notifies DES and seeks guidance immediately upon discovering a significant problem or time line setback (such as an unforeseen technical challenge or a change in DoIT policy affecting the schedule).</li> </ul>	<ul style="list-style-type: none"> <li>• Meets with developer on a regular, frequent schedule to review status of work and provide incremental feedback.</li> <li>• Doesn't expand scope of work.</li> <li>• Limits interruptions of DoIT staff outside of scheduled meetings to allow them to concentrate on coding.</li> <li>• Notifies DoIT to immediately discuss and address any change in project circumstances (such as new rules, loss of staff availability, etc.).</li> </ul>

<b>Testing the project</b>	
DoIT responsibility	DES responsibility
<p>Developer fully tests what he/she has built to make sure all additions and modifications work as described in the business materials before passing to the DES users to test. This includes (but is not limited to):</p> <ul style="list-style-type: none"> <li>• making sure all items (forms, buttons, columns etc.) requested are in the application,</li> <li>• labels are spelled correctly,</li> <li>• buttons work as expected,</li> <li>• data formats/requirements are enforced upon entry,</li> <li>• forms do not contain any errors,</li> <li>• proper user roles are set up and work as expected,</li> <li>• domain lists are enforced (where applicable),</li> <li>• tab order of columns is correct</li> <li>• application performs in a reasonable time manner to user requests.</li> </ul> <p>User testing should be done based on a written test plan developed jointly with the point person/business analyst. This test plan will document the who/what/when/where/how of testing and will describe the developer's responsibilities for correcting and retesting.</p>	<ul style="list-style-type: none"> <li>• Makes time to test the application fully, according to the testing plan, and within a reasonable time frame.</li> <li>• Testing should mimic actual work flow and be geared towards trying to "trip up" the application. If different user roles exist, each should be tested throughout the application.</li> </ul> <p>When application issues are discovered, sufficient documentation must be provided to the developer such as:</p> <ul style="list-style-type: none"> <li>• what steps (key strokes, buttons clicked etc.) were taken prior to achieving the error</li> <li>• screen shot of the form with the error clearly marked</li> <li>• any error numbers or IDs displayed on the screen</li> <li>• date the issue was discovered.</li> </ul> <p>Errors should be grouped by form and provided to the developer in a timely manner. When the developer has corrected the error(s), DES staff will retest and communicate with the developer on whether the problems were corrected.</p>

<b>Rolling out the project</b>	
<b>DoIT responsibility</b>	<b>DES responsibility</b>
<ul style="list-style-type: none"><li>• Creates user roles, grants rights to users, and works within DoIT policies and procedures to deploy application in a production environment.</li><li>• Assists with training the users and developing user manuals.</li><li>• Develops final entity relationship diagram (ERD) which depicts table and column structure for the application.</li><li>• Completes post-development activities, including commenting code and entering in Harvest source code control tool.</li><li>• Responds to any problems encountered in a production environment.</li></ul>	<ul style="list-style-type: none"><li>• Lead for setting up training and developing/updating user manuals.</li><li>• Notifies staff of rollout date and what to expect.</li><li>• Reports any problems with the application.</li></ul>

Other ideas for improving IT project management:

- 1) Use project management software (such as Microsoft Project) if available and staff are comfortable using it.
- 2) Create project wall space to document project and track its status. Include graphics to help depict the process for a more involved project.
- 3) Provide regular opportunities to share/transfer knowledge of projects or troubleshoot them whether through DoIT staff meetings, project sifting meetings, etc.
- 4) DoIT should examine software development tools periodically to make sure the best tools are being used to meet the changing needs of DES.
- 5) Bring in additional staff (DES and/or DoIT) to work on a project as needed and available in order to move a project along.