

Minnesota Statewide Freight System Plan

Task 5 - Strategies and Implementation

draft report

prepared for

Minnesota Department of Transportation

prepared by

Cambridge Systematics, Inc.

with

SRF Consulting Group, Inc.
Kimley-Horn and Associates, Inc.
Leo Penne Consulting

draft

Minnesota Statewide Freight System Plan

Task 5 - Strategies and Implementation

prepared for

Minnesota Department of Transportation

prepared by

Cambridge Systematics, Inc.
100 CambridgePark Drive, Suite 400
Cambridge, MA 02140

with

SRF Consulting Group, Inc.
Kimley-Horn and Associates, Inc.
Leo Penne Consulting

date

September 2015

Table of Contents

1.0	Introduction	1-1
2.0	Freight System Investments	2-1
2.1	About Freight Projects	2-1
2.2	Highway System Investments	2-2
2.3	Non-Highway System Investments	2-12
2.4	Freight Project Types for MnDOT’s Future Support.....	2-15
3.0	Supporting Strategies	3-1
3.1	Accountability, Transparency and Communication.....	3-6
3.2	Transportation in Context	3-11
3.3	Critical Connections	3-14
3.4	Asset Management	3-19
3.5	Traveler Safety and Security	3-21
3.6	Strategy Implications and Outcomes.....	3-25
4.0	Freight Action Agenda	4-1
4.1	Freight Action Agenda.....	4-1
4.2	Maintaining the Minnesota Statewide Freight System Plan.....	4-2

List of Tables

Table 2.1	Freight Project Types Linking to Freight Plan Goals	2-18
Table 3.1	Crosswalk of Strategies and Plan Goals.....	3-2
Table 4.1	Minnesota Statewide Freight System Plan Supporting Strategies - Freight Action Agenda.....	4-4
Table A.1	Highway System Investment Project List.....	A-1
Table B.1	Twin Cities Core Projects	B-1
Table B.2	Twin Cities to Albert Lea/Des Moines (I-35 Corridor) Projects -	B-3
Table B.3	Twin Cities to Chicago (River Route).....	B-3
Table B.4	Twin Cities to Duluth	B-3
Table B.5	Twin Cities to Fargo/Moorhead.....	B-4
Table B.6	Twin Cities to Saint Cloud.....	B-5
Table B.7	Twin Cities to Sioux Falls, South Dakota.....	B-5
Table B.8	Additional Freight and Crossing Safety Improvements	B-6

List of Figures

Figure 2.1	STIP Funding by MnSHIP Investment Category	2-9
Figure 2.2	STIP Freight Project Funding by District.....	2-10
Figure 2.3	Freight-Related STIP Projects on the NHS Network.....	2-11

1.0 Introduction

The objective of *Task 5 –Implementation Plan* of the Minnesota Statewide Freight System Plan (Plan) was to develop a “Freight Action Agenda” for Minnesota to integrate, invest and operationalize the freight system and decision-making within MnDOT, and ultimately serve as an improvement strategy for the State. This Plan presents an opportunity for MnDOT’s Office of Freight and Commercial Vehicle Operations (OFCVO) to become more integrated with other Offices within MnDOT and the overall project development, project prioritization, and funding processes. While there currently is no dedicated funding source for “freight projects,” it can be argued that almost any transportation improvement project has some benefit to freight. Better integrating the MnDOT OFCVO with other MnDOT Offices (e.g., Safety, Performance, Bridge, Pavement, etc.) will ensure that freight is being properly accounted for and considered in how the transportation system is designed and operated. In addition to Central Office staff, increased communications with the Districts will enhance the project prioritization process and also serve as an opportunity to eliminate potential freight bottlenecks or other significant freight issues that may exist. A very good example of this integration occurred when staff in District 4 consulted with the MnDOT OFCVO to determine whether or not a proposed roundabout on a supplemental freight route would be an impediment to large trucks. In the past, this type of interaction was not routine.

About Strategies

Strategies are at the core of this Implementation Plan. Strategies, in the context of this plan, are actions the State and its freight partners can take and can take the shape of project recommendations, policy guidance or next steps for planning. This Plan is focused specifically on those strategies that can be acted upon and implemented. The needs and issues identified and documents in the *Task 4 Tech Memo – Needs, Issues and Opportunities*, have been translated into the strategies presented in this Tech Memo.

Organization

This Tech Memo is organized into the following sections:

- **Section 2.0 – Freight System Investment Strategies.** This section describes the physical infrastructure investments needed today on the highway and non-highway freight systems, and outlines the types of future freight projects that could provide Minnesota benefits if pursued in the future.
- **Section 3.0 – Supporting Strategies.** This section recognizes that physical infrastructure projects, alone, will not be sufficient to address the numerous needs that exist internal and external to Minnesota. An array of supporting

strategies have been identified to address freight system needs and issues related to policy, organization, partnerships and funding.

- **Section 4.0 - Freight Action Agenda.** This section outlines the Minnesota Statewide System Freight Action Agenda and consolidates the recommended strategies in a single place.
- **Section 5.0 - Next Steps and Implementation.** This section briefly notes how the findings in this Tech Memo should be used by MnDOT and Minnesota's public and private sector freight stakeholders.

2.0 Freight System Investments

2.1 ABOUT FREIGHT PROJECTS

One of the primary challenges in quantifying the impacts and benefits of investments in the freight transportation system is developing an understanding of what defines a “freight project.” Currently, MnDOT does not specifically identify projects as freight projects, as it does with other kinds of projects (e.g., bicycle improvement projects) and has no definition or standard for what constitutes a freight project. Under MAP-21, the definition of a “freight project” is:

“a surface transportation project that improves the safety and efficiency of freight movements.”

While MnDOT’s funded surface transportation program may not contain projects designated as freight projects, many of these projects will have substantial carry-over benefits to the freight system. For example, repaving a segment of a state highway is a general improvement project intended to benefit all vehicles. While this may not primarily be considered a freight project, freight haulers will derive substantial benefits from the improved pavement conditions.

Many types of projects greatly enhance freight movements, even if they are not specifically identified as freight projects. What is not easily understood by the public, industry, and technical staff is how many and to what extent investments benefit freight movement. Freight haulers derive a wide range of benefits from this traditional transportation investment, including:

1. Lower operating costs since wheels, shocks, brakes, axles, and other vehicle parts are subject to less abuse, thus extending their useful life;
2. Greater fuel efficiency, and in turn, lower operating costs;
3. Reduced damage to goods in transport, and reduced insurance costs;
4. Improved safety;
5. More efficient movement/route since freight haulers will not have to reroute to other roadways to avoid poor pavements and the risk to damaging goods or vehicles;
6. Reduced driver fatigue since drivers will be able to drive more direct routes at higher speeds; and
7. Reduced travel time since drivers will be able to drive more direct routes at higher speeds.

Other project types such as bridge replacements, improved signage, or guardrail enhancements, all derive their own set of freight benefits. For example, ITS projects

that improve travel conditions for daily commuters can significantly benefit freight by reducing travel time and related shipping costs.

The location of a highway improvement project also greatly determines its value to freight movements. For instance, road projects completed on identified routes with heavy truck traffic (e.g., National Highway System or the Minnesota Principal Freight Network) will likely benefit freight movements more so than projects on other routes. Most freight trips use a combination of state and local systems to reach their destinations. However, the primary mover of truck traffic in the state is the NHS system.

For the purpose of the Minnesota Statewide Freight System Plan, a “freight project” is

“a transportation project that improves the safety and efficiency of freight movements.”

This definition is intended to apply to highway projects, as well as other projects on other modal systems, which can include projects on the rail, water, air and pipeline systems that fall within the public and private sector realms of ownership and operation.

2.2 HIGHWAY SYSTEM INVESTMENTS

This section provides a summary of the currently proposed investments on the highway system that may be considered freight projects.

Highway Project Types

Highway project types were defined in terms of freight projects to better understand the investments MnDOT is currently making that may benefit freight system operations, as well as to identify what project types MnDOT should continue investing in as freight projects in the future.

The evaluation of freight project types for the highway system was based on the categories defined in the Minnesota State Highway Investment Plan (MnSHIP). MnSHIP is one of MnDOT’s transportation investment plans and is responsible for directing a large portion of the agency’s expenditures (i.e., highway investments). There are currently 10 investment categories identified in MnSHIP. However, not all of these are related to freight. The categories of Pedestrian, Bicycle, and Project Support were excluded. The remaining categories have a direct impact on the movement of freight on the highway system, are further described below, and include:

- Pavement Condition,
- Bridge Condition,
- Roadside Infrastructure,
- Interregional Corridor Mobility,

- Twin Cities Mobility,
- Regional Community Improvement Program, and
- Traveler Safety.

Pavement Condition

MnDOT's largest and most widely used asset is its pavements. On an average day, there are more than 90 million vehicle miles traveled on Minnesota state highways. Most new pavements last approximately 20 years before deteriorating to a level that requires rehabilitation. Improved pavement conditions benefit freight by reducing the number of goods damaged in transit, improving operating and maintenance costs, and reducing driver fatigue.

MnDOT preserves the structural integrity and smoothness of its pavements through investment in the Pavement Condition category. It seeks to maximize the share of state highway pavement rated in "Good" condition and minimize the share in "Poor" condition by undertaking a balanced mix of preventive maintenance, rehabilitation, and replacement. Once pavements fall into Poor condition, the costs associated with effectively repairing them increase significantly. As a result, larger capital investments are necessary if MnDOT wants to achieve smooth pavement conditions and minimize the costs associated with preserving its pavements. Typical improvements to pavements include overlays, mill and overlays, full-depth reclamation, and reconstruction projects.

Bridge Condition

More than 4,500 of the state's 20,000 bridges are on the state highway system and are maintained by MnDOT. If maintained and invested at optimal intervals, bridges typically last 70 to 80 years before needing replacement. Freight movers rely on bridges as critical links in their supply chains. Bridges with reduced load restrictions may require freight movers to take costly alternate routes.

The inspection, maintenance, and construction of MnDOT bridges are the responsibility of MnDOT districts under the general direction of the MnDOT Bridge Office. The districts and the Bridge Office work together to identify both near-term and long-range investments that preserve bridges in a safe condition and extend their useful life. By planning its bridge investments in a timely and cost-effective manner, MnDOT is able to maintain the state's vital connections.

MnDOT tracks its performance in preserving bridge infrastructure by rating the structural condition of its bridges and measuring the percentage of bridge deck area in Good, Satisfactory, Fair, and Poor condition. Bridge investments are managed through MnDOT's Bridge Replacement and Improvement Management (BRIM) system. Typical improvements include replacement, rehabilitation, and painting. The Bridge Condition category does not include surrounding or supporting elements for bridges, such as signs, pavement markings, or lighting.

Roadside Infrastructure

Roadside Infrastructure condition includes an array of assets found on the Minnesota state highway system that support the safe, informed, comfortable, and efficient movement of people and goods throughout the state. Roadside infrastructure elements include:

- Drainage and culverts that carry water away from or under the road,
- Guardrails, including attenuators, cable-median barriers, and fencing that protect people and infrastructure,
- Traffic signals, lighting, and Intelligent Transportation Systems (ITS) that enhance safety and provide information,
- Overhead and other structures, such as noise walls, retaining walls, reinforced earth systems, and concrete barriers,
- Rest areas,
- Signage, including traffic and directional signs, and
- Pavement markings.

Roadside infrastructure improves safety and the overall driving experience for freight movers. Improvements are often completed in conjunction with a pavement or bridge project, although MnDOT also conducts stand-alone projects, such as culvert replacement projects along segments of road with poor drainage or failing culvert structures

Interregional Corridor Mobility

Minnesota's Interregional Corridor (IRC) system is a subset of the NHS, connecting the largest regional trade centers in Minnesota with each other and with neighboring states and Canada. This system consists of Greater Minnesota's most heavily traveled roads, accounting for only 2.5 percent (3,000 miles) of the state highway system, yet carrying about 30 percent of all statewide travel.

The IRC system is an essential transportation network for moving freight and supporting businesses. Safe and efficient IRC connections provide access to markets and services and facilitate recreational travel, improving quality of life. Congestion on IRCs negatively impacts travel time, reliability, safety conditions, fuel costs, and the state's economic competitiveness. Typical improvements on these corridors include low-cost solutions, such as intersection improvements, as well as major projects, such as roadway capacity improvements.

Twin Cities Mobility

The Twin Cities is a major freight hub with multiple origins, destinations, and intermodal facilities related to freight movement. Congestion in the metro area is a major concern of many freight movers as well as the general public. Managing congestion improves quality of life, safety, and air quality. While the focus of

MnSHIP is on identifying improvements in highway infrastructure, this infrastructure accommodates many users, including passenger vehicles, freight carriers, transit providers, bicyclists, and pedestrians.

Roughly half of all roadway travel in Minnesota occurs within the Twin Cities metropolitan area, which contains just nine percent of the total roadway miles in the state. In 2010, the Metropolitan Council completed its 2030 Transportation Policy Plan. Due to constrained funding, this plan marks a shift away from a reliance on major capacity expansion projects toward more cost-effective strategies. MnDOT now pursues the following strategies to address regional mobility issues:

- **Active Traffic Management (ATM).** Operational improvements to help manage the effects of congestion, which include variable message signs (traveler information systems), freeway ramp metering, dynamic signing and re-routing, dynamic shoulder lanes, reversible lanes, dynamic speed signs, and lane specific signaling.
- **Spot mobility improvements.** Lower cost, high-benefit projects that improve traffic flow and provide bottleneck relief at spot locations. These projects include freeway and intersection geometric design changes, short auxiliary lane additions, and traffic signal modifications to ease merging and exiting traffic.
- **Priced managed lanes.** Priced managed lane projects that provide a predictable, congestion-free travel option for transit users, those who ride in carpools, or those who are willing to pay. In the Twin Cities, system is called MnPASS11, which currently operates on I-394 and I-35W. During rush hour periods, MnPASS lanes are free for buses, carpools, and motorcycles; single-occupant vehicles are charged an electronic fee.
- **Strategic capacity enhancements.** Projects in the form of new interchanges, non-priced managed lanes, and limited general-purpose lanes that may be needed to address corridor congestion and/or provide lane continuity for existing facility or to complete an unfinished segment of the Metropolitan Highway System. The unfinished connection between existing MN 610 and I-94 in Maple Grove is an example of a high-priority strategic capacity enhancement project

Regional Community Improvement Program (RCIP)

Regional and Community Improvement Priorities (RCIPs) are collaborative investments that respond to regional and local concerns beyond system performance needs. The RCIP investment category assists MnDOT in delivering a well-rounded transportation investment program that advances objectives for which MnDOT may not have statewide performance targets, such as improving multimodal connections, community livability, economic competitiveness, environmental health, and quality of life in Minnesota.

Typical improvements include intersection improvements that increase traffic flow or facilitate efficient freight movement, projects that support multimodal connectivity, bypass or turning lanes, access management solutions, improvements that support Complete Streets, and regional or spot capacity expansion projects.

Traveler Safety

Vehicle crashes are the leading cause of death for people under the age of 35 and the fifth leading cause of death overall in the nation. Crash-related deaths and serious injuries create significant costs for individuals, families, and society. The Highway Safety Improvement Program (HSIP) is a federal program that was established in 2005 to fund programs that reduce fatalities and serious injuries on all roads. In Minnesota, these funds are distributed among MnDOT districts and local agencies. HSIP and state funds, together, represent MnDOT's Traveler Safety investments. MnDOT and its partners have made reducing fatalities and serious injuries a top priority through:

- **The Toward Zero Deaths (TZD) initiative.** MnDOT and its partners use a data-driven, multi-disciplinary “four Es” approach – education, engineering, enforcement, and emergency services – to target and reduce fatalities and serious injuries. By implementing the TZD10 approach, the state of Minnesota has seen a dramatic decline in traffic fatalities over the past decade.
- **Proactive lower cost, high-benefit safety features.** Lower cost safety improvements may be newly installed as part of a pavement project, including edge treatments (rumble stripes and rumble strips), guardrail, and pavement markings, or as stand-alone projects. MnDOT has also developed District Safety Plans (DSPs) for each MnDOT district over the past four years. The DSPs refer to crash data to prioritize proactive strategies at high-risk locations and identify appropriate treatments that are proven to reduce fatal and serious injury crashes. They also serve as the engineering component to the TZD initiative.
- **Improvements at sustained crash locations.** These are locations with a consistently high crash rate over a five-year period compared to similar locations across the state. Improvements at these locations tend to be higher-cost intersection improvements and can be targeted for motorized and non-motorized modes. Projects in this category include improvements such as roundabouts and passing lanes.

Typical improvements in the Traveler Safety category include lower cost, high-benefit engineering solutions, such as rumble stripes, lighting, signage, new cable median barriers, and dynamic warning signs. MnDOT uses higher cost treatments, such as four-way stop signs, signals, and reduced conflict intersection improvements (for example, roundabouts, median refuges, and J-turns), to address sustained crash locations.

While the investment categories included in MnSHIP do not specifically identify freight, many of the outcomes from investments made in these investment categories provide significant benefit to freight movements. Examples of this include smooth pavements, which provide lower operating costs, greater fuel efficiency, less damage to goods, and improved safety; or improvements to critical connections, which will decrease delays and reduce travel times. Traveler safety improvements likewise reduce the frequency and severity of crashes, simultaneously decreasing risk and delay. All of these improvements have significant benefits for freight.

Highway Projects on Minnesota's Principal Freight Network

The State Transportation Investment Program (STIP) is Minnesota's four-year transportation improvement program developed by MnDOT with approval from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). This document is the statewide transportation program in which MnDOT, local governments, and community and business interest groups worked together in eight District Area Transportation Partnerships (ATPs) to discuss regional priorities and reach agreement on important transportation investments.

The STIP identifies the schedule and funding of transportation projects by state fiscal year (July 1 through June 30). It includes all state and local transportation projects with federal highway and/or federal transit funding along with 100% state funded transportation projects. These projects are for state trunk highways, local roads and bridges, rail crossings and transit capital and operating assistance. The STIP is developed/updated on an annual basis.

The current STIP for fiscal years 2015-2018 was approved in October 2014 and contains information such as project location/description, agency responsible for project implementation, program categories, funding categories, and project cost. This project list was reviewed to better understand the level and type of investments that are programmed for the highway portion of the designated Minnesota Principal Freight Network, defined as the extents of the Enhanced National Highway System.

Many of the projects included in the STIP fall under categories unrelated to physical infrastructure improvement. These include funding categories such as staff training, planning, and transit system operations. These categories account for 42 percent of the STIP investment and were excluded from the analysis. Each remaining STIP project was evaluated to determine if it is located on the NHS system or on another non-NHS highway system. **Of the \$3.9 Billion allocated to infrastructure improvements, approximately 60 percent is programmed for projects on the NHS system.**

Identification of Primary MnSHIP Investment Categories

The STIP includes two fields which categorize the primary and secondary work types of each project. These categories include work type descriptions such as signing, striping, railroad signals, etc. In total there are over 270 uniquely identified project types contained in the STIP. The work type descriptions were used to guide the determination of the appropriate MnSHIP investment category for each project.

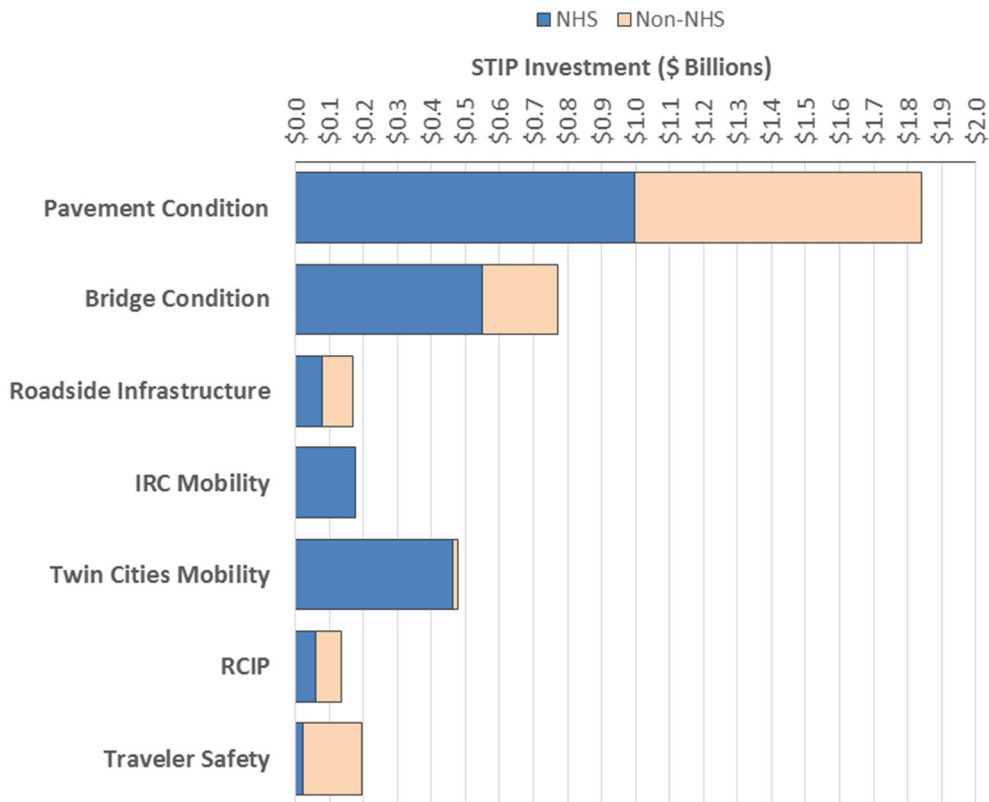
Many of the projects could potentially fit into more than one category. For example, a pavement mill and overlay project could be placed in the pavement category, but also potentially be included as bicycle and pedestrian improvements. It was determined that without having sufficient detailed knowledge of each STIP project, each project would be fully allocated to the MnSHIP investment category that most closely matched the work type description. The results of this analysis are shown in Figure 2.1 and display the relative investment within each category toward NHS and non-NHS roadways.

A list of freight projects from the STIP is included in Appendix A. In this case a freight project is defined as a project on the NHS network (a.k.a Minnesota Principal Freight Network) with primary designation as one the following project types:

- Pavement Condition,
- Bridge Condition,
- Roadside Infrastructure,
- IRC Mobility,
- Twin Cities Mobility,
- RCIP, or
- Traveler Safety.

A total of 436 projects meet these criteria.

Figure 2.1 STIP Funding by MnSHIP Investment Category



Source: MnSHIP data

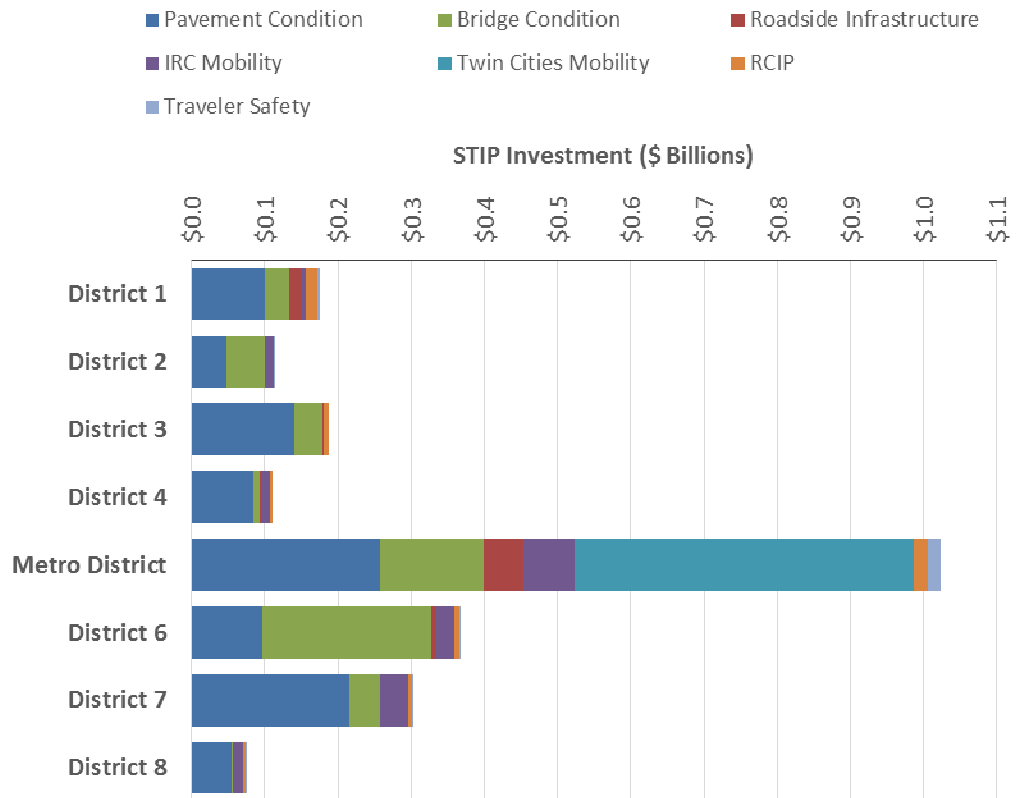
The results show that investment in pavement condition greatly exceeds the investment in all other categories. Pavement condition projects account for approximately 47 percent of infrastructure-related STIP funding. Over half of these investments are slated for roadways on the NHS.

Since all IRC roadways are also on the NHS, it is not a surprise that all investments under the IRC Mobility category are on the NHS. NHS investments also account for the majority of projects under Bridge Condition and Twin Cities Mobility and approximately half of the projects under Roadside Infrastructure and RCIP. Unlike the other categories, investments under the Traveler Safety categories are primarily on non-NHS roadways.

Highway Projects by MnDOT District

A summary of the freight-related investments on the NHS by District is shown in Figure 2.2.

Figure 2.2 STIP Freight Project Funding by District



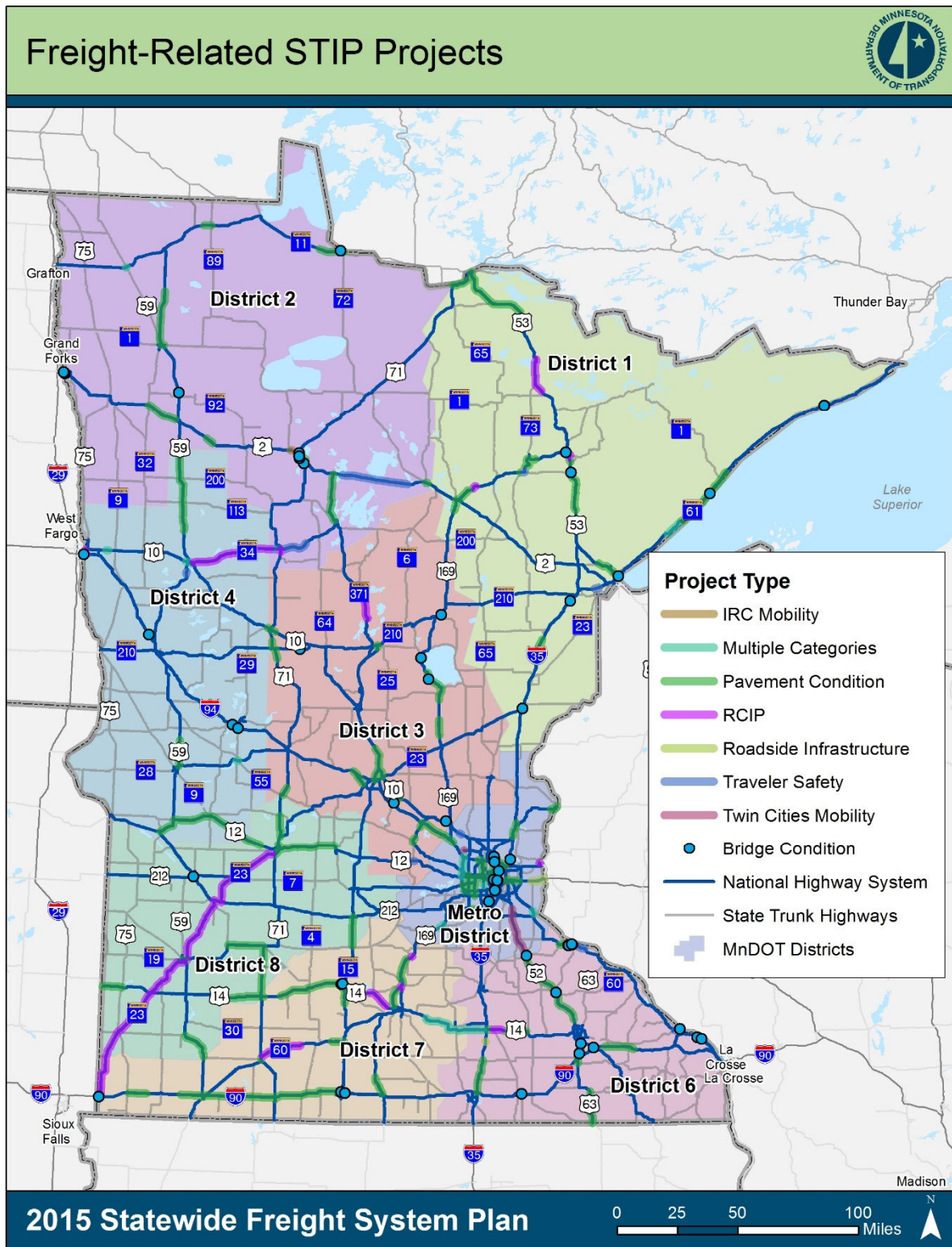
Source: MnSHIP data

A review of the funding for freight-related STIP projects on the NHS shows that the greatest amount of investment is planned for the Metro District. This is to be expected as the roadway traffic in the Twin Cities Metropolitan area accounts for roughly half of all roadway traffic statewide. The Twin Cities Mobility funding category is also unique to the Metro District and accounts for nearly half of all freight project funding in the district.

