



Chapter 3

WHAT IS DIRECTING THIS PLAN?

Recent changes in policy that affect this planning effort

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WHAT IS DIRECTING THIS PLAN?

For decades, there have been state and federal requirements for a statewide transportation plan. This includes updating the plan every four years and ensuring a sound and safe transportation system that is aligned with national, state, and local goals—from economic development to environmental protection. MnDOT is responsible for working with the public, local governments, metropolitan planning organizations (MPOs), regional development commissions (RDCs), tribes, and other transportation interests to produce a 20-year plan that sets statewide policy direction and guidance. Over the years, emphasis has shifted from an almost exclusive focus on automobile and truck movement to an approach that considers all transportation modes and connections between them.

This chapter describes how innovation and changing transportation policy direction has shaped the context for this plan.

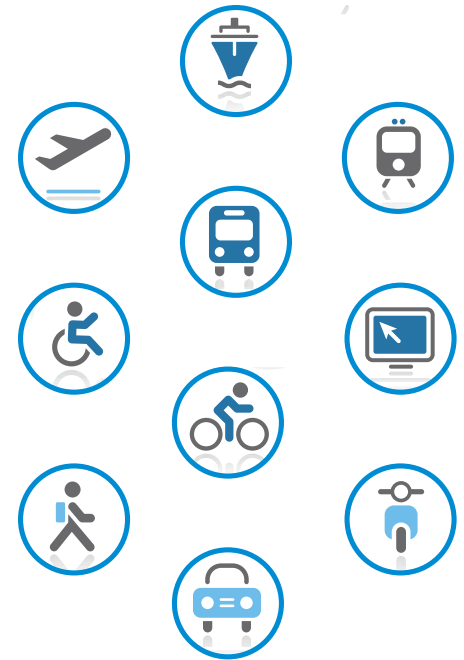
Purpose of Transportation Planning

Transportation shapes our patterns of community development. The entire transportation system has required an enormous amount of financial investment to create. The system also requires a substantial amount of financial reinvestment to maintain and operate. Growth and other changing community needs require system adjustments as years go by.

Transportation planning is the process of bringing together public expectations with public and private providers of transportation facilities and services to identify priorities, choices, and risks and to schedule resources for future investments to meet public expectations. Long-range planning for the transportation system is a prerequisite to be eligible for federal and state transportation funding assistance and important given the magnitude of system costs.

Federal direction for statewide transportation plans now requires a multimodal approach that supports economic vitality in ways that enhance global competitiveness; increases safety and security of the transportation system; improves accessibility and mobility for both people and freight; fosters environmental protection, energy conservation, and coordination between transportation and local plans; improves connections between transportation modes; achieves efficient system operations and management; and emphasizes preservation of the existing transportation system.²⁷

²⁷ Federal planning factors, 23 CFR, 450.206



Minnesota law requires a similar focus on safety, system condition, the importance of transportation for the economy, and compatibility with state environmental goals, as well as specific goals about transit access, reasonable commutes, and healthy bicycling and walking.²⁸

Links to both federal direction and state law as they pertain to this plan are referenced in **Chapter 6, “How do I get more information?”**.

Changes in Approach and Emphasis

PERFORMANCE-BASED AND RISK-BASED PLANNING

MnDOT has used performance measures to inform management and investment decisions since the mid-1990s and made it a formal part of the statewide planning process beginning in 2003. That was the first performance-based statewide transportation plan in the nation. Performance measures illustrate how well the transportation system is functioning in relation to quantifiable targets. Measures cover all modes, system assets, and operations. A few examples include average speed for travelers, crash rates and incidence of fatalities, pavement and bridge condition, and age of transit vehicles.

Heightened emphasis on the growing disparity between available resources and the work needed to maintain sound infrastructure was a major theme for the 2009 plan. This challenge remains. Currently, the investments required to meet existing performance targets exceed projected resources. As a result, MnDOT has begun formally incorporating risk management into the transportation planning process.

