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# Minnesota Department of Transportation

*Transportation Strategic Management and  
Operations Advisory Task Force  
Status Update  
Draft as of Nov. 26, 2013*



## **Transportation Strategic Management and Operations Advisory Task Force**

The Transportation Strategic Management and Operations Advisory Task Force was created by the 2008 Minnesota Legislature in Chapter 152, Article 6, Section 9. The focus of the task force was to “advise the Governor and the Legislature on management and operations strategies that will improve efficiency in transportation.” The task force provided an assessment that identified strategies and made recommendations to improve efficiency in state transportation construction and maintenance projects and management of state transportation infrastructure. This document serves to summarize actions taken to date relating to the task force recommendations.

### **Recent Reorganization and Focus**

In July of 2013, a number of organizational changes were made that has and will continue to have a positive impact on financial management at MnDOT. In addition to other changes, MnDOT made the following organizational structure changes:

1. Elevated the Chief Financial Officer (CFO) to Deputy Commissioner;
2. Reassigned the State Road Construction (SRC) funds management accountability to directly align to the CFO;
3. Established a controller function; and
4. Reduced the number of agency divisions from six to five.

In October 2013, MnDOT formally adopted *Enhancing Financial Effectiveness* as the agency’s strategic priority for Fiscal Years 2014-2015. The intent is to earn or reinforce stakeholder trust and confidence in MnDOT by demonstrating effective and efficient stewardship of public resources through delivering reliable and verifiable answers to key questions that drive decision-making. While every portion of the agency is responsible for outcomes to deliver our target level of service in a maximally effective *and* efficient manner, the agency has established four project groups focused on specific outcomes. These strategic focus areas are financial management, project management, asset management, and information & outreach.

### **RECOMMENDATION 1: *Planning and Policy Making Perspective – Validate Statewide Interests in MnDOT Regional Structure and Allocation Process***

This recommendation required further assessment to determine if and specifically how the current decentralized organizational and funding structures are optimal for the future and, if they are not optimal, identifies those aspects that could be enhanced.

Since 2008, MnDOT has:

- Implemented a more centralized programming process in several areas of capital resource allocation to highway projects. Additionally, the federal authorizing legislation MAP21<sup>1</sup>, passed by Congress in 2012, provided funding for surface transportation programs. Subsequently, MnDOT implemented the following changes to allocation of State Road Construction funds:
  1. Beginning with state FY2017, projects on the National Highway System are funded through one statewide program and selected in collaboration with Area Transportation Partners (ATP). Asset management systems for pavements and bridges are reviewed to create a list of candidate projects that will meet the statewide performance outcomes. Districts review the candidates, and after

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<sup>1</sup> Moving Ahead for Progress in the 21<sup>st</sup> Century Act (P.L. 112-141)

considering other risk factors, recommend a slate of projects to meet the outcomes and minimize those risks. The pavement and bridge specialists then review the District recommendations to assure that the District selected projects will still meet the required performance outcomes.

2. Remaining dollars are distributed to the Districts in a District Risk Management Program and are subject to a statewide risk balancing exercise to assure that local needs are addressed equitably within and across District boundaries.
- Centralized programs to address priorities to improve asset condition and performance or support economic competitiveness.
    1. Better Roads for a Better Minnesota is a program that combined new funding and savings from previous programs to concentrate on improving the condition of pavements across the state.
    2. Corridor Investment Management Strategy (CIMS) is a corridor-based initiative that brings MnDOT together with its local, modal and state partners to identify opportunities for collaborative and innovative investment and allocates resources competitively, selecting projects based upon factors such as return on investment.
    3. Transportation Economic Development Program (TED) is a joint effort of the Departments of Transportation and Employment and Economic Development. This competitive program focuses on projects with the highest potential to create local economic vitality.
    4. Corridors of Commerce focuses on highway expansion and completion projects strategically selected to support regional growth and economic activity.
  - In FY14 MnDOT established Shared Service Centers (SSC) to leverage internal expertise in a more cost effective manner allowing managers to focus on improved project delivery. SSCs will improve productivity and standardize enterprisewide procedures. Initial focus is on the following program support activities: ADA Accessibility Design and Construction Support, P6 Scheduling, Right of Way (R/W) Conveyances, GIS Support and Cost Estimating.
  - Partnered with the American Society of Civil Engineers and Center for Transportation Studies to conduct peer review assessments of MnDOT's annual reports, strategic plans, budgets, organizational structure and other written material. This included on-site assessments, with oral and written reports provided to MnDOT leadership.
  - Identified statewide priorities for projects and programs as a result of the peer reviews. MnSHIP<sup>2</sup>, which supports the guiding principles from Minnesota GO <http://www.dot.state.mn.us/minnesotago/>, established the state highway capital investment priorities for MnDOT. Priorities were created for each of nine investment categories, including pavement, bridge, mobility, bicycle infrastructure and others. Projects are selected for the Statewide Performance Programs and the District Risk Management program based upon investment guidance that was created to insure that the investments would meet the statewide performance outcomes.

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<sup>2</sup> Minnesota State Highway Investment Plan 2014-2033

- Validated that eight districts is the most efficient structure for delivering maintenance operations responsibilities. MnDOT's products and services are highly geographically distributed based on customer needs. District efficiency, based on services that are "location dependent", was reviewed and found to be effectively delivering services.
- Established Collaborative Partnerships with MnDOT ADA Accessibility Advisory Committee, Disadvantaged Business Enterprises (DBE) and Workforce Collaborative, and MnDOT/American Council of Engineering Companies Collaborative.

