



Document Synthesis

Working Paper #2

District 6 Freight Plan

March 14, 2021

INTRODUCTION

Before beginning work on the District 6 Freight Plan, it was important to understand and capture key takeaways from relevant studies, plans, and work already undertaken by MnDOT and their partners in the past. By doing so, this District Plan will be developed building upon past efforts and allow existing and newly identified regional issues to be analyzed at greater depth.

This Working Paper outlines key takeaways from previous work that will be used to inform the development of the District 6 Freight Plan.

- **Overarching Takeaways:** How does the freight operate within District 6?
- **Transportation System Concerns:** What concerns do freight users have with the District 6 multimodal system
- **Project Specific Needs:** Location-specific infrastructure needs which need further investigation during the development of the District 6 Freight Plan

DISTRICT FREIGHT PLANS

In January 2018, the Minnesota Department of Transportation (MnDOT) completed the Minnesota Statewide Freight System and Investment Plan (SFSP). Among the SFSP's key recommendations was for MnDOT to work with each area of the state to create more detailed District Freight Plans that would identify improvements to connect with the Minnesota Highway Freight Program.

The MnDOT District 6 Freight Plan will outline how the District, and public and private sector freight stakeholders could move forward in freight planning, transportation investments and operations. The intent of the District Plan is to leverage, validate and expand on existing studies and plans with relevant and current data analysis in order to identify priorities for freight within the District. The District Freight Plan will:

- Provide an up-to-date assessment of freight needs and issues specific to District 6
- Produce a list of strategies to improve freight mobility in the Southeast Minnesota region
- Roll up long-term planning and programming into the next Statewide Freight System Plan

MNDOT DISTRICT 6

MnDOT is divided operationally into regional districts. Each district plans, designs, constructs, and maintains the state and federal highway systems within its respective region. Additionally, the districts manage providing aid and assistance to local governments that qualify for state and federal transportation funding for roadways, bridges, trails, and transit systems.

District 6 serves 11 counties in Southeast Minnesota (**Figure 1**). The district has several unique characteristics that are important to understand in the development of its freight plan.

- Second-highest population density of the MnDOT districts
- Second-most interstate highway miles in the state
- Strong manufacturing and medical industry presence
- The eastern part of the district has hilly terrain along the Mississippi River
- The western part has flat agricultural plains prone to blizzards
- The district is bisected by I-35 and I-90 which make it a prime location for truck traffic moving across the state and country

