

Nomination Form

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Texas Department of Human Services
Project Management and Repository System (PMRS)
Executive Summary

Throughout the Information Technology (IT) industry, a great majority of projects fail or significantly over-run budgets and delivery dates. This has resulted in an industry-wide focus on improving the processes and project management of projects. In 2000, the Texas Department of Human Services (DHS) Management Information Systems (MIS) established the Project Management Office (PMO) to consolidate all facets of process and project management into one focused organization.

The Project Management Repository System (PMRS) is a critical automation resource supporting portfolio management for the MIS PMO. The system:

- Encompasses process development, continuous process improvement, and effective management and reporting of IT projects
- Centralizes the functions necessary to register and manage projects, applying standard methodology adopted from recognized industry and government standards
- Contains a workflow system to control and track work requests through the estimation process to project approval
- Provides automated status reporting and executive level report consolidation capabilities, which are used throughout the agency
- Is a custom-built Web application front-ending an Oracle database, which currently supports over 250 active projects, contains historical information on 900 completed projects, and has processed over 700 work requests for projects in the last twelve months.

Implementation of PMRS has strengthened technical project management with DHS and enabled delivery of government services in a more efficient manner. PMRS embodies the functionality necessary to support project management and the subsequent delivery of complex IT projects under a common set of continuously improving processes. Benefits include:

- Improved agency performance in areas such as timeliness and quality of product delivery
- Lower costs of IT services
- Improved visibility of complex technical system development
- Reduction in project risk and product liability
- Empowerment and increased efficiency of distributed project teams
- Improved collaboration among and between project teams
- Better visibility of project progress and collaboration between provider and customer

Description of project, including length of time in operation

The Texas Department of Human Services (DHS) Project Management and Repository System (PMRS) centralizes the functions necessary to register and manage projects of varying size and scope and applies a standard methodology adopted from recognized industry and government standards. The system, a key tool of MIS PMO portfolio management, is a custom-built Web application front-ending an Oracle database, which currently supports over 250 active projects, contains historical information on 900 completed projects and over 250 published process assets (processes, templates, checklists and worksheets), and has processed over 700 requests for projects in the last twelve months. The PMRS project was initiated in June 2000, planned with a phased implementation approach. The first release occurred in September 2000 and provided a process and project documentation repository. Incremental releases have provided continual improvements and increases in functionality.

PMRS provides the following functionality, which has been crucial to the successful implementation of the PMO:

- Key enabler for continuous process improvement and growth in organizational maturity, providing immediate access to the latest versions of processes, process templates & checklists
- Project management focal point from initial customer request through project execution and final product delivery
- Automated workflow from receipt of work requests for estimates to approval of project funding
- On-line access to all relevant project information for both active and closed projects
- Standardized project status reporting with executive-level status report summarization capability
- Historical archive with robust search capability
- Role-based access for all users

PMRS contains three functional areas: Process Management, Project Management and Reporting, and the Repository Archive.

