



PROJECT OVERVIEW

MnDOT Cost Estimation Process Improvement and Organizational Integration Project

Commitment to Effective Management of Transportation Resources

THE NEED

Many challenges make it increasingly difficult to successfully estimate project costs and to manage costs. Process-related factors – such as unforeseen engineering complexities and constructability issues, changes in economic and market conditions and regulatory requirements, local governmental and stakeholder pressures, and a transformation of community expectations – can drive project cost increases. Transportation agencies throughout the country, including Minnesota, are looking for ways to improve their cost estimation and cost management processes with the end goal of maximizing transportation resources.

PROJECT HIGHLIGHTS

MnDOT designed this project, in collaboration with the Center for Transportation Studies, to achieve accuracy, accountability, and consistency in cost estimation and cost management efforts during planning, scoping, design, and letting phases of highway projects. Organized in phases that build on one another, the two-year project has offered opportunities to share the things we do well and to apply new approaches to project cost management both in the short term and the long term.

THE VISION

To set a course for the project, MnDOT management developed a vision, which helps ensure that MnDOT will secure the benefits of improved cost estimating and cost management, such as improved delivery of projects, better use of available resources, and greater credibility with the public and other stakeholders.

Specific outcomes of the vision include:

Department-wide priority on estimating, managing, and controlling costs

- Fully developed and integrated policies, processes, and tools for cost estimation, management and control
- Baseline estimates that align with early project scope development and include an initial assessment of risk and uncertainty
- Clearly defined and documented cost management and approval process to authorize changes in scope and cost after the baseline estimate is established
- Dedicated resources that are focused on effective scoping, project cost estimating, and cost management

Reliable and accurate estimates

- Well-documented and complete cost estimates
- Clearly spelled out assumptions and risks that can be easily communicated

Statewide uniformity and consistency

- Uniform application and consistent statewide use of well-documented processes and tools
- Use of process tools during planning, scoping, design, and letting phases

Improved communication and credibility with external stakeholders

- Consistent and clear communication of cost estimates to external stakeholders at milestone points

–The ability to communicate cost estimates with confidence, leading to stronger relationships with external stakeholders, greater possibility for collaboration, and increased funding support of transportation initiatives

Clear accountability

- Accountability for cost estimating and cost management at all levels of the organization
- Defined roles and responsibilities for every person involved
- Accountability that is tracked at key points in the process

RELATED SCOPING INITIATIVE

In 2007, MnDOT began using a new project scoping process that resulted from the scoping initiative. The new scoping process calls for comprehensive scoping to occur earlier in the project development process and emphasizes the need for documentation of scope and decisions that impact scope. A comprehensive project scope is critical to determining accurate cost estimates

COMPLETED WORK: PHASES ONE AND TWO

- In phase one, the Project Team gathered and analyzed data to learn more about current practices and to identify opportunities for improvement and next steps. Results from the first phase demonstrated a need to focus on implementing a systematic and structured process approach to project estimating and cost management.
- The second phase involved identifying implementation issues and performance measures to assess outcomes. This part of the project built a foundation for new cost estimating and cost management strategies and for the policies that support these strategies.

NEXT STEPS: PHASES THREE AND FOUR

- Scheduled for completion in summer 2008, the third phase of the project involves drafting a *Technical Reference Manual*, which will document the new cost estimating and cost management process.
- Scheduled for completion in fall 2008, the last phase of the project will include training to promote the adoption of new processes and practices, as well as the development of an implementation plan to help ensure continued improvements.

INVOLVEMENT

Involvement of all MnDOT districts and Central Office functional representatives during all phases of this effort has been key to the project. MnDOT has formed the following project-specific groups:

- *Project Team*, which executes core project tasks, communicates with stakeholders, and makes recommendations to the Policy and Oversight Group.
- *Policy and Oversight Group (POG)*, which provides overall project oversight, establishes policies/processes, and promotes departmental change.
- *Other working groups with diverse representation*, which have assisted with phase one data gathering and phase two process development.

FOR MORE INFORMATION

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Updated March 25, 2008