Project Summary

The Wisconsin Department of Transportation’s Division of Transportation System Development oversees the administration of numerous engineering consultant contracts. These contracts have been increasing in complexity over the past years as the improvement projects within the department increase in complexity and numbers. The current process used in the Southeast Region for executing these contracts has potential for conflicting demands on budgets, schedules and scoping staff resources.

The goal of this project is to reduce the time and improve the process of consultant contracting from project scoping through executed contract within the region. The project was completed and baseline metrics established in January 2014.

Improvements

- Reduce time to scope and negotiate consulting contract to a range of 6 weeks to 10 weeks maximum for contracts greater than $1M. On average, the Southeast Region solicits 5 contracts greater than $1M per fiscal year; comprising approximately 20 percent of all solicited consultant contract work.
- Define and implement a standardize tool to track contracts by Fiscal Year. Tracking includes: scoping, negotiating, submittal, review and execution

MAPSS Core Goal Area
- Accountability

Statewide Goal Area
- Cost of government

Issue

The current process for executing engineering consultant contracts in the Southeast Region includes numerous processes and staff. The goal of this project is to reduce the time to scope and negotiate a consulting contract with the selected engineering firm. Based on current contract tracking data, less than 30 percent of the Southeast Region’s consultant contracts are executed within 12 weeks of consultant selection.

Lean Six Sigma Process

- Developed a project selection matrix to help define specific areas of the contract execution process on which to improve. Identified areas with the largest impact on project criteria
- Completed Kano Analysis to identify customer needs and desires.
- Performed SIPOC exercise to gain greater understanding of entire regional input, processes and output
- Completed a comprehensive assessment of the current regional workflow/business procedures for implementing an engineering consultant contract
- Developed recommended support tools and a control plan

Results

Cost of government: The department has processes in place for contract document preparation and review. This team identified and developed tools to address tracking and preparation of project scope, design estimate and concise solicitation documents within the region. It is anticipated that lead time in the future consultant contract work flow process will be reduced by 3 weeks and the accuracy of internal scopes and estimates to be improved by 25 and 30 percent respectively. The improvement will be measured by tracking submittals and comparing internal scope and estimates versus executed contract amounts.

Implementing the best practices and next step recommendations will result in a reduction of time to scope and negotiate consultant contracts to between 6 and 10 weeks, depending upon the type, size and scope of the consultant contract. It is anticipated that over 60 percent of regional contracts greater than $1M will be scoped and negotiated in under 10 weeks. Savings are estimated at approximately 4 weeks of regional staff time per fiscal year, which will be redirected to other region activities.

Next Steps

- Monitor implementation of more detailed project scoping and engineering estimating and Fiscal Year contract tracking tool
- Consider creating future Lean project to examine the additional barriers to timely consultant contract execution created by the statewide contract reviews and signatures process