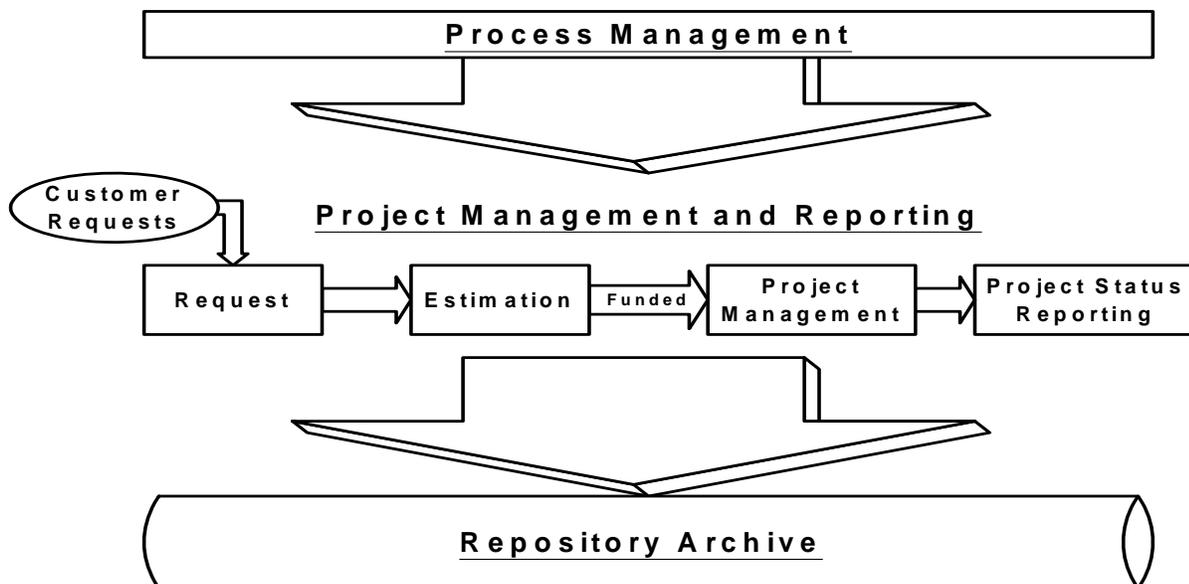


Figure 1

Process Management enables the customization of IEEE and CMMI industry standard best practices into the DHS environment. As the processes are customized, reviewed and approved, the versions are stored in PMRS. When a process is approved, it is promoted to the *published* state, and is added to the Process Assets Table (Figure 2). As the processes are updated based on experience gained in projects or through process improvement efforts, updated versions are automatically available in the Process Assets Table. This functionality has strengthened and furthered organizational maturity in both software development and project management.

The screenshot shows a Microsoft Word window titled "NASCIO Inserts - Microsoft Word" containing a web browser window. The browser window displays the "Project Management & Repository System" interface for the Texas Department of Human Services. The interface includes a navigation menu with links for "Process Assets", "Requests", "Projects", "Status Reports", "Search", "My Profile", "Admin", and "Log Out". Below the navigation menu, there is a section titled "Published Process Asset Documents" with a bulleted list of instructions. The main content is a table with the following data:

Process Asset Name	Project Phase	Process Document	Template	Checklist	Form/Memo/Worksheet/Instructions
Project Management	Initiating	100.100.000			
Project Integration Management (Umbrella)	Initiating	100.100.100			
Project Charter	Initiating		100.110.101		
Project Registration	Initiating	100.110.100			
Preliminary Estimation	Initiating	100.110.110	100.110.111	100.110.112	
Preliminary Estimating Object Worksheet	Initiating				100.110.114
Preliminary Estimation Detail	Initiating				100.110.115
Preliminary Estimating Bottom Up Cost Worksheet	Initiating				100.110.116
Preliminary Estimating Memo	Initiating				100.110.117
Preliminary Estimation Summary	Initiating				100.110.118
High Level Project Plan	Initiating	100.110.120	100.110.121	100.110.122	
Total Cost of Ownership (TCO) Estimation	Initiating	100.110.130	100.110.133	100.110.131	100.110.132
TCO Estimation Items to Consider	Initiating				100.110.135
TCO Estimation Skills to Consider	Initiating				100.110.136
TIERS-Legacy Project Coordination	Initiating	100.110.140			
System Development Life Cycle	Requirements	300.300.110			300.300.001
SDLC Operational Concept Document (OCD)	System Requirements		300.305.201		
SDLC Interface Requirements Specification (IRS)	System Requirements		300.310.301		
SDLC System/Segment Design Description (SSDD)	System Design		300.310.401		
SDLC System Architecture Specification (SAS)	System Design		300.310.501		

Figure 2 - Partial extract of the Process Assets Table
This table enables immediate access to the latest published version of any process or process asset.

Project Management and Reporting contains three sub-sections.

- Project Request Workflow tracks work requests from receipt through estimation, to funding as a project. The workflow routes requests to actors in the workflow, controls actions an actor may perform for the particular state of the request, enables electronic assignment of estimation teams, and stores preliminary and final estimation documents in the repository as attachments to the request. The final estimate is approved and forwarded to the customer for funding. Upon customer funding; the request is activated in PMRS as an approved project.