Using risk to inform investment and project decisions is not a new concept for MnDOT. However, moving forward, the use of risk management will be more standardized and transparent, and it will be an integral part of the modal investment plans. It will serve as a starting point for discussions with the public and transportation partners regarding investment decisions and required tradeoffs in light of fiscal constraints.

²⁸ State transportation goals, [Minn Stat 174.01](#)

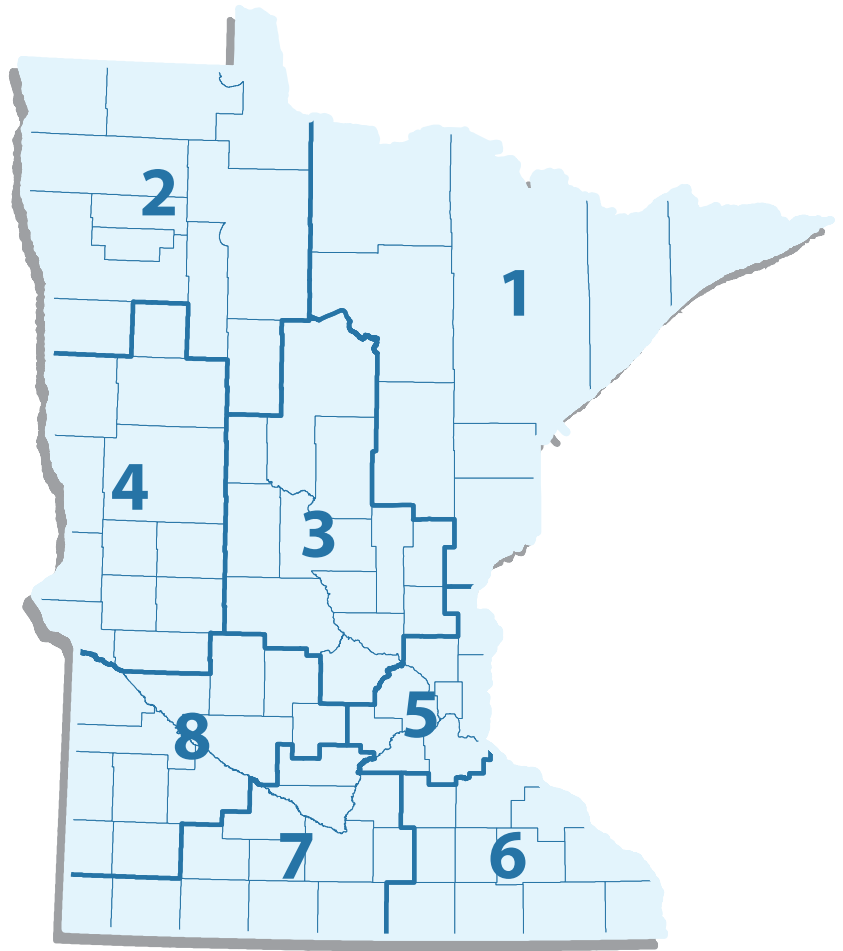
THE SIGNIFICANCE OF FREIGHT

Beginning in the early 1990s, federal transportation planning requirements shifted. One aspect of this shift was an increased emphasis on the role freight plays in our economic well-being. Over the years there has been considerable work to improve our understanding of Minnesota’s freight system and investment needs for ports and waterways, highways, rail, and aviation systems. The 2005 Statewide Freight Plan, freight studies for all regions of the state, and completion of the Minnesota Comprehensive Statewide Freight and Passenger Rail Plan in 2010 have all helped improve the understanding of how goods move across the state and reach local, regional, national, and international destinations. These plans and studies also begin to identify system priorities. Minnesota has major air service connections (for both passengers and freight), rail service that transects the state, highway connections between Minnesota’s urban centers and beyond, and exceptional water-based shipping options via the Mississippi River system and the Great Lakes. Together these freight systems connect all parts of Minnesota as well as to regional, national, and global marketplaces.

