



Chapter 4

HOW WILL WE GUIDE OURSELVES MOVING FORWARD?

Objectives and related strategies that will help achieve the Minnesota GO Vision

SEPTEMBER 2012

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HOW WILL WE GUIDE OURSELVES MOVING FORWARD?

In light of the challenges and opportunities that will influence transportation over the next 20 years, this plan focuses on six objectives and subsequent strategies that create a foundation for making progress toward the Minnesota GO Vision. The Minnesota GO Vision and Guiding Principles provide the basis for everything in this plan. The objectives and strategies were crafted having considered the key elements of the Vision—Minnesota's quality of life, environmental health, and economic competitiveness. Additionally, federal and state requirements were also an integral part of the objective development. Furthermore, in identifying critical topics and developing the specific strategies for this plan, existing policies from a number of MnDOT plans as well as plans from other transportation partners were reviewed and checked against the Vision and Guiding Principles.

It is important to ensure that progress will be made over the coming years to improve the transportation system and move toward the desired outcomes of the Vision. Widespread use of the Vision and Guiding Principles is one way to move toward achieving the desired future for Minnesota's transportation system.

All transportation partners are engaged in some activities that work toward realizing the Vision on a daily basis. The goal of this plan is not to reiterate these efforts but to focus on key areas where additional action is needed and to identify pivotal steps for the upcoming years. As such, the objectives and strategies do not capture all that is needed to make positive impacts. Every mode may not be addressed equally, however, the next tier of MnDOT's Minnesota GO planning effort, the modal investment plans, will apply the Vision and Guiding Principles and address how these objectives and strategies apply directly to each mode.

Linking the adopted Vision to what is being said in this plan as well as the subsequent plans is important. **Figure 4-1** provides an example of how a desired outcome of the Vision is carried through the objectives and strategies of this plan. While this serves as an overall example, each objective in this chapter includes an example that illustrates a strong connection to a Minnesota GO Vision statement and Guiding Principle.

Figure 4-1: Connecting the Vision

Minnesota GO Vision

Desired Outcome: The system connects Minnesota's primary assets—the people, natural resources and businesses within the state—to each other and to markets and resources outside the state and country.



Minnesota GO Vision

Guiding Principles: Ensure regional connections—Key regional centers need to be connected to each other through multiple modes of transportation.



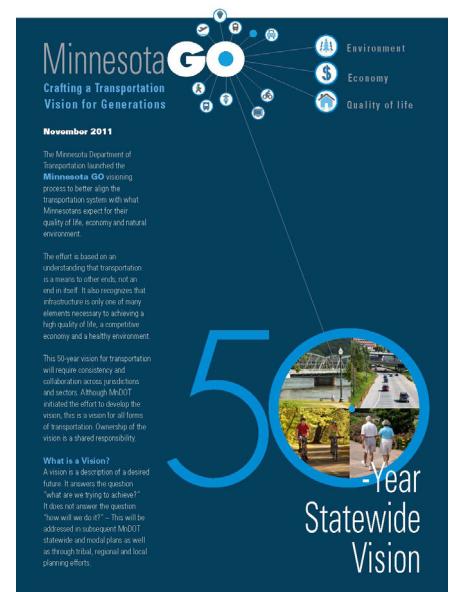
Statewide Multimodal Transportation Plan

Objective: Critical Connections—Identify global, national, statewide, regional, and local transportation connections essential for Minnesotans' prosperity and quality of life; maintain and improve those connections by maximizing return-on-investment, given constrained resources; and consider new connections.



Statewide Multimodal Transportation Plan

Strategy: Work together to define priority networks for all modes based on connectivity and accessibility.



Partners

Public and private interests and all levels of government are involved in transportation planning in order to provide a system that meets people's transportation needs. Some are responsible for the delivery of the system, either a specific mode or at a specific level. Others are responsible for providing guiding input, either technical or advocating for a specific interest. The key players that this plan relies on to develop, manage, and operate Minnesota's multimodal transportation system are outlined below. In addition to the partners identified below, state and federal legislators and leaders and the general public are also active participants in the state's transportation system.

- **Transportation partners**—Transportation Partners include all parties responsible for the delivery of the state's transportation system. This includes local, regional, state, tribal, federal, private sector, and other partners and includes all modes of transportation.
- **Local partners**—Partners primarily serving local areas include agencies and organizations responsible for transportation systems and decisions at the local level. Primarily this includes cities, counties, townships, public transit providers, ports, and airports.
- **Regional partners**—Regional partners include both MPOs and RDCs. Regional partners are primarily involved in the planning and programming of transportation projects. However, there are different levels of involvement, responsibilities, and requirements for the different regional partners.
- **State partners**—State partners include all state agencies and organizations with a statewide mission in Minnesota that have transportation interests or impacts. Key state partners include MnDOT, the Minnesota Department of Employment and Economic Development (DEED), the Minnesota Department of Health (MDH), the Minnesota Department of Agriculture (MDA), the Minnesota Chamber of Commerce, the Minnesota Housing Finance Agency (MHFA), the Minnesota Department of Public Safety (DPS), the Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Natural Resources (DNR), and Explore Minnesota Tourism.