Req #	4746 Status	Est. Memo Status	Green Sheet Status	FY	Proj #	Project Title	Related Projects	PAM	BAM	Agency	Program Area
2462	Estimation Completed	Submitted to BAM	Does Not Exist	'02	C666	Optimize HRMIS database		Laura	John	MIS SWAM	OTHR
2491	Estimation Completed	Submitted to BAM	Does Not Exist	'03	C669	Improve Error Checking in the DSS Fiscal Reporting Database (FRD) Load Prog		Laura	John	MIS SWAM	OTHR
2492	Estimation Completed	Submitted to BAM	Does Not Exist	'03	C670	RealignApplication Load Process		Laura	John	MIS SWAM	OTHR
2495	Estimation Completed	Submitted to BAM	Does Not Exist	'03	C548	FY03 MIS PI Program Processes & Initiatives		Laura	John	MIS SWAM	OTHR
2566	Estimation In Progress	Does Not Exist	Does Not Exist	'03	Z850	IRS Safeguard Procedures Audit FY03		Laura	Laura	MIS	OTHER
2642	Estimation Completed	Submitted to BAM	Does Not Exist	'03	Z354W	STAR Plus Auto-Disenrollment		Laura	John	MIS SWAM	OTHR
2652	Estimation Completed	Submitted to BAM	Does Not Exist	'03	IY401W	Penalty Codes (SWAM Warranty) IY401W		Laura	John	MIS SWAM	OTHR
2680	Estimation Completed	Submitted to BAM	Does Not Exist	'03	x883	FS Plucker edits for SNAP	Links	Laura	Laura	DHS	SWAM Correctio
2700	Estimation Completed	Submitted to BAM	Does Not Exist	'03	Y965	Legislative Tracking System - Warranty		Laura	Laura	DHS	SWAM Correctio

Figure 3 - Partial extract of Pending Requests table.

The second, third and fourth columns from the left display the current status of any pending request.

The Related Projects column Links a request to predecessor or successor requests or projects.

- Project Management sub-section provides electronic assignment of the Project Manager, access to all request and estimation documentation, and enables tailoring of the processes as necessary for effective management of the project. Project plans and other project documentation are stored in the individual project file within the repository, and are available to anyone with read access to PMRS for information sharing and easy re-use between projects.

- Project Status Reporting sub-section provides standardized report formats with specified risk/issue categories color-coded to reflect a comparison of present and last reporting periods (Figure 4). Reports are entered weekly, monthly, or immediately, as conditions warrant. Status reports are accessible by project, by search criteria, or in summarized formats. Reports can be retrieved based on any combination of multiple criteria, time period of interest or based on changes in status either positively or negatively since the prior report. Multiple project reports can also be consolidated based on any combination of criteria to produce high-level executive summaries, displaying at a glance changes in rated categories across groups of projects.