CONSULTATION

The 1990s shift in federal direction also heightened insistence that statewide planners consult with many different transportation interests—from metropolitan areas to representatives from rural areas and many others. In part, Minnesota met this obligation through its unique Area Transportation Partnerships (ATPs), which bring local, regional, state, and tribal interests together within each MnDOT district to more collaboratively decide priorities for available federal transportation funding. While there is considerable variation in total membership from one ATP to another, every ATP includes city, county, MPO, and RDC representatives from within the ATP area. American Indian tribes within an ATP have the option to participate on the ATP. For the Twin Cities area, the Transportation Advisory Board (TAB) functions as the metro area ATP. The TAB is the only ATP that includes several citizen representatives. **Figure 3-1** shows the eight ATP districts and identifies the membership of each group. **Figure 3-2** identifies the RDCs and MPOs in Minnesota.

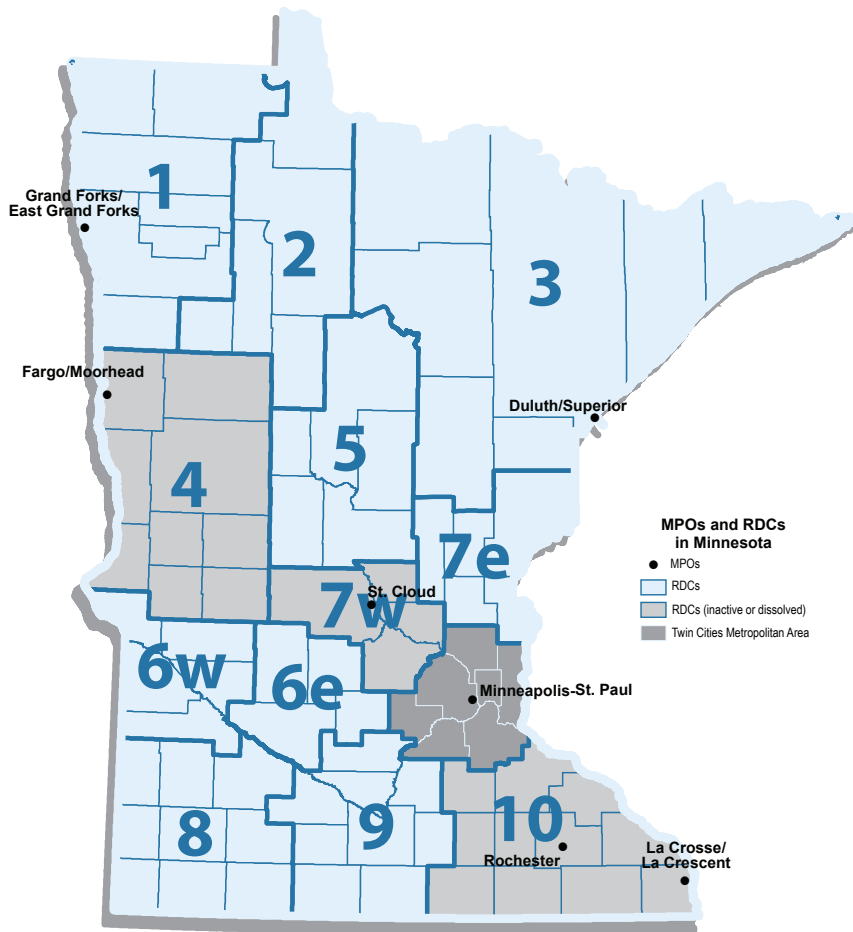
Figure 3-1: ATP Districts and Membership



ATP Membership				
	<i>Total Members</i>	<i>No. of MPOs</i>	<i>No. of RDCs</i>	<i>Elected Officials</i>
ATP 1	54	1	2	17
ATP 2	11	1	2	2
ATP 3	24	1	2	4
ATP 4	18	1	3	4
Metro TAB	33	1	1	17
ATP 6	12	2	0	0
ATP 7	14	0	2	5
ATP 8	15	0	3	6

Source: MnDOT

Figure 3-2: Minnesota RDCs and MPOs



Recognition of the sovereignty of tribes was formalized through a 2002 [Accord](#) between Minnesota’s 11 tribes, MnDOT, and the Federal Highway Administration, which established commitments for regular consultation. Reinforcement of the government-to-government character of relationships between the tribes and state agencies was the focus of state an [executive order](#) in 2005.