- **Tribal partners**—Tribal partners include the 11 sovereign nations of American Indian peoples with jurisdiction over lands and resources within Minnesota: Bois Forte Band of Chippewa, Fond du Lac Band of Lake Superior, Grand Portage Band of Lake Superior, Leech Lake Band of Ojibwe, Lower Sioux Community, Mille Lacs Band of Ojibwe, Prairie Island Indian Community, Red Lake Nation, Shakopee Mdewakanton Sioux Community, Upper Sioux Community, and White Earth Nation.
- **Federal partners**—Federal partners include federal agencies that provide a necessary source of federal funding and have policies that impact the delivery of the state's transportation system. Primarily this includes direct policies and regulations from the U.S. Department of Transportation (USDOT), including the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Federal Aviation Administration (FAA), Federal Railroad Administration (FRA) and others. However, other agencies such as the Environmental Protection Agency, Housing and Urban Development, Department of Commerce/Economic Development Administration, U.S. Corps of Engineers, and Fish and Wildlife Service can indirectly impact transportation decisions.
- **Private sector partners**—Private sector partners include transportation advocates, non-profits, developers, and private industry. Developers play an important investment role in bringing new transportation infrastructure to Minnesota communities. Private industry partners that own and operate parts of the overall transportation system consist primarily of railroads and other shippers and carriers.

Guiding Principles

The development, maintenance, and operation of a transportation system that enhances quality of life and supports Minnesota's prosperity while minimizing impacts to the environment depend on coordination between all units of government and between public and private sectors—not only for transportation facilities and services, but for the land uses and development practices that shape our communities. The Minnesota GO Guiding Principles were adopted to serve as a compass or touchstone for all transportation partners to help guide progress toward achieving the Vision for a multimodal transportation system that maximizes the health of people, the environment, and the economy. The Guiding Principles are identified on the following page.

GUIDING PRINCIPLES

The following principles will guide future policy and investment decisions for all forms of transportation throughout the state. These are listed in no particular order. The principles are intended to be used collectively.

Leverage public investments to achieve multiple purposes:

The transportation system should support other public purposes, such as environmental stewardship, economic competitiveness, public health and energy independence.

Ensure accessibility: The transportation system must be accessible and safe for users of all abilities and incomes. The system must provide access to key resources and amenities throughout communities.

Build to a sustainable scale: Consider and minimize long-term obligations—don't overbuild. The scale of the system should reflect and respect the surrounding physical and social context of the facility. The transportation system should affordably contribute to the overall quality of life and prosperity of the state.

Ensure regional connections: Key regional centers need to be connected to each other through multiple modes of transportation.

Integrate safety: Systematically and holistically improve safety for all forms of transportation. Be proactive, innovative and strategic in creating safe options.

Emphasize reliable and predictable options: The reliability of the system and predictability of travel time are frequently as important or more important than speed. Prioritize multiple multimodal options over reliance on a single option.

Strategically fix the system: Some parts of the system may need to be reduced while other parts are enhanced or expanded to meet changing demand. Strategically maintain and upgrade critical existing infrastructure.

Use partnerships: Coordinate across sectors and jurisdictions to make transportation projects and services more efficient.

While all eight principles may not apply in every instance, taken together, the principles are a tool for transportation planning, evaluating alternatives and trade-offs, and making decisions about investment priorities. The following bullets are a few potential ways the Guiding Principles may be used:

- Transportation partners communicate and encourage the use of the Minnesota GO Vision and Guiding Principles.
- Local and regional partners consider and incorporate the Guiding Principles into their transportation planning activities.
- State and federal partners consider how their policies and actions can support the Guiding Principles.
- MnDOT integrates the Guiding Principles into modal investment plans and programming decisions.

Objectives and Strategies

The objectives and subsequent strategies on the following pages are listed in no particular order. Their order is not meant to indicate priority; all are critical focus areas for the upcoming years. Under each objective heading is the objective statement—a few key phrases that describe the goal that transportation partners are working toward. Following the objective statement is supporting text that provides the context for each objective—background information and what each objective is about. The subsequent bulleted list is the strategies identified for each objective. The bold part of each bullet is the strategy itself, followed by text to better clarify each strategy through description or examples.

A connection to Vision/Guiding Principles

IS FLEXIBLE AND NIMBLE ENOUGH TO ADAPT TO CHANGES IN SOCIETY, TECHNOLOGY, THE ENVIRONMENT AND THE ECONOMY

The Vision identifies a future system that is able to adapt to changes in society, technology, the environment, and the economy. Transparency and communication are critical to understanding trends and changes, making it possible to adapt the system to meet shifting needs.



USE PARTNERSHIPS

The Guiding Principles call for partnerships to be used in making future policy and investment decisions, to coordinate across sectors and jurisdictions, and to be more efficient. The accountability, transparency, and communication objective emphasizes the importance of partnership and collaboration. The strategies identify a number of ways in which all transportation partners can work together and with the public to create a better transportation system for Minnesota. Some ways in which the strategies respond are educating stakeholders and improving coordination and communication.



1. ACCOUNTABILITY, TRANSPARENCY, AND COMMUNICATION

Make transportation system decisions through processes that are open and supported by data and analysis; provide for and support coordination, collaboration, and innovation; and ensure efficient and effective use of resources.

What This Is About

The importance of accountability, transparency, and communication to the transportation decision-making process is recognized and supported in federal legislation and state regulations. Current legislation calls out specific requirements for state departments of transportation and MPOs related to public involvement and collaboration.

