Wisconsin Department of Transportation
Concept Definition Report
Lean Summary Report

Project Summary

Regional offices in the Division of Transportation System Development (DTSD) prepare Concept Definition Reports (CDR) to document and communicate the scope of highway improvement projects. The information from the CDR is used by those involved in the delivery of highway improvement projects.

The goals of this project were to eliminate duplicative data entry, reduce process time and increase data accuracy.

This project was completed in September 2016.

Improvements

- Reduced data entry time by approximately 56 annual hours by eliminating duplicative data entry
- Improved project data accuracy by directing staff to a single, live data source

MAPSS Core Goal Area

- Accountability
- Service

Statewide Goal Area

- Cost of government
- Customer satisfaction
- Employee work environment

Issue

As of June 2016, three of five regions used the Concept Definition Report (CDR) generated by the Financial Integrated Improvement Programming System (FIIPS) to share information about project scope. The form takes approximately 20 minutes to complete per project. The information entered into the CDR form is duplicative of information entered into Project Management Plan (PMP). There are approximately 160 State Highway Rehabilitation (SHR) improvement projects scheduled for fiscal year (FY) 2022 in the regions that use the CDR (Southwest, North Central and Northwest). This results in regions spending approximately 56 hours completing CDRs in 2016 for the FY 2022 program (improvement programs use six-year planning cycles). Moreover, CDRs may not always been updated to reflect changes to project scope and location, resulting in use of inaccurate data, rework or corrections. Concept Definition Reports are completed for projects in all years of the program, so each year will see similar CDR completion levels to that of 2016.

Lean Six Sigma Process

A cross-division team used the DMAIC (Define, Measure, Analyze, Improve and Control) methodology to:

- Define the needs of customers
- Map the CDR process and define stakeholder participation
- Estimate CDR development time and identify revisions needed due to inaccurate CDR data
- Analyze the use of PMP system as the tool to document and communicate project scope
- Identify improvements to the PMP system needed to make PMP a more viable tool in replacement of the CDR
- Develop an implementation plan that includes making changes to the PMP tool, identifying manuals needing revisions to reflect the new process, and checking in with the Regions to assess how implementation is functioning and identify the need for further refinements

Results

Cost of Government: Improvements are projected to minimize, if not eliminate, the duplicate data entry for each project, saving approximately 56 hours in 2016 for development of the FY 2022 improvement program.

Customer satisfaction/Employee work environment: The team anticipates the improved process will reduce challenges, rework and corrective action caused by inaccurate data in outdated CDRs.