Project funding in non-Metro districts is almost entirely dedicated to either Pavement Condition or Bridge Condition. While most of these districts dedicate more funding to Pavement Condition, two exceptions are District 2 and District 6 both of which have a substantially larger share of bridge condition projects relative to their total funding levels.

A map of the freight-related projects on the NHS is displayed in Figure 2.3.

Figure 2.3 Freight-Related STIP Projects on the NHS Network



2.3 NON-HIGHWAY SYSTEM INVESTMENTS

This section provides a summary of the currently proposed strategies and investments for the non-highway portions of the freight system. One mode that is not included in this section is pipelines. The pipeline system is privately owned and operated. MnDOT plays only a small role in the development and oversight of the pipeline system.

Rail

The 2015 State Rail Plan Update presented a \$6.6 billion dollar, 20 year project list, with \$3.5 billion for freight rail-specific projects. In total, there are 62 freight projects and 45 crossing safety projects included in the Rail Plan Update, along with 57 passenger projects (not included here). Freight project types recommended include:

- **Track Condition/Capacity** - Projects focused on rail line condition and include projects that upgrade track or bridge condition, realign existing track, or add new track.
- **Efficiency/Chokepoint**. Projects where system efficiencies are lacking due to a physical system bottleneck or other capacity constraint. This includes new sidings or interchanges, or improvements in and around rail yards.
- **Signalization** - Projects to upgrade signals on rail lines carrying high volumes of freight traffic. Centralized traffic control, or CTC, is typically found on medium to high density rail lines, and involves a series of interlockings which are controlled by a single operator that conveys via signal to trains when they have the right-of-way to proceed.

Although not included specifically in the list of freight rail projects, Positive Train Control (PTC) upgrades are also part of the Rail Plan Update. The Rail Safety Improvement Act of 2008 mandated the widespread installation of PTC systems by December 2015 on all lines handling passenger trains or hazardous materials.

- **Grade Crossing Upgrades or Separations** - Projects to upgrade grade crossing infrastructure or installing grade separations are necessary at a number of highway-rail crossings in Minnesota to achieve goals of safety in terms of reduced accidents and mitigating challenges of shale oil and hazmat transport. MnDOT continues to invest in grade crossing upgrades, however many of the currently installed warning devices will need replacement by 2030 due to age and functional obsolescence.

The list of freight rail projects identified in the 2015 State Rail Plan Update are included in Appendix B.

Due to the fact that rail serves both freight and passenger travel in Minnesota, and that rail infrastructure, while owned and operated by private entities provides significant benefits to the state and general public, many of these investments

presume the need for multiple actors, methodologies and years. Unlike the funded highway projects on the MnSHIP, a range of financing tools will be needed among the public sector stakeholders – federal, state and regional/local – and the private sector including railroads and investor/developers to advance these projects. State general fund and bond proceeds have been dedicated to the existing freight and safety programs Minnesota counties and their Regional Railroad Authorities have committed significant local funding from both general funds and special purpose tax levies to advance these projects and support ongoing rail operations. Exploration of new funding opportunities are necessary to move rail development forward.

Ports and Waterways

The Minnesota State Legislature funds the Port Development Assistance Program. From 1996 to 2014 the program has been allocated \$27 million to address the needs of ports throughout the state. Past projects include dredging, rehabilitation of roads or railways, improved truck access, dock walls, building roofs, sprinklers and electrical systems, mobile handling equipment, and increased warehouse capacity. The ports have identified close to \$45 million of future development needs.

There are several strategies identified in the Statewide Ports and Waterways Plan that may result in future investment. One such strategy is improving infrastructure conditions and expanding capacity. To do this MnDOT will work to have a stable Port Development Assistance Program and compile an infrastructure needs assessment. Port infrastructure supports strategies such as assisting with adapting to new markets, adding capacity for containerization, and upgrading outdated systems to reduce maintenance costs.

Another issue of growing importance is preservation of waterfront land. This is especially true for land that has strategic importance for the marine freight system in existing and new locations. Multimodal connections are also an important factor in creating an efficient freight system.

The Port Development Assistance Program is anticipated to expend \$5,805,000 for four ports from 2015 to 2018. Duluth is expected to receive \$3,250,000, St. Paul is expected to receive \$1,295,000, Red Wing is expected to receive \$500,000, and Winona is expected to receive \$760,000. These numbers are subject to change as the Port Development Assistance Program comes directly from the legislature.

The current investments being made in the port and waterway system are as follows:

Duluth Seaway Port Authority

The Duluth Seaway Port Authority (DSPA) has utilized MnDOT appropriations, a \$10 million TIGER grant from the federal government, as well as almost a \$1 million grant from the Minnesota Department of Employment and Economic Development (DEED) to redevelopment DSPA Docks C and D. This 28 acre site

that was unusable due to the deteriorated state will expand the Duluth Seaway Port's capacity.

Red Wing Port Authority

The Red Wing Port Authority has applied for Port Development funds. In recent years there has been an increased demand from riverboats that visit Red Wing. The Port Authority is looking to construct a transient dock adjacent to Levee Park, a city-owned park.

St. Paul Port Authority

The St. Paul Port Authority has applied for addition Port Development funds to expand upon an existing project. The project will replace approximately 1,100 feet of dock wall. This was expanded upon from the previously funded 790-foot wall replacement.

Port Authority of Winona

The Port Authority of Winona has two projects in the near future. They are looking to prevent bolt breakage by installing an 8,000 square foot concrete cap. They are also looking to install a 300-ton crane that can accommodate heavy lifting. This requires creating a 1,200 square foot "Heavy-lift Zone" to accommodate the heavy loads.

Airports

The State of Minnesota has 97 airports listed in the FAA's National Plan of Integrated Airport Systems. Currently eight airports are identified in the NPIAS as primary airports. The most recent Minnesota Statewide Aviation System Plan estimates the need for \$712 million in short-term projects, \$326 in mid-term projects, and \$1.143 billion in long-term projects for the aviation system. Of the estimated costs, 40 percent are for improvements to the airports and 22 percent are for miscellaneous costs. However, the Plan does not currently distinguish projects as significant to freight or passenger travel.

Of the MN airports, five were identified as meeting the criteria for designation as part of Minnesota's Principal Freight Network. The Statewide Aviation System Plan also identified upgrades for each airport. This information helps guide MnDOT's Capital Improvement Plan (CIP). The CIP projects for the five identified airports for Minnesota's Principal Freight Network are outline below:

Minneapolis-St. Paul International Airport

Minneapolis-St. Paul International Airport is Minnesota's largest airport. Over the next 22 years, the airport has \$65,550,000 worth of projects listed in the CIP. Of that total \$44.2M will be from local funds, \$13.8M from the FAA, and \$5.4M from the State. Of the 39 projects listed, 37 may have direct positive impacts on freight.

Projects include runway pavement improvements, drainage improvements, and miscellaneous construction projects.

Duluth International Airport

Duluth has identified \$81,079,180 in projects for the next 20 years. Of that total \$8.9M will be from local funds, \$66.8M from the FAA, \$1.4M from other funds, and \$4M from the State. Of the 50 projects listed, 48 may have a direct positive impact on freight. Projects range from runway improvements, snow removal equipment, renovations to the Air Traffic Control Tower, land acquisition, hanger maintenance, and reconstruction of a runway.

Rochester International Airport

Rochester International Airport has identified \$38,315,000 in projects for the next 15 years. Of that total, \$4M will be from local funds, \$18.4M from the FAA, \$6.25M from other funds, and \$9.7M from the State. Of the 21 projects listed, 19 may have a direct positive impact on freight. Projects include runway improvements, navigation systems upgrades, and equipment replacement.

Bemidji Regional Airport

Bemidji Regional Airport has identified \$24,167,180 in projects for the next 14 years. Of that total, \$1.6M will be from local funds, \$21.1M from the FAA, and \$1.4M from the State. Of the 63 projects listed, 61 projects listed may have a direct positive impact on freight. Projects include runway maintenance, snow removal equipment, hanger upgrades, and road improvements.

Thief River Falls Regional Airport

Thief River Falls Regional Airport has identified \$19,603,000 in projects for the next 18 years. Of that total, \$2M will be from local funds, \$15.2M from the FAA, \$1.2M from other funds, and \$1.1M from the State. Of the 42 projects listed, all of them may have a direct positive impact on freight. Projects include runway maintenance, hanger construction, runway extension, and storm water management.

2.4 FREIGHT PROJECT TYPES FOR MNDOT'S FUTURE SUPPORT

Identified in the previous sections are various freight project types that MnDOT is currently investing in, or that have been identified as being freight-related or freight benefitting as part of this Plan. These freight project types are consolidated here for MnDOT's future consideration of support and advocacy with its public and private sector freight partners. It is not presumed that MnDOT will provide funding for all of these project types.

Projects have been roughly categorized into three groupings that align with Statewide Transportation Plan objectives:

- **Asset Management:** Projects that focus primarily on the maintenance and/or reconstruction of existing infrastructure.
- **Critical Connections:** Projects that increase the increase the capacity and performance of key freight system connections.
- **Traveler Safety:** Projects that improve safety for all users of the transportation system.

Highway Projects

Asset Management Projects:

- Pavement condition,
- Bridge condition,
- Roadside infrastructure (signage, guardrails/barriers, rest area improvements /upgrades)

Critical Connections:

- 2-4 lane conversions,
- Interchange improvements,
- MnPASS Lanes,
- Metro Congestion Management Program,
- First-/last-mile roadway improvements,
- Turn lanes,
- Interchanges,
- Intersection upgrades.

Safety:

- Safety program projects,
- Intersection upgrades,
- Improved lighting,
- Signage.

Rail Projects

Asset Management:

- Rail/bridge condition improvements,
- Capacity enhancements.

Critical Connections:

- First-/last-mile roadway improvements,
- Intermodal and multimodal facilities,
- Improvements in and around rail yards.

Safety and Security:

- Signalization - Centralized traffic control (CTC) and Positive Train Control (PTC),
- Grade crossing infrastructure upgrades or separation.

Ports and Waterway Projects

Asset Management:

- Dredging,
- Dock wall maintenance,
- Miscellaneous construction

Critical Connections:

- First-/last-mile roadway improvements,
- Intermodal and multimodal facilities,
- Dock expansion,
- Warehouse expansion,
- Mobile handling equipment investments.

Airports

Asset Management:

- Airfield infrastructure improvements, including runway, taxiway, or apron pavement condition or expansion,
- Air traffic control tower reconstruction,
- Miscellaneous construction.

Critical Connections:

- First-/last-mile roadway improvements
- Air Cargo Facilities

Safety:

- Communication, navigation, or surveillance systems.

Freight Projects and Minnesota Statewide Freight System Goals

During the planning process, Freight Plan Goals were developed to reflect the features most important to Minnesota’s multimodal freight system. Each of these goals is listed below and includes a description of why it is important to Minnesota. Potential freight projects were evaluated based on their ability to help meet these goals.

It should be noted that one Freight System Goal, Integrate Freight Throughout MnDOT, was excluded due to its focus on organizational policy decisions rather than infrastructure investments.

All of the projects noted in this document help MnDOT to achieve one or more of these goals. The relationship between the project types and the goals being addressed is summarized in **Error! Reference source not found.** The projects within each mode are roughly categorized in to three groupings that align with Statewide Transportation Plan objectives:

- **Asset Management:** Projects that focus primarily on the maintenance and/or reconstruction of existing infrastructure.
- **Critical Connections:** Projects that increase the increase the capacity and performance of key freight system connections.
- **Traveler Safety:** Projects that improve safety for all users of the transportation system.

Table 2.1 Freight Project Types Linking to Freight Plan Goals

Freight Mode	Freight Project Types	Minnesota Statewide Freight System Plan Goals				
		Econom y	Mobilit y	Infrastruc ture	Safety	Env. And Comm.
Highways	Asset Management: Pavement condition, bridge condition, roadside infrastructure (signage, guardrails/barriers, rest area improvements /upgrades)	✓	✓	✓	✓	✓
	Critical Connections: 2-4 lane conversions, interchange improvements, MnPASS Lanes, Metro Congestion Management, Safety Program, Last-mile roadway improvements, turn lanes, interchanges, intersection upgrades, etc.	✓	✓			
	Traveler Safety: Intersection upgrades, improved lighting, signing, etc.	✓	✓		✓	✓

Freight Mode	Freight Project Types	Minnesota Statewide Freight System Plan Goals				
		Economy	Mobility	Infrastructure	Safety	Env. And Comm.
Rail	Asset Management: Rail/bridge condition improvements, capacity enhancements.	✓	✓	✓	✓	
	Critical Connections: First-/last-mile roadway improvements, Intermodal and multimodal facilities, Improvements in and around rail yards.	✓	✓	✓		
	Safety and Security: Signalization - Centralized traffic control (CTC) and Positive Train Control (PTC), Grade crossing infrastructure upgrades or separation.	✓	✓	✓	✓	✓
Ports and Waterways	Asset Management: Dredging, dock wall maintenance, miscellaneous construction	✓	✓	✓	✓	✓
	Critical Connections: Last-mile roadway improvements Dock expansion, warehouse expansion, mobile handling equipment investments	✓	✓			
Airports	Asset Management: Airfield infrastructure improvements, including runway, taxiway, or apron pavement condition or expansion, Air traffic control tower reconstruction, Miscellaneous construction.	✓	✓	✓	✓	✓
	Critical Connections: First- last-mile roadway improvements, air cargo facilities	✓	✓			
	Traveler Safety: Upgrade communication, navigation, and surveillance systems.	✓	✓		✓	

3.0 Supporting Strategies

This section recognizes that physical infrastructure projects, alone, will not be sufficient to address the numerous needs and issues that have been identified as part of this Plan. An array of supporting strategies have been identified to address the freight systems' ability to meet the Minnesota Statewide Freight System Plan goals of:

- Support Minnesota's Economy;
- Improve Minnesota's Mobility;
- Preserve Minnesota's Infrastructure;
- Safeguard Minnesotans;
- Protect Minnesota's Environment and Communities; and
- Integrate Freight Throughout Minnesota.

In this section these supporting strategies have been organized by Minnesota Statewide Transportation Plan objective area. These objectives include:

- Accountability, Transparency and Communication
- Transportation in Context
- Critical Connections
- Asset Management
- Traveler Safety
- System Security

The strategies have been "crosswalked" to show how they help meet Plan goals in table 3.1.

As in the Statewide Transportation Plan, the objectives and subsequent strategies/actions 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 coming years.

Included under each strategy is a description of actions that are recommended, an indication of what MnDOT and its' partners should do next, and when the action should be taken. Additional detail is provided in Table 4.1, Minnesota's Freight Action Agenda.

Table 3.1 Crosswalk of Strategies and Plan Goals

ID	Strategy	General Description	Economy	Mobility	Infrastructure	Safety	Env. and Comm.	Integrate Freight
Accountability, Transparency and Communication								
1	Education	Educate the public on the critical role freight plays in the economy and every-day-life of Minnesotans.	X	X	X	X	X	
2	Partnerships	Engage and partner with Minnesota's public agencies and with producers, shippers/receivers, carriers and other private sector freight stakeholders to address Minnesota's freight issues together. Engage and partner with neighboring states to address regional freight issues together.	X	X	X	X	X	
3	Ongoing Freight Forum	Convene an on-going dialog between public and private sector freight stakeholders to keep freight topics front and center. Regularly engage the private sector and consider their perspectives during freight system planning.	X	X	X	X	X	
4	Advocacy	Public and private freight stakeholders advocate together for advancing critical freight partnerships, strategies, investments and a dedicated source of funding for freight infrastructure at the National level.	X	X	X	X	X	X
5	Freight Data	Improved data collection (e.g., truck counts) and use of innovative sources to help the public sector do better freight planning.	X	X	X	X	X	X
6	Integrate Freight into all Planning Projects	Consider freight in overall project planning across modes (highway, rail, water and air). Regularly engage the private sector and consider their perspectives during freight system planning.	X	X	X	X	X	X
7	Pilot Programs	Short-term and low-cost pilot programs to test the viability of concepts at a small scale.	X	X	X	X	X	
8	Workforce Development	Programs in cooperation with community colleges and private sector to ensure workforce is available for industry needs (e.g., truck drivers).	X					

ID	Strategy	General Description	Economy	Mobility	Infrastructure	Safety	Env. and Comm.	Integrate Freight
Transportation in Context								
9	Corridor Preservation	Actively manage preserved rail corridors held in the State Rail Bank and evaluate for possible future transportation uses	X				X	
10	Truck Routes	Coordination of truck routes/planning in industrial and urban areas with restrictions and enforcement in adjacent residential areas.					X	
11	Complete Streets	Treatments that consider truck movements as part of total vehicle traffic which can include time-of-day delivery windows to reduce conflicts with other street users, design guidelines for curb pullouts that can be used at different times for bus pullouts, truck parking, and others.					X	
12	Land Use Planning and Policies	Land use planning and policies to ensure freight development areas are designated and preserved, and that development occurs adjacent to existing infrastructure.	X				X	
13	Freight As A Good Neighbor	Programs and projects that maintain Minnesota's high quality of life by balancing the local negative impacts of freight transportation with the statewide benefits provided.	X				X	
14	Advanced Technology	Monitor development of advanced technologies and their applications for freight.	X	X	X	X	X	
Critical Connections								
15	Investments on the Principal Freight Network	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 - including investments in the highway, railroad, port and waterway systems in the State.	X	X	X	X	X	
16	First-/Last-mile Connections	Freight connections like highway access and rail spurs to local businesses.	X	X	X			

ID	Strategy	General Description	Economy	Mobility	Infrastructure	Safety	Env. and Comm.	Integrate Freight
17	Targeted Rail System Investments	Upgrade main line track (all Class I to III railroads) to 25 mph minimum speed, as warranted. Improve the network (all Class I to III railroads) to support the use of 286,000 pound railcars throughout.	X	X	X			
18	Intermodal and Multimodal Facilities	Intermodal and multimodal facility development to allow goods to shift between modes such as truck, rail and water. Includes making equipment available.	X	X				
19	Urban Goods Movement Programs	Projects and programs in urban centers focused on mitigating congestion caused by rush hour traffic, incidents, work zones or other factors where high volumes of freight and passenger traffic must coexist.		X				
20	Truck Size and Weight	More options available, and improved routing for overdimensional and overweight vehicles. Consistency of regulations between Minnesota and neighboring states.		X				
21	Modal Options/System Redundancy	Modal alternatives (e.g., truck, rail and water) in spot locations and modal redundancy within key corridors so companies have access to a variety of cost effective and competitive freight modes to ship their goods. Address captive shipper issue.	X	X		X		
22	Evaluate and Restructure Existing Freight Funding Programs	MnDOT's programs should be restructured to more adequately address needs.	X	X	X	X	X	X
Asset Management								
23	Freight System Performance Measures	Utilize freight system performance measures to monitor and report system condition and identify investment needs for key transportation infrastructure	X	X	X	X	X	X
24	Prioritize Maintenance on the Principal Freight Network	Prioritize bridge/pavement maintenance on these shared routes to ensure ability to handle freight rail and truck, as well as passenger, traffic			X			

ID	Strategy	General Description	Economy	Mobility	Infrastructure	Safety	Env. and Comm.	Integrate Freight
25	Corridor Improvement Programs	Implement roadway improvements that combine infrastructure, ITS technology, safety programs, and other actions to mitigate congestion for key shared passenger and freight corridors.		X	X			
26	Spot Improvements	Utilize freight system performance measures to identify critical network bottlenecks; plan and implement spot improvements as needed		X	X			
Safety and Security								
27	Traveler Information	Provide freight-specific traveler information, such as truck parking availability, expected travel time and roadway conditions	X	X		X		
28	Design for Freight Safety	Design and implement geometric features that improve vehicle safety such as the use of rumble strips/stripes, wider shoulders, and other features where appropriate.				X		
29	Truck Parking	Conduct assessment of truck parking and plan for expansion, as warranted	X			X		
30	Incident Management and Emergency Response Plans	Develop emergency plans to ensure critical supply chain connectivity and proactively route hazardous materials				X		
31	Rail Crossings	Assess grade crossing safety and implement policies, programs and investments related to safety of at-grade crossings and seek funding for implementation				X	X	
32	Positive Train Control	Partner with railroads to complete initial deployment of state-of-the-art traffic control and safety systems, in particular on Minnesota's high-density main lines				X		
33	Rail System Vulnerabilities	Develop and implement a comprehensive plan that addresses key safety vulnerabilities across Minnesota's rail network				X		

3.1 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 means to the Freight Plan

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. Development of this Plan utilized a transparent approach and engaged public and private freight stakeholders as an important resource in identifying needs and developing recommendations. A key component of implementing Plan recommendations also relies on the continued communication and coordination of activities with these stakeholders and agencies; making information available to them in a manner that is easy to find and understand.

Strategies

Education

Freight touches every Minnesota resident on a daily basis; the products purchased in store or online are available because freight transported them. Often negative impacts of freight are what the public are most familiar with, not with the improved quality of life and access to goods that come because of freight. MnDOT has started sharing information on the importance of freight as part of developing this Plan. The public must continue to be educated on Minnesota's Freight Story; the critical role freight plays in the economy and every-day-life of Minnesotans.

- Who Leads? MnDOT OFCVO
- Who Partners? Public and private sector freight stakeholders
- What action is needed? Outreach on the importance and benefits of freight to Minnesota and Minnesotans
- When is action started? Short-term, ongoing

Partnerships

As evidenced by the engagement process undertaken during developing this Plan, there are numerous stakeholders in the freight transportation system in Minnesota. These stakeholders represent the planners, owners, operators, users and funders of the system, both in Minnesota and across state borders. Partnerships can be formal (as noted in the Ongoing Freight Forum bullet, below)

or informal. The intent of the partnerships is to ensure that a regular dialog occurs, and that MnDOT has the opportunity to listen to and understand freight stakeholder perspectives. When mutual understanding is achieved, opportunities for working together to address common needs and issues arise. These partnerships can lead to collaboration on education (noted above), planning, and investing. As projects of Regional and National Significance begin to receive Federal funds, Minnesota's partnerships with its public and private sector freight stakeholders will be critical.

- Who Leads? MnDOT OFCVO
- Who Partners? Coordination with other Office within MnDOT that are also conducting outreach to freight stakeholders
- What action is needed? Outreach to public and private sector freight stakeholders in Minnesota and neighboring states. See Ongoing Freight Forum.
- When is action started? Short-term, ongoing

Ongoing Freight Forum

Parallel to Plan development, MnDOT in partnership with the University of Minnesota's Center for Transportation Studies (CTS) convened an Ad Hoc Working Group to explore the existing structure and role of the Minnesota Freight Advisory Committee (MFAC). Historically this group had been convened to facilitate an on-going dialog between public and private sector freight stakeholders to keep freight topics "front and center" and to hear private sector perspectives. Through Ad Hoc Working Group discussions it was determined that the MFAC should continue, but be given a defined mission, which includes:

- Monitor and report on the implementation of the Statewide Freight System Plan and its Action Agenda, including the development of recommendations for any revisions and updates to the Plan.
- Create an annual report for the MnDOT Commissioner that includes a "state of freight," an overview of trends and important issues, and reports on the activities of the Freight Advisory Committee from the past year.
- Review significant MnDOT initiatives and activities and provide freight impact and benefits comments.
- Direct the preparation and dissemination of "white papers" on freight transportation issues important to Minnesota's economy.
- Advocate for needs of freight transportation to the public, elected officials, and other public agencies and organizations.
- Suggest research initiatives and tools supporting the economic vitality of the state

Refer to the MFAC Recommendations Report for additional information on these recommendations and recommendations for modification of the MFAC structure/membership.

- Who Leads? MnDOT OFCVO
- Who Partners? CTS and members of the MFAC
- What action is needed? Partnerships and collaboration with the MFAC on fulfilling the recommendations of the Ad Hoc Working Group.
- When is action started? Short-term, ongoing

Advocacy

Consistent in stakeholder outreach conducted as part of this Plan, as well as the findings from MnDOT's previous freight studies, existing funding mechanisms are inadequate for making the levels of transportation investment needed on the freight system to accommodate current and projected future demand. Advocacy is required both raise awareness of the funding issue and to begin to secure funds for freight projects in the state of Minnesota.

The Obama Administration's transportation proposal, called the *Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act*, or GROW AMERICA Act, is a \$478 billion, six-year transportation reauthorization proposal that will provide increased funding highways, bridges, transit, and rail systems. One feature of this proposal is that it will provide \$18 billion for a multimodal freight program to strengthen exports and trade. This multimodal freight grant program would fund innovative rail, highway, and port projects focused on improving the movement of goods across the country. The GROW AMERICA Act will also give shippers and transportation providers a real seat at the table for making investment decisions and incentivizes States, like Minnesota, to collaborate and establish long-term freight strategic plans. Other transportation proposals are on the tables in the U.S. House and Senate with varying levels of funding and support for freight. Minnesota needs to advocate in the best interests of freight stakeholders in the state, to ensure that what ultimately becomes our Nation's next transportation legislation contains provisions important to the state.

- Who Leads? MnDOT Office of Government Affairs
- Who Partners? MnDOT OFCVO, public and private sector freight stakeholders
- What action is needed? Partnerships for advocacy; quantification of Minnesota's freight funding needs; secure funding for needed freight projects
- When is action started? Short-term, ongoing

Freight Data

Planning for the freight system can often be a challenge due to the private sector freight community that owns and operates a large portion of the freight system and maintains proprietary data. In order to do better planning and align resources to where they can provide the most benefit, improved freight data is required. There are steps that MnDOT can take to improve their own data collection efforts; for example, regularly taking classification counts when traffic counts are required so that the state's repository of truck count information is gradually improved. MnDOT should also continually evaluate innovative data collection technologies and sources to determine cost effective approaches for future freight data collection. As example, the FHWA has provided the National Performance Management Research Data Set (NPMRDS) to state DOTs for understanding truck travel time and delay – a source that was not available a year ago. It is not expected that private freight stakeholders will share their data in the future.

- Who Leads? MnDOT OFCVO
- Who Partners? MnDOT Offices collecting field data
- What action is needed? Expand data collection practices to include truck/classification counts; exploration of innovative sources for freight data
- When is action started? Short-term, ongoing

Integrate Freight into all Planning Projects

Freight is an important part of the entire transportation system. While it is vital to plan specifically for freight, freight should be considered in project planning across modes (highway, rail, water and air). A case study on District 4 was conducted as part of Plan development to understand what additional information may be required to better include freight in their approach to planning. Two tools were requested: 1) identification of key freight routes in the District and 2) identification of how to consider freight reflected in the scoping worksheets. This Plan identified Minnesota's Principal Freight Network, so the key freight routes and assets in each District are now available. While MnDOT's scoping worksheet has undergone recent revision, that process was not able to take into account the information and guidance developed in this Plan. As part of project planning, each MnDOT District should conduct outreach to freight stakeholders to consider their perspectives and ensure that project alternatives do not cause detrimental impacts to businesses/goods movement.

- Who Leads? MnDOT OFCVO
- Who Partners? Various MnDOT planning offices, state, regional and local planning agencies
- What action is needed? Develop guidance on how to include freight in planning projects; revise project scoping worksheet and guide accordingly;

Districts to regularly engage public and private sector stakeholders in project planning.

- When is action started? Short-term, ongoing

Pilot Programs

In an effort to test the viability of project concepts prior to expenditure of public dollars, pilot programs should be explored. These short-term, low-cost programs are conducted on a small scale and help public agencies understand the application and benefits of new technologies. These programs are often eligible for grant funds (usually through the Federal government) making them low a risk alternative for MnDOT. MnDOT is currently conducting a pilot to study truck parking technology along I-94; a concept that is being expanded to cover operations between Minnesota and Wisconsin, and one that could be expanded in the future to provide truck parking and parking information statewide.

- Who Leads? MnDOT OFCVO
- Who Partners? FHWA, public and private sector freight stakeholders, as needed, as project concepts are defined
- What action is needed? Exploration of pilot concepts, potential partners and funding; continued evaluation of the ongoing truck parking pilot program
- When is action started? Short-term, ongoing

Workforce Development

In order to sustain the freight-related businesses and industries that operate in Minnesota and that the State relies upon for goods, it is essential that employers have access to a large pool of potential employees that are appropriately trained in the skills required for freight-industry jobs. In particular, the trucking profession has difficulty attracting the next generation of drivers due to many factors including long work days and much time on the road away from home. Programs in cooperation with community colleges and other educational institutions, work training programs through the private sector, or others are important to ensure that an appropriate workforce is available for transportation needs.