SAFETY

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) law called for states to develop performance-based, data-driven plans to improve the safety of the traveling public. Minnesota’s subsequent plans and collaborative interagency strategies for public education, enforcement, improved emergency medical and trauma services, and engineering solutions have been remarkably successful, reducing annual traffic fatalities to levels not seen since World War II even while travel has increased significantly.



CONTEXT SENSITIVE SOLUTIONS

Minnesota has been a leader in developing transportation projects that adapt to the surrounding social, environmental, and economic context. This Context Sensitive Solutions (CSS) approach is progressing from limited case studies to agency-wide application at MnDOT. Through careful planning, CSS can help tailor a project to its setting by addressing alternatives that consider all transportation options through different design choices and flexibility. Flexibility in design choices allows for preserving and enhancing cultural and natural resources while improving or maintaining accessibility, safety, and mobility. CSS is not limited to the scope of a single project but looks beyond to the broader impacts of the system. CSS accomplishments have included widespread training for transportation professionals in addition to award-winning projects completed in partnership with local communities.

Figure 3-3 shows how reconstruction of Trunk Highway 169 through St. Peter, MN was accomplished with a design that echoes historic features.

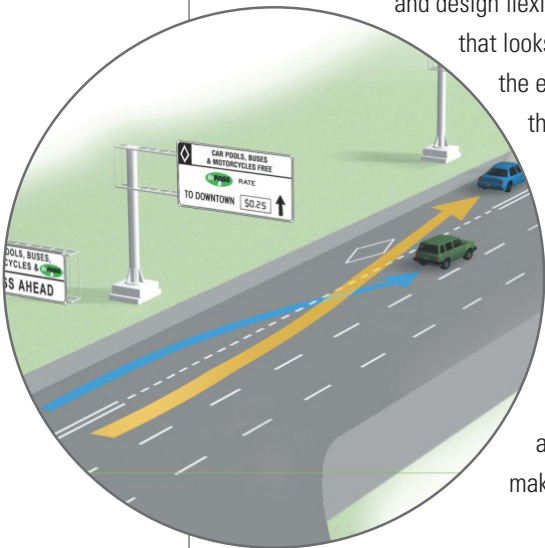
Figure 3-3: Reconstruction of TH 169



Figure 3-4 illustrates how the type and form of transportation system elements vary based on the function of the roadway and level of development.

Figure 3-4: Choosing Transportation System Elements to Fit the Setting





COMPLETE STREETS

Streets and roadways are inherently multimodal, accommodating the travel of people using autos, trucks, buses, emergency vehicles, bicycles as well as those walking. State legislation in 2008 directed MnDOT to lead an evaluation of feasibility for complete streets policy. The collaborative study found the approach feasible, beneficial, and closely aligned with CSS principles, but also emphasized that complete streets should not mean “all modes on all roads.” Subsequent legislation in 2010 defined complete streets as “the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings.” MnDOT was directed to shape and implement a policy. An ongoing partnership with cities, counties, advocates, and others is helping to identify and address obstacles to implementation and specifically helping inform MnDOT’s approaches to implementation. In addition to state legislation, more than 28 Minnesota cities, counties, and planning organizations have developed supporting policies. An up-to-date list of jurisdictions with complete streets policies can be found on the Minnesota Complete Streets Coalition [web page](#).

TECHNOLOGY

Recent advances in technology have had a dramatic impact on transportation system operations. Real-time traffic and travel time data is now available on computers, phones, roadway signage, and more. The combination of technology and design flexibility has spurred a major shift in system planning that looks for ways to optimize system performance within the existing footprint. Examples now include monitoring the system via cameras and embedded sensors and other strategies to ensure quick responses to traffic crashes and other incidents that disrupt reliable travel. Widespread ramp metering, MnPASS priced-lanes on some of the Twin Cities most congested roadways, real-time information about transit arrivals, and the “bus-only” shoulders that give a travel reliability advantage to transit riders are all part of the story. GPS-guided systems help make snow clearance safer and quicker.