- Includes two Public Ports: Red Wing, Winona

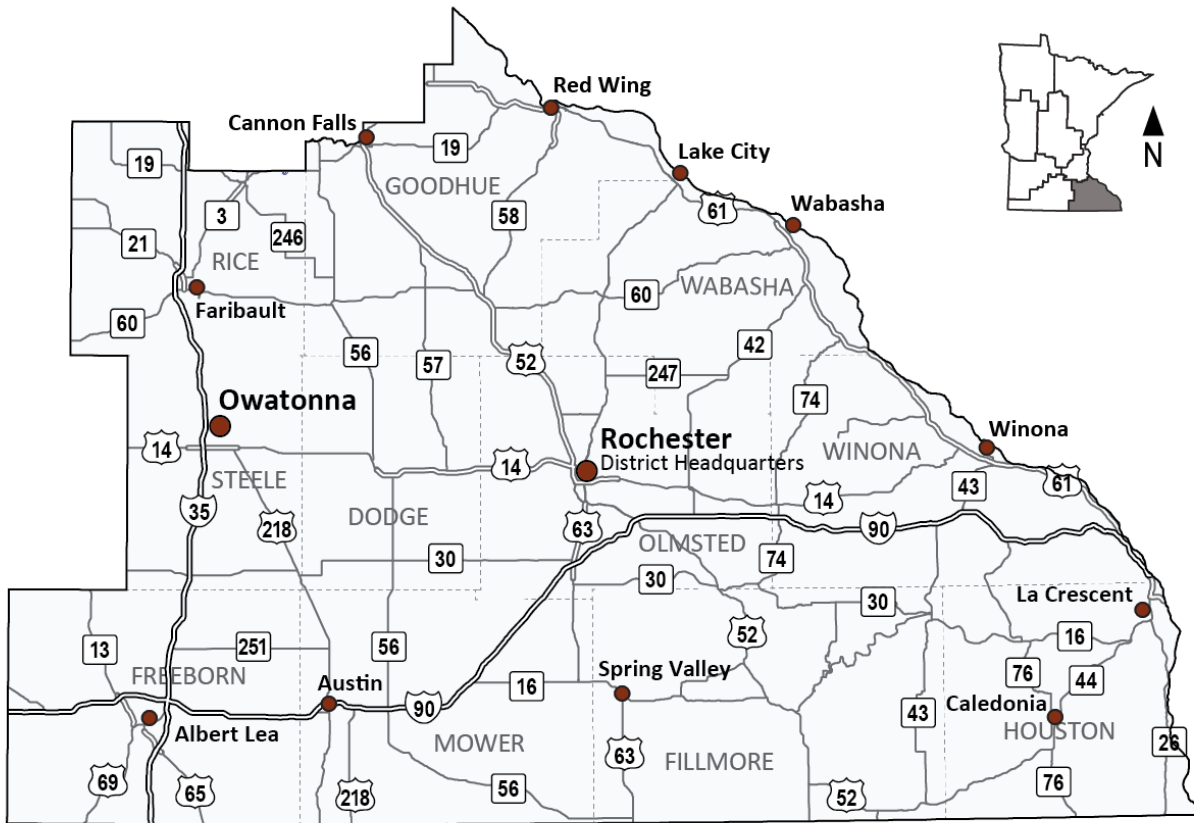


Figure 1: MndOT District 6 Location

SOUTHEAST MINNESOTA AREA TRANSPORTATION PARTNERSHIP

The Southwest Minnesota Area Transportation Partnership (ATP) is a group of traditional and non-traditional transportation partners including representatives from MnDOT, Metropolitan Planning Organizations (MPOs), counties, cities, tribal governments, special interests, and the public. The ATP is responsible for developing a regional transportation improvement program for their area of the state. The ATP process was introduced in the early 1990's to ensure stakeholder participation in identifying the investments of federal transportation funding in the area. The ATP process provides for early and continuous involvement in the development of MnDOT's State Transportation Improvement Plan (STIP), a four year list of projects that are expected to start construction within that timeframe.

MINNESOTA STATEWIDE FREIGHT SYSTEM PLAN

The 2018, Minnesota Statewide Freight System and Investment Plan (SFSP) describes the state’s multimodal transportation system and its role in the state’s economy, current and emerging industry trends, freight transportation system performance, and current and future issues and needs. The SFSP defines MnDOT’s overall freight policy – its vision – for Minnesota’s freight future.

Provide an integrated system of freight transportation in Minnesota – highway, rail, water, air cargo and intermodal terminals – that offers safe, reliable and competitive access to statewide, national and international markets.

To achieve this vision, MnDOT developed five freight planning goals to reflect the aspects of the multimodal freight system that are most important to the public and private sector freight stakeholders in the state (Figure 3). The statewide vision and goals will be used to guide the development of the District 6 Freight Plan. For example, the project team will use the SFSP goals to organize the development of the project’s SWOT analysis. Ultimately, the SWOT analysis will be used to produce the District Freight Plan’s recommendations.