- Who Leads? Minnesota Department of Employment and Economic Development (DEED), Minnesota Trucking Association
- Who Partners? Public and private sector freight stakeholders, community colleges and other educational institutions
- What action is needed? Quantification and agreement of the issue among partners, further identification of what is needed/what are the potential solutions, and who is the appropriate lead entity
- When is action started? Short-term, ongoing

3.2 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 means to the Freight Plan

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. While Minnesota residents and businesses rely on freight to provide their day-to-day needs, freight activity sometimes leads to unintended impacts. Understanding these impacts is an important part of freight project planning and policy development, and making sure decisions are made in consideration of land use, energy consumption, the environment, economy, public health, and the needs of traditionally underserved populations. Considering context when making freight 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.

Strategies

Corridor Preservation

Rail corridors held in the State Rail Bank should be actively managed and regularly evaluated for possible future transportation uses. Many unused rail corridors have been preserved through interim uses such as bicycle trails. While converting these corridors back to active rail use is often difficult and costly due to encroachment, regulations, and public opposition, they provide opportunities to enable right-of-way for relocation and elimination of road or rail traffic in other parts of the region. A proactive approach to management includes the identification on potential future opportunities early on, so that changing use (e.g., a bike trail to a roadway) is minimized.

- Who Leads? MnDOT OFCVO
- Who Partners? Various MnDOT planning offices, state, regional and local planning agencies

What action is needed? Proactive management of rail corridors and identification of potential future uses.

- When is action started? Short-term, ongoing

Truck Routes

Urban areas are where often the most conflicts between trucks and other motoring vehicles occur. This is not only on the highway system, but also on the local

roadway network, as trucks travel the system making pickups and deliveries. Truck route designation can help to focus through truck trips and minimize neighborhood cut-through traffic. With the current emphasis on Complete Streets (see below), there is a growing number of streets that have designated bike lanes and pedestrian pathways. In some cases, these uses are occurring on truck routes, creating safety issues and concerns. Trucks that must cross bike lanes to access on-street loading zones or that double-park due to lack of sufficient on-street parking for trucks can create particular hazards for bikes. In order to operate safely and improve efficiency, truckers often operate during off-peak hours when possible, however it is the responsibility of local planners to consider/designate truck routes/routing in their jurisdictions.

- Who Leads? Various state, regional and local planning agencies
- Who Partners? MnDOT OFCVO
- What action is needed? Consideration of trucks in planning; designation of truck routes to focus truck movements (and separate from conflicting transportation uses) especially in industrial and urban areas with restrictions/enforcement in adjacent residential areas
- When is action started? Mid-term, ongoing

Complete Streets

Similar to Truck Routes, above, Complete Streets planning principles are frequently used in the urban setting where roadways must serve multiple purposes for sometimes conflicting transportation users. Complete Streets projects often focus on accommodating personal automobiles, transit, bicycles and pedestrians, and sometimes do not fully include the needs of trucks. Complete Streets applications in Minnesota should consider truck movements as part of total vehicle traffic and propose treatments to create harmony between trucks and other users such as time-of-day delivery windows to reduce conflicts with other street users, design guidelines for curb pullouts that can be used at different times for bus pullouts, and truck parking.

- Who Leads? Various state, regional and local planning agencies
- Who Partners? MnDOT OFCVO, MnDOT Office of Transportation System Management
- What action is needed? Consideration of trucks in Complete Streets planning activities
- When is action started? Mid-term, ongoing

Land Use Planning and Policies

Land near freight facilities and port areas is ideal for freight shipping purposes but is increasingly in competition with residential, commercial, and recreational land uses. In the Minneapolis-St. Paul area and other parts of the state, businesses and

shippers have found difficulty obtaining land with rail and port access. In some cases, zoning has become restrictive toward industrial and commercial uses, and in other cases, citizens have rallied to prevent expansion in rail traffic and operations due to noise and environmental concerns. Land use planning and policies must be developed to ensure freight development areas are designated and preserved. Additionally, these areas (and new freight-intensive uses) should be sited adjacent to existing infrastructure, whenever possible.

- Who Leads? Various state, regional and local planning agencies
- Who Partners? MnDOT OFCVO, DEED
- What action is needed? Land use policies ensure freight development areas are designated and preserved, and that development occurs adjacent to existing infrastructure
- When is action started? Mid-term

Freight As A Good Neighbor

Minnesotans enjoy a high quality of life, however sometimes freight activities can have negative effects on local areas. Programs and projects that support and encourage freight activities and help mitigate local impacts of freight should be pursued. These strategies include actions such as encouraging cleaner trucks, “green” locomotives, alternative fuels use, shifting to lower emitting modal uses, idle reduction technology, and others. MnDOT has a role in encouraging private businesses/carriers to install these green technologies on their fleets. MnDOT can also serve as a conduit for grant funding to accomplish this.

- Who Leads? MnDOT OFCVO
- Who Partners? Various state, regional and local planning agencies, freight shippers and carriers
- What action is needed? Advocacy for private businesses to implement “green” technologies on fleets; grant funding for implementation
- When is action started? Mid-term

Advanced Technology

The deployment of advanced technology has the potential to increase freight system efficiency, improving the flow of goods as well as reducing the cost to move them. FHWA’s Office of Freight Management and Operations promotes the deployment of technology and the adoption of best practices by state DOTs. Their Intermodal Freight Technology program conducts operational tests of Intelligent Transportation Systems (ITS) technologies, supports the development of tools to evaluate infrastructure and operational needs at border crossings, and develops standards for exchanging electronic freight data. While much of their work has been “cutting edge,” technology is catching up, and the future holds promise of “real world” applications for state DOTs to consider. As noted in the section

above, emissions reduction technology is a proven application that has widespread deployment. Also, MnDOT is conducting a truck parking pilot using advanced technologies in partnership with freight carriers.

Looking to the future, MnDOT should monitor development of advanced technologies and their applications for freight. One area of particular promise is that of connected and autonomous vehicles (i.e., in-vehicle, vehicle-to-vehicle and vehicle-to-infrastructure technologies to reduce human error, avoid collisions and automate vehicle operation). Vehicle technology is mature and widely deployed, but is not yet in active use by the public. It is anticipated that some of the first autonomous vehicle “self-driving” applications will be by large trucking companies; autonomous trucks are currently being tested in the U.S. and could provide a solution to the workforce shortage in that industry.¹

- Who Leads? MnDOT OFCVO
- Who Partners? FHWA, MnDOT project planning and development staff
- What action is needed? Monitor development of advanced technology development and applications for freight; consider advanced technology as part of freight planning and project development
- When is action started? Mid-term – Long-term

3.3 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 means to the Freight Plan

Freight is unique in that it is multimodal, crosses state and National boundaries, and has a myriad of public and private sector stakeholders with distinct operational and jurisdictional perspectives. To say there are “many actors” is a bit of an understatement. While many types of connections are important to freight there are critical connections that serve as the backbone for movement across and within Minnesota and to points beyond. The Principal Freight Network, designated as part of this Plan, the multimodal, first- and last-mile, and the urban area connections are essential. 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. All freight connections regardless of jurisdiction, location, or mode need to be developed in coordination with one another to ensure a truly connected Minnesota.

¹ <http://www.wired.com/2015/05/worlds-first-self-driving-semi-truck-hits-road/>

Strategies

Investments on the Principal Freight Network

This Plan undertook a rigorous, data-driven process with oversight from a cross-agency Ad Hoc Working Group to identify Minnesota's Principal Freight Network. This designated network articulates the key infrastructure assets in the state on the highway, rail, waterway and aviation systems, as well as identifies key facilities where modal systems intersect. Designation of this freight network was required per Minnesota Statewide Transportation Plan guidance. As this network represents the backbone of industry supply chains, freight-related investments on Minnesota's Principal Freight Network should be given priority over other freight investments. The investments that are made to the highway system should consider "freight friendly" design principles including items such as generous turning radii, minimal/improved roundabouts, truck lanes, truck bypasses, and other features.

MnDOT is already making significant investments in the freight system. As part of Section 2.0 - Freight System Investments, this Plan noted the highway projects MnDOT has committed funding to on the Principal Freight Network in the State Transportation Improvement Program, and identifies the project types that should be considered on the highway system in the future. This Plan also notes in Section 2.0 the projects identified on the freight rail system during development of the State Rail Plan. These and all future freight investments should consider multimodal solutions, ensure a high return on investment, and complement the social, natural and economic features of Minnesota. When appropriate, private sector funds should be sought and used to leverage public dollars and private sector funds should be given an amount commensurate with benefits received.

Neither the Ports and Waterways or the Statewide Aviation Plans specifically identify freight projects on those modal systems. In the case of air cargo, the Office of Aviation has noted interest in conducting an air cargo needs assessment to more fully understand air cargo needs and future investments.

Note, as business practices and locations change over time, regular review and updates (every 2 years) should be made to Principal Freight Network to ensure that projects/investments that move forward are providing freight benefits.

- Who Leads? MnDOT OFCVO
- Who Partners? MnDOT Office of Aviation, MnDOT Office of Transportation System Planning, MnDOT Design and Engineering, public and private sector freight stakeholders
- What action is needed? Regular updates to the Principal Freight Network; design standards for highway projects on the network; project planning and funding selection based on location on the network; conduct an air cargo assessment to determine investment needs
- When is action started? Short-term, Mid-term, Long-term ongoing

First-/Last-mile Connections

First- and last-mile road, railway and port connections are the front door for Minnesota's industries. Through designation of Minnesota's Principal Freight Network it was determined that MnDOT can provide benefits, and help ensure the multimodal freight system has seamless connections between modes, by being proactive related to facility and industry connections to the network. The process of designating principal rail, port, airport and pipeline facilities highlighted that there are numerous significant freight generators in the state where the modal systems need to be connected. Review of Minnesota's designated NHS intermodal connectors highlighted that the majority of these freight facilities identified meet FHWA's primary or secondary criteria for NHS intermodal connector designation, but are not formally designated (or are only designated for passenger travel). MnDOT should work with the local agencies who have jurisdiction over these roadways to determine whether or not intermodal connector designation is something they would like to pursue. In the event connectors are designated, MnDOT can provide assistance to regional and local planning and economic development agencies to ensure that roads are designed and maintained at a level that enables them to best serve freight.

- Who Leads? MnDOT OFCVO
- Who Partners? Various state, regional and local planning and economic development agencies
- What action is needed? Determine designation of new intermodal connectors and provide local agencies with design and maintenance guidance
- When is action started? Short-term, ongoing

Targeted Rail System Investments

Two of the goals of the State Rail Plan are to upgrade main line track (all Class I-III railroads) to 25 mph minimum speed (FRA Class 2 track), as warranted and to improve the freight rail network (all Class I-III railroads) to support the use of 286,000 pound railcars throughout. These improvements are needed to ensure commercial viability and safety for rail operators in order to meet the needs of the current and future shippers that rely on them, and are primarily issues for short line railroads where infrastructure conditions tend to be inferior to those of the large railroads. MnDOT administers that Minnesota Rail Service Improvement (MRSI) that can be used to improve line condition. As a condition of funding, MnDOT should require the rail owner to update line to these modern standards.

- Who Leads? MnDOT OFCVO
- Who Partners? Shortline railroads, regional rail authorities
- What action is needed? MnDOT to require MRSI funding recipients to upgrade rail on the portion of the line where project funding is given.
- When is action started? Short-term, ongoing

Intermodal and Multimodal Facilities

Intermodal and multimodal facility development to allow goods to shift between modes such as truck, rail and water. The Minneapolis-St. Paul region is the only location where rail intermodal (the haulage of containers and trailers) service is available in Minnesota; and Chicago and the Pacific Northwest/Western Canada are the only markets that are served directly. Stakeholders have remarked that oftentimes containers are unavailable for loading in Minnesota, and sometimes it is more cost effective to truck goods for transload into containers in Chicago, rather than be served directly in Minnesota. Although efforts to provide service in other parts of the state have not been successful, stakeholder conversations revealed a strong desire for intermodal service in Duluth and the western and southern parts of the state, as well as additional terminal capacity and services in the Twin Cities.

- Who Leads? MnDOT OFCVO
- Who Partners? DEED, railroads in Minnesota, regional and local planning and economic development agencies where a new facility may be cited
- What action is needed? Conduct an intermodal/transload feasibility study to determine the need for and identify potential feasible locations for the facility; identify solutions to equipment shortages
- When is action started? Mid-term

Urban Goods Movement Programs

The assessment of the condition and performance of the freight system noted that the Top 10 freight bottlenecks in the state related to travel time and delay are in the Twin Cities. This urban area is the center of passenger activity as well as goods movement. Highway congestion experienced by persons is also experienced by truck drivers, and often at a higher cost due to the need for just-in-time delivery of goods. Projects and programs in urban centers focused on mitigating congestion caused by rush hour traffic, incidents, work zones or other factors where high volumes of freight and passenger traffic must coexist should be advanced. Many of these types of projects are already being implemented (e.g., MnPass lanes, traveler information and other ITS technologies), but should be sure to give consideration to the benefits they provide to the freight community. And, as noted earlier, planning for Truck Routes and accounting for trucks in Complete Streets planning should be considered in urban areas to benefit goods movement.

- Who Leads? MnDOT Traffic Operations, various state, regional and local planning agencies
- Who Partners? MnDOT OFCVO
- What action is needed? Continue advancing congestion management solutions in the urban area, consider impacts/benefits to freight in congestion management solutions
- When is action started? Mid-term, ongoing

Truck Size and Weight

MnDOT's Commercial Vehicle Office administers Oversize-Overweight (OSOW) permits for trucks traveling on the trunk highway system in the state. In Minnesota, individual counties are responsible for permitting loads on their county road networks. Generally, loads that exceed a width of 8'6", a height of 13'6", a length of 75'0", and a gross vehicle weight of 80,000 pounds require a permit. A common issue in Minnesota, and most other states, is that the number of enforcement staff at the state and local level trained in commercial vehicle operations is insufficient to reliably enforce the OSOW permitting program. Permitting requirements and nuances in the state are fairly complex and include a number of exceptions and provisions based on commodity types, truck configurations, and travel plans. One resulting issue is that unpermitted and improperly permitted loads can cause inordinate amounts of damage to state and local roadways.

In addition, there exists the need to streamline truck size and weight restrictions and align them with adjacent states and provinces to make it easier for haulers to do business across state lines.

- Who Leads? MnDOT OFCVO, state and local departments of public safety and enforcement
- Who Partners? Local permitting agencies
- What action is needed? Work with neighboring states to identify truck size and weight mismatches and develop a plan for harmonization; work with state and local enforcement departments to determine how OSOW movements can be better enforced
- When is action started? Mid-term

Modal Options/System Redundancy

Capacity over the entire multimodal freight network is stressed. Delays along one route or on one mode spreads to other networks and affects both passenger and freight travel. For example, in the recent past increased oil, gas, and agriculture rail shipments along BNSF's corridor from North Dakota to Minneapolis negatively impacted the on-time performance of other freight and passenger rail movements.

In addition, infrastructure across all modes is aging, raising the possibility that a critical link will fail. Temporary closures due to weather (especially high and low water on the inland waterway system) are also a concern. Redundancy, either via alternative routes or alternative modes, should be a consideration in freight system planning to ensure the freight system has resiliency. Whenever possible, routes and modes that can allow the flow of goods to continue even when a standard route is not available should be identified. Redundancy will also allow for options when a particular mode or route is unsuitable due to safety concerns or competing

demands. Redundancy and choice is key to alleviating captive shipper concerns (which is an issues predominantly on the rail system).

- Who Leads? MnDOT OFCVO
- Who Partners? MnDOT Office of Transportation System Management, public and private freight system stakeholders
- What action is needed? Develop a freight system resiliency plan to identify potential freight system threats, locate key parallel multimodal routes, locate critical gaps in modal/system redundancy, and identify contingency alternatives to ensure freight disruptions are minimized.
- When is action started? Mid-term

Evaluate and Restructure Existing Freight Funding Programs

As noted in the State Rail Plan, MnDOT's funding programs should be evaluated and restructured to more adequately address needs. As example, the Minnesota Rail Service Improvement (MRSI) should be restructured to allow for larger projects, and the Rail/Highway Grade Crossing program should expand to consider strategies beyond active warning devices. Build upon the existing Minnesota Rail Service Improvement Program (MRSI), including raising the maximum loan amount beyond the current \$200,000 ceiling

- Who Leads? MnDOT OFCVO
- Who Partners? Public and private freight stakeholders that receive funds from MnDOT administered funding programs
- What action is needed? Evaluation of existing funding programs and structure, adjustments to programs to better meet funding needs
- When is action started? Mid-term

3.4 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 means to the Freight Plan

In many cases, the same infrastructure is used for both freight and passenger travel, creating synergies between asset management for both forms of transportation. Keeping individual assets viable and managing for long-term system needs are important for both systems. However, there are key differences in terms of performance goals, time horizons, and maintenance needs, among others for corridors that are heavily utilized by freight, in contrast to those that serve primarily passenger travel. Routes that serve heavy-haul equipment of see

high levels of truck traffic are more vulnerable to pavement degradation, for example, and may need higher levels of maintenance. One of the key applications of the Principal Freight Network designated by MnDOT is to assist in asset management, and in particular to identify and prioritize system needs on the highway system, which is more fully under MnDOT jurisdiction and has more funding allocation than other modes.

Strategies

Freight System Performance Measures

Freight system performance measures and indicators were developed as part of this freight plan. In conjunction with defining Minnesota's Principal Freight Network, performance measures allow documentation of key attributes of the system and comparison across geography and time. Establishing a baseline and/or goal, tracking progress or managing performance, and communicating results are all ways in which performance measures are an important part of the project development process. Freight system performance measures should be used to monitor and report system condition and identify investment needs for key transportation infrastructure that is owned and operated within the public and private sectors.

- Who Leads? MnDOT Office of Transportation System Management
- Who Partners? MnDOT OFCVO
- What action is needed? Regular data collection and application of freight performance measures and indicators, in particular those that apply to the Principal Freight Network; inclusion of freight performance measures as part of annual performance measure reporting.
- When is action started? Short-term, ongoing

Prioritize Maintenance on the Principal Freight Network

The system of Principal Freight Network routes should be used as a prioritization tool when assessing systemwide needs in other highway/statewide investment plans; especially when considering other types of systems (i.e., super-load corridors, OSOW, etc.). For example, prioritizing bridge/pavement maintenance so that pavements are free of potholes, and that roadway and railway bridges are able to handle heavy loads.

- Who Leads? MnDOT Office of Transportation System Management; MnDOT Bridge
- Who Partners? MnDOT OFCVO, MnDOT District Offices
- What action is needed? Review priority criteria and develop strategies to prioritize maintenance on the Principal Freight Network
- When is action started? Short-term, ongoing

Corridor Improvement Programs

MnDOT has designated a number of corridors, most recently the Principal Freight Network, but also the Interregional Corridor Network and others, to identify routes that are key for freight and commercial connectivity within the state. Focused improvements on these roadway corridors can combine infrastructure (e.g., mainline, auxiliary lanes, truck bypasses, and geometric improvements), ITS technology, safety programs, and other actions to mitigate congestion and ensure reliable routes for freight.

- Who Leads? MnDOT Traffic Operations
- Who Partners? MnDOT OFCVO, MnDOT Districts
- What action is needed? Identify key corridors that are opportunities for improvements and develop implementation strategies.
- When is action started? Mid-term, Long-term

Spot Improvements

Roadway and railroad projects such as interchange improvements, lane/siding additions, ramp improvements, traffic signal coordination or other improvements can mitigate chokepoints and reduce congestion at spot locations. Freight performance measures can be used to identify and target locations in most need of improvement, allowing MnDOT to conduct advanced planning and construction of solutions to the state's most critical network bottlenecks.

- Who Leads? MnDOT Traffic Operations
- Who Partners? MnDOT OFCVO, MnDOT Districts
- What action is needed? Use performance measures to determine locations for spot improvement and implement improvement activities.
- When is action started? Short-term, Mid-term, Long-term

3.5 TRAVELER SAFETY AND SECURITY

Safeguard travelers, transportation facilities, and services; apply proven strategies to reduce fatalities and serious injuries for all travel modes. And, reduce system vulnerability and ensure system redundancy to meet essential travel needs during emergencies.

What this means to the Freight Plan

One of the guiding principles of Minnesota Go is to “Integrate safety: Systematically and holistically improve safety for all forms of transportation. Be proactive, innovative and strategic in creating safe options.” Freight safety and security involves not only making travel safer for freight vehicles, but also for the passenger vehicles that share the roadways, rails, air and waterway systems. This

is the case not only in day to day activities, but also in times of emergency, when the focus of the transportation system shifts to support essential travel and supply chains that are critical to supporting residents of all parts of Minnesota. The “4Es” of safety in Minnesota – education, enforcement, engineering, and emergency services all have a place in the supporting strategies of this freight plan, and align with the idea that the freight system should be resilient, reliable, and have alternatives available for critical connections.

Strategies

Traveler Information

Freight-specific traveler information, such as truck parking availability, expected travel time and roadway conditions can help industry better plan when/where they travel on roadways, and where they are able to stop safely for rest periods. See the *Truck Parking* strategy.

- Who Leads? MnDOT Traffic Operations
- Who Partners? MnDOT OFCVO, public and private sector freight stakeholders
- What action is needed? Incorporate freight-targeted traveler information into existing MnDOT traveler information resources; ensure freight considered in future traveler information installations
- When is action started? Short-term, ongoing

Design for Freight Safety

Interstate highways were designed and built to standards to safely accommodate travel by large trucks. State and local roadways in particular may present safety challenges to trucks due to narrower lanes, non-paved shoulders, or intersection design. Especially on the Principal Freight Network and routes heavily used by truck traffic MnDOT should employ a strategy to, where context appropriate, design and build features that improve vehicle safety such as rumble strips/stripes, center rumble strips, guardrails, wider shoulders, turn lanes, barrier wall/cable median barrier, and other features.

- Who Leads? MnDOT Traffic Engineering and Design
- Who Partners? MnDOT OFCVO
- What action is needed? Devolvement and implementation of design guidance
- When is action started? Short-term, ongoing

Truck Parking

Truck parking is an issue nationwide. Trucks need parking availability to comply with Federal Hours of Service regulations, and pull of the road to rest or avoid congestion. MnDOT recently conducted a study to demonstrate an automated

truck stop management system that can determine the number of occupied parking spaces at MnDOT safety rest areas. The data from the project can be used by MnDOT and private site owners to determine if existing facilities are suitable for demand, and if needed, should be used to plan improvement or expansion projects.

- Who Leads? MnDOT OFCVO
- Who Partners? Public and private sector freight stakeholders, Neighboring states
- What action is needed? Conduct comprehensive assessment of truck parking needs and plan for improvement and expansion, as warranted
- When is action started? Short-term, ongoing

Incident Management and Emergency Response Plans

Emergency response and incident management plans are important to ensure the highest level of emergency response and incident management possible during catastrophic events. These plans can help address both day-to-day and long-term connectivity and operational challenges due to extreme weather, accidents, or other catastrophic events. Planning should involve identifying the region's critical supply chains and bottlenecks so that actions can be taken effectively, such as proactive rerouting of hazardous materials.

- Who Leads? Minnesota Office of Public Safety
- Who Partners? MnDOT OFCVO, public and private sector freight stakeholders
- What action is needed? Determine the appropriate scope of statewide and/or local emergency response plans needed; identify critical supply chains and bottlenecks, and hazardous materials routes; develop emergency response plans in conjunction with partner agencies.
- When is action started? Short-term

Rail Crossings

Rail-highway crossing safety is a concern due to a history of accidents with crossing vehicles, trucks, bicyclists and pedestrians. Significant improvement has been made with the safety of rail crossings in Minnesota, but many of the currently installed warning devices will need to be replaced by 2030, and improvements beyond active warning devices also will be necessary in some locations.

MnDOT recently conducted an analysis of grade crossing active warning devices to determine the prevalence of and the need to upgrade aging infrastructure. This effort estimated that approximately 270 signals are 20 years old or older (as of 2006), while the normal lifespan for an active warning device is 25 years. Aging active warning devices are increasingly difficult to maintain due to technological obsolescence thus often entirely new warning devices must be installed at a cost

of \$200,000 to \$500,000, depending on the complexity of the installation. As many signals were installed in the 1980s and 1990s, MnDOT estimates that within 20 years, almost all of the 1,400 warning devices will need upgrading. At current values, it is estimated that \$280 million over 20 years will be needed, and the capacity to install 70 major grade crossing devices each year, not counting new installations for high-speed passenger corridors, quiet zones, and the proposed expanded deployment of an additional 170 devices on paved county roads.

- Who Leads? MnDOT OFCVO
- Who Partners? Public and private sector rail stakeholders
- What action is needed? Continue to assess grade crossing safety and identifying solutions including improving grade crossing protection, highway/rail grade separations, crossing closures, and geometric improvements; seek alternative sources of funding to accelerate the rail safety implementation
- When is action started? Short-term, ongoing

Positive Train Control

Positive Train Control (PTC) refers to state-of-the-art traffic control and safety systems that are capable of preventing train-to-train collisions, overspeed derailments and casualties or injuries to roadway workers. Installation is underway in Minnesota and elsewhere, with an initial deadline for December, 2015. The Class I railroads have been implementing PTC largely at their own expense, but PTC is especially challenging to short line railroads. MnDOT can help support Class Is and especially shortlines to complete initial deployment of state-of-the-art traffic control and safety systems on Minnesota's high-density main lines

- Who Leads? Class I and shortline railroads
- Who Partners? MnDOT OFCVO
- What action is needed? Determine the remaining need for PTC implementation and opportunities for partnership between MnDOT and the railroads to complete implementation.
- When is action started? Short-term

Rail System Vulnerabilities

Safety and security on the rail system is of paramount concern to Minnesota. Not only have a series of recent disasters involving unit trains of oil have occurred across North America led to the Minnesota legislature passing laws to increase the safety of rail movements in the state, but in 2014, the legislature charged MnDOT to study the risks of highway grade crossing that have significant crude-by-rail activity and provided funding for improving rail grade crossings and hiring additional rail inspectors. This is an important and key step of a long-term strategy

to develop and implement a comprehensive plan that addresses key safety vulnerabilities across Minnesota's rail network.

- Who Leads? MnDOT OFCVO
- Who Partners? Public and private sector freight stakeholders, Minnesota Department of Public Safety
- What action is needed? Develop comprehensive plan identifying and addressing vulnerabilities on Minnesota's rail network.
- When is action started? Short-term

3.6 STRATEGY IMPLICATIONS AND OUTCOMES

The strategies described represent a wide variety of actions that MnDOT should pursue in order to meet the goals and objectives of this freight plan as well as the broader goals of Minnesota GO. The strategies are designed to build upon one another to align the actions of the MnDOT OFCVO and its partners both within and external to MnDOT in a way that improves the efficiency, mobility, and safety of freight transportation within the State.

The strategies are developed to identify quick, short-term actions that can be implemented with a minimum of additional effort, as well as longer term actions that build upon other strategies or require significant amounts of coordination. Some strategies are noted as "short term and ongoing", such as Freight Data and Integrating Freight. These are strategies that should be implemented quickly, yet will produce benefits over a long period of time and serve as foundational elements for other actions, such as Corridor Improvement Programs, integrating freight into Land Use Policies or building Intermodal and Multimodal connectors.

Tools developed during the Freight Plan, including Freight Performance Measures and the Principal Freight Network are key building blocks as well that can be utilized to continue making progress on these strategies. Maintaining and updating these tools to meet the ongoing needs of MnDOT will allow them to continue to be effective resources, not only for the OFCVO, but also for other offices within MnDOT that touch the freight system, such as the Office of Transportation System Management.

Freight system investments increasingly involve partnerships between different public-sector jurisdictions, private-sector entities, or combinations of the two. Partnerships is its own strategy under Accountability, Transparency, and Communication, but many of the other strategies discussed are also partnership opportunities, requiring significant participation from or leadership from agencies beyond the OFCVO. The benefit of this is it gives the OFCVO an opportunity to partner with other MnDOT offices, and MnDOT to build stronger partnerships with outside agencies and the private sector. The OFCVO can serve as a guiding partner and leader in pushing these strategies that benefit the state and its residents and industry.

The suite of strategies and projects developed as part of this plan will lead to outcomes that align with the objectives of Minnesota GO. As the strategies are implemented and projects undertaken, this will have implications on both the freight and overall transportation system. Prioritizing projects that are important to freight and ensuring that critical freight connections are kept in good condition will ensure that commerce continues to flow smoothly through the state, and that industries and residents have access to the goods necessary for their businesses and lives. As freight is integrated into MnDOT's planning, programming, and funding processes, and these strategies become part of the day to day operations of MnDOT, this will allow the agency to not only make freight investments that have measureable benefits to the State and Industry, but also to be able to track and report the outcomes of these investments using performance measures and metrics, and to increase their levels of accountability, transparency, and communication.