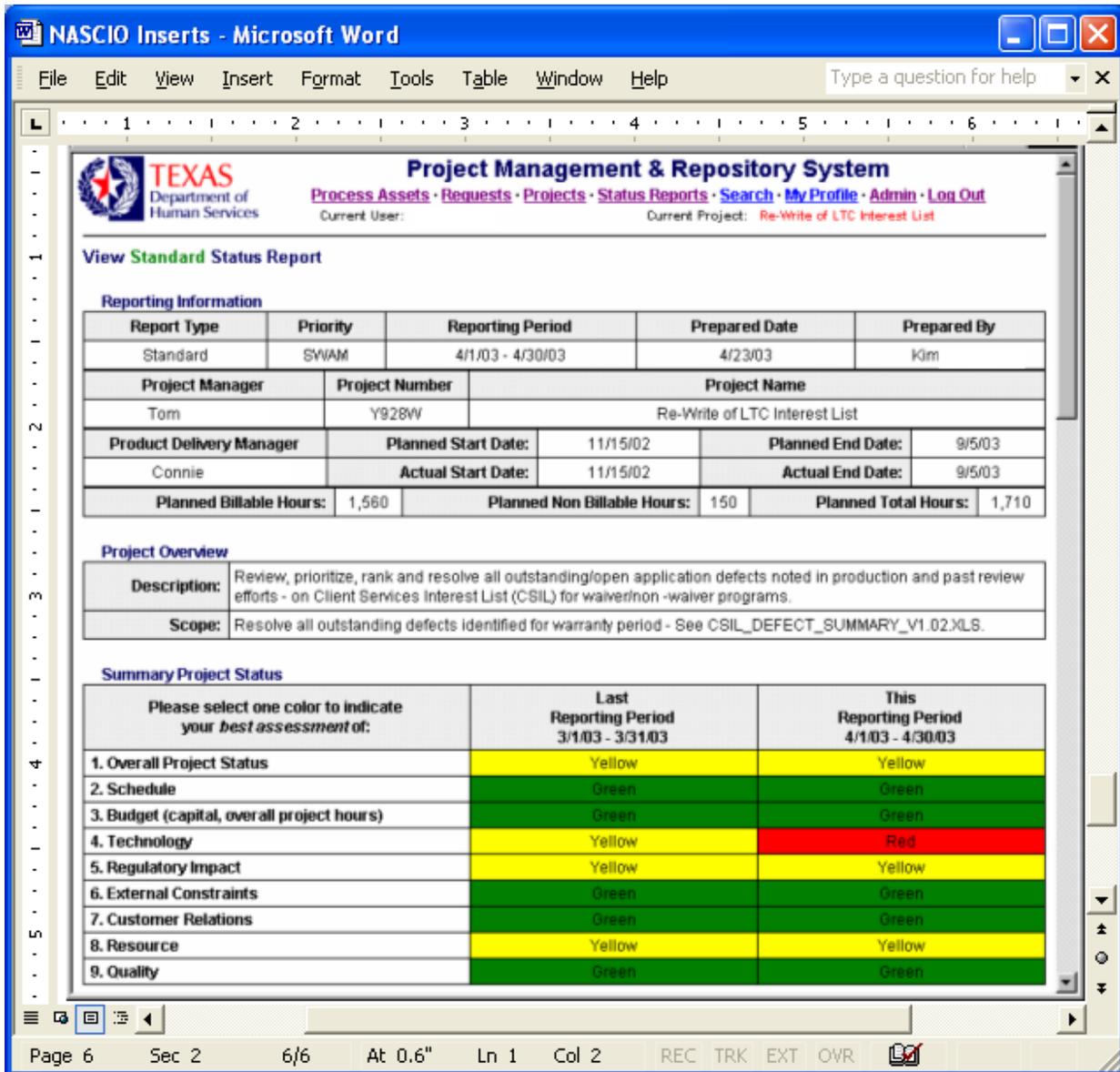


Figure 4 - Top section of Standard Status Report

Repository Archive contains all documents and status reports stored for all projects and processes. A robust search capability enables searching across projects, timeframes, and any combination of attributes. There is

also a document content search with free-text query capability. Use of this repository archive provides for storage of historical information, which enables easy re-use between projects or processes, reducing the time to complete projects and deliver IT products and services.

Significance to the improvement of the operation of government

Throughout the IT industry, a great majority of IT projects fail, or significantly over-run budgets and delivery dates. This has resulted in an industry-wide focus on improving the processes and project management of projects. PMRS embodies the functionality necessary to support project management and delivery of complex Information Technology (IT) projects under a common set of continuously improving processes. Implementation of PMRS has strengthened technical project management, postured DHS for continued growth in organizational maturity and enabled long-lasting improvement in the delivery of government services.

Benefits realized by service recipients, taxpayer, agency or state

Benefits of implementation include improved agency performance in areas such as:

- Standardizing and improving the project management across all projects
- Timeliness and quality of product delivery
- Lower cost IT services
- Improved visibility and coordination of concurrent project development on complex technical systems
- Reduction in project risk and product liability
- Empowerment and increased efficiency of distributed project teams
- Decrease in administrative burden, freeing project staff to concentrate on technical matters, thereby improving morale and retention
- Improved collaboration among and between project teams
- Better visibility of project progress and collaboration between provider and customer

Return on investment, short-term/long-term payback (include summary calculations). Projects must exhibit measurable operational benefits.

Approximately 10,000 man-hours of effort have been expended on PMRS development over the past two years. In addition, we anticipate an annual expenditure of about 5000 hours for PMRS maintenance. We estimate a savings of approximately 15,000 hours of project management effort per year as a result of PMRS automation capability. The result is a net savings of 10,000 hours (about \$600,000) a year that can be reallocated to meet customer needs.