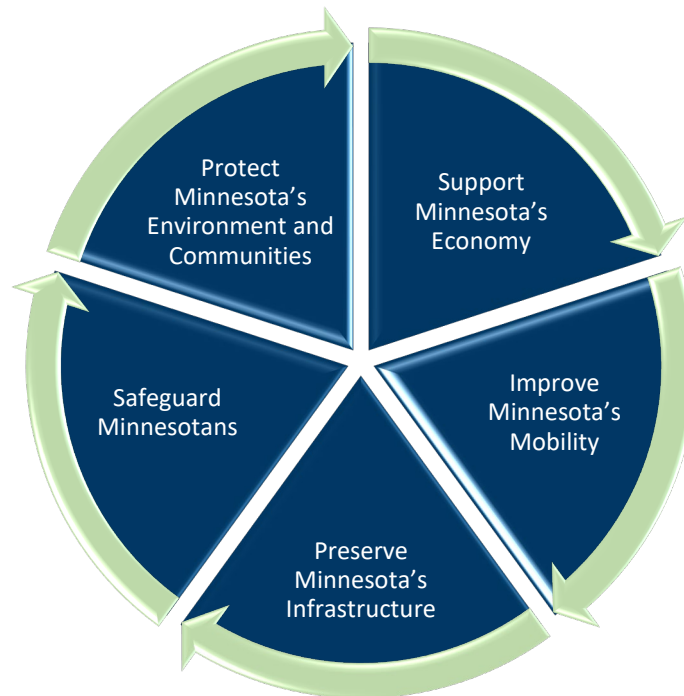


Figure 2: State Freight System Plan Goals (2018)

MINNESOTA'S FREIGHT ACTION AGENDA

The Minnesota Statewide Freight System Plan also includes the Minnesota’s Freight Action Agenda for MnDOT and its partners that focuses on advancing several strategies that will improve the efficiency, safety and reliability of the freight system. The Action agenda identified 30 short- and medium-term items that need to be undertaken to advance freight performance statewide. All 30 strategies will play a role in developing the key recommendations of the District 6 Freight Plan.

LEVERAGING PAST WORK

Before beginning work on the District 6 Freight Plan, it was important to understand and capture key takeaways from relevant studies, plans, and work already undertaken by MnDOT and their partners in the past. By doing so, this District Plan will be developed building upon past efforts and assessing existing and newly identified regional issues at greater depth.

Overall, twenty past freight-related planning efforts (**Table 1**) were reviewed in support of the District Plan. This Working Paper describes the key findings of the desk scan and details on each individual effort and how this information will be used to prepare the District 6 Freight Plan are presented in Appendix A. The following sections outline key takeaways from the project team’s review.

Table 1: Documents Reviewed

Statewide	Statewide Freight System & Investment Plan
	State Rail Plan
	Statewide Ports & Waterways Plan
	Statewide Truck Parking Study
	Minnesota Weight Enforcement Investment Plan
	Minnesota State Highway Investment Plan
	Freight Rail Economic Development Study
	Rail Grade Crossing Safety Project Selection Study
	Connected and Automated Vehicle Strategic Plan
	MAASTO Connected and Automated Vehicle eSummit
District/Region	Develop MN: Comprehensive Development Strategy for Greater Minnesota
	Greater Minnesota Mobility Study
	Southeast Minnesota Regional Freight Study
	Manufacturers’ Perspectives on Minnesota’s Transportation System (District 6)
	Capital Highway Investment Plan (District 6)
	Advancing Transportation Equity (District 6)
Partners	ROCOG Long Range Transportation System Plan
	LaCrosse Area Planning Committee Metropolitan Transportation Plan
	Destination Medical Center Strategic Plan & Integrated Transit Studies

OVERARCHING TAKEAWAYS

After completing their review of the twenty-past freight-related planning efforts, the project team identified several overarching themes that will be used to inform the development of the District 6 Freight Plan.