While legislation related to public participation is important, true accountability, transparency, and communication go beyond just meeting requirements. They are about building public trust, one of MnDOT's priorities. Since the majority of transportation funding comes from the public through fees and taxes, transportation decision-makers need to be accountable for the system they provide, ensuring that public resources are used efficiently and effectively. This means achieving the most "bang for the buck" on transportation investments, including completing projects on time and within budget as well as performing timely and efficient operations and maintenance. Additionally, it is the responsibility of transportation providers to continually explore technology, innovation, and the driving forces behind the system as important tools for improving transportation planning processes and increasing the efficiency of the transportation system.

Transportation decision-makers are stewards of the transportation system and have the responsibility to be open about how and why decisions are made. Communication is an essential component of this transparency. Good communication is not just making information available, but also making it easy to find and understand. Education is the foundation for understanding. This includes telling the big-picture story of the transportation system and the importance of investing in it.

Strategies

- **Work with users of the system to better understand what is important to meet their needs today and what will matter tomorrow.** Consistent with the guidance of [Hear Every Voice](#), transportation partners should evaluate and implement technologies and other improved methods to engage transportation users. In particular, it is important to identify more effective means to engage non-English speaking and other traditionally underserved populations. For example, Metro Transit currently conducts a biannual, on-board transit rider survey to capture riders' opinions and perceptions about effectiveness and importance of transit service and communications to inform future decision making. MnDOT has relied on market research as a way to tap into citizen's priorities and perspectives. This work has recently explored how Minnesotans define quality of life (QOL) and how transportation is a benefit or hinderance. Additionally, the La Crosse Area Planning Committee, through their Coulee Vision 2050 process, is using engagement tools such as surveys and focus groups to gather input from area residents related to the future of transportation and land use.
- **Align all plans and performance measures with the Minnesota GO Vision and Guiding Principles, Statewide Multimodal Transportation Plan objectives and strategies, and how Minnesotans define quality of life.** MnDOT is a leader in the use of performance measures to evaluate services and guide plans, and will continue to use them to track progress toward meeting state priorities. The Minnesota GO Vision and Guiding Principles will require making adjustments to how MnDOT tracks and measures condition and performance of the transportation system. MnDOT will also track its performance by annually reporting progress toward meeting each of the identified Statewide Multimodal Transportation Plan objectives and strategies.



Who will act?

TRANSPORTATION
PARTNERS



Who will act?

MNDOT

Who will act?
TRANSPORTATION
PARTNERS

Who will act?
TRANSPORTATION
PARTNERS

- **Educate stakeholders on systemwide and project-specific transportation issues.** Important topics include system- and project-level funding, the benefits and limitations of transportation investments, involvement opportunities, the status of ongoing projects, as well as project selection and overall decision-making, including trade-offs. Providing open, honest, accessible, and timely information will allow the following common questions to be answered: (1) How are projects identified and by whom? (2) Where does the money come from and how is it spent? (3) What are the benefits of transportation investments? (4) What are the goals for our transportation system and progress toward these goals? (5) What is the timeline for a specific project? (6) How and when do stakeholders get involved?
- **Improve early communication and coordination on projects to minimize resource use and maximize benefits.** Coordinating early in the planning process may present opportunities to combine resources and leverage public and private investments. This allows transportation projects to address multiple needs, including non-transportation issues and goals related to health, housing, the environment, and economy. For example, MnDOT currently coordinates with MDH through the [Statewide Health Improvement Program](#) on collaborative projects that increase biking and walking.

2. TRAVELER SAFETY

Safeguard travelers, transportation facilities, and services; apply proven strategies to reduce fatalities and serious injuries for all travel modes.

What This Is About

Safety is a top priority for Minnesota. MnDOT is partnering with the Minnesota Department of Public Safety (DPS) and Minnesota Department of Health (MDH) on the [Toward Zero Deaths](#) (TZD) program. This program is the state's cornerstone traffic safety initiative with the goal to raise awareness of traffic safety issues and develop tools to reduce the number of deaths and injuries resulting from traffic crashes in Minnesota.

Traveler safety applies to all users on all types of transportation and involves an integrated approach that includes the "4Es" of safety—education, enforcement, engineering, and emergency medical and trauma services. MnDOT, in coordination with DPS and MDH, has also developed a [Strategic Highway Safety Plan](#) (SHSP) that brings together all safety plans and programs from agencies and advocacy groups working to improve transportation safety.

An example of a contributing plan to the SHSP is the annual [Commercial Vehicle Safety Plan](#) (CVSP) where MnDOT and DPS coordinate to further enhance safety and reduce the number of commercial vehicle crashes and fatalities. This plan outlines the state's commercial motor vehicle safety objectives, strategies, activities, and performance measures.