These are only a few of the ways that the rapid evolution of technology has helped to make the system more efficient in ways previously unimaginable. Technology has been applied to stretch limited resources and has allowed for improvements in operations that maximize return-on-investment and yield more widespread improvements than expensive traditional approaches.

Technology is also changing whether and when travel occurs. Telework, online education, even over-the-computer medical appointments are all examples of evolving changes to traditional travel patterns.

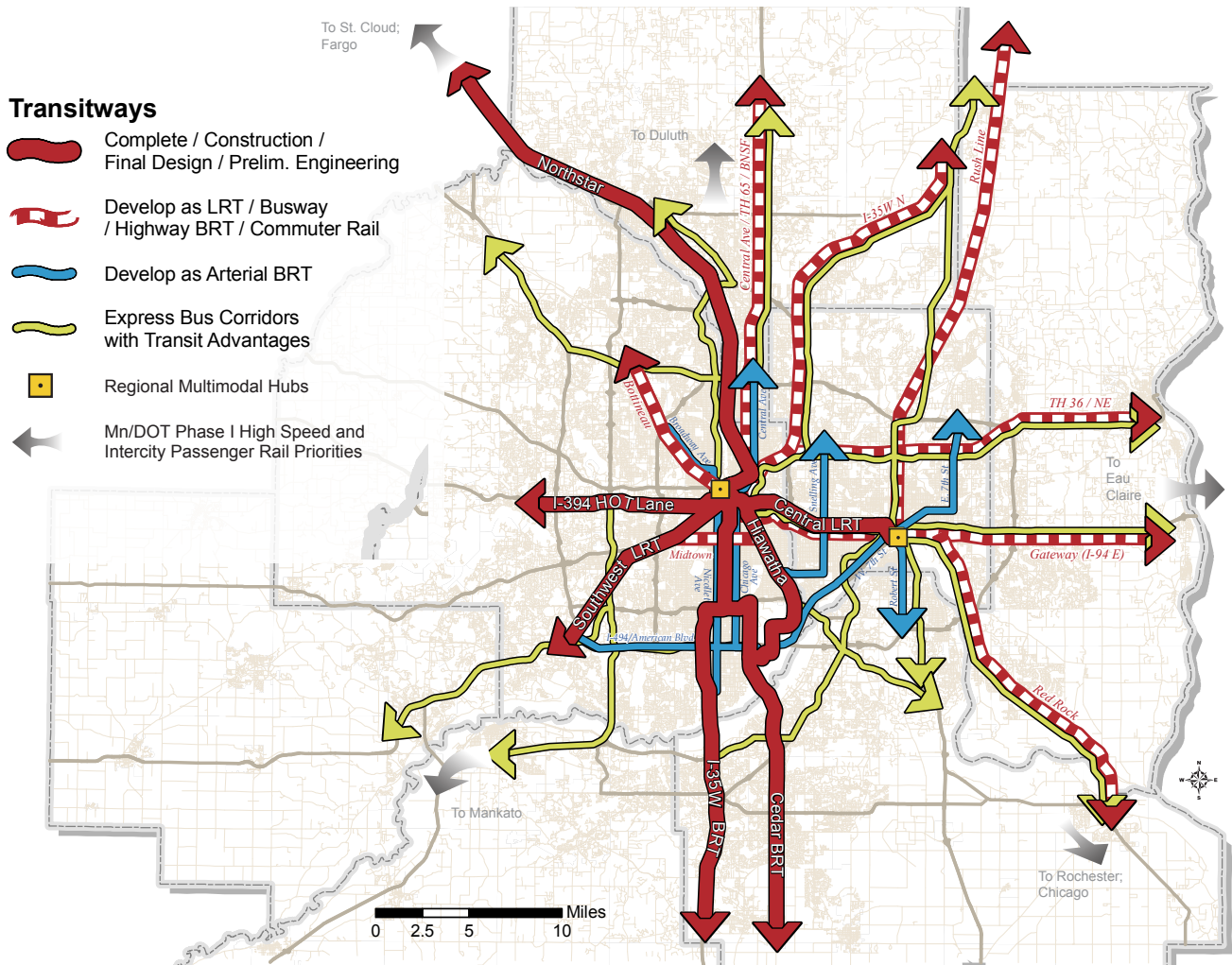
INTEGRATED MULTIMODAL TRANSPORTATION SYSTEM

Heightened understanding of how all elements of the transportation system interact also has improved planning for all modes. For example, the Metropolitan Council's 2030 Transportation Policy Plan (TPP) reported that 40 percent of employees in downtown Minneapolis regularly commute using transit. As many as a third of all travelers on some Twin Cities highways rely on transit during peak travel times. There is increased recognition that provisions for travel by transit, bicycling, walking, as well as driving greatly enhance overall system capacity and efficiency, and the strength of Minnesota's economy. Performance measures are expanding beyond simply measuring congestion-related delay to track such things as accessibility to desired destinations and the reliability and predictability of the overall multimodal transportation system.



The 2030 TPP reflects a regional commitment, with supporting investment from metro counties, to extend substantial transit improvements throughout the region over the next 20 years. **Figure 3-5** shows the planned transitways for the Twin Cities metropolitan area. Additionally, fixed route and other transit systems in Greater Minnesota continue to provide and deliver important services, showing regional commitment in Greater Minnesota cities and counties.

Figure 3-5: 2030 Planned Transitways



Source: Metropolitan Council

Broadening beyond coordination among transportation modes, the federal sustainable communities partnership between the Department of Transportation, Environmental Protection Agency, and Housing and Urban Development is helping to support the Twin Cities Corridors of Opportunity efforts to capitalize on planned transitway developments to create sustainable, healthy, vibrant communities.

Another example of multimodal integration and efficiency comes from the 2010 Comprehensive Statewide Freight and Passenger Rail Plan. Coordination between freight rail system investments along with standardization for passenger rail development showed very considerable savings when managed systematically rather than on a corridor-by-corridor basis.