MARITIME TRANSPORTATION

- Direct access to two of the five river ports in the state, Red Wing and Winona
- Both District 6 area public ports have good commercial access via State Trunk Highways, local arterials, and Class 1 railroads
- The region also has easy access to another major port in La Crosse, WI
- Land port areas considered ideal for freight shipping purposes are increasingly in competition with residential, commercial, and recreational development
- Aging Port Infrastructure

INTERMODAL CONNECTIVITY

- Intermodal Connectors: Existing intermodal links between the marine system and the road and rail freight systems are, in some cases, in poor condition, and in need of repair. In other cases, additional system connectivity linkages are needed
- Concerns specifically include that intermodal connectors are adequate for rail track and road pavement condition, travel lane width, turning radii, and vertical and horizontal bridge clearance

IMPORTANCE OF RAIL

- Minnesota's two major intermodal container terminals are in the Twin Cities, using BNSF and CP's Chicago-to Pacific Northwest corridors
- Many businesses truck containerized cargo to Chicago or Kansas City to access the Ports of Long Beach/Los Angeles
- A private intermodal terminal in Winona has been built on a similar business model but continues to face challenges of attracting major customers and having only limited support from the servicing railroad

ROLE OF FREIGHT IN EQUITY

- While freight is the physical manifestation of an economy in motion, it has several negative externalities that are often felt disproportionately by environmental justice communities. The Plan must integrate freight into our community – not just move focusing on freight at the consequence of everything else that drives our communities

COMPLETE STREETS

- When developing project concepts and recommendations, it is important to consider all users, including not freight but also bicycle, pedestrian, transit and MaaS. Considering all modes will led to a better and more equitable quality of life for District 6 residents
- Projects identified on designated bicycle routes and pedestrian heavy corridors should focus on delivering mobility options that are safe for all users

INNOVATIVE TECHNOLOGIES

- Develop Truck Platooning Network Plan: While this plan would be statewide, the recommendation mentions that District Freight Plans could assess how to improve truck platooning corridor pavements and

bridges to improve and maintain oversize overweight corridors and Critical Urban and Rural Freight Corridors

- Research and Pilot (Connected Autonomous Vehicle (CAV) Freight Technologies: After the development of a Truck Platooning Network Plan conduct industry outreach to encourage the research and testing of CAV freight platooning and automation in Minnesota. Monitor state and federal legal challenges to freight automation
- Review and Update MnDOT Plans: This recommendation was aimed at updating statewide planning efforts to include truck platooning and related behavior, patterns, vehicle types, these could be considerations for the District 6 Plan as well
- District 6 shares a border with Wisconsin and is home to two major Interstates. The District 6 Freight Plan must be mindful of the role it plays in multijurisdictional planning for CAVs

PARTNERSHIP

- Explore the use of public-private partnerships (formal or informal) in helping to finance freight infrastructure projects
- Because of the significant freight volumes in and around the Rochester/Olmstead county region, the MPO is a key partner in delivering the 3C transportation planning process. This includes the freight planning process

DESTINATION MEDICAL CENTER

- The MnDOT District 6 Manufacturers' Perspectives Study mentions the development of the DMC and the impact it may have on overall freight and passenger volumes. A significant amount of growth has been forecasted for this area, which will result in increased freight movement throughout the district to not only support the medical industry but resident's lifestyles as well

TRANSPORTATION SYSTEM CONCERNS

The document review discovered several transportation-specific concerns that will be used to inform the development of the District 6 Freight Plan

MISSISSIPPI RIVER CROSSINGS

- Minnesota businesses must use Chicago-area intermodal yards to access to Port of LA/LB and ports on the east coast
- Trucks use the crossings to access river ports in Wisconsin
- Workers and supply chains live/operate on both sides of the River. A 10-day shutdown of the Winona Bridge in 2011 for preventive maintenance highlighted the fact that almost a fourth of Winona's labor force commute from Wisconsin, and the concentrated manufacturing and transportation business in Winona faced reduced transportation options, significant cost increases for detours, and reduction in business levels

WINTER WEATHER

- Western part of District 6 has flat agricultural plains prone to blizzards
- Freight stakeholders identified snow and ice removal as a primary employee safety and commuter issue. Specific areas of concern:
 - Highway 14: snow drifts, icy conditions.
 - Highway 63 from Zumbro Falls to Stewartville: snow drifts, icy hills.
 - I-35 from Owatonna to Albert Lea: snow drifts, blowing snow, ice.