A connection to Vision/Guiding Principles

PROVIDES SAFE, CONVENIENT, EFFICIENT AND EFFECTIVE MOVEMENT OF PEOPLE AND GOODS

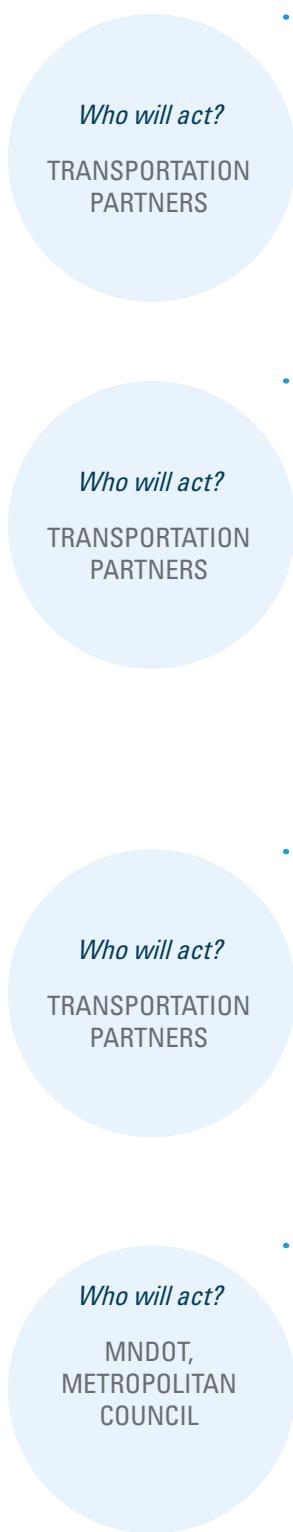


The Vision identifies a future system that provides safe travel of people and goods. The traveler safety strategies identify the key ways in which safe travel will be ensured and improved in the upcoming years.

INTEGRATE SAFETY

The Guiding Principles call for future policy and investment decisions to systematically and holistically improve safety for all forms of transportation and to be proactive, innovative and strategic in creating safe options. Some ways in which the traveler safety objective and strategies respond include increasing involvement in Toward Zero Deaths (TZD), which provides a holistic, systematic and collaborative approach to safety; proactively sharing educational materials about safety related concerns; and supporting the use of technology and innovation to improve safety.





Strategies

- Increase participation of all road authorities in the collaborative safety initiative TZD and explore new opportunities to work together to improve safety for all modes.**

TZD is a highly-successful, collaborative program aimed at eliminating fatal and life-changing injury crashes in Minnesota by strategically addressing education, enforcement, engineering, and emergency response issues. As the umbrella traffic safety program for Minnesota, all modes can adopt this integrated approach and leverage the statewide program structure to improve safety.
- Develop and share critical safety information and support educational initiatives.**

For example, the MDH supports educational programs related to bicycle safety for youth as a part of a broader goal of encouraging life-long active transportation, and improving safety for active transportation is an important component of MDH's active living goals. DPS develops and distributes child passenger safety materials to child care centers, preschools, and teachers to help educate on keeping kids safe in vehicles. MnDOT provides educational information on rail crossings, work zone safety, distracted driving, and Share the Road, which is a statewide campaign targeted at bicyclists, pedestrians, and motorists. Collaboration and coordination of these educational efforts is critical.
- Collaborate with law enforcement to promote compliance with traffic laws, affect driver behavior, and reduce unsafe driving practices for all modes.**

For example, cities, counties, MnDOT, and DPS work together on efforts to prevent impaired driving. Minnesota's enhanced driving while intoxicated law enforcement efforts have been a factor in the continued reduction of alcohol-related crash deaths. Compliance of motorists, commercial vehicles, bicyclists, and pedestrians with traffic laws plays an important role in improving safety for all modes.
- Work with local and regional partners that are public transit providers to ensure enforcement of safety and security requirements.**

For example, MnDOT provides continuing safety education and training for Greater Minnesota transit operators on topics such as passenger assistance, defensive driving, and driver and passenger safety. This also includes the development of vehicle and facility safety and security plans, implementation of drug and alcohol testing programs, and major incident reporting. In the Twin Cities metropolitan area the Metropolitan Council is the primary entity with responsibility for transit passenger assistance and safety as well as transit operator training and security.

- **Ensure that transportation facilities are planned, engineered, operated, and maintained with consideration for the safety of all users.** Transportation should be designed for the safety of all users regardless of socioeconomic status, individual ability, or choice of travel mode. For example, many local and regional partners have adopted Complete Streets ordinances or policies that change their approach to how roads are designed to enable safe access for drivers, transit users, pedestrians, and bicyclists. Additionally, MnDOT and other transportation partners continually work to ensure the compliance of the transportation system with Americans with Disabilities Act (ADA) standards.
- **Implement strategic and sustainable engineering solutions to improve traveler safety.** This primarily includes systematically implementing improvements such as cable median barriers, rumble strips, intersection lighting, and turn lanes. Other examples include performing proper maintenance and improving access management. Technology can also play a critical role in improving traveler safety. Technology examples include intelligent transportation system applications such as intersection conflict warning systems, bus driver guidance assist systems, smart phone applications for the visually impaired, emergency vehicle preemption, as well as electronic air navigation aids and positive train control technology, which is train location and collision avoidance technology for freight and passenger rail service.
- **Work with emergency medical and trauma services to reduce response time and increase survivability.** Implementation and support of a statewide trauma system is critical. Law enforcement officers are often first responders to the scene of a crash and it is important that their first responder training be current.

Who will act?

TRANSPORTATION PARTNERS

Who will act?

MNDOT, LOCAL, REGIONAL, AND TRIBAL PARTNERS

Who will act?

