Appendix D

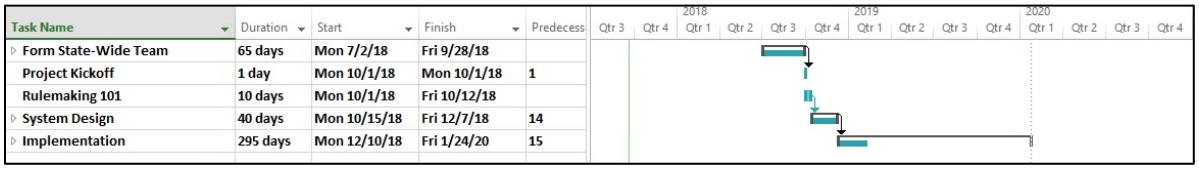
MARSS Project Plan – In-House Build

The following project plan and cost estimates are based on the requirements outlined by the MARSS working group. The initial build of the MARSS system will include functionality for a records repository, preservation of rulemaking records, reporting on rulemakings, and public access to the rulemaking records. The initial build will also lay the ground work for future enhancements including, but not limited to, subscription based notifications, electronic workflows, and electronic signing of rulemaking documents.

Schedule

The following is a high-level time line for building and deploying the MARSS system in house:

TASK NAME	DURATION (working days)
Form State-Wide Team	65 days
MARSS Project Kickoff	1 day
Rulemaking 101	10 days
System Design	40 days
Implementation	295 days



Implementation

Building the MARSS system in-house using the Revisor Information System (IS) unit's current technology stack allows for flexibility in supported features. It also allows for leveraging any technology currently developed by the Revisor IS unit that may apply to rulemaking. Each component, such as workflow or notifications, can be purchased and developed separately yet still be integrated into a cohesive system. This allows for an initial implementation that can be built on in the future to support more advanced features, such as electronic workflow and notifications.

People

We recommend hiring four contractors.

1. Project Manager. Manages the implementation and coordinates the work of Revisor IS staff and contractors. Leads the development team using agile software development techniques. Uses agile techniques to engage users and stakeholders throughout the project.
2. Business Process Analyst. Documents rulemaking processes and aids in requirements finalization and vendor selection.
3. Senior Web Developer. Has existing skills and experience to be quickly productive. Will develop custom search screens used by the public. Can develop in the current web technologies used by the Revisor IS unit.
4. Senior Java Developer. Legislative experience is preferable. The developer will backfill for the Revisor IS staff person reassigned as the MARSS Software Architect. The Java Developer works on existing Revisor applications, not MARSS.

We recommend limited use of existing Revisor IS-staff. The expertise of the Revisor's IS staff will be necessary during the MARSS project. Correctly integrating new technologies into the existing IT architecture will result in reliable operation of MARSS and lower, long-term maintenance costs. At the same time, existing IS staff will have limited time to work on MARSS because they are fully utilized for maintaining existing essential applications. Recommendations for existing IS-staff are:

1. Software Architect. Re-assign one person to the MARSS project for its duration. This person will ensure that the project adheres to IT best practices and Revisor conventions and standards. This person will also work towards seamless integration of MARSS with the Revisor's existing architecture.
2. Database Administrator (DBA). The staff DBA will consult on the MARSS database and data structure issues. This person will also train the new DBA (see below) on Revisor conventions and standards.
3. Web programmer. A staff web programmer will consult on the MARSS web site and web page issues. This person will also train the Senior Web Developer contractor on Revisor conventions and standards.

We recommend adding three FTE positions.

1. Senior database administrator (DBA). This person will install, configure, and maintain the commercial database holding rulemaking records and associated metadata. This person will design the database tables for storing data, assist in data loading into the MARSS system, and develop database queries for use in the custom written software.
2. Senior Software Developer. This person will have existing skills and experience to be quickly productive in the current Revisor technology stack and will work on a team of developers to program the custom features of MARSS. This position will also be

responsible for future maintenance of the MARSS custom software once the system is complete. Current Revisor IS staff is already fully utilized for maintaining current legislative systems.

3. MARSS Administrator. This person will monitor rulemaking records for completeness, serve as a resource to authorized users (e.g., agency users) on system usage, and facilitate communication between authorized users and IS staff.

IT Purchases

The following expenses will be incurred to build and maintain the MARSS system:

Hardware

Desktop hardware will be needed for contractors and new FTEs. Virtual servers and storage will be needed for MARSS data and preservation of the data.

Software

Software products will be needed for system features, software development, project management, and communication with project participants.

Local Contractors

Four contractors will work on-site in the Revisor's Office space. The project manager, web developer, and java developer are needed for the duration of the development efforts. The business process analyst is required at the start of the project to guide development and system configuration as they relate to the requirements.

New FTEs

Three new, permanent, Revisor FTEs will be needed.

Estimated Implementation Costs

Item	1.5 Years	Ongoing Annual Maintenance	Note
Hardware			
Laptops (7)	$10,500	-	[1]
Phone (7)	$1,750	-	[1]
Virtual servers		$9,500	
Storage		$2,151	
Software			
Oracle DB Standard ed.	$14,700	$3,054	[2]
eSignLive	-	-	
Workflow Software	-	-	
WebEx teleconference	$4,000	-	
MS Office ($200 per user/year)	$800	$600	[3]
MS Project (2)	$792	-	[4]
MS Visio (2)	$676	-	[4]
Tivoli Service Manager	$2,700	$350	
Data Backup		$1,109	
Application Server		$9,200	
Local Contractors			
Project Manager	$402,000	-	[5]
Business Process Analyst	$60,000	-	[6]
Senior Web Developer	$402,000	-	[5]
Senior Java Developer	$402,000	-	[5]
New FTEs (with benefits)			
Senior DBA		$125,000	
Senior Developer		$125,000	
Senior Legal Editor		$96,046	
TOTAL One Time	$1,301,918	$372,010	[7][9]
TOTAL with maintence	$1,859,933.0		[8]

Notes:

[1] Cost for 4 contractors and 3 FTEs.

[2] Oracle Standard Edition is sufficient for the initial MARSS implementation. If security features to support redacted content or non-public information are needed in future development efforts, licensing and modules for Oracle Enterprise Edition may be needed at additional costs.

[3] Cost for implementation for 4 contractors and 3 FTEs. Cost for maintenance for 3 FTEs.

[4] One time license purchase for use by the Project Manager + Software Architect.

[5] Calculations based on $150 per hour and 8 hour work days.

[6] Calculations based on $150 per hour and 8 hour work days for the initial system design. Estimating 50 working days for this effort.

[7] Totals include software purchases and contractors only.
Yearly maintenance costs apply as well.

[8] Totals with maintence include the yearly maintainence costs for 1.5 years.

[9] For budgeting purposes anticipate maintence costs to rise around 3% per-year.