- I-90: snow drifts, blowing snow.

SAFETY

- The Northfield area has the second highest likelihood of unmet parking demand statewide. District 6 businesses often said that trucks park in inconvenient or unsafe locations and pointed to a need for traffic management around private truck stops
- Rochester-Olmstead Council of Governments listed cable barriers in their current Transportation Improvement Program
- Parking is likely an issue due to the prevalence of manufacturers and the presence of I-35 and 90
- Safety impacts of heavy truck traffic in/near neighborhoods and schools were identified as an equity issue
- Three new weight enforcement facilities have been identified within District 6:
 - I-90: Between Rochester and Fremont
 - I-90 Nodine Pull-Off Sites (EB & WB)
 - US 52: Weight in Motion #32

OSOW

- Southeast Minnesota terminates an unusually large number of over-size/over-weight truck loads that require special permits for routes and curfews, and often require special services including escorts and heavy equipment such as cranes to accomplish their moves
- Virtually all moves needed for wind turbine installations in Southern Minnesota
- Frac Sand: Area is home to significant mining operations for Frac Sand
- Several super-load entry sites:
 - US 69/65: Alternative crossing points due to vertical clearance constraints on I-35 at the Minnesota/Iowa border
 - US 63: Alternative crossing point due to vertical clearance challenges on I-90 in southeast Minnesota
 - Other important alternative corridors include portions of MN 16, MN 44, and MN 56

PAVEMENT QUALITY

- Current road conditions were good but had shippers had concerns about a possible future decline in highway maintenance because of funding issues

PASSING LANES

- District 6 roads stay busy with the area's relatively dense population, and the many manufacturers, highways, and interstates in the district. Combined with curvier roads in the east and slow-moving agricultural equipment elsewhere, District 6 freight users value passing opportunities

INTERSECTIONS

- The Manufacturers' Study reported that, Businesses around the district described how difficult it can be to merge into fastmoving traffic, particularly during peak traffic hours. Vehicles and employees can be delayed and may risk crashes trying to enter intersections

CONGESTION

- Roads can become congested during shift changes at nearby businesses. Congestion is projected to increase significantly in the Rochester area, due to the Destination Medical Center development

ACCESS MANAGEMENT AND CONNECTIONS

- Shippers noted that truck routes and local connections to businesses were adequate for today’s need. Concerns were shared about recognizing the size of semi-tractor-trailer rigs now in common use, often with a total rig length of 70 feet or more, and a total wheelbase of up to 67 feet (WB67) and designing safety features and turn geometry

INNOVATIVE DESIGN

- The trucking community has been generally very receptive of innovative intersection design innovations, with the caveat that design should be monitored and given public review in order to easily handle long, heavy commercial vehicles safely, and that crossing traffic consisting of heavy trucks (on the minor route) not be compromised by these installations

PROJECT SPECIFIC NEEDS

Four reports (District 6 Manufacturers’ Perspectives on Minnesota’s Transportation System, Greater Minnesota Mobility Study, Minnesota Weight Enforcement Investment Plan (DRAFT), and the District 6 Advancing Transportation Equity Report) listed location-specific freight needs.

Subsequent tasks (and their resulting Working Papers) will review this list to eliminate projects that have been constructed or have funding programmed by MnDOT, MPOs, counties and local governments. The remaining needs will be evaluated and prioritized with the needs identified by the project team’s analysis and stakeholder feedback.