TRANSPORTATION PARTNERS

A connection to Vision/Guiding Principles

RECOGNIZES AND RESPECTS THE IMPORTANCE, SIGNIFICANCE AND CONTEXT OF PLACE—NOT JUST AS DESTINATIONS, BUT ALSO WHERE PEOPLE LIVE, WORK, LEARN, PLAY AND ACCESS SERVICES



The Vision identifies a future system that recognizes the importance of place—where people live, work, learn, play and access services. The transportation in context objective and strategies will help ensure that transportation decisions lead to projects that are sustainable and consider their surroundings.

LEVERAGE PUBLIC INVESTMENTS TO ACHIEVE MULTIPLE PURPOSES



The Guiding Principles call for future policy and investment decisions that leverage public money to achieve multiple purposes, that in addition to meeting transportation needs also support other public purposes such as environmental stewardship, economic competitiveness, public health, and energy independence. Some ways in which the transportation in context objective and strategies respond include integrating land use and transportation to leverage both public and private money; planning, designing, developing and maintaining projects consistent with CSS; and minimizing adverse impacts to Minnesota's natural and cultural resources.

3. TRANSPORTATION IN CONTEXT

Make fiscally responsible decisions that respect and complement the natural, cultural, and social context; and integrate land uses and transportation systems to leverage public and private investments.

What This Is About

Transportation projects do not occur in a vacuum; they are surrounded by context. Context refers to the things people care about—the people, places, and circumstances of their lives. Transportation and context are intrinsically linked, and together they shape the communities where life takes place. It is important that transportation decisions are made with consideration of contextual elements such as land use, energy consumption, the environment, economy, public health, and the needs of traditionally underserved populations. Transportation decisions impact the surrounding context; they can shape the ways in which people live, work, play, and access services. More importantly, the surrounding context should impact transportation decisions. Not all places are the same; there is no one size fits all solution. Considering context when making transportation decisions leads to projects that are safer, sustainable in scale, and tailored to the specific places in which they exist—projects that respect and complement the economy, environment, and quality of life of a place.

MnDOT has embraced the importance of context through its [Context Sensitive Solutions](#) (CSS) initiative. CSS has proven itself as a principle-based and benefit-driven approach that can better serve and balance the needs of all transportation stakeholders and users more successfully and cost-effectively within existing constraints. MnDOT has identified integration of CSS principles and best practices as one of the highest priorities for the department. Specific to transportation project development and maintenance, CSS is defined as an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources while improving or preserving transportation safety, mobility, and infrastructure conditions. CSS requires ongoing and broad-based involvement of interdisciplinary perspectives and stakeholders to foster the continuing communication and collaboration that build and achieve consensus in decision-making. Other familiar programs and initiatives, such as sustainability, Safe Routes to School, Complete Streets, and Americans with Disabilities Act (ADA) requirements and opportunities, can be implemented more effectively with a CSS approach.

Strategies

- **Support the development of land use plans or policies that minimize long-term costs by taking advantage of investments made in existing and planned infrastructure.** Transportation and land use are fundamentally linked and must be supportive of one another. Community land use plans and complementary zoning are important tools to enhance the efficiency and affordability of the transportation system. Local land use decisions can have great impacts on transportation that affect the economy, environment, energy use, public health, and quality of life not just at the local level but regionally and statewide. The parties responsible for land use and transportation decisions should recognize the connection between land use and transportation and work together to coordinate plans, projects, and services. Where appropriate, Transit-Oriented Development (TOD) is a tool for accommodating and maximizing walking, bicycling and transit through higher density residential and commercial development. TOD often incorporates features to encourage transit ridership.
- **Work together to improve accessibility and safety for everyone traveling on, along, and across roads.** Examples range from improved pedestrian crossings, consideration of truck movements in intersection design, and accommodating transit stops. Additionally, the Complete Streets initiative seeks to develop a balanced transportation system that integrates all modes, safely includes transportation users regardless of socioeconomic status or individual ability, and enhances quality of life. MnDOT is committed to the principles of Complete Streets and is working with an external advisory group to articulate a Complete Streets vision and policy.
- **Plan, design, develop, and maintain projects in a way that is consistent with the principles of CSS.** The principles of CSS lead to projects that consider alternatives; address environmental, economic, and social needs; involve a broad range of stakeholders; and create lasting value for communities. MnDOT will also increase the content and availability of CSS resources and training that serve internal and external stakeholders who seek to better understand, apply, and advance CSS implementation and best practices.

Who will act?

LOCAL, REGIONAL, AND TRIBAL PARTNERS

Who will act?

MNDOT,
LOCAL, AND
TRIBAL PARTNERS

Who will act?

MNDOT

Who will act?
TRANSPORTATION
PARTNERS

Who will act?
TRANSPORTATION
PARTNERS

- **Work together to support and implement both system-wide and project-specific approaches to avoid, minimize and mitigate adverse impacts to Minnesota's natural and cultural resources.** It is important to address these concerns at the project level while still considering broader impacts such as air pollution and greenhouse gas emissions, water quality, and noise impacts from transportation system operation and use. For example, MnDOT currently implements a system-wide wetland banking program to address project-specific wetland mitigation.
- **Support statewide economic vitality and create and maintain jobs through transportation infrastructure investments.** MnDOT will work with public and private partners, such as DEED, to define economic development objectives and leverage local and private resources through the use of Transportation Economic Development funding. All transportation stakeholders should continue to be actively involved to ensure that the projects selected for funding achieve net economic gains for the state.

4. CRITICAL CONNECTIONS

Identify global, national, statewide, regional, and local transportation connections essential for Minnesotans' prosperity and quality of life; maintain and improve these connections by maximizing return-on-investment, given constrained resources; and consider new connections.