4.0 Freight Action Agenda

This Section outlines the actions and next steps for Minnesota’s public and private sector freight stakeholders—the cornerstone of which is the Minnesota Freight Action Agenda.

This Plan made next step recommendations based on the analysis conducted and findings presented in this document. These next steps amount to a very long list, and recommendation for much work to do in the coming years. This Plan was not developed as a resource constrained Plan, and it will be up to MnDOT and its partners to determine what can realistically be accomplished in the coming years of all the necessary actions identified.

4.1 FREIGHT ACTION AGENDA

Development of this Plan was led by MnDOT’s Office of Freight and Commercial Vehicle Operations, however this is Minnesota’s Freight Plan. This is a Plan that is important to MnDOT, but likely more so to the private business and industries who depend on the freight system in Minnesota each and every day. A Freight Action Agenda has been developed to outline next steps for MnDOT as well as the State’s public and private sector freight partners, all of whom had a role and provided input into developing this Plan.

The Freight Action Agenda outlines a series of strategies organized by Plan objectives. Included under each strategy is a description of actions that are recommended, an indication of what MnDOT and its’ partners should do next, and when the action should be taken. Additional detail is provided in Table 5.1, Minnesota’s Freight Action Agenda, including:

- **ID.** Thirty-three strategies have been identified.
- **Strategy Name.** Short name of strategy.
- **Description.** Short description of strategy.
- **Action.** A variety of actions have been aligned to each strategy. These are described in more detail in **Chapter 4** and identified in the table, as follows:
 - **(P) Partnerships/outreach.** Indicates that partnerships will be required outside of MnDOT to accomplish action.
 - **(S) Study required/planning related.** Indicates that a follow-up study or further planning-related activities will be required.
 - **(D) Design.** Indicates that action requires design modification of adjustment of design standards.
 - **(O) Operations.** Indicates that action relates to operational modifications.

- **(F) Funding.** Indicates that action relates to funding whether review, allocation or advocacy for funding by MnDOT
- **Lead Agency.** Entity to take the lead in actions identified.
- **Partners.** Partners with varying levels of involvement in the action.
- **Timeframe.** Generally the actions should be initiated within the following timeframes:
 - **Short-Term.** 2015-2017 (0-2 yrs)
 - **Mid-Term.** 2018-2020 (3-5 yrs)
 - **Long-Term.** 2020+ (>5 yrs)

4.2 MAINTAINING THE MINNESOTA STATEWIDE FREIGHT SYSTEM PLAN

Key to developing this Plan was partnerships, and key to implementing and maintaining the Plan will also be partnerships. This Plan and the Freight Action Agenda are not intended to be static documents, but rather modified as stakeholder needs change. As such, continuous outreach and communication with public and private sector freight stakeholders will be critical to Plan implementation.

One group that has agreed to assist with this is the Minnesota Freight Advisory Committee (MFAC). Similar to other working groups convened during Plan development, an MFAC Ad Hoc Working Group was convened to explore the structure and purpose of the Committee. Over several months of discussion, and evaluation of National best practices, recommendations were made. One key recommendation that is critical to this Plan is that the MFAC will

Monitor and report on the implementation of the Statewide Freight System Plan and its Freight Action Agenda, including the development of recommendations for any revisions and updates to the Plan.

By having a body comprised of public and private freight stakeholders from around the State, the Plan's recommendations will stay at the front of freight conversations, and each stakeholder will know their roles and responsibilities. As updates are needed Plan or the Freight Action Agenda (e.g., adjustment to the implementation timeframe), the MFAC will ensure that the documents are revisited and modifications are made on a regular and timely basis.

Several other recommendations of the MFAC Ad Hoc Working Group are also key to maintaining this Plan and making sure that the most recent, relevant information is being considered. These other recommendations include:

- Create an Annual Report for the MnDOT Commissioner that includes a "State of Freight," an overview of trends and important issues, and reports on the activities of the MFAC from the past year.

- Review significant MnDOT initiatives and activities and provide freight impact and benefits comments.
- Direct the preparation and dissemination of white papers on freight transportation issues important to Minnesota's economy.
- Advocate for needs of freight transportation to the public, elected officials, and other public agencies and organizations.
- Suggest research initiatives and tools supporting the economic vitality of the state.

Table 4.1 Minnesota Statewide Freight System Plan Supporting Strategies – Freight Action Agenda

ID	Strategy Concept	Description	Action(s)	Lead Agency	Partner	Timeframe
Accountability, Transparency and Communication						
1	Education	Educate the public on the critical role freight plays in the economy and every-day-life of Minnesotans.	P	MnDOT OCVFO	Public and private sector freight stakeholders	Short-term, ongoing
2	Partnerships	Engage and partner with Minnesota's public agencies and with producers, shippers/receivers, carriers and other private sector freight stakeholders to address Minnesota's freight issues together. Engage and partner with neighboring states to address regional freight issues together.	p	MnDOT OCVFO	Offices within MnDOT conducting outreach	Short-term, ongoing
3	Ongoing Freight Forum	Convene an on-going dialog between public and private sector freight stakeholders to keep freight topics front and center. Regularly engage the private sector and consider their perspectives during freight system planning.	P, S	MnDOT OCVFO	CTS and members of the MFAC	Short-term, ongoing
4	Advocacy	Public and private freight stakeholders advocate together for advancing critical freight partnerships, strategies, investments and a dedicated source of funding for freight infrastructure at the National level.	P, S, F	MnDOT Office of Government Affairs	MnDOT OFCVO, public and private sector freight stakeholders	Short-term, ongoing
5	Freight Data	Improved data collection (e.g., truck counts) and use of innovative sources to help the public sector do better freight planning.	P, S	MnDOT OFCVO	Offices within MnDOT collecting field data	Short-term, ongoing
6	Integrate Freight into all Planning Projects	Consider freight in overall project planning across modes (highway, rail, water and air). Regularly engage the private sector and consider their perspectives during freight system planning.	P, S	MnDOT OFCVO	MnDOT planning offices, state, regional and local planning agencies	Short-term, ongoing
7	Pilot Programs	Short-term and low-cost pilot programs to test the viability of concepts at a small scale.	P, S, O	MnDOT OFCVO	FHWA, public and private sector freight stakeholders	Short-term, ongoing
8	Workforce Development	Programs in cooperation with community colleges and private sector to ensure workforce is available for industry needs (e.g., truck drivers).	P	MN DEED, Minnesota Trucking Association	Public and private sector freight stakeholders, community colleges and	Short-term, ongoing

ID	Strategy Concept	Description	Action(s)	Lead Agency	Partner	Timeframe
					other educational institutions	
Transportation in Context						
9	Corridor Preservation	Actively manage preserved rail corridors held in the State Rail Bank and evaluate for possible future transportation uses	P, S	MnDOT OFCVO	MnDOT planning offices, state, regional and local planning agencies	Short-term, ongoing
10	Truck Routes	Coordination of truck routes/planning in industrial and urban areas with restrictions and enforcement in adjacent residential areas.	P, S, D, O	Various state, regional and local planning agencies	MnDOT OFCVO	Mid-term, ongoing
11	Complete Streets	Treatments that consider truck movements as part of total vehicle traffic which can include time-of-day delivery windows to reduce conflicts with other street users, design guidelines for curb pullouts that can be used at different times for bus pullouts, truck parking, and others.	P, S, D, O	Various state, regional and local planning agencies	MnDOT OFCVO, MnDOT Office of Transportation System Management	Mid-term, ongoing
12	Land Use Planning and Policies	Land use planning and policies to ensure freight development areas are designated and preserved, and that development occurs adjacent to existing infrastructure.	P, S	Various state, regional and local planning agencies	MnDOT OFCVO, DEED	Mid-term
13	Freight As A Good Neighbor	Programs and projects that maintain Minnesota's high quality of life by balancing the local negative impacts of freight transportation with the statewide benefits provided.	P, S, D, O	MnDOT OFCVO	Various state, regional and local planning agencies, freight shippers and carriers	Mid-term
14	Advanced Technology	Monitor development of advanced technologies and their applications for freight.	P, S, O	MnDOT OFCVO	FHWA, MnDOT project planning and development staff	Mid-term - Long-term
Critical Connections						
15	Investments on the Principal Freight Network	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 - including "freight project" investments in the highway, railroad, port and waterway systems in the State.	P, S, D, O	MnDOT OFCVO	MnDOT Office of Aviation, MnDOT Office of Transportation System Planning, MnDOT Design and Engineering, public and private sector freight stakeholders	Short-, Mid-, and Long-term

ID	Strategy Concept	Description	Action(s)	Lead Agency	Partner	Timeframe
16	First-/Last-mile Connections	Freight connections like highway access and rail spurs to local businesses.	P, S	MnDOT OFCVO	Various state, regional and local planning and economic development agencies	Short-term, ongoing
17	Targeted Rail System Investments	Upgrade main line track (all Class I to III railroads) to 25 mph minimum speed, as warranted. Improve the network (all Class I to III railroads) to support the use of 286,000 pound railcars throughout.	P, F	MnDOT OFCVO	Shortline railroads, regional rail authorities	Short-term, ongoing
18	Intermodal and Multimodal Facilities	Intermodal and multimodal facility development to allow goods to shift between modes such as truck, rail and water. Includes making equipment available.	P, S	MnDOT OFCVO	DEED, railroads in Minnesota, regional and local planning and economic development agencies where a new facility may be cited	Mid-term
19	Urban Goods Movement Programs	Projects and programs in urban centers focused on mitigating congestion caused by rush hour traffic, incidents, work zones or other factors where high volumes of freight and passenger traffic must coexist.	P, S, D, O	MnDOT Traffic Operations, various state, regional and local planning agencies	MnDOT OFCVO	Mid-term, ongoing
20	Truck Size and Weight	More options available, and improved routing for overdimensional and overweight vehicles. Consistency of regulations between Minnesota and neighboring states.	P, S, O	MnDOT OFCVO, state and local departments of public safety and enforcement	Local permitting agencies	Mid-term
21	Modal Options/System Redundancy	Modal alternatives (e.g., truck, rail and water) in spot locations and modal redundancy within key corridors so companies have access to a variety of cost effective and competitive freight modes to ship their goods. Address captive shipper issue.	P, S	MnDOT OFCVO	MnDOT Office of Transportation System Management, public and private freight system stakeholders	Mid-term
22	Evaluate and Restructure Existing Freight Funding Programs	MnDOT's programs should be restructured to more adequately address needs.	P, S, F	MnDOT OFCVO	Public and private freight stakeholders that receive funds from MnDOT administered funding programs	Mid-term

ID	Strategy Concept	Description	Action(s)	Lead Agency	Partner	Timeframe
Asset Management						
23	Freight System Performance Measures	Utilize freight system performance measures to monitor and report system condition and identify investment needs for key transportation infrastructure	S, O	MnDOT Office of Transportation System Management	MnDOT OFCVO	Short-term, ongoing
24	Prioritize Maintenance on the Principal Freight Network	Prioritize bridge/pavement maintenance on these shared routes to ensure ability to handle freight rail and truck, as well as passenger, traffic	O, F	MnDOT Office of Transportation System Management; MnDOT Bridge	MnDOT OFCVO, MnDOT District Offices	Short-term, ongoing
25	Corridor Improvement Programs	Implement roadway improvements that combine infrastructure, ITS technology, safety programs, and other actions to mitigate congestion for key shared passenger and freight corridors.	S, D, O, F	MnDOT Traffic Operations	MnDOT OFCVO, MnDOT Districts	Mid-term, Long-term
26	Spot Improvements	Utilize freight system performance measures to identify critical network bottlenecks; plan and implement spot improvements as needed	S, D, O, F	MnDOT Traffic Operations	MnDOT OFCVO, MnDOT Districts	Short-term, Mid-term, Long-term
Safety and Security						
27	Traveler Information	Provide freight-specific traveler information, such as truck parking availability, expected travel time and roadway conditions	P, S, O	MnDOT Traffic Operations	MnDOT OFCVO, public and private sector freight stakeholders	Short-term, ongoing
28	Design for Freight Safety	Design and implement geometric features that improve vehicle safety such as the use of rumble strips/stripes, wider shoulders, and other features where appropriate.	D	MnDOT Traffic Engineering and Design	MnDOT OFCVO	Short-term, ongoing
29	Truck Parking	Conduct assessment of truck parking and plan for expansion, as warranted	P, S, O	MnDOT OFCVO	Public and private sector freight stakeholders, Neighboring states	Short-term, ongoing
30	Incident Management and Emergency Response Plans	Develop emergency plans to ensure critical supply chain connectivity and proactively route hazardous materials	P, S	Minnesota Office of Public Safety	MnDOT OFCVO, public and private sector freight stakeholders	Short-term

ID	Strategy Concept	Description	Action(s)	Lead Agency	Partner	Timeframe
31	Rail Crossings	Assess grade crossing safety and implement policies, programs and investments related to safety of at-grade crossings and seek funding for implementation	P, S, F	MnDOT OFCVO	Public and private sector rail stakeholders	Short-term, ongoing
32	Positive Train Control	Partner with railroads to complete initial deployment of state-of-the-art traffic control and safety systems, in particular on Minnesota's high-density main lines	P, S	Class I and shortline railroads	MnDOT OFCVO	Short-term
33	Rail System Vulnerabilities	Develop and implement a comprehensive plan that addresses key safety vulnerabilities across Minnesota's rail network	P, S, O	MnDOT OFCVO	Public and private sector freight stakeholders, Minnesota Department of Public Safety	Short-term

A. Highway System Investment Project List

Source: Minnesota Statewide Transportation Improvement Program

Table A.1 Highway System Investment Project List

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
0980-143	I 35, IN CLOQUET FROM 0.449 MI NORTH OF TH 33 TO 1.25 MI SOUTH OF BOUNDARY AVE IN PROCTOR, CABLE MEDIAN BARRIER INSTALLATION	1	Safety	2015	\$1,246,622
0980-148AC	**AC** I 35, 1 MI N JCT TH 27 TO ST LOUIS RIVER, SCANLON, PAINT BR #S 09807, 09808, 09837, 09838, DECK OVERLAY BR #S 09819, 09832 (AC PAYBACK 1 OF 1)	1	Bridge	2015	\$1,500,000
6982-290AC4	**AC**I 35, BOUNDARY AVE TO 26TH AVE E, PAVEMENT REPL & REPAIRS, BR REPL BR #S 69831, 69832, 69880 & REPAIRS BR #S 69851, 69852, 69879 + SPOT REPAIRS AT 21ST AVE W INTERCHANGE, REMOVE BR #S 69835 & 69828 NEAR 27TH AVE W, SAFETY IMPROVEMENTS (AC PAYBACK 4 of 4)	1	Bridge	2015	\$2,454,611
6982-313	I 35, IN DULUTH, DRAINAGE IMPROVEMENTS/REPAIRS, BRIDGE COLUMN REPAIR & BRIDGE PAINTING	1	Bridge	2015	\$680,000
6982-314	I-35, IN DULUTH, URGENT BOX CULVERT REPAIR AT KINGSBURY CREEK BR# 3633	1	Bridge	2015	\$500,000
6982-315	I-35, IN DULUTH, URGENT BOX CULVERT REPAIR AT CHESTER CREEK BR#96911	1	Bridge	2015	\$150,000
6982-69887F	I-35, IN DULUTH, 0.3MI N. OF GARFIELD AVE & AT JCT 1-535 & I-35, EMERGENCY WORK ON BRIDGE/REPAIR PILE FOR BR. # 69887 & 69881	1	Bridge	2015	\$320,000
1602-48	**FMP** MN 61, 5.9 MI SO. GUNFLINT TR CSAH-12 AT CUT FACE CREEK, REPLACE CULVERT WITH SINGLE SPAN BRIDGE# 16005 (\$2.0M CHAP 152)	1	Bridge	2015	\$2,500,000
6925-135	**PV40M** MN 61, IN DULUTH, FROM 0.04 MILE N OF THE E END BR# 5772 (LESTER RIVER) TO 0.22 MILES N OF SUPERIOR S, MILL AND OVERLAY	1	Pavement	2015	\$680,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
3608-48	**PV40M**ADA5M** ADA**US 53, IN I-FALLS , FROM JCT CRESCENT DR TO JCT 4TH ST & MN 11 FR. 3RD AVE W.TO E. SHORE DOVE ISLAND ,MILL & INLAY, ADA, SIGNAL	1	Pavement	2015	\$6,720,000
3608-49	**MN239**PV40M** TH 53 FR. 0.40 MI. SO KINMOUNT CREEK TO JCT CRESCENT DR. IN INTERNATIONAL FALLS. MILL & OVERLAY, TURN LANE CONSTRUCTION, REPLACE BOX CULVERT # 8207 WITH BR # 69X16, BRIDGE DECK OVERLAY #36003, SLOPE REPAIR	1	RCIP	2015	\$13,400,000
6918-83	**Chap152**US 53, UNITED TACONITE OPERATIONS RELOCATION, DRILLED TEST SHAFTS	1	Pavement	2015	\$4,500,000
6922-55	**RI20M** US 53, AT THE ORR WAYSIDE REST, HISTORIC WALL REPAIRS	1	Roadside Infrastructure	2015	\$33,555
3115-71	**PV40M** US 16, 9 IN GRAND RAPIDS FROM WOODLAND PARK RD TO 13TH ST. & IN COLERIANE FROM, JCT CURLEY AVE TO ELIZABETH AVE MILL & OVERLAY & REPAIR BR #31003	1	Pavement	2015	\$2,800,000
5880-186	I 35, OVER THE BNSF RR, 2 MI SO JCT TH 48, NB REPLACE BR # 9784, SB REPLACE BR #9783	1	Bridge	2016	\$6,400,000
6980-59	**PV40M** I 535, IN DULUTH, FROM JCT BLATNIK BRIDGE TO JCT I 35, CPR WORK (TIED TO 6933-92, 6926-52)	1	Pavement	2016	\$400,000
1603-48	MN 61, OVER DEVIL TRACK RIVER, 4.0 MI NE OF GUNFLINT TRAIL, REPLACE BR# 8910	1	Bridge	2016	\$1,304,000
6926-52	MN 61, NB FROM HOMESTEAD RD TO SOUTH END BR# 9341 AT KNIFE RIVER, CPR WORK . (TIED TO 6933-92 & 6980-59)	1	Pavement	2016	\$200,000
3116-142	**COC**AB**MN169, FROM 0.66 MI. SW OF CSAH 15 TO 0.30 MI. EAST OF SCENIC 7, RECONSTRUCTION FROM 2 LANES TO 4 LANES (CHAP 117)	1	IRC	2016	\$8,300,000
6933-92	MN 194, IN DULUTH, FROM MESABA AVE CROSSING TO JCT I-35, CPR AND REPAIR BR # 69839 AND BR #69840 (TIED 6980-59, 6926-52)	1	Bridge	2016	\$3,000,000
6915-133	**ADA** US 53, IN DULUTH, FROM 0.422 MI N JCT ANDERSON RD TO E JCT TH 194 EB, MILL AND OVERLAY	1	Pavement	2016	\$1,260,000
6918-80	**AB**Chap 152**AC** US 53 BETWEEN EVELETH AND VIRGINIA, RELOCATE US 53	1	Pavement	2016	\$28,000,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	AWAY FROM UNITED TACONITE OPERATIONS (AC PROJECT, PAYBACK 2017)				
6918-81	US 53, IN EVELETH AND VIRGINIA, FROM N JCT TH 37 TO 0.04 MI N JCT VERMILLION DR, PAVEMENT RESURFACING	1	Roadside Infrastructure	2016	\$1,600,000
6918-84	**CGMC**Chap 152** US 53 BETWEEN EVELETH AND VIRGINIA, CMGC FOR RELOCATING US 53 AWAY FROM UNITED TACONITE OPERATIONS	1	Bridge	2016	\$1,000,000
6922-54	**ELLA**MN239** TH 53 IMPROVEMENTS VARIOUS LOCATIONS. FR. 0.27 MI. S. JCT CR 540 TO JCT CR 517. TURN LANE & BYPASS CONSTRUCTION, CULVERT REPAIR	1	RCIP	2016	\$2,000,000
0980-150	I-35, OVER CSAH 61, 3.5 MI S OF JCT TH 210, REPAIR AND RE-DECK BRIDGE # 09824	1	Bridge	2017	\$2,000,000
5880-180	**AC** I 35, FROM 0.9 MILES NORTH OF PINE CO CSAH 33 TO 1.8 MILES SOUTH OF CARLTON CO LINE, WHITE TOPPING (AC PROJECT, PAYBACK IN 2018)	1	Roadside Infrastructure	2017	\$5,000,000
3806-70	**ELLA** **HB** MN 61, OVER THE BEAVER RIVER, REHABILITATE BR#9395	1	Bridge	2017	\$3,000,000
0119-26M	MN 210, OVER SISSABAGAMAH RIVER, REPLACE BR# 6296 (DESIGNED BY DISTRICT 3 SP 0109-26 AND FUNDED BY ATP 1 UNDER 0119-26M)	2	Bridge	2017	\$1,000,000
6916-104	US 53, IN DULUTH, S OF HAINES RD TO S OF MIDWAY RD, MILL & OVERLAY	1	Pavement	2017	\$3,800,000
6917-141	US 53, SB ONLY, 0.1 MI. S. OF WHITEFACE RIVER TO AUGUSTA LAKE RD (UT RD. 3231) MILL & OVERLAY	1	Pavement	2017	\$4,100,000
6917-142	US 53, NB, SOUTH OF JCT TH 37, LYON SPRING AREA, PAVEMENT RESURFACING	1	Pavement	2017	\$6,500,000
6918-80AC1	**AB**Chap 152**AC** US 53 BETWEEN EVELETH AND VIRGINIA, RELOCATE US 53 AWAY FROM UNITED TACONITE OPERATIONS (AC PAYBACK 1 OF 1)	1	Pavement	2017	\$20,000,000
6934-117L	US 169, IN HIBBING AT TH 37, ROUNDABOUT (TIED TO 6934-116, 6947-50)	1	Safety	2017	\$333,333
6934-116	US 169, IN HIBBING, FROM S JCT TH 73 TO N JCT TH 73 AND FROM N JCT 73 TO 0.26 MI E CSAH 5 (TIED TO SP 6934-117, 6947-50)	1	Pavement	2017	\$5,000,000
6934-117	US 169, IN HIBBING AT TH 37, ROUNDABOUT (TIED TO 6934-116, 6947-50)	1	Safety	2017	\$1,000,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6935-89	US 169, IN VIRGINIA, FROM .07 MI W CR-109 TO JCT 53 (HOOVER RD), OVERLAY, REPAIR BRIDGE #69034 & #69035	1	Bridge	2017	\$3,600,000
5880-180AC1	**AC** I 35, FROM 0.9 MILES NORTH OF PINE CO CSAH 33 TO 1.8 MILES SOUTH OF CARLTON CO LINE. WHITE TOPPING (AC PAYBACK 1 OF 1)	1	Roadside Infrastructure	2018	\$8,000,000
3605-41	MN 11, FROM W. JCT TH 71 TO 0.3 MI W. JCT CSAH 332, MILL & OVERLAY	1	Pavement	2018	\$2,100,000
3805-79L	MN 61, FROM 5TH ST IN TWO HARBORS TO .7MI N SILVER CRK TUNNEL, MILL & OVERLAY, REBUILD SIGNAL SYSTEMS (ASSOC. 3805-79)	1	Safety	2018	\$400,000
3805-79	MN 61, FROM 5TH ST IN TWO HARBORS TO .7MI N SILVER CRK TUNNEL, MILL & OVERLAY, REBUILD SIGNAL SYSTEMS	1	Pavement	2018	\$3,000,000
3808-36	MN 61, FROM 0.15 MI S LAFAYETTE BLUFF TUNNEL TO 3.2 MI N TH 1, (VARIOUS LOCATIONS) MILL AND OVERLAY	1	Pavement	2018	\$3,300,000
6928-28	MN 73, VARIOUS LOCATION, MILL & OVERLAY	1	Pavement	2018	\$8,470,000
6937-(69101A)	US 2, WB OFF RAMP OVER I-35 RAMP AT JCT OF US 2 & I-35 & EB RAMP OVER I-35, AT EAST JCT I-35 & US 2, SUPER STRUCTURE/BEAMS & PIER CAP WORK ON BRIDGE 69101 & 69102	1	Bridge	2018	\$479,650
6917-144	US 53, AT TH 37, REPLACE BRIDGE #9530	1	Bridge	2018	\$3,000,000
6917-145	US 53, AT THE CN RR BRIDGE, CLEARANCE FOR BR# 9481 & AT TRAIL, CLEARANCE FOR BR# 9482	1	Bridge	2018	\$959,299
6803-40	MN 11 AND LAKE ST INTERSECTION AREA IN WARROAD, SIGNAL REPLACEMENT	2	Safety	2015	\$270,000
4503-14	**RI20M**AB** MN 32, FROM N LIMITS OF THIEF RIVER FALLS TO MIDDLE RIVER, BITUMINOUS RECLAIM & OVERLAY AND REPLACE 4 BRIDGES & APPROACHES	2	Pavement	2015	\$10,400,000
2902-42	**COC** MN 34, FROM DETROIT LAKES TO NEVIS, CONSTRUCT PASSING LANES (CHAP 117) (DESIGNED BY DIST 4, FUNDED BY DIST 2 & DIST 4, DIST 4 \$7,662,600 UNDER SP 0303-64, DIST 2 \$1,247,400, ASSOCIATED WITH 0303-64)	2	IRC	2015	\$1,247,400
1120-55	MN 371, FROM WALKER TO JUST SOUTH OF RAILROAD CROSSING S OF CASS LAKE, MILL & OVERLAY, (DESIGNED BY DIST 2,	2	Pavement	2015	\$0