Table 2: Project Specific Takeaways from the following 4 reports – 1) District 6 Manufacturers’ Perspectives on Minnesota’s Transportation System, 2) Greater Minnesota Mobility Study, 3) Minnesota Weight Enforcement Investment Plan (DRAFT), 4) District 6 Advancing Transportation Equity Report

Issue Type	Location	Source			
		Manufacturers’ Report	Greater MN Study	Advancing Equity	Weight Enforcement
Intersection/Interchange	Bridge Avenue/I-90 Ramps	X			
Intersection/Interchange	I-90 and Highway 52	X			
Intersection/Interchange	I-90 and Highway 63	X			
Intersection/Interchange	Highways 43 and Highway 61	X			
Intersection/Interchange	Highway 61 and Cannon River Avenue	X			
Intersection/Interchange	Highway 16 (south intersection) with Highway 63	X			
Intersection/Interchange	Highway 30 and Highway 52	X			
Intersection/Interchange	Highway 44 and Esch Drive	X			
Intersection/Interchange	Highway 61 at 54th Avenue	X			
Intersection/Interchange	US 61 at MN 16/CSAH 6		X		
Intersection/Interchange	I-90 at US 63		X		
Intersection/Interchange	I-90 at Oakland PL SE		X		
Signal Timing	US 61 (US 14 to CR 129): Huff Street				
Signal Timing	US 61: CSAH 19 to Downtown Red Wing		X		
Passing Lanes	Highway 14 between Dodge Center and Owatonna	X			
Passing Lanes	Highway 61 between Red Wing and Wabasha	X			

Issue Type	Location	Manufacturers' Report	Greater MN Study	Advancing Equity	Weight Enforcement
Passing Lanes	Highway 52 between Chatfield and Rochester	X			
Passing Lanes	Highway 56 north of Kenyon	X			
Passing Lanes	Southbound Highway 63 south of Zumbro Falls	X			
Bypass Lanes	Highway 218 at the Steele County landfill	X			
Bypass Lanes	Highway 52 at Union St. in Chatfield	X			
Bypass Lanes	Eastbound Highway 56 and 770th Avenue in Le Roy	X			
Bypass Lanes	Southbound Highway 61 at 5th Grant Boulevard West in Wabasha.	X			
Turn Lanes	TH 14 left turn lane to CSAH 25	X			
Turn Lanes	Kwik Trip entrance length, off Highway 14	X			
Turn Lanes	Utica intersection of multiple roads with Highway 14	X			
Turn Lanes	I-90 and Highway 52	X			
Turn Lanes	Highway 3 at multiple intersections in Faribault, including at 20th Street NW	X			
Turn Lanes	Highways 30 and 218.	X			
Turn Lanes	Highway 63 in Stewartville, including Olmsted County Road 6	X			
Turn Lanes	From westbound 16th Street in Rochester to northbound Highway 52	X			
Turn Lanes	Highway 43 and Highway 61 (longer lanes needed)	X			
Turn Lanes	Dodge County Road 9 and US 14 (longer left and right turn lane needed)	X			
Acceleration Lanes	I-90 and Highway 63	X			
Acceleration Lanes	Eastbound Interstate 90 and Highway 52.	X			
Acceleration Lanes	Olmstead County Highway 104 southbound onto westbound Highway 14.	X			
Acceleration Lanes	Highway 61 and Bundy Boulevard (NB and SB)	X			
Four Lane	Highway 14. Sections are still two lanes	X			
Four Lane	Highway 43 from Winona to Interstate 90	X			
Four Lane	Highway 52 from Rochester to Iowa	X			
Four Lane	Highway 60 from Faribault to Mankato	X			
Four Lane	Highway 61 from north of Red Wing through Lake City	X			
Shoulder Widening	Highway 43 close to Winona and Highway 61	X			
Shoulder Widening	Highway 60 from Mankato to Highway 52	X			
Shoulder Widening	Highway 63 north and south of Rochester	X			
Shoulder Paving	Highway 26 from La Crescent to the Iowa border	X			
Shoulder Paving	Highway 30 between Blooming Prairie and Interstate 35	X			
Shoulder Paving	Highway 52 between Fountain and Marion	X			
Signage Request	Highway 52 to the southbound Highway 63 ramp (sharp curve)	X			
Signage Request	St. Olaf Avenue onto Highway 3 (sight distance)	X			
DMS Request	Before the Highway 19 exit on NB I-35 and the Elko Exit on SB I-35	X			
DMS Request	I-35, 90 and Highway 52 and 63	X			
Pavement Quality	Highway 61 (multiple locations)	X			
Pavement Quality	Highway 14 (near Winona has been worn down from frac sand hauling)	X			
Pavement Quality	Highway 52 (Preston and near Cannon Falls)	X			
Pavement Quality	Highway 63 (Lake City and Rochester as an area with rough pavement)	X			