What This Is About

Each person identifies different connections as critical based on where they live and their individual needs. In urban areas, critical connections may mean providing safe and reliable alternatives to driving during peak travel periods. In rural areas, it may mean roadway connections to regional centers for both people and goods. Critical connections also vary by type of transportation. For example, the key connections needed for driving may be different than those for transit, bicycling or walking. There also are different scales of connections. There are connections that move people and goods across the state, connections that move people and goods throughout a region, and connections that move people and goods within a community. All of these connections are important to the overall economic prosperity and quality of life in Minnesota.

While many types of connections are important, given finite resources, it is necessary to set priorities to provide complete, efficient, and affordable movement of both people and goods. Though all connections are important to someone at some time, there are critical connections that serve as the backbone for movement across and within Minnesota. Identifying, maintaining, and enhancing these priority connections are shared responsibilities. As a state agency, MnDOT, in cooperation with other transportation stakeholders, strives to ensure connections that move people and goods across the state and within regions. This includes, but is not limited to, roadways, waterways, intercity and regional bus, airports, and rail. MPOs, as regional units of government, strive to ensure connections that move people and goods throughout their region. This means developing regional transportation plans and programming projects of regional significance. Local units of government, such as cities and counties, strive to ensure connections that move people and goods within their community. This could mean an integrated network of local roads, safe options to bicycle and walk, or last-mile freight connections. All connections regardless of level, location, or transportation type need to be developed in coordination with one another to ensure a truly connected Minnesota.

A connection to Vision/Guiding Principles

CONNECTS MINNESOTA'S PRIMARY ASSETS—THE PEOPLE, NATURAL RESOURCES AND BUSINESSES WITHIN THE STATE—TO EACH OTHER AND TO MARKETS AND RESOURCES OUTSIDE THE STATE AND COUNTRY

The Vision identifies a future system that connects the people, natural resources, and businesses of Minnesota not only to each other but also to outside the state and country as well. The critical connections objective and strategies will help ensure the key connections are identified, maintained, and enhanced where appropriate.



ENSURE REGIONAL CONNECTIONS



The Guiding Principles call for future policy and investment decisions that ensure key regional centers are connected to each other through multiple modes of transportation. Some ways in which the critical connections objective and strategies respond include developing intercity passenger rail, improving intercity bus and transit services, and improving freight operations and connections.



Strategies

- **Apply multimodal solutions that ensure a high return-on-investment, given constrained resources, and that complement the unique social, natural and economic features of Minnesota.** This approach will be applied throughout the state and across modes. In Greater Minnesota examples may include coordinating signal timing along a corridor, reducing risk at intersections, and extending transit service both in terms of area and hours of service. In the Twin Cities, the Metropolitan Council has identified what it calls “lower cost, high benefit” projects as primary focus areas for addressing congestion and improving safety.
- **Support and develop multimodal connections that are accessible for all Minnesotans regardless of socioeconomic status or individual ability.** The connections should enhance quality of life by providing links to key resources and amenities within communities and throughout the state. For example, local and regional partners are working to provide active, safe transportation options for bicycling and walking to school through the Safe Routes to School program. The St. Cloud Area Planning Organization included Safe Routes to School planning for a number of schools as a part of the development of a City-Wide Transportation Plan for the City of Sauk Rapids.
- **Work together to define priority networks for all modes based on connectivity and accessibility.** This means identifying the connections essential for local, regional, statewide, national, or global travel to ensure that Minnesotans can reach the destinations important to them. This may include both existing and proposed facilities. Priority networks should be defined at the local, regional, statewide, national, and global levels. MnDOT will focus on priorities for travel across the state and within regions, MPOs will focus on travel throughout their metropolitan area, and local units of government will focus on travel within their community. Coordination with all transportation partners is necessary to ensure connectivity between the priority networks at all levels and across all modes. For example, the Metropolitan Council, in its 2030 Transportation Policy Plan, has identified the metropolitan highway network and a system of transitways as priority areas for investment within the Twin Cities metropolitan area. MnDOT has identified the interregional corridor system and supplemental freight routes as the priority roadway network for connectivity and accessibility in Greater Minnesota.

- **Collaborate to provide greater accessibility and more efficient movement of goods and people throughout the Twin Cities metropolitan area.** As the major population and economic center in the state, the efficient movement of goods and people into and throughout the region are critical to the overall economy and quality of life in Minnesota. Multimodal options including transit, bicycling, and walking are important contributors to the efficient movement of people throughout the region. A better defined and connected freight network—air, rail, truck, ports, and waterways—will provide greater accessibility, more efficient movement of goods, and contribute to the overall economy and quality of life of the region and state. The Metropolitan Council has identified active traffic management, the development of a managed lane system, and the expansion of the metropolitan area transit system as primary focus areas for reducing congestion and improving safety.
- **Work together to improve the connections between transit services to provide greater transportation options for travel within and between cities.** Primary partners include MPOs, RDCs, local human service agencies, transit providers, and other local agencies. For example, the RDCs and MPOs developed Human Service Public Transit Local Coordination Plans to identify strategies and potential projects to coordinate transit services for older adults, persons with disabilities, and low-income populations.
- **Work to develop intercity passenger rail and improve intercity bus service for better connections between cities and regions in Minnesota and across the nation.** For example, MnDOT and partners will work to advance intercity passenger rail projects incrementally and simultaneously as demand warrants and funding is identified.
- **Work together to ensure the people and businesses of Minnesota have convenient access to the air transportation network.** Air transportation provides a critical connection to markets and resources outside the state and country. Providing viable connections may include maintaining or enhancing airline services in the Twin Cities and in Greater Minnesota where appropriate. Air transportation connections are essential to enhancing Minnesota's role in a globally competitive economy.

