Iterative Project Report for Programs & Multi-Year Phased Projects

Submitted to Project Oversight on 6/6/2025

GENERAL INFORMATION

Program/Project Name: RIMS/CMMS Rewrite

Agency Name: Department of Transportation

Project Sponsor: Chad Orn

Project Manager: Shannon Bishop

PROJECT DESCRIPTION

North Dakota Department of Transportation (NDDOT) is looking to replace several systems that utilize aging technology and are not keeping up with current business needs. These systems are Roadway Information Management System (RIMS), Preliminary and Construction Engineering Reports (PACER), Construction Automated Records System (CARS), Statewide Transportation Improvement Program (STIP), and materials management processes (CMMS) that do not have a unified system. This project will procure and implement a single system to replace Roadway Capital Planning functions of the RIMS and STIP systems.

BUSINESS NEEDS

1. Support costs of current legacy systems will increase over time.
2. Staff currently utilize shadow systems (spreadsheets/MS Access) to meet business needs.
3. Staff need a system that can be functionally expanded upon to meet current business needs. Legacy systems cannot be functionally expanded upon and business processes must follow system limitations.

PROGRAM/PROJECT FORMAT

Program/Project Start Date: August 9th, 2021

Budget Allocation at Time of Initial Start Date: $9,660,000.00

How Many Phases Expected at Time of Initial Start Date: 5

Phase Approach Description: Five systems to be replaced centered around business functions and informed by business process modeling to better align to business needs.

Estimated End Date for All Phases Known at Time of Initial Start Date: To be determined

PROGRAM/PROJECT ROAD MAP

The program road map shows the high-level plan or vision for the program/projects/phases. It is intended to offer a picture of the lifespan of all the effort that is expected to be required to achieve the business objectives.

Project/ Phase	Title	Scope Statement	Estimated Months Duration	Estimated Budget
Project 1	Business Process Modeling	As-is, to-be, and process improvements for PACER, RIMS, CARS, and CMMS systems.	13	$390,992
Project 2	Roadway Capital Planning	Procurement and implementation of system to replace RIMS and STIP Capital Planning business functions.	31	$1,140,596
Project 3	Roadway Preconstruction	Procurement and implementation of system to replace RIMS and PACER Preconstruction business functions.	31	$1,509,602.00

Project/ Phase	Title	Scope Statement	Estimated Months Duration	Estimated Budget
Project 4	Transportation Project Management System	Procurement and implementation of system to replace RIMS Milestone and Project Status Reporting business		
Project 5	Asset Management	Procurement and implementation of system to replace RIMS and CMMS Asset Management business functions.		
Project 6	Remaining Mainframe Module Analysis & Market Research	Current and future state business process analysis for mainframe modules not covered by Project 1's scope and to conduct market research to inform Project 7's implementation approach (custom build or commercial-off-the-shelf).		
Project 7	Remaining Mainframe Module Replacements	Replacement of remaining mainframe modules required to retire the legacy infrastructure.		
Project 8	Roadway Construction	Procurement and implementation of system to replace CARS Construction business functions.		
Project 9	Civil Rights	Procurement and implementation of a system to replace legacy Civil Rights systems to meet current business needs.		

Notes:
Projects 4 implementation schedule is currently unknown while the project is in the Request for Proposal (RFP) process.
Projects 5 and 6 order and start are dependent upon the successful planning of Project 4.

PROJECT BASELINES

The baselines below are entered for only those projects or phases that have been planned. At the completion of a project or phase a new planning effort will occur to baseline the next project/phase and any known actual finish dates and costs for completed projects/phases will be recorded. The iterative report will be submitted again with the new information.

Project/ Phase	Project/ Phase Start Date	Baseline End Date	Baseline Budget	Funding Source	Actual Finish Date	Schedule Variance	Actual Cost	Cost Variance
Project 1	10/18/2021	11/21/2022	$390,992	Special	3/1/2023	14.5% Over	$380,938	2% Under
Project 2	1/9/2023	12/31/2024	$1,140,596	Special				
Project 3	11/8/2023	6/8/2026	$1,750,053.58	Special				

OBJECTIVES

Project/ Phase	Business Objective	Measurement Description	Met/ Not Met	Measurement Outcome
Project 1	Develop a request for proposal (RFP) for a new system or systems based on current business needs.	Business processes that utilize PACER, CARS, RIMS, and CMMS are sufficiently mapped to develop an RFP.	Met	Documentation completed and will be attached to RFP.
Project 2	Staff that work on the STIP are able to perform work more efficiently.	A Net Promoter Score of 6 or more determined by a survey sent by Change Practitioner to staff involved with the STIP after Go-Live.		
Project 2	Reduce reliance on legacy mainframe system.	No projects created in Project Master after Go-Live, verified by Business Analyst Account Manager reviewing mainframe field updates.		
Project 2	Increase collaboration and transparency with MPO, Cities, and Counties.	Change Practitioner will survey MPO, Cities, and Counties after Go-Live if they feel that the STIP building process is more transparent and information is more readily available determined by a Net Promoter Score of 6 or more.		
Project 3	Reduce support required to maintain Preconstruction System by 10% within 6 months after implementation.	Business Analyst Account Manager will analyze incidents submitted through ServiceNow and WMS 6 months before and after system implementation.		
Project 3	Increase satisfaction with the Preconstruction System by at least 2 points utilizing Net Promoter Score.	Change Manager and program personnel will survey current system users one year before and after each system is implemented.		

KEY LESSONS LEARNED AND SUCCESS STORIES

A lessons learned effort is performed after each project or phase is completed. This process uses surveys and meetings to determine what happened in the project/phase and identifies actions for improvement going forward. Typical findings include, “What did we do well?” and “What didn’t go well and how can we fix it the next time?”

Project/ Phase	Key Lessons Learned and Success Stories
Project 1	• The final report that was provided by the vendor was used to build requirements for the Request for Proposal. • Project deliverables allowed for additional processes to be modeled. The STIP was scoped into the project to allow five systems to be captured. • Having multiple modules being worked on at the same time led to subject matter experts being overallocated, causing dependent tasks to be delayed. In future projects, deliverables should be planned around dependent work and a regular cadence. • Project team utilized a pilot program to run through business process modeling for a single module first, then modified based on what worked well that led to success for other modules.

KEY CONSTRAINTS AND/OR RISKS

- Core team members and subject matter experts must be available for project activities.
- Project 2 scope is accurate to what was sought in the procurement process.
- Project 2 solution must be sufficiently implemented before Project 3 solution can integrate.