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	FUNDED BY ATP 3 UNDER SP 1120-55M, \$5,300,000) (TIED TO 1120-55M)				
1102-62	**COC** US 2, BETWEEN CASS LAKE AND DEER RIVER, (FROM PIKE BAY LOOP TO E CASS CO LINE), CONSTRUCT PASSING LANES AND TURN LANES (CHAP 117)	2	IRC	2015	\$10,500,000
6004-23	**ELLA** WB LANES – FROM 0.5MI W OF THE WEST ERSKINE CITY LIMITS TO 0.1 MI W OF JCT MN 32, CONCRETE PAVEMENT REHAB, TURN LANES, & REPLACE CULVERTS	2	Pavement	2015	\$7,644,216
6005-61	**PV40M** US 2, EBL - FROM 0.4 MI E OF FOSSTON TO 3.4 MI E OF FOSSTON, BITUMINOUS RECLAIM AND OVERLAY	2	Pavement	2015	\$2,300,000
6018-02PE	US 2, IN EAST GRAND FORKS, REDECK BR 9090, KENNEDY BR, OVER THE RED RIVER OF THE NORTH, PRE-LETTING CONSULTANT ENGINEERING, (MN LEAD) (CHAP 152)	2	Bridge	2015	\$1,980,000
8822-164	US 2, FROM CASS LAKE TO DEER RIVER & ON MN 34 FROM AKELEY TO WALKER, AND FROM PARK RAPIDS TO OSAGE, INSTALL CENTERLINE RUMBLE STRIPS & WET REFLECTIVE STRIPING (FY 2015 HSIP)	2	Safety	2015	\$375,000
6303-38	US 59, 5.0 MI S OF PLUMMER, REPLACE OLD BR 5819 WITH BOX CULVERT 63X01 OVER LOST RIVER & APPROACHES	2	Bridge	2015	\$1,100,000
3901-41	MN 11, FROM 7.6 MI W OF MN 172, (W OF BAUDETTE), TO E MN 72 IN BAUDETTE, BITUMINOUS MILL AND OVERLAY	2	Pavement	2016	\$5,800,000
6802-27	**ELLA** MN 11, FROM ROSEAU CSAH 15 TO E MN 89 IN ROSEAU, BITUMINOUS RECLAIM AND OVERLAY & EXTEND ONE END OF BR 68X06	2	Pavement	2016	\$2,600,000
3905-09PE	MN 72, MN/CANADA BORDER IN BAUDETTE, REPLACE OLD BR 9412, BAUDETTE BR, OVER THE RAINY RIVER, PRE-LETTING CONSULTANT ENGINEERING (CHAP 152)	2	Bridge	2016	\$3,000,000
0406-59	**ELLA** US 2 & MN 89, W OF BEMIDJI, RECONSTRUCT INTERSECTION AND ADD NEW BR 04030	2	Pavement	2016	\$5,000,000
6018-02	**AC** US 2, IN EAST GRAND FORKS, REDECK BR 9090, KENNEDY BR, OVER THE RED RIVER OF THE NORTH, (MN LEAD) (CHAP 152) (TOTAL \$18.0M, MN SHARE \$9.0M, ND SHARE \$9.0M) (AC PROJECT, PAYBACK IN FY 2018)	2	Bridge	2016	\$10,800,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6018-02CE	US 2, IN EAST GRAND FORKS, REDECK BR 9090, KENNEDY BR, OVER THE RED RIVER OF THE NORTH, CONSTRUCTION CONSULTANT ENGINEERING, (MN LEAD) (CHAP 152)	2	Bridge	2016	\$1,800,000
6015-07PE	US 2B, IN EAST GRAND FORKS, REHAB/REPL BR #4700, SORLIE BR, OVER THE RED RIVER OF THE NORTH, PRE-LETTING CONSULTANT ENGINEERING, (ND LEAD) (CHAP 152)	2	Bridge	2016	\$3,125,000
5705-59	US 59, IN THIEF RIVER FALLS, REALIGN GREENWOOD ST FROM HANSON DR TO US 59 & BITUMINOUS MILL & OVERLAYS ON ATLANTIC AVE, DAVIS AVE, & OAKLAND PARK RD (TIED WITH 170-115-017)	2	Pavement	2016	\$125,000
5702-44	MN 1, FROM N JCT MN 32 TO CSAH 18/150 AVE NE & ON US 59, FROM 1ST ST TO ATLANTIC AVE IN THIEF RIVER FALLS, RECONSTRUCT URBAN STREET	2	Pavement	2017	\$3,600,000
0416-51	MN 197, IN BEMIDJI, NB & SB FROM 7TH ST SW TO 3RD ST NW, MILL AND OVERLAY & PED RAMPS	2	Pavement	2017	\$1,800,000
0406-60	US 2, BEMIDJI BYPASS, EB & WB LANES, LOW SLUMP OVERLAYS TO BRIDGES 04005, 04006, 04007, 04008, 04009, 04010 AND LOWER GRADE UNDER BR 04019	2	Bridge	2017	\$3,300,000
3102-46	**COCII** US 2, IN DEER RIVER, FROM 2ND ST NW TO E LIMITS OF DEER RIVER, URBAN RECONDITIONING	2	IRC	2017	\$1,210,000
3502-19	IN KARLSTAD, MN 11, FROM W LIMITS OF KARLSTAD TO RAILROAD CROSSING & ON US 59, FROM KITTSON CSAH 9 TO HARRISON AVE, MILL & OVERLAY & PED RAMPS	2	Pavement	2018	\$1,066,000
3905-09	**AC** MN 72, IN BAUDETTE, REPLACE OLD BR 9412 OVER THE RAINY RIVER AND APPROACHES (CHAP 152) (AC PROJECT, PAYBACK IN FY 2019)	2	Bridge	2018	\$6,100,000
3905-09CE	MN 72, IN BAUDETTE, REPLACE OLD BR 9412, OVER THE RAINY RIVER, CONSTRUCTION CONSULTANT ENGINEERING (CHAP 152)	2	Bridge	2018	\$1,500,000
6018-02AC	**AC** US 2, IN EAST GRAND FORKS, REDECK BR 9090, KENNEDY BR, OVER THE RED RIVER OF THE NORTH, (MN LEAD) (CHAP 152) AC PAYBACK 1 OF 1	2	Bridge	2018	\$7,200,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6015-07	**AC** US 2B, MN/ND BORDER IN EAST GRAND FORKS, REHAB/REPL BR 4700, SORLIE BR, (CHAP 152) (ND LEAD) (AC PROJECT, PAYBACK IN FY 2019)	2	Bridge	2018	\$11,675,000
6008-15M	US 59, THE JCT MN 200 TO 0.7 MI S OF WINGER, MILL & OVERLAY, (DESIGNED BY DIST 4, FUNDED BY ATP 2 & APT 4, ATP 2 \$560,000, ATP 4 SP 4404-13, \$4,142,547)	2	Pavement	2018	\$560,000
2904-15	US 71, FROM S OF HUBBARD CSAH 15 TO 8TH ST IN PARK RAPIDS & ON HUBBARD CSAH 15 FROM 500' W TO 500' E OF US 71, S OF PARK RAPIDS, INTERSECTION RECONSTRUCTION	2	Pavement	2018	\$1,600,000
7380-247	SE END OF BRIDGE# 73865 (WB) AND BRIDGE# 73866 (EB) OVER SAUK RIVER TO NW END OF BRIDGE #73853 (WB) AND BRIDGE# 73854 (EB) OVER STEARNS CO CSAH 75, MILL AND OVERLAY	3	Pavement	2015	\$2,999,470
8680-160	I 94, REPAIR RAILING, APPROACH PANEL, MILL AND OVERLAY, BRIDGE #86810 UNDER WRIGHT CO CR 111, 7 MI W OF JCT MN 25	3	Bridge	2015	\$409,500
8680-167	I 94, FROM WRIGHT COUNTY CSAH 75 AT MONTICELLO TO MN 241, MILL AND OVERLAY EB ONLY, AND US 10, FROM 1.2 MI E OF MN 23 IN ST CLOUD TO 0.2 MI W OF MN 24, MILL AND OVERLAY EB ONLY	3	Pavement	2015	\$6,000,000
7302-22	**PV40M** MN 15, FROM KINGSTON RD AT MEEKER/STEARNS CO LINE TO LINDEN AVE E IN KIMBALL, MILL AND OVERLAY	3	Pavement	2015	\$838,041
7305-117	RURAL INTERSECTION WARNING SYSTEM AT STEARNS CR 158 COLD SPRING GRANITE	3	RCIP	2015	\$145,000
8605-50	**PV40M** MN 25, .5 MI S OF WRIGHT CO CR 106 TO .4 MI S OF SCHOOL BLVD IN MONTICELLO, RECONSTRUCTION, INSTALL TRAFFIC SIGNAL AT WRIGHT CO CR 106 AND FROM .4 MI S OF SCHOOL BLVD TO JCT I 94, MILL AND OVERLAY	3	Pavement	2015	\$6,625,000
3006-40	MN 95, LANDSCAPING AT BR# 30001 OVER RUM RIVER IN CAMBRIDGE	3	Roadside Infrastructure	2015	\$30,000
1805-78	**SEC164** CONSTRUCT DUAL LEFT TURN LANES AT JCT TH 371 IN BAXTER	3	RCIP	2015	\$850,000
4904-43	**ADA** 2015 ADA PROJECT; ON MN 27, FROM 13 ST NW TO BRIDGE #5907 OVER MISSISSIPPI RIVER IN LITTLE FALLS; AND	3	Roadside Infrastructure	2015	\$350,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	ON MN 6, FROM MN 210 (MAIN ST) TO 4TH ST NW IN CROSBY				
1120-55M	WALKER TO JUST S OF THE RR CROSSING S OF CASS LAKE, MILL AND OVERLAY (DESIGNED BY DISTRICT 2, ATP-3 PORTION)	2	Pavement	2015	\$4,900,000
0502-103	**PV40M**ELLA** ON TH 10, BENTON CSAH 4 TO 0.2 MI N OF ST. GERMAIN IN ST CLOUD (WBL & EBL), UNBONDED CONCRETE OVERLAY; AND ON TH 15, FROM TH 10 TO 1.0 MI SOUTH/BENTON CSAH 33, RECONSTRUCTION - let date 6/6/14	3	Pavement	2015	\$18,978,435
0502-110	US 10, WB ONLY FROM .3 MI N OF 115 ST NW IN RICE TO CSAH 33, AND ON US, EB ONLY FROM .3 MI N OF 115 ST NW IN RICE TO CSAH 4, MILL AND OVERLAY	3	Pavement	2015	\$2,300,000
7102-131	**SEC164** MEDIAN CABLE GUARDRAIL FROM CR 43 IN BIG LAKE TO WACO ST NW IN ELK RIVER	3	Roadside Infrastructure	2015	\$950,000
8602-50	US 12, INSTALL CONTINUOUS T-SIGNAL SYSTEM AT JCT MN 25 E OF MONTROSE (HSIP PROJECT)	3	RCIP	2015	\$1,400,000
4814-52	US 169, .2 MI S OF VINELAND RD IN VINELAND, REPLACE BR# 6657 WITH NEW BR# 48029 OVER RUM RIVER	3	Bridge	2015	\$1,860,000
7380-239	**PV40M** I 94, FROM STEARNS CO CSAH 75 W OF ST. JOSEPH TO W END OF BR #73865 AND BR #73866 OVER SAUK RIVER, UNBONDED CONCRETE OVERLAY; AND ON I 94 FROM STEARNS CO CR 159 AT COLLEGEVILLE E TO STEARNS CO CSAH 75, MILL AND OVERLAY	3	Pavement	2016	\$16,460,000
7321-51	**PV40M** MN 15, 0.1 MI N OF JCT TH 23 TO S END OF BRIDGE #05011 OVER MISSISSIPPI RIVER, MILL AND OVERLAY, INCLUDE CONSTRUCT DUAL SB LEFT TURN LANES AT 12TH ST N IN ST. CLOUD AND AT STEARNS CO CSAH 1 IN SARTELL	3	RCIP	2016	\$2,223,000
7321-51S	**PV40M** MN 15, 0.1 MI N OF JCT TH 23 TO S END OF BRIDGE #05011 OVER MISSISSIPPI RIVER, MILL AND OVERLAY, INCLUDE CONSTRUCT DUAL SB LEFT TURN LANES AT 12TH ST N IN ST. CLOUD AND AT STEARNS CO CSAH 1 IN SARTELL (HSIP PROJECT)	3	RCIP	2016	\$794,444
7108-23	**PoDI** **ELLA** **AC** MN 24, AT CLEARWATER, REPLACE BR# 6557 WITH	3	Bridge	2016	\$15,000,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	NEW BR #71004 OVER MISSISSIPPI RIVER (AC PROJECT, PAYBACK IN 2017)				
8605-49	MN 25, 7TH ST TO CATLIN ST IN BUFFALO, RECONSTRUCTION, UPGRADE TRAFFIC SIGNAL	3	Pavement	2016	\$5,000,000
4904-44	**ADA** ADA IPROJECT; FROM EAST END OF BR# 5907 TO 10TH STREET NE IN LITTLE FALLS	3	Roadside Infrastructure	2016	\$250,000
8607-59	MN 55, AT WRIGHT CO CSAH 14 (EBL), CONSTRUCT LEFT TURN LANE AND DETACHED RIGHT TURN LANE (HSIP PROJECT)	3	RCIP	2016	\$450,000
8823-294	US 10, SIGNAGE IMPROVEMENTS FROM RICE TO WADENA	3	Roadside Infrastructure	2016	\$420,000
4903-69	BNSF RR, INSTALL GATES, FLASHING LIGHTS, CIRCUITRY AND CANTILEVERS, US 10, 2ND AVE, MOTLEY	3	RCIP	2016	\$275,000
7318-38	**PV40M** US 71, FROM E JCT MN 55 IN BELGRADE TO I 94 IN SAUK CENTRE, MILL AND OVERLAY	3	Pavement	2016	\$6,214,549
4812-84	US 169, FROM BR# 48033 OVER RUM RIVER TO .2 MI S OF WAGIDAAKI DR IN VINELAND, MILL AND OVERLAY	3	Pavement	2016	\$4,117,000
4812-86	**PV40M**ELLA** US 169, FROM MILLE LACS CSAH 11/190TH ST N OF MILACA, TO RUM RIVER REST AREA (NB), RECONSTRUCTION, INCL. TURN LANE EXTENSIONS	3	Pavement	2016	\$7,300,000
7106-83	US 169, AT JCT SHERBURNE CO CSAH 4 IN ZIMMERMAN, GEOMETRIC IMPROVEMENTS, CONSTRUCT SB ACCEL LANE, RESURFACING AND SIGNAL REPLACEMENT	3	Roadside Infrastructure	2016	\$450,000
7108-23AC	**PoDI** **ELLA** **AC** MN 24, AT CLEARWATER, REPLACE BR# 6557 WITH NEW BR #71004 OVER MISSISSIPPI RIVER (AC PAYBACK 1 OF 1)	3	Bridge	2017	\$9,000,000
7704-14	MN 27, FROM N JCT TH 71 TO 9TH ST NE IN LONG PRAIRIE, MILL AND OVERLAY, AND US 71, FROM N OF S LIMITS IN LONG PRAIRIE N TO S END OF LONG PRIARIE RIVER BRIDGE (BRIDGE #6852), MILL AND OVERLAY	3	Pavement	2017	\$1,170,000
1810-92	**AC** MN 371, FROM 0.5 MI N OF CROW WING CO CSAH 18 IN NISSWA TO 0.5 MI N OF CROW WING CO CSAH 16 IN JENKINS, CONSTRUCT 4-LANE, INCLUDE CULLEN	3	Pavement	2017	\$40,000,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
1814-06	BROOK BRIDGE REPLACEMENT (AC PROJECT, PAYBACK INTO THE FUTURE) MN 371B, FROM MN 210 (WASHINGTON ST) TO JOSEPH ST IN BRAINERD, RECONSTRUCTION, INCLUDING SIDEWALKS, CURB AND GUTTER	3	Pavement	2017	\$7,500,000
7102-127	US 10, REPLACE BRIDGE #5955 OVER ELK RIVER (LAKE ORONO) IN ELK RIVER (CHAP 152)	3	Bridge	2017	\$10,000,000
7709-16	US 71, FROM BERTHA TO WADENA/TODD CO LINE, MILL AND OVERLAY	3	Pavement	2017	\$3,000,000
1804-5265A	US 169, .5 MI S OF JCT MN 18, PRESERVE BRIDGE #5265 OVER DRY STREAM	3	Bridge	2017	\$1,000,000
7108-24	MN 24, FROM BR# 86807 OVER I 94 IN CLEARWATER TO US 10 IN CLEAR LAKE, MILL AND OVERLAY	3	Pavement	2018	\$2,200,000
7701-39	MN 210, 0.5 MI E OF TODD CO CSAH 9, REPLACE BR# 5802 OVER MORAN BROOK	3	Bridge	2018	\$1,800,000
8001-40	US 10, MILL AND OVERLAY, FROM END OF 4-LANE W OF WADENA E TO OINK JOINT ROAD; AND URBAN RECONSTRUCTION, FROM 0.1 MI W OF 3RD ST NW TO 0.1 MI E OF 2ND ST NE IN WADENA INCLUDING RR SIGNAL UPGRADE (DESIGNED BY D3, ATP 4 PORTION OF \$825,985)	3	Pavement	2018	\$8,800,000
1480-168	I-94 WEIGH STATION MODIFICATION	4	Roadside Infrastructure	2015	\$477,885
1480-169	**SECTION 164** I-94, TH 336 TO BARNESVILLE AND 3 MI E OF ALEXANDRIA TO EAST DOUGLAS COUNTY LINE, INSTALL MEDIAN CABLE GUARDRAIL	4	Roadside Infrastructure	2015	\$2,300,000
5680-130	DECK REPLACEMENT ON BRIDGE #56813 (WB) AND 56814 (EB) OVER CSAH 10	4	Bridge	2015	\$1,357,887
8402-17	ON TH 9 FROM TH 27 IN HERMAN TO SOUTH STREET IN MORRIS, AND FROM TH 75 IN DORAN TO TH 55, ON TH 55 FROM S JCT OF CSAH 11 IN WENDELL TO TH 59, AND ON TH 28 FROM N JCT OF TH 9 IN MORRIS TO 500' W OF TH 59, GRADING , MILL AND OVERLAY INCLUDING CENTER LEFT TURN LANE ON TH 28 FROM 1300' W OF 540TH AVE TO 1300' EAST OF 540TH AVE	4	Pavement	2015	\$8,682,997
7605-38M	**AB** KERKHOVEN TO PENNOCK - OVERLAY PROJECT (DESIGNED BY DISTRICT 8, FUNDED BY DIST 4 & DIST 8)	4	Pavement	2015	\$1,548,600

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	DIST 8 SP 3403-66 \$1,900,000, DIST 4 SP 7605-38M \$1,548,600 (TIED TO 3403-66)				
2103-35AC	**AC** MCKAY AVE N OF ALEXANDRIA TO TH 210 - MILL AND BITUMINOUS SURFACING (AC PROJECT, PAYBACK 1 OF 1)	4	Pavement	2015	\$3,000,000
0303-64	**COC** PASSING LANES ON TH 34 FROM DETROIT LAKES TO NEVIS (CHAP 117) (DESIGNED BY DIST 4, FUNDED BY ATP 4 & ATP 2, ATP 4 \$7,662,600; ATP 2 SP 2902-42 \$1,247,400)	4	IRC	2015	\$7,662,600
1401-173	**CIMS** ADA5M**GEOMETRIC IMPROVEMENTS AT JCT. OF 11th ST. AND MAIN AVE/TH75 AND 11TH ST. FROM CENTER AVE TO MAIN AVE, M/O, RECONSTRUCT, AND SIGNAL WORK, ASSOCIATED S.A.P. 144-121-006 AND S.A.P. 144-136-014 (CIMS GRANT=\$3,404,000, **ADA5M**=500,000)	4	RCIP	2015	\$3,904,000
1407-25AC	**AC** TH 10 TO N CLAY CO LINE - GRADING, BITUMINOUS MILLING & SURFACING (AC PROJECT, PAYBACK 1 OF 1)	4	Pavement	2015	\$2,200,000
1406-66	**AC** I-94/TH 75 INTERCHANGE MODIFICATION (AC PROJECT, PAYBACK IN 2017)	4	Pavement	2016	\$5,234,212
8824-119	**ITS**I-94 TRAVEL MESSAGE SYSTEM FROM MORHEAD TO ALEXANDRIA	4	Roadside Infrastructure	2016	\$675,000
2102-58	**AB****PoDI**ELLA**ALEXANDRIA 4-LANE EXPANSION FROM I-94 TO CSAH 28, INCLUDING REPLACING BRIDGE OLD BR 21814 WITH NEW BR 21828 & OLD BR 21813 WITH NEW BR 21827 & I-94 WITH INTERCHANGE MODIFICATION (CHAPTER 152 FUNDS)	4	Pavement	2016	\$15,788,274
0303-65	**COCII**CONSTRUCT CENTER LEFT TURN LANE IN DETROIT LAKES FROM N JCT 59 TO HIGHLAND DRIVE	4	IRC	2016	\$1,900,000
7506-17	JCT. 28 IN MORRIS TO NORTH STEVENS COUNTY LINE, CONCRETE OVERLAY	4	Pavement	2016	\$4,582,930
0301-60AC	**AC** US 10 FROM W. OF AIRPORT RD TO WEST OF US 59, & US 59 FROM US 10 TO 3130 FT. SOUTH OF US 10 - GRADING, UNBONDED CONCRETE OVERLAY, BITUMINOUS SURFACING, ADA IMPROVEMENTS, SIGNALS, LIGHTING & BRIDGE 03001 (TH 59 OVER HOLMES	4	Pavement	2016	\$6,300,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	STREET) (TIED TO SP 117-010-006) (AC PROJECT, PAYBACK 1 OF 1)				
1406-66AC	**AC** I-94/TH 75 INTERCHANGE MODIFICATION (AC PROJECT, PAYBACK 1 OF 1)	4	Pavement	2017	\$4,000,000
1481-9066B	BRIDGE PAINTING ON I-94 OVER THE RED RIVER (BRIDGE # 9066, 9067)	4	Bridge	2017	\$3,000,000
7608-19	**ADA** IN BENSON ON MN 9, MN 12, AND 29, MILL AND OVERLAY, SIGNAL ENHANCEMENTS, ADA	4	Pavement	2017	\$2,670,566
0301-63	REPLACE BRIDGE #03003 OVER CP RAILROAD, EB IN DETROIT LAKES	4	Bridge	2017	\$3,103,000
1401-171	0.02 MI W OF FOUNDATION AVENUE TO .10 E OF 110TH STREET, REHABILITATION AND ACCESS MANAGEMENT IN GLYNDON (\$2.0M CHAP 152)	4	Pavement	2017	\$2,394,912
7605-89	JCT CSAH 25 (E OF BENSON) TO KERKHOVEN, MILL AND OVERLAY	4	Pavement	2017	\$4,830,619
0304-34	INTERSECTION IMPROVEMENTS ON TH 59 AT CSAH 22, SOUTH OF DETROIT LAKES (TIED TO SP 003-622-034)	4	Pavement	2017	\$2,051,304
0305-34	0.4 MILES S OF BUFFALO RIVER TO JCT TH 200, MILL AND OVERLAY	4	Pavement	2017	\$7,356,980
7609-10	TH 119 TO JCT TH 12, MILL AND OVERLAY	4	Pavement	2017	\$2,701,628
2180-104	**AC** ON I94, OVER LATOKA LAKE, REPLACE OLD BR#21805 WITH NEW BR#21829 AND REPLACE OLD BR#21806 WITH NEW BR#21830 (AC PROJECT, PAYBACK IN SFY 2019)	4	Bridge	2018	\$1,909,942
5605-21M	US 10, MILL AND OVERLAY, FROM END 4-LANE W OF WADENA TO OINK JOINT ROAD: AND URBAN RECONSTRUCTION, FROM 0.1 MI W OF 3RD ST NW TO 0.1 MI E OF 2ND ST NE IN WADENA INCLUDING SIGNAL UPGRADE, DESIGNED BY DISTRICT 3, FUNDED BY ATP 3 AND ATP 4, ATP 3, 8.8M, ATP 4, \$825,985	4	Pavement	2018	\$825,985
7604-22	JCT. US 59 TO BENSON, MILL AND OVERLAY	4	Pavement	2018	\$5,606,790
4404-13	FROM THE JCT MN200 TO 0.7 MI S OF WINGER, MILL & OVERLAY, (DESIGNED BY DIST 4, FUNDED BY ATP 4 & ATP 2, ATP 4 \$4,142,547; ATP 2 SP 6008-15M \$560,000)	4	Pavement	2018	\$4,142,547
2480-104	**PV40M**AC**I 35 SB FROM 0.55 MI. S. CSAH 23 TO 0.53 MI. N. MN 30, UNBONDED	6	Pavement	2015	\$13,650,757

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	CONCRETE OVERLAY (AC PROJECT, PAYBACK IN 2016)				
6680-112	**ITS** I 35 PHASE III - NORTH SEGMENT FROM RICE COUNTY CSAH 1 INTERCHANGE NORTH TO DAKOTA CR 70	6	Roadside Infrastructure	2015	\$925,000
7480-113AC1	**AC** I 35 NB AND SB FROM 0.5 MI N OF S LIMITS OF OWATONNA (40.787) TO 0.25 MI N OF N JCT US 14 (42.856), RECONSTRUCT PAVEMENT AND NB AND SB FROM BRIDGE STREET TO N JCT US 14, OWATONNA, CONSTRUCT AUXILIARY LANE AND REPLACE BRIDGES 74815, 74816, 74817 AND 74818 (AC PAYBACK - 1 OF 2)	6	Pavement	2015	\$10,000,000
5580-90	**PV40M** I 90, I 90, WB LANES FROM 1.3 MI W OF TH 42 TO 2.3 MI E OF TH 74, UNBONDED CONCRETE OVERLAY, CULVERT WORK, LIGHTING , RWIS AND BRIDGE 85817	6	Pavement	2015	\$13,816,200
8580-149OV2	I 90 DRESBACH BRIDGE (CHAP 152) - 2015 COSTS FOR CONSTRUCTION OVERSIGHT	6	Bridge	2015	\$2,221,000
8580-165AC	**AC** I 90 EB FROM 0.8 MI W MN 76 TO 0.69 W OF CSAH 12 OVERPASS, UNBONDED CONCRETE OVERLAY (AC PAYBACK 1 OF 1)	6	Pavement	2015	\$2,600,000
8580-168	I 90, AT DAKOTA, REPLACE INTERCHANGE LIGHTING SYSTEM	6	Safety	2015	\$160,000
8503-46	**CMGC**AC** WORK PACKAGE #4 - REMAINDER OF BRIDGE 85851, GRADING, PAVING, DRAINAGE, RETAINING WALLS, SIGNING, LIGHTING AND STRIPING - WINONA (CHAP 152) (MAX FEDERAL PARTICIPATION OF \$30.7M FOR BRIDGE 85851) (AC PROJECT, PAYBACK IN 2016)	6	Bridge	2015	\$36,693,392
8503-5900G	**CMGC** WORK PACKAGE #3 - BRIDGE 85851 EARLY FOUNDATIONS FOR RIVER PIERS AND NORTH ABUTMENT AND BRIDGE 5900 SCOUR CONTERMEASURES IN WINONA (CHAP 152) (MAX FEDERAL PARTICIPATION OF \$30.7M FOR BRIDGE 85851)	6	Bridge	2015	\$16,000,000
8510-11	MN 43, INSTALL WEIGH IN MOTION FOR WINONA BRIDGE	6	Roadside Infrastructure	2015	\$250,000
8826-167	**IDIQ** DISTRICT WIDE BRIDGE CRACK SEALING, VARIOUS BRIDGES ON MN 13, US 14, MN 16, I35, US 52, MN 65 and I90 - MINIMUM AMOUNT \$300,000; MAXIMUM	6	Bridge	2015	\$300,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	AMOUNT \$700,000; EXPIRATION DATE 11/15/2016				
2001-36	US 14 FROM I 35 TO DODGE CENTER, MEDIUM BITUMINOUS MILL AND OVERLAY	6	Pavement	2015	\$5,909,000
2001-38	**COCII** PURCHASE RIGHT OF WAY FOR EXPANSION BETWEEN DODGE CENTER AND OWATONNA	6	IRC	2015	\$1,500,000
7401-41	**TH14TB** FROM 0.6 MI W OF OWATONNA CITY LIMITS TO W JCT I35 AND FROM E JCT I35 TO SIGNAL ON HOFFMAN STREET (STATE AVENUE), ROADWAY RECONSTRUCTION, CONCRETE PAVEMENT REHAB AND BITUMINOUS SHOULDER REPLACEMENT, TURNBACK OF OLD TH 14	6	Pavement	2015	\$2,750,000
7402-30	**COC**ELLA** FROM TH 218 TO CR 180 IN STEELE COUNTY, TWO-LANE TO FOUR-LANE EXPANSION; GRADING, CONCRETE AND BITUMINOUS SURFACING, LIGHTING, SIGNING AND CULVERT IMPROVEMENTS (CHAP 117)	6	IRC	2015	\$12,010,983
5508-121	**ITS** US 52 - EXTENSION OF FIBER OPTIC COMMUNICATION LINE NORTH FROM 75TH ST TO ELK RUN INTERCHANGE NORTH OF ORONOCO	6	Roadside Infrastructure	2015	\$350,000
5508-122	US 52 AND US 14 IN ROCHESTER, REPLACE LIGHTING LUMINAIRES	6	Safety	2015	\$407,000
2513-93	US 61 AT SEVASTOPOL ROAD AND WACOUTA ROAD - SOUTH OF RED WING, ADD LEFT TURN LANES AND REMOVE ACCESSES - TIED WITH SP 2514-120	6	Pavement	2015	\$1,193,323
2514-120	**PV40M** US 61 NB AND SB FROM READY MIX ENTRANCE IN RED WING TO POTTER ST AND FROM OLD WEST MAIN ST TO MN 19, MEDIUM BITUMINOUS MILL AND OVERLAY - TIED WITH SP 2513-93	6	Pavement	2015	\$4,397,800
2514-122	**CIMS**ADA5M**PV40M** US 61 IN RED WING FROM POTTER STREET TO OLD WEST MAIN STREET, RECONSTRUCTION, MEDIAN CONSTRUCTION AND PEDESTRIAN SAFETY IMPROVEMENT - MUNICIPAL AGREEMENT PROGRAM - F.Y. 2015 - \$2.445M CIMS, \$630,000 ADA5M AND \$20,400 PV40M	6	RCIP	2015	\$7,049,912
2313-22	US 63 FROM IOWA/MN SL TO E JCT MN 16, CONCRETE PAVEMENT REHABILITATION, CONCRETE PLANING AND BITUMINOUS SHOULDER REPLACEMENT	6	Pavement	2015	\$2,620,740