**RECOMMENDATION 2: *Foundational Areas to Ensure Change - Develop a Continuous Improvement Process in MnDOT***

The Task Force acknowledged many examples of excellent progress in the use of metrics and data-driven decision making at MnDOT. However, it was also noted that where cost is part of the decision process, systemic barriers and cultural resistance may result in less organizational drive for continuous improvement compared with high-performing private businesses. The Task Force recommended that MnDOT implement a continuous improvement process throughout the organization.

Since 2008, MnDOT has:

- Conducted a peer review of MnDOT Project Management. The peer review generated a report that was the genesis of MnDOT's enhanced project management effort. Phase I (schedule management using P6) is in active system development and will result in better management of project staff, dollars and scope.
- Reviewed MnDOT's Cost Estimating/Cost Management processes and several recommendations were implemented in the Cost Estimation and Cost Management Technical Reference manual <http://dotapp7.dot.state.mn.us/edms/download?docId=670233>. The manual was implemented between 2008 and mid-2013. In 2013 MnDOT completed a Cost Estimation and Cost Management implementation review and sought additional recommendations. This review and recommendations can be found at: <http://www.dot.state.mn.us/pm/pdf/MnDOT%20CE-CM%20Final%20Report.pdf>.
- Initiated or improved risk-based cost estimating, contractor-style cost estimating, and the use of resource loaded project schedules and budgets.
- Adjusted MnDOT performance measures and targets to align with strategies, investment levels and decision processes, i.e. pavement quality, traffic congestion, interregional corridors, etc.
- Implemented LEAN continuous process improvement agency-wide and we are averaging seven Kaizen events per year.

- Expanded the internal control program, *Safeguarding MnDOT*:
  1. Trained and certified all managers, finance and human resources staff on the executive branch code of conduct and internal control concepts. Completed two annual re-certifications.
  2. Convened an Internal Control and Accountability Governance Council at MnDOT,
  3. Completed a control environment self-assessment which will be re-assessed annually.
  4. Completed the following financial risk assessments:
    - a. MnPASS Accounting (in progress for FY14)
    - b. Commercial Vehicle Permitting Processes (FY13)
    - c. Right of Way Payments and Accounting Processes (FY13)
    - d. Billing and Collections Process (FY12)
    - e. Bonding Cash Flow Process (FY12)
    - f. Infrastructure Capital Accounting Process (FY12)
    - g. Partnership Agreements Process (FY12)
    - h. Payroll and Business Expense Accounting Processes (FY12)
    - i. Purchasing Card Process (FY12)
  5. Completed annual internal control system certifications
  6. Completed annual SWIFT accounting system certifications
  
- Improved processes to ensure frequent and meaningful public involvement influence in projects. Recent examples include the reconstruction of Highway 169 through historic St. Peter and the MnPASS Express Lanes on I-394 and, most recently, I-35W in the Twin Cities.
  
- Operationalized the HSOP<sup>3</sup> to maintain MnDOT's 12,000-mile transportation system. This plan balances many competing activities including clearing snow and ice, patching roadways, inspecting bridges and replacing damaged signs.
  
- Adopted formal financial policies for managing the trunk highway fund debt service, fund balance, cash balance and federal advanced construction funds use.

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<sup>3</sup> Highway Systems Operations Plan

**RECOMMENDATION 3: *Practice and Implementation Perspective – Establish and Use Best Practices for Business Operations.***

The Transportation Task force observed that while design-build contracting and construction is not appropriate for all MnDOT projects, the department’s experience and knowledge of the unique project management processes and practices related to design-build should be more broadly utilized. Much of this learning can be used to improve overall MnDOT project management practices, regardless of the contracting or construction method. The task force recommended that MnDOT address internal structural barriers to implementing innovative project management approaches and cultivate best practices.

Since 2008, MnDOT has:

- Incorporated best practices of Design-Build into Design-Bid-Build processes, (i.e. risk management, schedule management, quality management and prequalification requirements.) MnDOT is currently working on a process to utilize ATC<sup>4</sup>s within design bid build projects.
- Moved the Design-Build program from the Office of Construction and Innovative Contracting to the Office of Project Management and Technical Support to mainstream Design-Build into regular project management processes.
- Incorporating the alternative project delivery (Design-Build and Construction Manager – General Contractor) program into the Project Management section to identify project delivery methods earlier in the project development process.
- Utilizing indefinite delivery/indefinite quantity contracting method to more efficiently deliver repetitive work types, i.e. noise wall maintenance, rural intersection conflict warning systems, etc.
- Applying alternative bidding to several projects where both concrete and asphalt options are allowed. With the correct application, this method will increase competition and provide for best value at time of construction.

In addition to these continuing efforts to identify best practices internally, MnDOT maintains relationships with other transportation agencies through organizations such as the American Association of State Highway and Transportation Officials and the U.S Department of Transportation. The department values these relationships to conduct research and exchange best practices throughout the industry.

MnDOT recognizes that the agency is charged with using efficient management and operations strategies to provide Minnesotans with a strong, well connected transportation network. Continued integration of the Task Force recommendations, among other inputs, will assist the department in furthering this mission.

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<sup>4</sup> Alternative Technical Concepts

## **Additional Resources**

Additional information and supporting documentation are available at:

Transportation Strategic Management and Operations Advisory Task Force  
<http://www.dot.state.mn.us/updates/transportationtaskforce.html>

American Society of Civil Engineers Peer Review  
<http://www.dot.state.mn.us/updates/pdf/report-to-mndot.pdf>

2011 Annual Transportation Performance Report  
<http://www.dot.state.mn.us/measures/pdf/2011-Full%20Report%204-3-13%20HIGH%20RES.pdf>

Minnesota Department of Transportation Strategic Plan  
<http://ihub.dot.state.mn.us/vision/>

Minnesota Department of Transportation Organizational Chart  
<http://www.dot.state.mn.us/information/orgchart.html>