

Minnesota Target Setting: Planning Under Fiscal Constraints

Constraint-Based Planning

The [Minnesota 20-year State Highway Investment Plan](#) (MnSHIP) is the vehicle used by the Minnesota Department of Transportation's (MnDOT) for estimating needs, projecting revenue and setting capital investment priorities on the state highway system. Early in the 2014-2033 MnSHIP development process, agency staff estimated 20-year needs to be \$30 billion, \$18 billion of which was needed to achieve preexisting targets in just two areas, pavement and bridge condition. With only \$18 billion in total revenue available and a number of critical priorities beyond the preservation threshold, MnDOT was forced to rethink these targets and the role they play in MnDOT's investment decision-making.

Drawing on recent [long-range](#) and [multimodal](#) plans, MnSHIP demonstrates a shift from policy-based targets to fiscally-constrained targets informed by risk. The MnDOT process of determining investment priorities and performance targets can be described in three phases: scenario development, scenario analysis, and plan development.

Scenario Development

To determine the effect of varying investment levels on system performance, agency staff engaged internal topic-area experts. MnDOT also considered risk-based evaluations of financial and political consequences. For example, underfunding bridge and pavement repairs would jeopardize the

KEY ACCOMPLISHMENTS

- A fiscally-constrained, risk-based, transportation planning process
- Public understanding of tradeoffs between multiple planning approaches
- Programmatic alignment of investment priorities and performance targets

state's bond rating because condition targets are part of the Government Accounting Standards Board (GASB) requirements for the state. After considering a variety of combined investment levels, the agency produced three scenarios:

- Approach A would focus on existing infrastructure system-wide with minimal funding for local priorities and mobility;
- Approach B would emphasize pavement, bridges, and safety with some funding for local priorities and mobility;
- Approach C would provide greater funding for multimodal mobility and local priorities at the expense of existing infrastructure on most state highways.

Scenario Analysis

After the agency produced these three scenarios, they presented them externally and internally. Through public outreach, MnDOT came to better understand stakeholder expectations and the compromises the public was willing to accept under existing constraints. MnDOT also found that when advocates with opposing views were brought together, they more readily accepted necessary tradeoffs.



With nine stakeholder meetings and an online interactive toolkit, MnDOT aimed to demonstrate connections between given investments, resulting system-wide improvements, and more tangible outcomes at district and corridor levels. The public's overwhelmingly positive responses to these efforts reflected their appreciation of, and engagement in, the planning process.

When public outreach had concluded, MnDOT went through a parallel process of internal analysis with agency leadership and key staff. The internal group produced detailed scenario outcomes and thoroughly reviewed the key risks associated with each capital strategy.

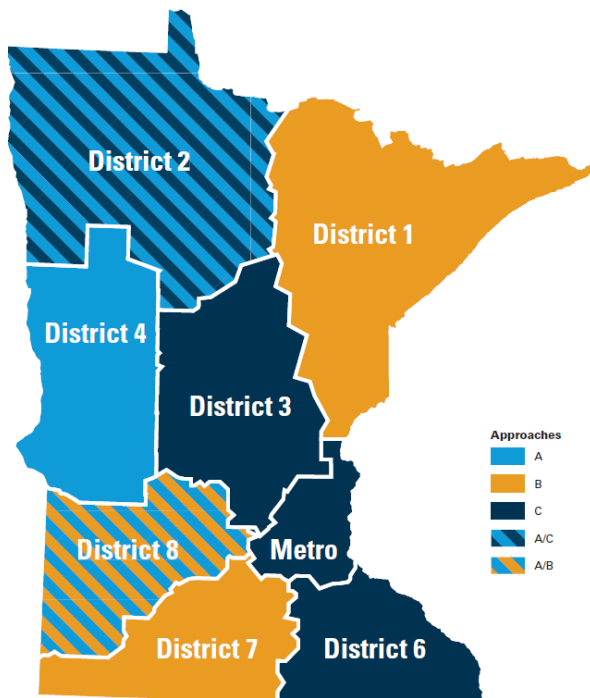


Figure 1 Most frequently selected planning approaches at outreach meetings, by district (Source: MnDOT)

Plan Development

The final stage of investment prioritization and target setting (for areas like pavement condition, roadway fatalities, traffic congestion, etc.) differed from the previous edition of the MnSHIP in three ways that are listed here and described below:

1. It established two 10-year sets of priorities within the 20-year plan;

2. It developed fiscally constrained performance targets; and
3. It created two new programs for guiding the selection of individual projects.

Based on feedback received from the public, MnDOT established investment priorities for years 1-10 that are largely in-line with Approach B. Investment priorities in years 11-20 adhere more closely to Approach A, primarily due to Federal and State requirements.

MnDOT revised its performance targets to reflect outcomes that are associated with MnSHIP's fiscally constrained investment priorities. Crucially, these targets were revised through the same process—and at the same series of meetings—that allocated funds across competing investment areas. Unlike targets that are more aspirational in nature, targets that are achievable (i.e. funded) and in-line with strategic priorities can be used to guide plan implementation and hold decision-makers accountable for results.

To achieve these new targets, MnDOT adopted two new project selection programs: the Statewide Performance Program and the District Risk Management Program. These programs, which are described in Chapter 4 of MnSHIP, align projects with statewide targets while preserving sufficient flexibility to respond to local concerns.

Contacts

Brian McLafferty

Principal Transportation Planner, MnDOT
 brian.mclafferty@state.mn.us
 651-366-3747

Brad Utecht

Principal Transportation Planner, MnDOT
 brad.utecht@state.mn.us
 651-366-3773

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