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
5509-78	US 63 FROM CSAH 35 TO CR 120 (STEWARTVILLE), SHARED-USE PATH - MUNICIPAL AGREEMENTS PROGRAM	6	Pavement	2015	\$50,000
5509-79	**PV40M** US 63 NB & SB FROM 0.1 MI. N. N. JCT. MN 30 TO 28TH ST SE (ROCHESTER), MEDIUM BITUMINOUS MILL AND OVERLAY	6	Pavement	2015	\$4,765,088
5509-80	**TED14** TH 63, CSAH 16 & US 63 INTERCHANGE RECONSTRUCTION (BRIDGE 9407) AND AIRPORT ACCESS IMPROVEMENT PROJECT - \$2.224 TED14 FUNDS	6	IRC	2015	\$11,519,000
5509-82	US 63 NB AND SB FROM ROOT RIVER BRIDGE (STEWARTVILLE) TO 0.1 MI N OF N JCT MN 30, CONCRETE PAVEMENT REHABILITATION, PLANING AND BITUMINOUS SHOULDER REPLACEMENT	6	Pavement	2015	\$1,150,000
2404-41	**ADA5M** US 65 NB AND SB FROM 0.5 MI. S. OF I 35 TO NEWTON AVE, MEDIUM BITUMINOUS OVERLAY & MILL & FILL, SIDEWALK REPLACEMENTS AND ADA RAMP WORK; EB AND WB ON TH 13 FROM 0.05 MI E OF EUCLID AVE TO US 65, MEDIUM BITUMINOUS OVERLAY, SIDEWALK REPLACEMENTS AND ADA RAMP WORK	6	Pavement	2015	\$4,720,903
2480-104AC	**AC** I 35 SB FROM 0.66 MI. S. CSAH 23 TO 0.5 MI. N. MN 30, UNBONDED CONCRETE OVERLAY (AC PAYBACK 1 OF 1)	6	Pavement	2016	\$4,050,000
7480-113AC2	**AC** I 35 NB AND SB FROM 0.5 MI N OF S LIMITS OF OWATONNA (40.787) TO 0.25 MI N OF N JCT US 14 (42.856), RECONSTRUCT PAVEMENT AND NB AND SB FROM BRIDGE STREET TO N JCT US 14, OWATONNA, CONSTRUCT AUXILIARY LANE AND REPLACE BRIDGES 74815, 74816, 74817 AND 74818 (AC PAYBACK - 2 OF 2)	6	Pavement	2016	\$3,177,485
7480-124	I 35, STRAIGHT RIVER REST AREA REPLACEMENT	6	Roadside Infrastructure	2016	\$4,500,000
5080-161	I 90, UNDER 11TH DRIVE NE, AUSTIN, REPLACE OR REHAB BRIDGE 9177 (NEW BRIDGE 50808) - HISTORIC BRIDGE STUDY	6	Bridge	2016	\$1,468,500
8580-149OV3	DRESBACH BRIDGE (CHAP 152) - 2014 COSTS FOR CONSTRUCTION OVERSIGHT	6	Bridge	2016	\$1,591,000
8503-46AC	**CMGC**AC** WORK PACKAGE #4 - REMAINDER OF BRIDGE 85851, GRADING, PAVING, DRAINAGE, RETAINING WALLS, SIGNING, LIGHTING AND STRIPING -	6	Bridge	2016	\$13,331,608

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	WINONA (CHAP 152) (MAX FEDERAL PARTICIPATION OF \$30.7M FOR BRIDGE 85851) (AC PAYBACK 1 of 1)				
8503-46C	**CMGC** WORK PACKAGE #5 - COMPLETE ROADWAY APPROACHES FOR BRIDGES 85851 AND 5900, REHABILITATION AND RECONSTRUCTION BRIDGE 5900 AND COMPLETE BRIDGE 85851 IN WINONA (CHAP 152) (AC PROJECT, AC PAYBACK 2017 & MANAGED INTO THE FUTURE)	6	Bridge	2016	\$33,968,392
5007-32	**PV40M** MN 105, FROM N END BR 5971 TO JCT W RAMPS I 90, MEDIUM MILL AND OVERLAY	6	Pavement	2016	\$1,100,000
2505-53	US 52, SB LANES FROM 0.4 MI. S. CSAH 11 TO 100' S MAIN ST. RAMP (PINE ISLAND) AND FROM S JCT MN 60 (S OF ZUMBROTA) TO 1.2 MI N CSAH 7, MEDIUM BITUMINOUS MILL AND OVERLAY	6	Pavement	2016	\$2,500,000
8504-75	US 61 SB OVER TROUT CREEK, REPLACE BRIDGE 9065	6	Bridge	2016	\$1,001,952
8505-39	US 61, GILMORE AVENUE, WINONA, RECONSTRUCT INTERSECTION AND INSTALL NEW SIGNAL	6	Pavement	2016	\$2,000,000
8503-46CAC	**CMGC** WORK PACKAGE #5 - COMPLETE ROADWAY APPROACHES FOR BRIDGES 85851 AND 5900, REHABILITATION AND RECONSTRUCTION BRIDGE 5900 AND COMPLETE BRIDGE 85851 IN WINONA (CHAP 152) (AC PAYBACK 1 OF 1) - MANAGED INTO THE FUTURE FOR REMAINING PAYBACK	6	Bridge	2017	\$14,000,000
2510-50	MN 58, OVER TH 52 IN ZUMBROTA, REPLACE BRIDGE 9661	6	Bridge	2017	\$4,000,000
2506-75	US 52, NB LANES, ROCHESTER TO CANNON FALLS WITH EXCEPTIONS FROM R.P. 64.398 TO 66.632 AND R.P. 79.360 TO 82.206, MEDIUM BITUMINOUS OVERLAY	6	Pavement	2017	\$10,400,000
5507-63	US 52 OVER US 63, REPLACE DECKS NB BRIDGE 55009 AND SB BRIDGE 55010	6	Bridge	2017	\$4,244,173
2514-121	US 61 OVER HAY CREEK AND WITHERS HARBOR DRIVE, REPLACE BRIDGE 6483 AND OVER ABANDONED C&NW RR, PLUG BRIDGE 6482 - IN RED WING	6	Bridge	2017	\$7,500,000
5509-81	**ITS** US 63 - EXTENSION OF ROCHESTER TMS FROM TH 52 TO I 90 INTERCHANGE	6	Roadside Infrastructure	2017	\$350,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6680-103	AT I 35/MN 21 INTERCHANGE IN FARIBAULT, IMPROVE RAMP GEOMETRICS	6	Pavement	2018	\$550,000
8826-154	DISTRICTWIDE DECK REPAIR ON I 35 NB AT VARIOUS LOCATIONS	6	Bridge	2018	\$960,000
7408-47	US 14 OVER UP RAIL REHAB BRIDGES 74001 AND 74002 AND OVER STRAIGHT RIVER REHAB BRIDGES 74003 AND 74004	6	Bridge	2018	\$1,540,000
2506-77	US 52, SB LANES FROM 1.2 MI N CSAH 7 TO 2.2 MI S MN 19, MEDIUM BITUMINOUS MILL AND OVERLAY	6	Pavement	2018	\$5,675,033
2506-79	**AC** US 52 OVER LITTLE CANNON RIVER, REPLACE BRS 9485 AND 9486 (AC PROJECT, PAYBACK IN 2019)	6	Bridge	2018	\$2,937,552
8504-78	US 61, SB OVER CEDAR CREEK, REPLACE BRIDGE 9063	6	Bridge	2018	\$1,881,522
2515-21	**AC** US 63, RED WING, REHAB OR REPLACE BRIDGE 9040 OVER MISSISSIPPI RIVER AND CP RAIL PLUS APPROACH WORK AND REHAB OR REPLACE BRIDGE 9103 (CHAP 152) - INCLUDES \$14.53M SBPF AND \$28.5M TH BONDS (AC PROJECT - PAYBACK IN 2019 AND 2020)	6	Bridge	2018	\$87,205,300
3280-126	**PV40M** I 90, DESIGN BUILD, EB LANES FROM 0.74 MI E OF TH 86 TO 0.5 MI E OF TH 4 & WB LANES FROM CSAH 5 TO 0.5 MI E OF TH 4, MILL & CONCRETE OR BITUMINOUS OVERLAY, DRAINAGE REPAIRS, LIGHTING AND ADA	7	Pavement	2015	\$36,300,000
0805-112AC	**AC** PV40M** MN 15, FROM BROWN COUNTY LINE TO 1.7 MI SOUTH OF NORTH JCT CSAH 24, MILL & OVERLAY (AC PAYBACK 1 OF 1)	7	Pavement	2015	\$2,530,445
0704-88AC	**AC** MN 22, FROM TH 83 TO CSAH 26, SIGNAL REVISIONS AND ADA IMPROVEMENTS AT ALL INTERSECTIONS, CONSTRUCT ROUNDABOUTS AT THE JCT OF TH 22 WITH MADISON AVE/CSAH 17 AND WITH ADAMS ST & CPOR FROM ADAMS ST TO 0.48 MI N IN MANKATO (AC PAYBACK 1 OF 1)	7	Pavement	2015	\$564,800
4012-36	MN 22, NEAR ST PETER WEST OF BR#40002, RAISE ROAD ELEVATION AND CONSTRUCT NEW BRIDGE 40005	7	Pavement	2015	\$2,500,000
1703-70	**AC**AB** FROM EAST OF MOUNTAIN LAKE TO WEST OF BUTTERFIELD, RECONSTRUCT	7	Pavement	2015	\$6,900,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	FROM 2 LANE TO 4 LANE, ALTERNATE BID, (AC PROJECT, PAYBACK IN 2016 AND 2017)				
8308-44AC2	**AC** MN 60, FROM CSAH 5 IN BUTTERFIELD TO 700TH AVE IN ST JAMES, CONSTRUCT 4 LANE ROADWAY AND NEW BRIDGE #83040 (AC PAYBACK 2 OF 2)	7	IRC	2015	\$4,161,472
8827-175	**ELLA**ITS** MN 60, VARIOUS LOCATIONS, INSTALL DYNAMIC MESSAGE SIGNS	7	Safety	2015	\$137,034
0702-116AC2	**AC** **LGA** CSAH 12 & TH 14 BRIDGE #07587 & RAMPS (LGA PAYBACK TO COUNTY 2 OF 3) TIED 007-612-011	7	Bridge	2015	\$2,100,000
5203-102	US 14, LOOKOUT DRIVE AT TH 14, BRIDGE 52006 AND RAMP WORK (TIED 150-070-001 & 150-116-009)	7	Pavement	2015	\$800,000
5203-102S	US 14, LOOKOUT DRIVE AT TH 14, WESTBOUND RAMP ROUNDABOUT (TIED 150-070-001 & 150-116-009)	7	Pavement	2015	\$700,000
5203-104	**COC** US 14, FROM NICOLLET TO NORTH MANKATO, CONSTRUCT 4 LANE ROAD AND BYPASS AROUND NICOLLET AND NEW BR 52005 (CHAP 117)	7	IRC	2015	\$34,000,000
8103-113	**TH14TB**US 14, FROM CO RD 60 TO W CITY LIMITS OF JANESVILLE, & E CITY LIMITS OF JANESVILLE TO THE W CITY LIMITS OF WASECA & E CITY LIMITS OF WASECA TO 0.6 MI W OF THE OWATONNA CITY LIMITS, UNBONDED CONCRETE OVERLAY, DESIGN BUILD	7	Pavement	2015	\$10,900,000
8103-114	US 14, FROM THE W CITY LIMITS OF JANESVILLE TO THE E CITY LIMITS OF JANESVILLE, RECONSTRUCT	7	Pavement	2015	\$5,750,000
3205-29	**CIMS** US 71, 0.3 MI S OF SPRINGFIELD PARKWAY TO 0.16 MI S OF INDUSTRIAL PARKWAY IN JACKSON, RECONSTRUCT, MILL & OVERLAY, HAWK SIGNAL, PED/BIKE TRAIL AND REPLACE BR 6741 WITH NEW BR 32011 (CIMS \$1,260,000) (TRLF \$244,000) (TIED 032-090-005)	7	RCIP	2015	\$5,504,000
4013-54	**TED14** US 169, JCT WITH CSAH 28, NORTH OF LE SUEUR, ACCESS IMPROVEMENTS, (\$2,072,571 IS TED14 FUNDS), (\$405,526 IS STATE FUNDS)	7	Pavement	2015	\$3,715,139
5209-66AC	**AC** US 169, ST PETER TO LE SUEUR, 1.8 MILES OF GRADE RAISE FOR FLOOD	7	Pavement	2015	\$5,046,455

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
1703-70AC	MITIGATION AND MILL AND OVERLAY SB LANES ONLY (AC PAYBACK 1 of 1) **AC** MN 60, MOUNTAIN LAKE TO BUTTERFIELD, EXPANSION (AC PAYBACK 1 OF 1)	7	Pavement	2016	\$7,600,000
0702-116AC3	**LGA** CSAH 12 & TH 14 BRIDGE #07587 & RAMPS (LGA PAYBACK TO COUNTY 3 OF 3) TIED 007-612-011	7	Bridge	2016	\$2,225,962
8103-115	**TH14TB** US 14, FROM THE W CITY LIMITS OF WASECA TO THE E CITY LIMITS OF WASECA, RECONSTRUCT	7	Pavement	2016	\$12,750,000
3205-32	**TED12** US 71, AT INDUSTRIAL PARKWAY AND TH 71, CONSTRUCT ROUNDABOUT,(\$1,800,000 TED), (TRLF \$377,400)	7	Pavement	2016	\$2,635,575
5211-59	**FMP** US 169, FROM TH 14 TO ST PETER, GRADE, SURFACE AND MEDIAN WORK, \$8M ECONOMIC DEVELOPMENT ADMINISTRATION FUNDS (CHAP 152)	7	Pavement	2016	\$14,000,000
5211-61	US 169, FROM TH 14 TO ST PETER, MILL AND CONCRETE OVERLAY	7	Pavement	2016	\$11,300,000
4680-124	**ELLA** I 90, EAST OF FAIRMONT, BR#46821 & 46822 AND AT THE JCT OF TH 15, BR# 46833 & 46834, REHAB BRIDGES	7	Bridge	2017	\$2,190,000
4680-126	I90, SHERBURN TO FAIRMONT WB LANES, MILL & OVERLAY	7	Pavement	2017	\$7,400,000
5380-133	**ELLA** I90, RUSHMORE TO WORTHINGTON WB LANES, & FROM WORTHINGTON TO 3.7 MI E OF TH 264 EB LANES, MILL & OVERLAY	7	Pavement	2017	\$11,700,000
6780-105	I 90, 0.3 MI E OF SOUTH DAKOTA STATE LINE BR#9685 & 9686, & 2.9 MI E OF JCT TH 23, BR#9689 & 9690, REHAB BRIDGES	7	Bridge	2017	\$4,900,000
0805-113	MN 15, FROM 0.2 MI S OF TWP RD 46 TO TH 14/TH 15 (7TH NORTH SIGNAL) IN NEW ULM, MILL & OVERLAY	7	Pavement	2017	\$7,180,000
4603-45	MN 15, FROM JOHNSON STREET TO 0.05 MI S OF GOEMANN RD IN FAIRMONT, MILL & OVERLAY AND ADA	7	Pavement	2017	\$6,100,000
1703-69	**AC** MN 60, FROM WINDOM TO WEST OF MOUNTAIN LAKE, RECONSTRUCT FROM TWO LANE TO FOUR LANE DIVIDED HIGHWAY (AC PAYBACKS IN 2018, 2019)	7	Pavement	2017	\$5,420,000
4008-25	RECONDITION INPLACE BRIDGE #4930 OVER THE MN RIVER IN ST. PETER	7	Bridge	2017	\$4,900,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
0804-113	US 14, FROM 7TH AVE NE IN SLEEPY EYE TO THE WEST LIMITS OF NEW ULM, MILL & OVERLAY GRINDING	7	Pavement	2017	\$4,300,000
5304-38	US 59, FROM N JCT TH 60 TO I90 IN WORTHINGTON, MILL & OVERLAY	7	Pavement	2017	\$2,200,000
6780-107	I90, WB LANES, FROM THE BRIDGE OVER ROCK RIVER (67806) TO THE ROCK/NOBLES COUNTY LINE, MILL & OVERLAY	7	Pavement	2018	\$2,500,000
1703-69AC1	**AC** MN 60, FROM WINDOM TO WEST OF MOUNTAIN LAKE, RECONSTRUCT FROM TWO LANE TO FOUR LANE DIVIDED HIGHWAY (AC PAYBACK 1 of 2)	7	Pavement	2018	\$18,000,000
1703-73	MN60, FROM TH 62 TO 490TH AVE IN WINDOM, MILL & OVERLAY	7	Pavement	2018	\$3,500,000
8309-49	MN 60, FROM CO RD 103 TO S JCT TH 15, WB LANES ONLY, CONCRETE PAVEMENT REHAB AND MILL & OVERLAY	7	Pavement	2018	\$2,000,000
0803-38	US 14, FROM CO RD 5 IN SPRINGFIELD TO 7TH AVE NE IN SLEEPY EYE, MILL & OVERLAY, CONCRETE PAVEMENT REHAB & ADA	7	Pavement	2018	\$10,530,000
0804-81	**AC** **Chap 152**US 14, DESIGN BUILD, OVER MN RIVER, DM&E RR & MSAS 111, 0.4 MI E OF S JCT OF TH 15, REPLACE BR 9200 & BR 9294 (AC PAYBACK IN 2019)	7	Bridge	2018	\$25,960,000
2208-113	US 169, FROM 1 MI NORTH OF I90 NEAR BLUE EARTH TO 0.2 MI NORTH OF CSAH 12 IN WINNEBAGO, MILL & OVERLAY	7	Pavement	2018	\$3,800,000
5209-74	US 169, FROM UNION ST IN ST PETER TO TH 93 AT LE SUEUR, NB LANES ONLY, MILL & OVERLAY	7	Pavement	2018	\$6,400,000
4303-89	**AC PV40M** WINTHROP TO BROWNTON, MILL & OVERLAY (AC PROJECT, PAYBACK IN FY 2016) (\$800,000 FROM PV FUNDS)	8	Pavement	2015	\$800,000
4205-32	BRUCE STREET TO JCT MN 23 (MARSHALL), MILL & OVERLAY (TIED TO SP'S 4208-58 & 4209-23)	8	Pavement	2015	\$500,000
3408-18PE	**COCII** ENVIRONMENTAL WORK TO PREPARE MN 23 FOR FUTURE EXPANSION FROM NEW LONDON TO PAYNESVILLE AND PAYNESVILLE TO RICHMOND	8	IRC	2015	\$1,500,000
4207-55	**CIMS** JCT OF MN 23 & SARATOGA IN MARSHALL, RCI (REDUCED CONFLICT	8	RCIP	2015	\$3,500,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	INTERSECTION) & IMPROVED PEDESTRIAN FACILITIES				
1206-54	**AC** N JCT MN 7 TO W JCT MN 40 (MONTEVIDEO), OVERLAY (AC PROJECT, PAYBACK IN 2016)	8	Pavement	2015	\$864,978
3403-5526	E OF CSAH 5 (WILLMAR), SCARIFY & OVERLAY BRIDGE #5526	8	Bridge	2015	\$340,000
3403-66	**AB** KERKHOVEN TO PENNOCK - OVERLAY PROJECT (DESIGNED BY DISTRICT 8, FUNDED BY DIST 4 & DIST 8) DIST 8 SP 3403-66 \$1,900,000, DIST 4 SP 7605-38M \$1,548,600 (TIED TO 7605-38M)	8	Pavement	2015	\$1,900,000
4704-47	**PV40M**AB** W MEEKER COUNTY LINE TO MN 22, RECLAMATION OR ALT. BID (\$600,000 FROM PV FUNDS), INCLUDES WORK ON MN 4 FROM US 12 TO RR TRACKS	8	Pavement	2015	\$6,300,000
8601-60	WEST OF COKATO, FROM 1300' E OF QUIMBY AVE SW TO 3100' W OF QUIMBY AVE SW, INSTALL 3 ROAD SURFACE SENSORS (ATP 3 AREA, BUT DISTRICT 8 IS LEAD FOR PROJECT)	8	Safety	2015	\$166,374
4208-58	**ADA**PV40M** MN 19 TO MN 23 (MARSHALL), MILL & OVERLAY PLUS PEDESTRIAN RAMPS ((\$160,000 FROM PV FUNDS) (TIED TO SP'S 4205-32 & 4209-23)	8	Pavement	2015	\$1,200,000
4209-23	N JCT MN 68 (MARSHALL) TO N OF LYON CSAH 33, MILL & OVERLAY PLUS SCARIFY & OVERLAY BRIDGE 42003 (TIED TO SP'S 4205-32 & 4208-58)	8	Pavement	2015	\$950,000
6405-64	**PV40M** US 14 TO S OF 11TH STREET (REDWOOD FALLS), MILL & OVERLAY (\$480,000 FROM PV FUNDS)	8	Pavement	2015	\$3,900,000
6508-67	**RI20M** AT BEAVER CREEK S. OF OLIVIA, STREAM STABILIZATION (\$90,000 FROM RI FUNDS)	8	Roadside Infrastructure	2015	\$90,000
8712-31	**ADA5M** E END OF BRIDGE #87015 (GRANITE FALLS) TO MN 23, MILL & OVERLAY (\$100,000 FROM ADA FUNDS) (TIED TO SP'S 8705-18 & 8706-23)	8	Pavement	2015	\$800,000
4303-89AC	**AC PV40M** WINTHROP TO BROWNTON, MILL & OVERLAY (AC PROJECT, PAYBACK 1 OF 1)	8	Pavement	2016	\$3,200,000
3405-42	JCT OF MN 23 & KANDIYOHI CSAH 5, BUILD INTERCHANGE (COUNTY IS THE LEAD)	8	IRC	2016	\$1,511,111

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
3405-42S	JCT OF MN 23 & KANDIYOHI CSAH 5, BUILD INTERCHANGE (COUNTY IS THE LEAD) - HSIP	8	IRC	2016	\$488,889
4206-22	**COC** - I-90 TO WILLMAR, CONSTRUCT PASSING LANES (CHAP 117)	8	IRC	2016	\$10,300,000
1206-54AC	**AC** N JCT MN 7 TO W JCT MN 40 (MONTEVIDEO), OVERLAY (AC PROJECT, PAYBACK 1 OF 1)	8	Pavement	2016	\$615,600
3404-56	E OF US 71 (WILLMAR) TO KANDIYOHI/MEEKER COUNTY LINE, OVERLAY (TIED TO SP'S 3406-17 & 3411-89)	8	Pavement	2016	\$1,800,000
5104-39	MN 62 (FULDA) TO S JCT MN 30, MILL & OVERLAY	8	Pavement	2016	\$4,000,000
3411-89	S JCT MN 23 (WILLMAR BY-PASS) TO MN 971A (BEG 4-LANE) - ALSO INCLUDES WORK ON MN 23 FROM 0.25 MI W CSAH 5 TO 2.6 MI E CSAH 5 R.P 141+00.232 TO 144+00.107, MILL & OVERLAY - WESTBOUND LANES ONLY (TIED TO SP'S 3406-17 & 3404-56)	8	Pavement	2016	\$2,600,000
4204-38	LYON CSAH 5 TO LYON CSAH 7 (MARSHALL), OVERLAY	8	Pavement	2017	\$610,000
6403-34	W JCT MN 67 TO REDWOOD FALLS, MILL & OVERLAY	8	Pavement	2017	\$3,700,000
4308-34	**AC**AB** W JCT MN 7 TO LITCHFIELD, 4" OVERLAY & RECLAIM SHLDS (AC PROJECT, PAYBACK IN 2018)	8	Pavement	2017	\$3,338,000
3405-89	CLARA CITY TO KANDIYOHI CSAH 5 (WILLMAR), OVERLAY	8	Pavement	2017	\$2,100,000
1206-90	N OF US 212, REPLACE BRIDGE 9111 OVER TC&W RAILROAD	8	Bridge	2017	\$1,700,000
5101-14	LAKE WILSON TO US 59 (SLAYTON), OVERLAY	8	Pavement	2017	\$2,200,000
3417-18	N. OF JCT MN 23 TO N. OF JCT MN 9, MILL & OVERLAY	8	Pavement	2017	\$2,097,889
3417-18S	N. OF JCT MN 23 TO N. OF JCT MN 9, MILL & OVERLAY - HSIP	8	Pavement	2017	\$450,000
4705-45	US 12 & CSAH 34 (LITCHFIELD), OFFSET FREE RIGHT AND MEDIAN SEPERATION (2017 HSIP PROJECT)	8	RCIP	2017	\$211,111
4101-89	STATE LINE TO LAKE BENTON, MILL & OVERLAY	8	Pavement	2017	\$2,800,000
4208-59	US 59 & CSAH 6, LEFT TURN LANE (2017 HSIP PROJECT)	8	RCIP	2017	\$450,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
4308-34AC	**AC**AB** W JCT MN 7 TO LITCHFIELD, 4" OVERLAY & RECLAIM SHLDS (AC PROJECT, PAYBACK 1 OF 1)	8	Pavement	2018	\$2,662,000
6401-36	0.1 MI W REVERE CL TO BROWN COUNTY LINE, MILL AND OVERLAY	8	Pavement	2018	\$2,300,000
5906-40	S. JCT. MN 23 TO N. END OF BR 6572 IN PIPESTONE, MILL & OVERLAY PLUS REPLACE BRIDGE #6572	8	Pavement	2018	\$2,500,000
1380-85	ON I35 FROM CHISAGO CSAH 10 IN HARRIS TO CHISAGO CSAH 1 IN RUSH CITY-CABLE MEDIAN BARRIER	M	Roadside Infrastructure	2015	\$1,800,000
1982-171	ON I35E FROM THE SOUTH SIDE FROM N OF DEERWOOD DR TO JUST NE OF FAWN WAY IN EAGAN - NOISE WALL	M	Roadside Infrastructure	2015	\$495,000
1982-179	SB I35E, FROM KETTLE PARK TO S OF KINGS ROAD IN EAGAN - PRE-CAST CONCRETE PANEL NOISEWALL, GUARDRAIL END TREATMENTS	M	Roadside Infrastructure	2015	\$1,428,000
6280-367B	FROM I94 IN ST PAUL TO JUST N OF LITTLE CANADA RD IN LITTLE CANADA - MNPASS OPERATION/INTEGRATION	M	Twin Cities Mobility	2015	\$1,200,000
6280-379	**RI20M**FROM LITTLE CANADA RD TO MN 36 IN LITTLE CANADA AND ON I694 FROM RICE ST TO E JUNCTION WITH I35E IN VADNAIS HTS- REPAINT NOISE WALL (\$2.35M FROM ROADSIDE INFRASTRUCTURE)	M	Roadside Infrastructure	2015	\$4,085,000
6280-384	AT THE INTERSECTION OF RANDOLPH AVE (RAMSEY-CSAH 38) & I35E SB ENTRANCE & EXIT RAMP-ADA IMPROVEMENTS AND APS INSTALLATION	M	Safety	2015	\$32,500
6281-20	RAMSEY CSAH 96 OVER I35E IN WHITE BEAR LAKE-REDECK AND WIDEN BRIDGE 62834, REPLACE APPROACH PANELS, CONCRETE OVERLAY ON CSAH 96 BETWEEN CENTERVILLE RD AND WHITE BEAR PARKWAY AND RAMPS FROM I35E TO CSAH 96, DRAINAGE, REPLACE TRAFFIC SIGNALS, ADA PED TRAIL AND FACILITIES, RETAINING WALL, (TIED TO 6281-25)	M	Bridge	2015	\$4,390,000
6281-25	FROM 0.2 MILE S OF RAMSEY CR E (CSAH 15) TO 0.5 MILE S OF RAMSEY CSAH 96 IN VADNAIS HEIGHTS-REPLACE BRIDGES 9567 (NEW 62729) AND 9568 (NEW 62730) INCLUDING PROFILE ADJUSTMENTS ON BOTH SIDES OF BRIDGE, MILL AND	M	Bridge	2015	\$20,855,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6281-44	UNBONDED CONCRETE OVERLAY, ADA, RETAINING WALLS, POND, GUARDRAIL, DRAINAGE, TMS (TIED WITH 6281-20) SB I35E FROM RAMSEY CR J IN WHITE BEAR TWP TO RAMSEY CSAH 96 N WHITE BEAR LAKE-SIGNS AND SHOULDERING FOR BUS ONLY SHOULDER	M	Twin Cities Mobility	2015	\$10,000
160-020-025	AT I-35W AND CLEVELAND AVE IN ROSEVILLE-RECONSTRUCT RAMP TERMINALS INCLUDING DUAL LEFT TURN LANES ON NB CLEVELAND AVE	M	Pavement	2015	\$1,490,730
2782-295	FROM 42ND ST IN MPLS TO 66TH ST IN RICHFIELD - GATEWAYS LANDSCAPING	M	Roadside Infrastructure	2015	\$953,304
2782-315	FROM 42ND ST IN MPLS TO 66TH ST IN RICHFIELD - CORRIDOR LANDSCAPING	M	Roadside Infrastructure	2015	\$150,000
2782-334	FROM 39TH ST TO JUST N OF LAKE ST IN MPLS-STORMWATER TUNNEL REPAIR (CHAP 388 BONDS)	M	Roadside Infrastructure	2015	\$6,250,000
2783-138	I35W, JUST N OF LAKE ST TO 13TH AVE S AND ON I94 FROM WILLOW ST TO PORTLAND AVE S IN MPLS-SEAL AND GROUT STORMWATER TUNNELS (\$7M CHAP 152 BONDS)	M	Roadside Infrastructure	2015	\$9,260,000
6284-157	AT RAMSEY CSAH 96 (CTY RD G) OVER I35W IN ARDEN HILLS/NEW BRIGHTON-REPLACE BRIDGE 9577 WITH 62911, APPROACH PANEL AND RAMP WORK	M	Bridge	2015	\$2,500,000
6284-170	FROM MN36 IN ROSEVILLE TO LEXINGTON AVE IN BLAINE-INSTALL ITS, INCLUDING VEHICLE DETECTION, FIBER, REPLACE SHELTERS & ELIMINATE COPPER (\$75K IS FROM OPERATING FUNDS)	M	Safety	2015	\$1,170,000
6284-171	AT RAMSEY CSAH 12 (CR F) IN ARDEN HILLS/NEW BRIGHTON - REPLACE BRIDGE 9599 WITH BRIDGE 62890 AND APPROACHES, GUARDRAIL, PED/BIKE TRAIL	M	Bridge	2015	\$3,215,000
2780-66	**COC**ELLA**AUXILLIARY LANE CONSTRUCTION EB FROM TH241 IN ST. MICHAEL TO TH101 IN ROGERS-INCLUDING WB EXIT RAMP EXTENSION AT TH 101 AND WB THIRD LANE FROM TH101 TO TH241 (CHAP 117)	M	IRC	2015	\$28,327,500
2780-90	**RI20M**AT I94/I494 INTERCHANGE IN MAPLE GROVE -REPLACE TOWERS AND LIGHTING SYSTEMS	M	Safety	2015	\$1,100,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
2781-462	**TED14** WB I94, EXIT RAMP TO 5TH ST SOUTH IN MPLS (REORIENT 5TH ST S TO 7TH ST S)- CONSTRUCT NEW BRIDGE #27W27	M	Pavement	2015	\$6,790,000
6283-245	ON I-94, FROM W OF MOUNDS BLVD TO EAST OF MCKNIGHT ROAD IN ST PAUL- INSTALL DETECTION; AT I494 & PORTLAND AVE IN BLOOMINGTON/RICHFIELD AND AT MN5 & POST RD IN MSP AIRPORT- DYNAMIC MESSAGE SIGNS (\$535K IS FROM OPERATING FUNDS)	M	Safety	2015	\$535,000
8282-116	MANNING AVE IN WOODBURY TO ST. CROIX RIVER IN LAKELAND TWP- REPAIR, REPLACE & LINE LARGE PIPES	M	Roadside Infrastructure	2015	\$4,100,000
8282-123	I94, ST. CROIX WEIGH STATION IN LAKELAND - REPLACE WEIGH-IN-MOTION SORTER SYSTEM	M	Roadside Infrastructure	2015	\$1,996,726
2789-136	JUST E OF MN100 IN GOLDEN VALLEY TO W END OF BRIDGE #27770D AND ON I94 NEAR JCT I94 AND I394 IN MPLS- MILL AND OVERLAY INCLUDING N AND S FRONTAGE ROADS, MINOR CPR, DIAMOND GRINDING, DRAINAGE, ADA UPGRADES, GUARDRAIL, SIGNAL LOOPS AND RE-DECK BRIDGE 27799L	M	Pavement	2015	\$6,640,000
2789-142	**ELLA**FROM I494 IN MINNETONKA TO WASHINGTON AVE N IN MPLS (I394 MNPASS) - PARTIAL ITS REFURBISHMENT, INCLUDING COMMUNICATIONS, FIBER, POWER, NON-INTRUSIVE DETECTION AND CABINETS (IN "OTHER" \$1.35M IS MNPASS REVENUE, \$200K IS ABC GARAGE FUNDS)	M	Twin Cities Mobility	2015	\$1,888,741
2785-330	**PV40M**ADA5M**AC**FROM I394 TO I94/I694 -ADD GENERAL PURPOSE LANE BETWEEN TH 55 AND I-94/I-694, ADD AUXILIARY LANE BETWEEN TH 55 AND CR 6, ADD NB AUXILIARY LANE FROM I394 TO CARLSON PARKWAY, PAVEMENT RESURFACING & RECONSTRUCTION, PONDS, NOISEWALLS, SIGNAL REVISIONS, LIGHTING, TMS, REPLACE BRIDGES 27973 (27W21), 27974 (27W22), 27975 (27W23), 27976 (27W24), 27977 (27W25), 27978 (27W26), AND MISC REPAIRS ON 11 BRIDGES (AC PROJECT, PAYBACK 1 IN 2016; REMAINDER OF AC MANAGED INTO THE FUTURE)	M	Twin Cities Mobility	2015	\$39,030,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
2785-338	FROM FLYING CLOUD DR TO W OF BUSH LAKE RD IN BLOOMINGTON - LANDSCAPING	M	Roadside Infrastructure	2015	\$500,000
2785-403	**ELLA**FROM I394 TO I94/694 - TEMPORARY BYPASS WORK INCLUDING PAVEMENT, WIDENING OF BRIDGES 27974, 27976, 27978 AND LIGHTING	M	Pavement	2015	\$5,739,143
6285-148	US10 SB TO EB LEFT ENTRANCE TO I694 AND MERGE TO SNELLING AND SB HAMLIN TO EB I694 IN ARDEN HILLS - LANDSCAPING	M	Roadside Infrastructure	2015	\$200,000
2732-104	**SEC164**I494 IN BLOOMINGTON TO MN55 IN MPLS-CABLE MEDIAN BARRIER (TIED TO SP 2773-12 AND 2775-24)	M	Roadside Infrastructure	2015	\$320,000
6201-86	FROM MN55 IN MPLS TO DAVERN AVE ST IN ST PAUL - REDECK BRIDGE 9300, PAINT BRIDGES 9300 AND 9491, MINOR REPAIRS TO BRIDGES 9489, 9490 AND 9491, MINOR CONCRETE PAVEMENT REPAIR	M	Bridge	2015	\$10,544,665
6211-102	FROM EDGERTON ST IN MAPLEWOOD TO MN120 IN N ST PAUL-INSTALL TMS	M	Safety	2015	\$800,000
8204-62	FROM I-694 IN PINE SPRINGS TO JUST EAST OF HIGHLANDS TRAIL N IN GRANT-LANDSCAPING	M	Roadside Infrastructure	2015	\$80,000
8214-114MIT15	OVER ST CROIX RIVER NEAR STILLWATER-MITIGATION/CONSULTANT ITEMS INCLUDING ENDOWMENT FUND FOR REPLACEMENT OF RIVER BRIDGE 4654	M	Bridge	2015	\$11,845,000
8214-164	FROM W OF GREELEY AVE/CSAH 66 (W LIMIT OF ST. CROIX CROSSING PROJECT) TO E OF OSGOOD AVE - LANDSCAPING	M	Roadside Infrastructure	2015	\$460,000
8214-165	BETWEEN OSGOOD AVE AND MN95 IN OAK PARK HEIGHTS - TYPE I STATE ENTRY AND EXIT SIGN	M	Roadside Infrastructure	2015	\$965,000
8214-174C	FROM WI ST HWY35 TO CR-E AND OVERPASS-GRADING FOR LOOP TRAIL AS PART OF THE ST. CROIX RIVER CROSSING PROJECT-WISCONSIN LET	M	Pavement	2015	\$65,000
8214-175	NORTHWEST RAMP AT MN5 – CONSTRUCT OVER-WEIGHT ENFORCEMENT PULL OFF PAD, INCLUDING WEIGH-IN-MOTION SYSTEM AT MN36 AND OSGOOD AVE N, AS PART OF ST CROIX RIVER CROSSING PROJECT	M	Roadside Infrastructure	2015	\$1,000,000
8221-01AC1	**AC**OVER ST CROIX RIVER NEAR STILLWATER & OAK PARK HEIGHTS-NEW BRIDGE 82045 OVER ST. CROIX RIVER,	M	Bridge	2015	\$8,368,663