Who will act?

MNDOT,
THE METROPOLITAN
COUNCIL AND LOCAL
AND PRIVATE-SECTOR
PARTNERS

Who will act?

MNDOT, LOCAL,
REGIONAL, AND
TRIBAL PARTNERS

Who will act?

MNDOT, LOCAL,
REGIONAL, TRIBAL,
FEDERAL, AND
PRIVATE SECTOR
PARTNERS

Who will act?

MNDOT, LOCAL, REGIONAL,
FEDERAL AND PRIVATE SECTOR
PARTNERS AND NEIGHBORING
STATES AND PROVINCES

Who will act?

MNDOT, LOCAL, REGIONAL, AND FEDERAL PARTNERS, NEIGHBORING STATES AND PROVINCES, AND PRIVATE SHIPPERS AND CARRIERS

- **Work together to improve freight operations and connections for better access to the transportation system.** Important freight connections include last-mile links for manufacturers and distribution centers; farm-to-market routes; forestry access; terminals on the rail, waterway, and air cargo systems; and others. Protecting and improving these connections is an essential part of ensuring the prosperity of Minnesota. As an example, the Duluth-Superior Metropolitan Interstate Council formed a Harbor Technical Advisory Committee to discuss harbor-related issues and concerns, promote the harbor's economic and environmental importance to the community, and provide sound planning and management recommendations to decision makers. Other near-term activities may include using region-level freight studies to inform planning and decision making, reviewing the designations of National Highway System terminals, identifying and preserving a network of routes appropriate for oversize/overweight truck loads, and defining a primary freight network.

5. ASSET MANAGEMENT

Strategically maintain and operate transportation assets; rely on system data, partners' needs, and public expectations to inform decisions; put technology and innovation to work to improve efficiency and performance; and recognize that the system should change over time.

What This Is About

Asset management is a systematic process of cost-effectively operating, maintaining, and upgrading assets once they are built or purchased. It includes both keeping individual assets viable as well as managing for long-term system needs, including adjusting for change. Asset management involves planning for the appropriate changes that will allow the system to adapt to future needs. This includes supporting research that helps improve materials and practices to be more efficient and effective. In strategic asset management, it is essential to set priorities and manage based on those priorities. This includes making appropriate trade-offs when necessary. It is critical to think in terms of risk and to assess likely impacts to Minnesota's quality of life, economy and the environment.

Transportation assets include all aspects of the transportation system such as travel ways, vehicles, and support facilities. Examples include waterways, rail trackage, trails, roadways, runways, airspace, and transit vehicles.

A connection to Vision/Guiding Principles

PROVIDES SAFE, CONVENIENT, EFFICIENT AND EFFECTIVE MOVEMENT OF PEOPLE AND GOODS



The Vision identifies a future system that provides for safe, efficient and effective travel of both people and goods. The asset management objective and strategies will help ensure that assets of the transportation system are properly operated, maintained and upgraded.

STRATEGICALLY FIX THE SYSTEM

The Guiding Principles call for future policy and investment decisions to be aimed at strategically fixing the system, to maintain and upgrade critical existing infrastructure and to recognize that some parts of the system may need to be reduced. Some ways in which the asset management objective and strategies respond include giving priority to maintaining and operating assets on identified priority networks, supporting technology and innovation to improve system performance, and recognizing that the system should change over time.

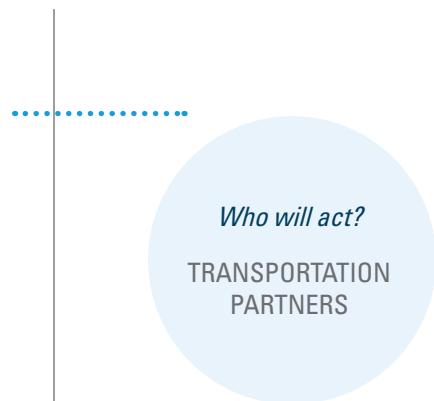




Strategies

- **Prioritize maintaining and operating assets on identified priority networks.** Based on recent revenue projections, it will not be feasible to maintain all assets in current condition or better over the short to medium term. Given this outlook, MnDOT will work with its partners to define priority networks based on connectivity and accessibility and invest in these assets accordingly. These priority networks will be maintained to a higher standard than the rest of the systems. This may include strategically maintaining and upgrading critical existing infrastructure where appropriate.
- **Keep Minnesota's transportation system on a sustainable track for the future.** Using a risk-based approach, make capital, operations, and maintenance investment decisions by considering impacts to the state's economy, environment, and quality of life. Considering these potential impacts before making decisions allows the system to change over time to address present and future needs. Specifically, MnDOT will identify, assess, and manage the potential risks and trade-offs for the transportation assets within the agency's control. MnDOT also will use a risk-based approach to identify appropriate investment levels for the agency's assets.
- **Ensure that safety, operations, and maintenance needs are considered and addressed in transportation planning and programming.** Investment decisions have many implications in regards to safety, operations, and maintenance. For example, capital investments in technology add value but also carry with them additional operational and maintenance needs. It is critical that these implications are factored into the decision-making process during project planning and programming.

