

Wisconsin Department of Transportation

Research Quarterly Progress Report Review and Acceptance

Lean Summary Report



Project Summary

WisDOT managed a \$4.2 million program for research, library and technology transfer services during fiscal year 2013. The WisDOT Research Program includes:

- Wisconsin Highway Research Program (WHRP) in collaboration with the University of Wisconsin-Madison
- Department Policy Research Program
- Participation in Transportation Pooled Fund projects

All contracted researchers are required to submit a quarterly progress report (QPR) to document progress status and justify payment of a quarterly invoice.

This process could be streamlined to ensure consistent review of QPRs so that projects make adequate progress and invoices are processed in a timely manner.

The goals of this project were to reduce the steps in the current process and reduce the time needed for review.

Improvements

- Elimination of six non-value-added steps
- Streamlined administrative process steps
- Pre-filled QPR form to eliminate errors and report defects
- Started recording process metrics

MAPSS Core Goal Areas

- Accountability

Statewide Goal Areas

- Culture of Government
- Customer Satisfaction

Issue

Research and Library Services quarterly progress report (QPR) review and acceptance process involves stakeholders from business areas throughout the Wisconsin Department of Transportation (WisDOT) and contracted researchers. The University of Wisconsin-Madison is also a contracted stakeholder for research done under the WHRP. Quarterly progress reports document project progress and justify payment of associated invoices. Several issues were identified in the current QPR review and acceptance process:

- Variance in process between research areas
- Poor on-time submittals of the WHRP QPRs
- High error rate on administrative data in the WHRP QPRs
- Rework and extra work due to errors on the WHRP QPRs
- Extra work caused by poor on-time submittals

Lean Six Sigma Process

Using Lean Six Sigma methodology and tools, the team mapped the current Research QPR review and acceptance process, conducted root cause analysis, and designed a new streamlined Research QPR review and acceptance process. Eight improvements were identified, including:

- Modifying the roles and responsibilities of staff involved in administrative aspects of the process
- Defining and implementing a standard methodology across all research areas
- Revising the QPR form and using a pre-filled form to eliminate errors and reduce process time
- Attending research project kick-off meetings to reinforce standard methodology
- Eliminating several non-value-added steps
- Increasing use of automation for further process improvement

Results

Customer satisfaction: Process time has reduced by an estimated 18 percent through the pre-filled QPR form, elimination of errors and rework, and changes in administrative roles. Lead time for invoice processing has decrease by approximately 30 percent from 13 to 9 days on average.

Culture of government: Communicated standards will reduce variability in the process and facilitate capture of process metrics.

Next Steps

The Performance, Policy and Research Section of the Office of Policy, Finance and Improvement will continue with implementation of the control and continuous improvements. The Lean project results will be used as input for upcoming discussions on the WHRP research contract.