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6215-99	INCLUDING RAMPS ON & OFF TH 95 (AC PAYBACK 1 OF 2) **ADA5M**ADA**FROM JUST S OF DAYTON TO PIERCE BUTLER AVE IN ST PAUL-MILL AND OVERLAY, BRIDGE 9377 DECK REPLACEMENT, CHANNELIZATION, ADA, BUS STOP BUMPOUTS FOR RAPID BUS SERVICE, LIGHTING, STREETSCAPING, SIGNAL REVISION/REPLACEMENTS AND REPAIRS ON BRIDGE 62847 AT I94 OVER FAIRVIEW (CHAP 152 TRANSIT ADVANTAGE BONDS)	M	Pavement	2015	\$9,595,000
1910-44	UP RR, COURTHOUSE BLVD IN HASTINGS-INSTALL CANTS, UPGRADE TO GATES AND FLASHING LIGHTS	M	RCIP	2015	\$275,000
195-010-011AC	**AC**FROM JUST W OF N JCT MN149 TO JUST E OF S JCT MN149 IN EAGAN-WIDEN FROM 4 TO 6-LANE EXPANSION, TRAIL, ADA, SIGNALS (AC PAYBACK 1 OF 1)	M	Pavement	2015	\$2,640,000
2722-82	AT HENNEPIN CSAH 101/SIOUX TRAIL IN MEDINA - REPLACE TEMPORARY WOOD POLE SIGNAL SYSTEM WITH PERMANENT SIGNAL SYSTEM	M	Safety	2015	\$300,000
2723-123	WB MN55 FROM I494 SB EXIT RAMP TO PLYMOUTH BLVD IN PLYMOUTH- CONSTRUCT A WB THIRD LANE, SIGNALS, DRAINAGE, ADA AND CONSTRUCT RIGHT/LEFT TURN LANES AT FERNBROOK LANE	M	RCIP	2015	\$1,160,000
2723-127	**ADA**AT WINNETKA AVE IN GOLDEN VALLEY-RAISED MEDIAN, SB THROUGH LANE, MODIFY SIGNAL, PED CROSSING AT W LEG OF INTERSECTION	M	Safety	2015	\$638,500
2773-12	**SEC164**I494 TO US169 IN MINNETONKA/EDEN PRAIRIE-CABLE MEDIAN BARRIER (TIED TO SP 2732-104 AND 2775-24)	M	Roadside Infrastructure	2015	\$280,000
2775-24	**SEC164**MN77 TO 34TH AVE S IN MPLS-CABLE MEDIAN BARRIER (TIED TO 2732-104 AND 2773-12)	M	Roadside Infrastructure	2015	\$300,000
0208-142	FROM 133RD AVE IN BLAINE TO BUNKER LAKE BLVD IN HAM LAKE-FRONTAGE ROAD AND CLOSE ACCESSSES	M	Pavement	2015	\$350,000
0208-153	AT ANOKA-CSAH 12 (109TH AVE NE) IN BLAINE-RIGHT TURN LANE AND UPGRADE SIGNALS	M	RCIP	2015	\$299,160

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
1925-52	OVER MN RIVER IN BLOOMINGTON AND EAGAN-PAINT NB BRIDGE 9600N, SB 9600S AND PED BRIDGE 9600F AND REPLACE GUARDRAIL, JOINTS AND REHAB BEARINGS	M	Bridge	2015	\$3,540,000
2734-33AC	**AC**FROM 36TH ST TO 26TH ST IN ST. LOUIS PARK - REPLACE BRIDGES 5308(27303), 5309(NEW PED BRIDGE 27304), 5462(27305), 5598(27306), OVERLAY AND JOINT REPLACEMENT BRIDGE 27109, RECONSTRUCT MAIN LINE PAVEMENT AND INTERCHANGES INCLUDING CONSTRUCTING AUXILLIARY LANES AND NOISE WALLS (AC PAYBACK 1 OF 1)	M	Pavement	2015	\$3,800,000
238-010-003AC	**AC**AT HENNEPIN CSAH 144 IN ROGERS- RECONSTRUCT INTERCHANGE, MULTI-USE TRAIL AND SIDEWALK, SIGNALS AND LIGHTING (AC PAYBACK 1 OF 1)	M	Pavement	2015	\$5,368,066
7008-100	**PV40M**FROM 0.2 MI S OF MN 282 TO 0.9 MI N OF MN 21 IN JORDAN - RECONSTRUCT/OVERLAY MAINLINE INCLUDING MEDIAN J-BARRIER AND REPLACE MEDIAN DRAINAGE STRUCTURES AND PIPES; REPLACE JOINTS, MILL AND OVERLAY BRIDGES 6802, 6803, 6804 ON US169 AND 6859 ON MN282; MINOR REPAIRS ON BRIDGES 9123 AND 9124 ON MN21	M	Roadside Infrastructure	2015	\$8,200,000
2771-37	**COC**AB**HENNEPIN CR81 TO I94 IN MAPLE GROVE- 4-LANE FREEWAY COMPLETION AND CONSTRUCT 105TH AVE FROM MAPLE GROVE PARKWAY TO APPROXIMATELY 0.5 MILES W OF I94 INCLUDING NEW BRS 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16 (CHAP 117)	M	Twin Cities Mobility	2015	\$95,475,316
2771-37E	**MN266** HENNEPIN CR81 TO I94 IN MAPLE GROVE- 4-LANE FREEWAY COMPLETION AND CONSTRUCT 105TH AVE FROM MAPLE GROVE PARKWAY TO APPROXIMATELY 0.5 MILES W OF I94 INCLUDING NEW BRS 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16 (BEING USED AS PART OF SP 2771-37 CONSTRUCTION)	M	Twin Cities Mobility	2015	\$399,932
2771-37F	**MN249** HENNEPIN CR81 TO I94 IN MAPLE GROVE- 4-LANE FREEWAY COMPLETION AND CONSTRUCT 105TH AVE FROM MAPLE GROVE PARKWAY TO APPROXIMATELY 0.5 MILES W OF I94 INCLUDING NEW BRS 27228,	M	Twin Cities Mobility	2015	\$490,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
2771-37G	27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16 (BEING USED AS PART OF SP 2771-37 CONSTRUCTION) **MN119** HENNEPIN CR81 TO I94 IN MAPLE GROVE- 4-LANE FREEWAY COMPLETION AND CONSTRUCT 105TH AVE FROM MAPLE GROVE PARKWAY TO APPROXIMATELY 0.5 MILES W OF I94 INCLUDING NEW BRS 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16 (BEING USED AS PART OF SP 2771-37 CONSTRUCTION)	M	Twin Cities Mobility	2015	\$116,233
2771-37H	**MN235** HENNEPIN CR81 TO I94 IN MAPLE GROVE- 4-LANE FREEWAY COMPLETION AND CONSTRUCT 105TH AVE FROM MAPLE GROVE PARKWAY TO APPROXIMATELY 0.5 MILES W OF I94 INCLUDING NEW BRS 27228, 27230, 27245, 27246, 27251, 27R10, 27R11, 27W15, 27W16 (BEING USED AS PART OF SP 2771-37 CONSTRUCTION)	M	Twin Cities Mobility	2015	\$4,204,068
2771-37J	**COC**HENNEPIN CR81 TO I94 IN MAPLE GROVE-DESIGN AND CONSTRUCTION OVERSIGHT (CHAP 117)	M	Twin Cities Mobility	2015	\$4,935,000
2771-37K	**COC**HENNEPIN CR81 TO I94 IN MAPLE GROVE-UTILITY AGREEMENTS WITH AT&T, TDS METROCOM, AND MCES (CHAP 117)	M	Twin Cities Mobility	2015	\$775,000
2771-37L	**COC**HENNEPIN CR81 TO I94 IN MAPLE GROVE-RR AGREEMENT (CHAP 117)	M	Twin Cities Mobility	2015	\$485,324
2771-37M	**COC**HENNEPIN CR81 TO I94 IN MAPLE GROVE-STIPENDS FOR UNSUCCESSFUL BIDDERS (CHAP 117)	M	Twin Cities Mobility	2015	\$675,000
2771-37N	**COC**HENNEPIN CR81 TO I94 IN MAPLE GROVE-MISCELLANEOUS CONSULTANT AGREEMENTS (CHAP 117)	M	Twin Cities Mobility	2015	\$505,000
2771-37RW1	**MN211**HENNEPIN CR81 TO I94 IN MAPLE GROVE-RIGHT OF WAY (SAFETEA-LU) (REMAINING R/W AMOUNT INCLUDED IN R/W SETASIDE)	M	Twin Cities Mobility	2015	\$2,107,164
2771-37RW2	**MN226**HENNEPIN CR81 TO I94 IN MAPLE GROVE-RIGHT OF WAY (SAFETEA-LU) (REMAINING R/W AMOUNT INCLUDED IN R/W SETASIDE)	M	Twin Cities Mobility	2015	\$1,873,034
2771-37RW3	**MN119**HENNEPIN CR81 TO I94 IN MAPLE GROVE-RIGHT OF WAY (SAFETEA-LU) (REMAINING R/W AMOUNT INCLUDED IN R/W SETASIDE)	M	Twin Cities Mobility	2015	\$936,518