- **Better align ownership of Minnesota's roadways with statewide, regional, and local priorities.** Working with critical partners, including cities, counties, and townships, MnDOT will initiate a comprehensive review of current roadway use and ownership and identify barriers to making ownership changes. Recommended adjustments will allow project selection to better reflect priorities at all levels.
- **Work with transportation partners to implement a transparent and collaborative approach to corridor investment along the state highway system.** This approach will help MnDOT and partners generate and implement sustainable and cost-effective investment strategies that are consistent with MnDOT's performance and risk-based investment framework and responsive to local priorities.
- **Monitor and report system condition and identify investment needs for key transportation infrastructure that is owned and operated within the private sector.** Transportation infrastructure owned and operated by the private sector is an important component of the overall transportation system in Minnesota. It is important that these private assets remain in good condition and connect to the publicly-owned system. Currently within the state, key privately-owned transportation assets include select rail and port vehicles and facilities.



A connection to Vision/Guiding Principles

IS FLEXIBLE AND NIMBLE ENOUGH TO ADAPT TO CHANGES IN SOCIETY, TECHNOLOGY, THE ENVIRONMENT AND THE ECONOMY



The Vision identifies a future system that is adaptive, which, in essence, is a secure system. It is able to respond to emergency, disaster, and special events.

EMPHASIZE RELIABLE AND PREDICTABLE OPTIONS



The Guiding Principles call for future policy and investment decisions to recognize that reliability of the system and predictability of travel time are frequently as important as speed, and to prioritize multiple multimodal options over reliance on a single option. Reliability and options are the essence of system security. Meeting the system security objective means ensuring reliable options exist, that there is system redundancy to meet essential travel during emergencies. Some ways in which the system security objective and strategies respond include collaborating to ensure coordinated and timely response to security related events and expanding communications infrastructure across the state for more reliable and predictable dissemination of information.

6. SYSTEM SECURITY

Reduce system vulnerability and ensure system redundancy to meet essential travel needs during emergencies.

What This Is About

In times of emergency, the focus of the transportation system shifts to ensuring essential travel needs. Essential travel refers to the movement of goods and people that are critical to public well-being. This could mean ensuring access to hospitals and pharmacies, improving emergency response, as well as ensuring that food and supplies are able to reach all parts of Minnesota.

System redundancy and reliability are important components to ensuring system security. It is important not only to have the availability of alternatives in both transportation route and type, but to have a system that is consistent. In terms of reliability, it will be important to identify potential security risks the system may face in the next 20 years.

Strategies

- **Collaborate with emergency planning efforts to ensure efficient and coordinated response to special, emergency, and disaster events.** For example, MnDOT has developed an emergency response plan that provides for mitigation, response, and recovery to events that impact transportation. The emergency response plan is supplemented with mutual aid agreements with various agencies and local jurisdictions. Other individual organizations, including state and local agencies, emergency responders, and public transit providers also have prepared emergency response plans. The Grand Forks - East Grand Forks Metropolitan Planning Organization has established a Bridge Traffic Incident Management Plan to address traffic impacts during closure of any of the four major bridges across the Red River in their area.
- **Expand emergency communications infrastructure across the state.** MnDOT maintains a statewide shared safety communication system for Minnesota public safety providers through a communication backbone service known as the Allied Radio Matrix for Emergency Response.
- **Collaborate with local emergency management to address security issues in their planning efforts.** This includes, as appropriate, emergency relief and disaster preparedness plans as well as strategies and policies that support homeland security and safeguard the personal security of all users. For example, MPOs address system security issues in their long range transportation plans.

Who will act?

TRANSPORTATION PARTNERS

Who will act?

MNDOT, LOCAL, REGIONAL, AND TRIBAL PARTNERS

Who will act?

TRANSPORTATION PARTNERS

OVER THE NEXT 20 YEARS

It is important to track the outcome of this plan to gauge whether progress is being made toward achievement of the objectives and the broader Minnesota GO Vision. As a part of this tracking, MnDOT has identified a number of performance measures, targets, and indicators that are regularly evaluated and reported via the annual Minnesota Transportation Performance Report.

For this Statewide Multimodal Transportation Plan, the identified strategies are key focus areas for the upcoming years, not a comprehensive list of every action related to transportation in Minnesota. In the upcoming years, the ongoing performance measurement efforts will continue along with broader, interagency summaries about the quality of life, economy, and public and environmental health of our state. All of this data, as well as customer and partner input, will help to identify whether the strategies have been realized and where more effort is required. Analysis of these outcomes will provide input for the next update of this plan.

Over the next 20 years, strategic investments will be focused on maintaining and improving facilities, accessing travel options, managing congestion, and fostering greater safety. Closer coordination of land use and transportation resources can enhance our communities and neighborhoods. Technologies are evolving, which will facilitate achievement of some plan objectives during this timeframe. New capabilities for rail and urban transit systems are expected to progress. As the system is presently funded, constraints will force a focus toward preservation of aging infrastructure and resources. Alternatives that stretch resources, including new arrangements of roles and responsibilities, will be welcomed and supported.