RESEARCH AND ANALYSIS

MnDOT and its local partners have put a high value on innovation as a strategy for improving both transportation system performance and the efficiency of transportation agencies. Transparency and accountability are cornerstones for MnDOT that call for input from the public and transportation partners. The views of users of the transportation system about performance and future needs have been regularly tapped through market research and policy plan development. In addition to an annual outreach survey, thousands have been engaged over the past two years in helping to identify what Minnesotans feel contributes to their quality of life and how transportation helps or hinders.

Substantial research also is supported every year that helps to identify better, more durable, or efficient materials and methods for improving the safety and efficiency of the transportation system. Analysis of travel behavior and priorities as well as potential future system management and funding innovations all add insights that help shape future statewide plans. For example, MnDOT's [Study of Long-Range Solutions for Transportation Funding](#) considers implications of increasing vehicle efficiency, fuel type (including electric vehicles), changing travel patterns, and fuel price volatility on gas tax-based revenue levels and other implications.

Connecting to the Minnesota GO Vision

Even in the few years since the 2009 plan was developed, there have been dozens of plans and studies completed that improve our understanding of Minnesota’s transportation system and options to manage it over the coming years. **Chapter 6 “How do I get more information?”** includes links to these resources and additional information.

A key difference for this 2012 Statewide Multimodal Transportation Plan update is that it has been shaped substantially by the Minnesota GO Vision for transportation in Minnesota—a statement of the long-range (50-year) Vision and Guiding Principles for our transportation system (see **Chapter 1 “Where are we going?”**). Extensive public engagement and stakeholder input shaped the Minnesota GO Vision which was adopted in November 2011. **Chapter 4 “How will we guide ourselves moving forward?”** synthesizes this rich background to shape a framework of objectives and strategies that will help MnDOT and other transportation partners implement projects, programs, and services to better align with the Minnesota GO Vision.