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
8825-503	METROWIDE (I-35, I-35E, I-494, I-694, MN212 AND MN41)-INSTALL GROUND IN WET REFLECTIVE EDGE MARKING	M	Safety	2015	\$900,000
0202-95	**CIMS**AT ANOKA-CSAH 83 IN RAMSEY-CONSTRUCT INTERCHANGE, INCLUDING CSAH 83 BRIDGE 02007 OVER US10 & CSAH 83 BRIDGE 02586 OVER BNSF RR, PED/BIKE IMPROVEMENTS, DRAINAGE, BARRIERS, LIGHTING, STRIPING, SIGNAL, SIGNING	M	RCIP	2015	\$10,000,000
0214-44	**SEC164**FROM I35W IN MOUNDS VIEW TO MN 610 IN BLAINE-CABLE MEDIAN BARRIER (TIED TO 2762-98)	M	Roadside Infrastructure	2015	\$718,000
2714-142	EB US12, FROM E JCT HENNEPIN CSAH 101 IN WAYZATA TO I494 CD RD EXIT IN MINNETONKA-CONSTRUCT AUXILIARY LANE, DRAINAGE, GUARDRAIL AND OVERHEAD SIGN STRUCTURES ("OTHER" AMT IS MNPASS REVENUE)	M	Pavement	2015	\$1,445,000
1905-39	AT DAKOTA-CSAH86 IN RANDOLPH TOWNSHIP-GRADE SEPARATED CROSSING (\$702K IS CO-OP, \$1M IS SAFETY CAPACITY, \$356K WRE)	M	Pavement	2015	\$3,356,000
1907-107	FROM DAKOTA CSAH 46 IN COATES TO N JCT OF MN 55 IN INVER GROVE HTS-CABLE MEDIAN BARRIER	M	Roadside Infrastructure	2015	\$1,620,000
1928-60	FROM SOUTHVIEW BLVD IN SOUTH ST PAUL TO PLATO BLVD IN ST PAUL - REPLACE LIGHTING SYSTEMS	M	Safety	2015	\$1,665,000
1913-64B	**MN261**HASTINGS BRIDGE 19004 (2010 APPROPRIATIONS ACT-STP)	M	Bridge	2015	\$134,618
1913-64E	**MN261**HASTINGS BRIDGE 19004 - NATIONAL PARK SERVICE MITIGATION, BIRD STUDY PHASE I (2010 APPROPRIATIONS ACT-STP)	M	Roadside Infrastructure	2015	\$65,000
1913-64G	**MN261**HASTINGS BRIDGE 19004-POST CONSTRUCTION SURVEY OF HISTORICAL BLDGS (2010 APPROPRIATIONS ACT-STP)	M	Roadside Infrastructure	2015	\$60,000
1913-74	**MN261**HASTINGS BRIDGE 19004-STAGING AREA FOR HASTINGS BRIDGE REPLACEMENT - PRAIRIE RESTORATION (2010 APPROPRIATIONS ACT-STP)	M	Roadside Infrastructure	2015	\$50,000
2772-114	FROM I394 IN GOLDEN VALLEY TO BROOKLYN BLVD IN MAPLE GROVE AND BROOKLYN PARK-SIGN REPLACEMENT	M	Safety	2015	\$500,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
2772-99	ON EAST SIDE US169 FROM 16TH ST W TO JUST N OF WAYZATA BLVD IN ST LOUIS PARK - NOISE WALL	M	Roadside Infrastructure	2015	\$495,000
2762-98	**SEC164**POWERS BLVD IN CHANHASSEN TO I494 IN EDEN PRAIRIE-CABLE MEDIAN BARRIER (TIED TO 0214-44)	M	Roadside Infrastructure	2015	\$1,368,000
1982-172	AT DIFFLEY RD (DAKOTA CSAH30) EAST AND WEST RAMPS IN EAGAN-REPLACE TRAFFIC SIGNAL AND ADA UPGRADES	M	Safety	2016	\$500,000
6280-369	FROM ST. CLAIR AVE TO RAMSEY ST/GRAND AVE IN ST. PAUL - MISC REPAIRS TO BRIDGES 9519, 62802 AND 62803	M	Bridge	2016	\$1,370,000
6280-370	FROM SHEPARD ROAD TO KELLOGG BLVD IN ST. PAUL - REPLACE LIGHTING SYSTEMS	M	Safety	2016	\$1,800,000
0280-70	SB ENTRANCE RAMP FROM LAKE DR (ANOKA CSAH 23) IN BLAINE TO S OF 85TH AVE IN SHOREVIEW - CONSTUCT SB PARALLEL ACCELERATION LANE, DRAINAGE, CURB & GUTTER	M	Pavement	2016	\$355,000
2782-316	FROM 42ND ST IN MINNEAPOLIS TO 66TH ST IN RICHFIELD - CORRIDOR LANDSCAPING	M	Roadside Infrastructure	2016	\$150,000
2783-137	FROM HENNEPIN AVE TO JOHNSON ST IN MPLS - OVERLAY AND DECK REPAIR ON BRIDGES 27885, 27886, 27989, 27994, MILL AND PATCH DECK ON BRIDGE 27985, GUARDRAIL	M	Bridge	2016	\$1,965,000
6284-162	AT RAMSEY COUNTY RD H (T.C. ARSENAL ENTRANCE) IN ARDEN HILLS - REPLACE BRIDGE #9582 (NEW BRIDGE 62732) AND RAMP RECONSTRUCTION	M	Bridge	2016	\$6,800,000
6284-163	FROM S I694 TO S OF RAMSEY CR E2 IN ARDEN HILLS/NEW BRIGHTON - REPLACE BRIDGE 9570 (NEW BRIDGE 62873)AND APPROACHES, GUARDRAIL, PONDING AND AUXILLIARY LANES IN BOTH DIRECTIONS (TIED TO 6284-166)	M	Bridge	2016	\$12,355,000
6284-166	**PV40M**FROM RAMSEY CR C IN ROSEVILLE TO I694 IN ARDEN HILLS/NEW BRIGHTON- MILL AND OVERLAY, DRAINAGE, GUARDRAIL, SIGNING, STRIPING (TIED TO 6284-163)	M	Pavement	2016	\$7,645,000
2780-91	**ELLA**I94 EB EXIT RAMP TO WEAVER LAKE ROAD IN MAPLE GROVE- REPLACE RAMP SETTLEMENT AREA-LIGHT WEIGHT	M	Safety	2016	\$490,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6282-204	GEOFOAM FILL, BITUMINOUS PAVING, DRAINAGE, TMS AND LIGHTING FROM JUST E OF DALE ST TO JUST W OF PELHAM BLVD IN ST PAUL - REPAIR SUBSTRUCTURE UNITS ON BRIDGES 9379, 9381, 9452, 9457, 9663 AND 62813, REDECK AND OVERLAY BRIDGES 9383, 62845, 9387, ADA PED RAMPS, GUARDRAIL UPGRADE, DRAINAGE	M	Bridge	2016	\$4,465,000
6283-175	EB I94 FROM E 7TH ST EXIT TO PED BRIDGE 62868 IN ST PAUL-ADD AUXILLIARY LANE, NOISEWALL, DRAINAGE, POND, TMS, SIGNING, LIGHTING, GUARDRAIL (TIED TO 6283-234 AND 6283-233)	M	Pavement	2016	\$4,045,000
6283-233	AT MCKNIGHT RD (NORTH, SOUTH AND BURNS AVE RAMPS) IN MAPLEWOOD-REPLACE SIGNALS (TIED TO 6283-234 AND 6283-175)	M	Safety	2016	\$500,000
6283-234	**PV40M**FROM JUST E MOUNDS BLVD IN ST PAUL TO JUST E OF MN120 IN WOODBURY AND ON US61 FROM JUST S OF BURNS AVE TO W JCT MN5 IN ST PAUL- UNBONDED CONCRETE OVERLAY, BITUMINOUS M&O, CONCRETE WHITE TOPPING, REPAIR BRIDGES 9143, 9144, 9145, 9146, 62706, 62861, 62862, 62838, 62870, AND PIER STRUT WORK ON BRIDGES 9147, 9148, 62861, 62868 AND 62869, DRAINAGE, SIGNALS, LIGHTING, SIGNING, GUARDRAIL, TMS, ADA AND CONSTRUCT TRAIL ALONG NB MN120 FROM BROOKVIEW DR TO 4TH ST & ALONG MCKNIGHT RD FROM BURNS AVE TO HUDSON RD (TIED TO 6283-175 AND 6283-233)	M	Pavement	2016	\$32,725,000
2789-143	FROM I494 IN MINNETONKA TO WASHINGTON AVE N IN MPLS (I394 MNPASS) - PARTIAL ITS REFURBISHMENT, INCLUDING DMS, TOLLING EQUIPMENT AND TOLL SIGNING (OTHER \$\$ ARE MNPASS REVENUES)	M	Twin Cities Mobility	2016	\$1,500,000
2785-330AC	**AC**FROM I394 TO I94/I694 -ADD GENERAL PURPOSE LANE BETWEEN TH 55 AND I-94/I-694, ADD AUXILIARY LANE NB BETWEEN TH 55 AND CR 6, ADD NB AUXILIARY LANE FROM I394 TO CARLSON PARKWAY, PAVEMENT RESURFACING & RECONSTRUCTION, PONDS, NOISEWALLS,	M	Twin Cities Mobility	2016	\$32,000,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
	SIGNAL REVISIONS, LIGHTING, TMS, REPLACE BRIDGES 27973 (27W21), 27974 (27W22), 27975 (27W23), 27976 (27W24), 27977 (27W25), 27978 (27W26), AND MISC REPAIRS ON 11 BRIDGES (AC PAYBACK 1 OF 1)				
6285-143	**COC** FROM EAST OF RICE ST IN LITTLE CANADA TO W OF LEXINGTON AVE IN ARDEN HILLS - CONSTRUCT A 3RD LANE AND RECONSTRUCT EXISTING LANES, PONDING, MILL AND LOW SLUMP OVERLAY ON BRIDGES 62723 AND 62724, PIER STRUTS ON BRIDGES 62823, 62582, 6582, 6581, 6580, NOISEWALL AND MEDIAN BARRIER (CHAP 117)	M	IRC	2016	\$42,200,000
6201-87	FROM HENNEPIN/RAMSEY CO LINE TO W 6TH ST IN ST PAUL-BUS STOP BUMPOUTS FOR RAPID BUS SERVICE (CHAP 152 TRANSIT ADVANTAGE BONDS)	M	Twin Cities Mobility	2016	\$5,000,000
2706-230	AT US169 EAST AND WEST RAMP IN HOPKINS-REPLACE EXISTING SIGNAL	M	Safety	2016	\$500,000
2706-231	FROM MN41 IN SHOREWOOD TO MN100 IN ST LOUIS PARK- SIGN REPLACEMENT	M	Safety	2016	\$500,000
1901-171	AT CSAH 5 IN BURNSVILLE- LANDSCAPING	M	Roadside Infrastructure	2016	\$50,000
6212-148	OVER LEXINGTON AVENUE IN ROSEVILLE-REPLACE BRIDGE 5723 (NEW WB BRIDGE 62731 & EB 62734) AND RECONSTRUCT APPROACHES, BITUMINOUS MILL AND PAVING, SIGNALS, TMS, ADA, GUARDRAIL, STORM SEWER, PONDS AND CONCRETE PAVEMENT REHABILITATION ON HAMLINE AVE RAMPS (\$10.7M CHAP 152 Bonds)	M	Bridge	2016	\$13,460,000
8204-64	AT MN120 IN N ST PAUL & OAKDALE - REPLACE TRAFFIC SIGNAL & ADA UPGRADES	M	Safety	2016	\$300,000
8214-114AK	FROM N SUNNYSIDE DR TO CHESTNUT ST IN STILLWATER - MULTI-USE LOOP TRAIL AS PART OF ST CROIX MITIGATION PACKAGE	M	Pavement	2016	\$2,400,000
8214-114MIT16	OVER ST CROIX RIVER NEAR STILLWATER-MITIGATION/CONSULTANT ITEMS FOR REPLACEMENT OF RIVER BRIDGE 4654	M	Bridge	2016	\$5,000,000
8214-160	FROM OSGOOD AVE TO WESTSIDE OF MN95 IN OAK PARK HEIGHTS- LANDSCAPING	M	Roadside Infrastructure	2016	\$550,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
8214-173	CONSTRUCTION OF BERM AT KRIESEL FARMSTEAD IN WI AS PART OF ST. CROIX MITIGATION PACKAGE- WISCONSIN LET	M	Pavement	2016	\$30,000
8214-174A	WI ST HWY64 FROM CR-E TO 150TH AVE- GRADING FOR LOOP TRAIL AS PART OF THE ST. CROIX RIVER CROSSING PROJECT- WISCONSIN LET	M	Pavement	2016	\$175,000
8221-01AC2	**AC**OVER ST CROIX RIVER NEAR STILLWATER & OAK PARK HEIGHTS-NEW BRIDGE 82045 OVER ST. CROIX RIVER, INCLUDING RAMPS ON & OFF TH 95 (AC PAYBACK 2 OF 2, PARTIAL CONVERSION OF MANAGED INTO THE FUTURE AC)	M	Bridge	2016	\$9,040,000
1008-81	HISTORIC CHASKA ATHLETIC PARK IN CHASKA-LANDSCAPING	M	Roadside Infrastructure	2016	\$50,000
7010-100	**ELLA**FROM RR X-ING #7002025 IN LOUISVILLE TOWNSHIP TO JUST SOUTH OF MN RIVER BRIDGE #10012 IN JACKSONVILLE TWP - MILL & OVERLAY, SLOPE ARMORING	M	Pavement	2016	\$810,000
2733-89	**ELLA**FROM JCT I494 IN BLOOMINGTON TO JUST N OF W 36TH ST IN ST LOUIS PARK-BITUMINOUS OVERLAY, DRAINAGE, GUARDRAIL IMPROVEMENTS, OVERLAY OF BRIDGES 9431, 9500, 27103, 27104 AND MISC REPAIR OF BRIDGES 27210, 9432, 27029, 27102	M	Pavement	2016	\$16,040,000
2735-193	SB ENTRANCE RAMP FROM DULUTH ST TO MN100 IN GOLDEN VALLEY- CONSTRUCT HOV BYPASS, DRAINAGE, TMS	M	Pavement	2016	\$260,000
2748-62	FROM MN610 IN BROOKLYN PARK TO I694 IN BROOKLYN CENTER-SIGNAL COORDINATION, DEPLOY CC CAMERAS, AND DYNAMIC MESSAGE SIGNS	M	Safety	2016	\$839,039
6241-102	**PV40M**FROM JUST S COMO IN ST PAUL TO I35W IN ROSEVILLE-MILL AND OVERLAY, RECONSTRUCT RAMP AT NB MN280 TO I35W, ADA RAMP IMPROVEMENTS, DRAINAGE, AND GUARDRAIL	M	Pavement	2016	\$2,800,000
1301-110	**AB** FROM JUST W OF JCT MN95 (TERN AVE) IN FRANCONIA/SHAFER TO MIDDLE OF BRIDGE 6566 IN TAYLORS FALLS- RECONSTRUCT ROADWAY AND CORRECT SUBGRADE AND SLOPE FAILURE, GUARDRAIL AND CONSTRUCT ROUNDABOUT AT US8 & MN95	M	Pavement	2016	\$8,900,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
0202-93	**ELLA**AT FELDSPAR AVE NW IN RAMSEY-RECONSTRUCT INTERSECTION	M	Pavement	2016	\$260,000
2713-107	AT HENNEPIN CSAH 90 IN INDEPENDENCE - CONSTRUCT LEFT TURN LANES	M	RCIP	2016	\$760,000
6244-101	FROM PLATO BLVD TO I94 IN ST. PAUL - LANDSCAPING	M	Roadside Infrastructure	2016	\$300,000
1913-64F	**MN261**HASTINGS BRIDGE 19004 - NATIONAL PARK SERVICE MITIGATION, BIRD STUDY PHASE 2 (2010 APPROPRIATIONS ACT-STP)	M	Roadside Infrastructure	2016	\$35,000
8205-137	FROM MAYCREST AVE TO US10 INTERSECTION IN DENMARK TOWNSHIP- CONSTRUCT TURN LANES, MAYCREST AVE CONNECTION, MILL AND OVERLAY, STORM SEWER, PONDS, GUARDRAIL, ADA CURB RAMPS	M	RCIP	2016	\$3,290,000
8205-141	WASHINGTON CSAH19 OVER US 61 IN COTTAGE GROVE - CLEAN BEARINGS, REPLACE JOINTS & MINOR SUBSTRUCTURE REPAIRS ON BRIDGE #9071	M	Bridge	2016	\$120,000
2750-82	FROM MN610 IN BROOKLYN PARK TO US10 IN ANOKA-SIGNAL COORDINATION, DEPLOY CC CAMERAS, AND DYNAMIC MESSAGE SIGNS	M	Safety	2016	\$1,152,197
2750-84	AT 93RD AVE IN BROOKLYN PARK/OSSEO- LANDSCAPING	M	Roadside Infrastructure	2016	\$50,000
2772-103	ON EAST SIDE FROM 42ND AVE N TO 49TH ST N IN NEW HOPE - NOISE WALL	M	Roadside Infrastructure	2016	\$1,305,000
7005-105	FROM SCOTT CSAH 14 IN LOUISVILLE TOWNSHIP TO OLD SHAKOPEE RD IN BLOOMINGTON-SIGN REPLACEMENT	M	Safety	2016	\$400,000
7005-106	FROM CANTERBURY RD(SCOTT CSAH 83) TO CSAH 18 IN SHAKOPEE-RECONSTRUCT AND WIDEN RIGHT SHOULDER TO BUS SHOULDER AND ADD SIGNAGE, GUARDRAIL	M	Pavement	2016	\$965,000
7005-114	AT CR 69 IN JACKSON TWP-LANDSCAPING	M	Roadside Infrastructure	2016	\$50,000
7005-88	FROM SOUTH OF HENNEPIN/SCOTT CO LINE IN SHAKOPEE TO EAST OF US169 IN SAVAGE - TMS INSTALLATION	M	Safety	2016	\$500,000
6280-381	S OF UNIVERSITY AVE TO JUST N OF MARYLAND AVE IN ST PAUL-LANDSCAPING	M	Roadside Infrastructure	2017	\$300,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
6280-382	FROM I94 IN ST PAUL TO JUST N LITTLE CANADA RD IN LITTLE CANADA-LANDSCAPING	M	Roadside Infrastructure	2017	\$300,000
2782-327	**AC**FROM 43RD ST TO I94 IN MPLS - MANAGED LANE COMPLETION, PAVEMENT RECONSTRUCTION AND REPAIR, NOISEWALLS, TMS, LIGHTING, REPLACE BRIDGES 9731 (27822, 27777), 9733 (27844, 27841), 27842, 27843, 27867 (27V47, 27V48), 27868, 27869 (27W02), 27870 (27W03), 27871, 27872 (27W06), CONSTRUCT NEW BRIDGES 27448 AND 27W01, REMOVE BRIDGE 27648 AND MISC REPAIRS ON 27851 (CHAP 152) (AC PROJECT-AC PAYBACK IN FY 2018)	M	Twin Cities Mobility	2017	\$233,165,000
2783-148	AT 5TH ST SE OVER I35W IN MPLS - REPAIR PED BRIDGE 27987, APPROACHES, FENCING, ADA PED CURB RAMP	M	Bridge	2017	\$1,305,000
2781-432	FROM NICOLLET AVE IN MPLS TO W SHINGLE CREEK BRIDGE 27909 IN BROOKLYN CENTER-MAJOR CPR AND DIAMOND GRINDING, SIGNING, GUARDRAIL, TMS, DRAINAGE AND MISC REPAIR ON 51 BRIDGES (TIED TO 2781-452 & 2781-453)	M	Pavement	2017	\$33,895,000
2781-452	OVER GLENWOOD AVE IN MPLS-REPAIR BRIDGES 27726, 27726A, 27726B, 27727, 27727A, 27727B, 27728 (TIED TO 2781-432 & 2781-453)	M	Bridge	2017	\$1,635,000
2781-453	AT HENNEPIN/LYNDALE TUNNEL (BRIDGE 27832) AND EB I94 UNDER I35W TUNNEL (BRIDGE 27834) IN MPLS-TILE REPAIR (TIED TO 2781-432 & 2781-452)	M	Bridge	2017	\$2,500,000
6282-203	ON S SIDE OF I-94, FROM SNELLING AVE N TO PASCAL ST N IN ST PAUL-NOISE WALL	M	Roadside Infrastructure	2017	\$565,000
1985-143	AT SE QUADRANT OF I494 & BLAINE AVE E IN INVER GROVE HEIGHTS - REPAIR & IMPROVE DRAINAGE TO POND T-23	M	Roadside Infrastructure	2017	\$62,000
0285-66	FROM BNSF RR TO WEST OF I35W IN FRIDLEY - PAINT BRIDGES 02807, 9860, 62828, 9390 AND 9389	M	Bridge	2017	\$1,625,000
7001-112	FROM E OF US 169 IN SAVAGE TO JUST E OF WASHBURN AVE IN BURNSVILLE-MILL AND OVERLAY, BUS SHOULDER, DRAINAGE, GUARDRAIL, ADA, SIGNAL REPLACEMENT	M	Pavement	2017	\$5,535,000
8214-114MIT17	OVER ST CROIX RIVER NEAR STILLWATER-MITIGATION/CONSULTANT ITEMS FOR REPLACEMENT OF RIVER BRIDGE 4654	M	Bridge	2017	\$3,005,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
8214-161	S JCT MN95 TO E CHESTNUT ST IN STILLWATER AND ON MN95 FROM S JCT MN36 TO 10TH AVE N IN BAYPORT- LANDSCAPING AS PART OF THE ST CROIX RIVER CROSSING PROJECT	M	Roadside Infrastructure	2017	\$200,000
8214-174B	WI ST HWY64 FROM NEW RIVER BRIDGE 82045 TO 150TH AVE-INSTALL PAVEMENT FOR LOOP TRAIL AS PART OF THE ST. CROIX RIVER CROSSING PROJECT- WISCONSIN LET	M	Pavement	2017	\$37,500
8217-4654D	**ELLA** OVER ST CROIX RIVER - LIFT BRIDGE MGMT PLAN AND REPAIR CONVERSION PROJECT FOR BRIDGE # 4654 AS PART OF ST CROIX MITIGATION PACKAGE	M	Bridge	2017	\$11,610,000
1008-76	AT HUNDERTMARK RD IN CHASKA - CONSTRUCT SB THRU LANE FROM WB HUNDERTMARK RD TO SB MN41, AND EXTEND LEFT TURN LANE FROM NB MN41 TO WB HUNDERTMARK RD	M	RCIP	2017	\$390,000
0208-149	FROM 85TH AVE NE IN BLAINE TO SIMS RD IN EAST BETHEL - EXTEND 16 LEFT TURN LANES, CULVERT REPAIRS	M	RCIP	2017	\$685,000
2734-50	FROM 36TH ST TO CEDAR LAKE RD IN ST LOUIS PARK-LANDSCAPING	M	Roadside Infrastructure	2017	\$250,000
1918-110	**AB**FROM MN55/MN13 IN MENDOTA HTS TO I494 IN INVER GROVE HTS- RECLAMATION/WHITE TOPPING, ACCESS CLOSURES, TURN LANE EXTENSIONS, DRAINAGE REPAIRS, SIGN REPLACEMENT AND ADA IMPROVEMENTS	M	Pavement	2017	\$7,435,000
2771-43	FROM US169 IN BROOKLYN PARK TO MN47 IN COON RAPIDS - INSTALL TRAFFIC MANAGEMENT SYSTEM	M	Safety	2017	\$425,000
1906-65	FROM JCT MN19 IN CANNON FALLS TO 117TH ST IN ROSEMOUNT-CLOSE MEDIAN CROSSOVERS, CONSTRUCT 3/4 INTERSECTIONS WITH U-TURNS AND LEFT TURN LANES	M	RCIP	2017	\$2,760,000
2772-104	SB US169 AT 16TH ST W IN ST LOUIS PARK - ACCESS CLOSURE, CONSTRUCT VISUAL BARRIER	M	Safety	2017	\$875,000
2772-105	JUST NORTH OF MN62 IN EDINA TO MN55 IN GOLDEN VALLEY -CPR WITH DIAMOND GRINDING AND MILL AND OVERLAY, DRAINAGE, NOISEWALL REMOVAL AND	M	Pavement	2017	\$12,310,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
2772-110	RECONSTRUCT (INCLUDING REMOVAL FROM BRIDGE 27586) AT CEDAR LAKE ROAD IN MINNETONKA/ST LOUIS PARK - LENGTHEN ACCELERATION & DECELERATION LANES, STORM SEWER, LIGHTING, TMS	M	Safety	2017	\$760,000
2772-111	FROM 23RD AVE TO MEDICINE LAKE RD IN PLYMOUTH - CONSTRUCT NEW LOW POINT DRAINAGE SYSTEM	M	Roadside Infrastructure	2017	\$450,000
2772-112	FROM I394 IN GOLDEN VALLEY TO I94 IN BROOKLYN PARK-INCIDENT MGMT, ITS REFURBISHMENT AND ENHANCEMENT	M	Safety	2017	\$500,000
8280-47	FROM 80TH ST E TO JCT I35/I35W/I35E AND ON I35W FROM N OF MAIN ST TO JCT I35/I35W/I35E AND ON I35 FROM JCT I35/I35W/I35E TO N OF US 8- BITUMINOUS MILL AND UNBONDED CONCRETE OVERLAY, REPLACE BRIDGES 82815, 02804, 02806	M	Pavement	2018	\$39,175,000
2782-327AC	**AC**FROM 43RD ST TO I94 IN MPLS - MANAGED LANE COMPLETION, PAVEMENT RECONSTRUCTION AND REPAIR, NOISEWALLS, TMS, LIGHTING, REPLACE BRIDGES 9731 (27822, 27777), 9733 (27844, 27841), 27842, 27843, 27867 (27V47, 27V48), 27868, 27869 (27W02), 27870 (27W03), 27871, 27872 (27W06), CONSTRUCT NEW BRIDGES 27448 AND 27W01, REMOVE BRIDGE 27648 AND MISC REPAIRS ON 27851 (AC PAYBACK 1 OF 1)	M	Twin Cities Mobility	2018	\$36,000,000
2732-102	I494 TO TOWER ROAD-REPAIR/REPLACE DRAINAGE INFRASTRUCTURE	M	Roadside Infrastructure	2018	\$1,110,000
2706-237	FROM JUST E OF I494 TO JUST W OF LOUISIANA AVE- BITUMINOUS MILL AND OVERLAY, ADA, INTERSECTION REVISIONS	M	Pavement	2018	\$5,680,000
8214-114AH	ST CROIX MIT ITEM - KOLLINER PARK: REMOVAL OF NON-HISTORIC ELEMENTS TO ALLOW REVERSION TO "NATURAL"- WISCONSIN LET	M	Pavement	2018	\$46,000
8214-114MIT18	OVER ST CROIX RIVER NEAR STILLWATER-MITIGATION/CONSULTANT ITEMS FOR REPLACEMENT OF RIVER BRIDGE 4654	M	Bridge	2018	\$120,000
8214-114Z	ST CROIX MIT ITEM - BLUFFLAND RESTORATION - REMOVAL OF BUCKHORN SIGN, PARTIAL RESTORATION OF WISCONSIN APPROACH (REMOVAL OF	M	Pavement	2018	\$25,000

PROJECT NUMBER	DESCRIPTION	DISTRICT	PROJECT CATEGORY	#YEAR	STIP TOTAL
8214-169	PAVEMENT FROM EAST END OF BRIDGE TO STH 35 AND PORTIONS OF CTH E) - WISCONSIN LET FROM SUNNYSIDE DR TO 0.2 MI N OF SUNNYSIDE DR IN STILLWATER - MULTI-USE LOOP TRAIL, DRAINAGE, RETAINING WALLS AS PART OF ST CROIX MITIGATION PACKAGE	M	Pavement	2018	\$307,000
8214-174	WISCONSIN LOOP TRAIL IN ST. CROIX COUNTY WI AS PART OF THE ST. CROIX RIVER CROSSING PROJECT-WISCONSIN LET	M	Pavement	2018	\$637,500
8214-176	FROM SUNNYSIDE DR TO 0.2 MI N OF SUNNYSIDE DR - LANDSCAPING AS PART OF THE ST CROIX RIVER CROSSING PROJECT	M	Roadside Infrastructure	2018	\$75,000
2726-74	FROM 27TH AVE NE IN MPLS TO 40TH AVE NE IN COLUMBIA HEIGHTS - MILL AND OVERLAY, ADA	M	Pavement	2018	\$2,780,000
2773-10	FROM BEACH RD TO UNDER TRACY AVE BRIDGE AND ON US212 FROM 0.1 MI S OF MN62 TO E JCT WITH MN62-CONCRETE REHAB WITH DIAMOND GRINDING, MILL AND OVERLAY, SIDEWALK	M	Pavement	2018	\$7,350,000
7007-33	FROM GERMAN RD AND STOPPEMAN BLVD NEAR BELLE PLAINE-CULVERT, STORM SEWER, EROSION CONTROL	M	Roadside Infrastructure	2018	\$115,000
7008-111	FROM MN25 TO MN282 - UNBONDED CONCRETE OVERLAY, MILL BITUMINOUS PAVEMENT, MEDIAN CLOSURES, ADD U-TURNS, ENSION CABLE GUARDRAIL	M	Pavement	2018	\$17,995,000

B. Rail System Investment Project List

Source: Minnesota State Rail Plan

Table B.1 Twin Cities Core Projects

FREIGHT PROJECTS				
RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
BNSF	Hinckley Subdivision	Coon Creek Junction/Third Main	\$100.0	TBD
BNSF	Midway Subdivision	Add track and passing sidings	\$ 5.3	TBD
BNSF	Minneapolis Junction	Improvements to the west leg of the wye to increase track speed on the curve and facilitate NLX routing	\$33.0	TBD
BNSF	Moorhead Junction	Improvements to turnouts to increase track speed on the KO Subdivision	\$5.0	TBD
BNSF	East Metro	New Siding	TBD	TBD
BNSF	Saint Anthony Junction	Improvements in and around Minnesota Commercial's A Yard to facilitate higher speeds and volumes on the Saint Paul Subdivision	\$ 27.0	TBD
BNSF	Twin Cities Core	Adding 0.26 miles of additional track to the existing double main track between Seventh Street and Hoffman Junction	\$ 0.4	TBD
BNSF	Twin Cities Core	Rehab/Replace Double Track Lift Bridge St. Croix Junction to Prescott, WI	\$50	TBD
BNSF/CP	East Metro	Third Main/Yard leads, Cottage Grove	\$65.6	TBD
BNSF/CP	East Metro	Third Main/mainline & connectors, Hoffman-Newport	\$61.9	TBD
BNSF/CP	East Metro	St. Croix Flyover and connectors	\$429.6	TBD
BNSF/CP	East Metro	Mississippi River Bridge/Hastings	\$ 853.4	TBD
BNSF/CP/UP	East Metro	Hoffman-Westminster Trench/UP underpass	\$84.1	TBD
BNSF/CP/UP	East Metro	Hoffman Junction & Wye/Flyover	\$122.0	TBD
CP	CP Corridor	Prior Ave Bridge	\$3.0	TBD
CP	CP Corridor	Snelling Ave Bridge	\$10.0	TBD
CP	CP Corridor	Prior Ave Junction Easement/Merriam Park Junction	\$20.0	TBD
CP	East Metro	Lower Afton Station (Red Rock Corridor)	TBD	TBD

FREIGHT PROJECTS				
RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
CP	East Metro	Cottage Grove Station (Red Rock Corridor)	TBD	TBD
CP	East Metro	Hastings Station (Red Rock Corridor)	TBD	TBD
CP	East Saint Paul	CP Saint Paul Yard capacity expansion	\$60.0	CP
CP	Hastings bridge	Proposed replacement bridge would be a 324-foot-long double track vertical lift span	\$90.0	TBD
BNSF/CP	East Metro	Access Road	TBD	TBD
TBD	TBD	Intermodal Facility – New Twin Cities Area Facility	\$150.0	TBD
TCW	Savage	Rehabilitate currently out-of-service bridge over Minnesota River. A proposed replacement bridge would be a single track 160-foot-long through truss vertical lift span.	\$34.0	TBD
UP	Albert Lea Subdivision	Dan Patch Interchange	\$10.0	TBD
UP	Albert Lea Subdivision	Pigs Eye Bridge (UP) over Mississippi River. A proposed replacement bridge would be a 240-foot-long single track vertical lift span.	\$ 76.0	TBD
UP	Hudson bridge	Improve/replace bridge. A proposed replacement bridge would be a 160-foot-long single track vertical lift span.	\$87.0	TBD
UP	Mankato Subdivision - Shakopee	Realign main line to increase speed in and around Shakopee	\$163.0	TBD
UP	Mendota Heights	Mendota Heights (UP) (Omaha Road Bridge Number 15) over Mississippi River. A proposed replacement bridge would be a 200-foot-long single track vertical lift span.	\$44.0	TBD
UP	Saint Paul	Robert Street Vertical Lift Bridge (UP) over Mississippi River	\$51.0	TBD
CROSSING SAFETY PROJECTS				
BNSF	Como Avenue, Saint Paul	Grade Separation	\$25.0	TBD

Table B.2 Twin Cities to Albert Lea/Des Moines (I-35 Corridor) Projects -

FREIGHT PROJECTS				
RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
UP	Albert Lea Subdivision	Install CTC between St Paul Yard across St Paul UP Bridge	\$1.6	TBD

Table B.3 Twin Cities to Chicago (River Route)

FREIGHT PROJECTS				
RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
CP	La Crescent	Replace span with single, fixed, double track bridge on CP's Tomah Subdivision	\$117.0	TBD
CROSSING SAFETY PROJECTS				
CP	Sioux Street, Winona	Active Warning Devices Upgrades-4 Quad Gates	\$0.6	TBD
CP	W Lyon Avenue (US-63), Lake City	Active Warning Devices Upgrades-4 Quad Gates	\$0.6	TBD
CP	Louisa Street, Winona	Grade Separation	\$12	TBD
CP	Sturgeon Lakd Road (at Prairie Island), Red Wing	Grade Separation	\$14.2	TBD

Table B.4 Twin Cities to Duluth

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
CROSSING SAFETY PROJECTS				
BNSF	Multiple	Grade crossing improvements on Twin Cities to Cambridge Corridor	\$1.2	TBD
BNSF	NLX	Grade Crossing improvements on NLX Corridor	\$60.8	TBD

Table B.5 Twin Cities to Fargo/Moorhead

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
FREIGHT PROJECTS				
BNSF	Capital costs	Add 82.69 miles of new signals	\$62.6	TBD
BNSF	KO Subdivision	Add passing sidings (1.16 miles) on the KO Subdivision for Twin Cities to Fargo/Moorhead Corridor	\$2.0	TBD
BNSF	KO Subdivision	Additional passing sidings and new track beyond existing double main track on KO Subdivision	\$2.9	TBD
CROSSING SAFETY PROJECTS				
BNSF	US-71, Wadena	Active Warning Devices Upgrades-Interconnect with Adjacent Roadway Traffic Signals	\$0.3	TBD
BNSF	1 st Avenue N, Perham	Active Warning Devices Upgrades-4 Quad Gates	\$0.6	TBD
BNSF	4 th Street, Audubon	Active Warning Devices Upgrades-Medians	\$0.1	TBD
BNSF	5 th Street W, Frazee	Active Warning Devices Upgrades-Medians	\$0.1	TBD
BNSF	Ferry Street (MN-47), Anoka	Grade Separation	\$20.0	TBD
BNSF	Foley Blvd NW (CSAH-11), Coon Rapids	Grade Separation	\$30.0	TBD
BNSF	Hanson Blvd NW (CSAH 78), Coon Rapids	Grade Separation	\$23.2	TBD
BNSF	Proctor Avenue NW, Elk River	Grade Separation	\$20.0	TBD
BNSF	Farwell Street, Verndale	Active Warning Devices Upgrades-Medians	\$0.1	TBD
BNSF	Jefferson Street S, Wadena	Active Warning Devices Upgrades-Interconnect with Adjacent Roadway Traffic Signals	\$0.3	TBD
BNSF	Parke Avenue S, Glyndon	Active Warning Devices Upgrades-Medians	\$0.1	TBD
BNSF	6 th Avenue NW, Perham	Grade Separation	\$10.0	TBD
BNSF	Ramsey Blvd NW (CSAH 56), Ramsey	Grade Separation	\$11.5	TBD
BNSF	Sunfish Lake Road NW (CSAH 57), Ramsey	Grade Separation	\$10.0	TBD

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
BNSF	S Main Avenue, New York Mills	Active Warning Devices Upgrades-4 Quad Gates	\$0.6	TBD
BNSF	SW Brown Street, Verndale	Active Warning Devices Upgrades-Medians	\$0.1	TBD
BNSF	Broadway W (MN-27), Little Falls	Active Warning Devices Upgrades-4 Quad Gates	\$0.6	TBD
BNSF	Main Avenue, 20 th Street, 21 st Street, Moorhead	Grade Separation, Moorhead Subdivision	\$43.0	Partially funded

Table B.6 Twin Cities to Saint Cloud

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
FREIGHT PROJECTS				
BNSF	Staples Subdivision	Double track, Randall to Lincoln	\$20.0	BNSF
BNSF	Hinckley Subdivision	Passing sidings (23.54 miles)	\$10.0	TBD
BNSF	Midway Subdivision	Add passing sidings (0.624 miles) for Twin Cities to Saint Cloud Corridor	\$1.1	TBD
BNSF	Staples Subdivision	Sidings and Track (4.2 miles)	\$7.3	TBD
BNSF	Staples Subdivision	24 miles new track	\$86.6	TBD
BNSF	Staples Subdivision	Big Lake to Becker, and Little Falls to Darling second main track	TBD	BNSF
CROSSING SAFETY PROJECTS				
BNSF	Staples Subdivision	Grade Crossing Improvements	\$3.5	TBD

Table B.7 Twin Cities to Sioux Falls, South Dakota

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE
FREIGHT PROJECTS				
BNSF	Marshall Subdivision	Installation of CTC on 122.6 miles from Willmar to South Dakota border	\$67.4	TBD
CROSSING SAFETY PROJECTS				
BNSF	Prosper Subdivision	Grade Crossing Improvements	\$3.6	TBD

Table B.8 Additional Freight and Crossing Safety Improvements

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE	CORRIDOR
FREIGHT PROJECTS					
CN	Duluth	Steelton Hill (Duluth) Double Track	\$40.0	CN	Duluth
MVRRRA	Minnesota Prairie Line	Track upgrades from Class 1 to Class 2, 60 miles	\$58.0	TBD	Hanley Falls to Norwood
CN	Ranier	Ranier Yard Expansion	\$15.0	CN	Ranier
CN	Rainy/Superior Subdivisions	Signal upgrades from Ranier to Duluth	\$10.0	CN	Ranier to Duluth
CROSSING SAFETY PROJECTS					
BNSF	11 th Street, Moorhead	Grade Separation, Moorhead Subdivision (north) and KO Subdivision (south)	\$40.0	TBD	Twin Cities to Fargo-Moorhead, Moorhead to Willmar
BNSF	US-12 & MN-40, Willmar	Grade Separation, (result of Willmar Wye Bypass construction)	\$49.8	Multiple, Partially funded	Moorhead to Sioux Falls
BNSF	Willmar	Willmar Wye Bypass	\$20.0	BNSF	Moorhead to Willmar
BNSF	County Road 22 (CSAH 22), Morris	Active Warning Devices Upgrades-Medians, Morris Subdivision	\$0.1	TBD	Moorhead to Willmar
BNSF	W 5 th Street, Morris	Active Warning Devices Upgrades-4 Quad Gates , Morris Subdivision	\$0.6	TBD	Moorhead to Willmar
BNSF	W 7 th Street, Morris	Active Warning Devices Upgrades-4 Quad Gates , Morris Subdivision	\$0.6	TBD	Moorhead to Willmar
BNSF	14 th Street S (MN-29), Benson	Grade Separation, Morris Subdivision	\$10.0	TBD	Twin Cities to Bismarck
CP	Broadway Avenue, Crystal	Active Warning Devices Upgrades-4 Quad Gates, Paynesville Subdivision	\$0.6	TBD	Twin Cities to Bismarck
CP	Central Avenue, Watkins	Active Warning Devices Upgrades-4 Quad Gates , Paynesville Subdivision	\$0.6	TBD	Twin Cities to Bismarck
CP	Douglas Drive, Crystal	Active Warning Devices Upgrades-4 Quad Gates , Paynesville Subdivision	\$0.6	TBD	Twin Cities to Bismarck
CP	MN-29, Glenwood	Grade Separation, Elbow Lake Subdivision	\$10.0	TBD	Twin Cities to Bismarck
CP	Main Street, Kimball	Active Warning Devices Upgrades-Medians, Paynesville Subdivision	\$0.1	TBD	Twin Cities to Bismarck

RAILROAD	LOCATION	PROJECT DESCRIPTION	COST (\$ MILLIONS)	FUNDING SOURCE	CORRIDOR
CP	Oak Avenue, Maple Lake	Active Warning Devices Upgrades-Medians, Paynesville Subdivision	\$0.1	TBD	Twin Cities to Bismarck
CP	State Street, Eden Valley	Active Warning Devices Upgrades-Medians, Paynesville Subdivision	\$0.1	TBD	Twin Cities to Bismarck
CP	Winnetka Avenue, New Hope	Active Warning Devices Upgrades-4 Quad Gates , Paynesville Subdivision	\$0.6	TBD	Twin Cities to Bismarck
BNSF	6th Avenue NE, Pipestone	Active Warning Devices Upgrades-Medians, Marshall Subdivision	\$0.1	TBD	Willmar to Sioux Falls
BNSF	East Main Street, Pipestone	Active Warning Devices Upgrades-4 Quad Gates, Marshall Subdivision	\$0.6	TBD	Willmar to Sioux Falls