The Wisconsin Department of Transportation (WisDOT) MAPSS Performance Improvement Program focuses on the five core goals (Mobility, Accountability, Preservation, Safety and Service) and associated performance measures that guide us in achieving our mission. External reporting of this program every quarter is important in ensuring the department measures its performance in improving these core goal areas. The issue with the previous (current state) quarterly update process was that it took too much time and too much rework to develop and publish the informational graphics on the MAPSS website and the printed MAPSS report.

Lean Six Sigma Process

The cross-divisional team composed of staff within OPFI, division points of contact for MAPSS reporting, business intelligence developers in BITS and a graphic designer in CCS participated in multiple team meetings to:

- Review and analyze the MAPSS quarterly update process
- Create a value-stream map of the current state
- Collect data and statistically analyze the quality of material submitted by divisions, BITS and CCS
- Identify root causes and effects to develop multiple solutions to overcome causes

An improvement plan was implemented to control for the quality of templates used by divisions in submitting their data and narratives for each performance measure, utilize and improve the use of Microsoft SharePoint for review and submittal of material, and ensure that divisions review and submit any design changes to BITS as early as possible. Performance metrics and a control plan have been established to continuously validate these changes as actual improvements.

Results

The team reduced the total defect rate of templates submitted by divisions from 42 percent to 28 percent. Completeness and accuracy of informational graphic material submitted by BITS improved from 75 percent to 80 percent. Completeness and accuracy of report material submitted by CCS improved from 73 percent to 88 percent. The recorded improvement in quality for all products submitted helps improve employee work environment by reducing the amount of rework in producing each quarterly report. Moreover, this project has established a statistical method for quality control of a WisDOT product that is integral to running a successful and efficient organization and meeting public expectations.

Next Steps

- Continue with modifications to performance measure templates that have not received them
- Follow the control plan to ensure improvements and new (future state) process continues