Issue Type	Location	Manufacturers' Report	Greater MN Study	Advancing Equity	Weight Enforcement
Pavement Quality	Highway 14 at the junction of CSAH 22 to 200 feet west	X			
Pavement Quality	Interstate 35 between 14 and the northern limits of Owatonna.	X			
Pavement Quality	Highway 16 adjacent to Preston.	X			
Pavement Quality	Highway 30 from Hayfield to Interstate 35 has many potholes and bumps.	X			
Pavement Quality	Highway 58 bridges on each side of Goodhue County Road 16.	X			
Winter Weather	Highway 14: snow drifts, icy conditions	X			
Winter Weather	Highway 63 from Zumbro Falls to Stewartville: snow drifts, icy hills	X			
Winter Weather	I-35 from Owatonna to Albert Lea: snow drifts, blowing snow, ice	X			
Winter Weather	I-90: snow drifts, blowing snow	X			
Speed Issue	MN 19 (I-35): Speed issues with trucks going to/from Flying J		X		
Safety	I-90 (US 14): Left exits, curves, weaving/merging		X		
Safety	US 52 (MSAS 118/Armstrong Ave to MN 3)		X		
Safety	Main Street outside of Hormel and near school			X	
Safety	I-35 and CR 46			X	
Safety	Grade Crossings in Winona			X	
Reliability	US 218 (I-90 to CSAH 27)		X		
Weight Enforcement	I-90: Between Rochester and Fremont				X
Weight Enforcement	I-90 Nodine Pull-Off Sites (EB & WB)				X
Weight Enforcement	US 52: Weight in Motion #32				X

Project: Statewide Freight System & Investment Plan

Sponsor: MnDOT

Scope: Statewide

Year: 2018

Background

The plan detailed Minnesota's freight transportation system and the role it plays in the state's economy, presented current and emerging freight trends, portrayed the performance of the freight transportation system, and listed current and future issues and needs.

The plan included Minnesota's Freight Action Agenda for MnDOT and its state and regional partners so that they can advance several strategies focused on improving the efficiency, safety and reliability of the freight system across the state. At a larger scale, the Minnesota Statewide Freight System and Investment Plan is part of a "family of plans," and aligned with Minnesota GO and the Statewide Multimodal Transportation Plan, which established Minnesota's overall vision for transportation. The plan outlined a vision for Minnesota's multimodal freight system to, *"Provide an integrated system of freight transportation in Minnesota – highway, rail, water, air cargo and intermodal terminals – that offers safe, reliable and competitive access to statewide, national and international markets,"* and defined five supporting goals:

- Support Minnesota's Economy
- Improve Minnesota's Mobility
- Preserve Minnesota's Infrastructure
- Safeguard Minnesotans
- Protect Minnesota's Environment and Communities

Importance to the District 6 Freight Plan

The Statewide Freight System Plan lays the groundwork for all freight activities undertaken by MnDOT. The alignment of freight activities statewide is critical to move the state's economy forward. The Statewide Freight System Plan goals will be used to organize the overall project and the Freight Action Plan's strategies will inspire the plan's recommendations.

Project: State Rail Plan (DRAFT)

Sponsor: MnDOT

Scope: Statewide

Year: 2015

This Plan was updated to guide the future of both freight and passenger rail systems and rail services in the state. The 2015 version built upon the technical analyses and findings of the 2010 Plan, incorporated information on changes between 2010 and 2015, and reflected the most current state of the system and stakeholder comments. The Plan noted, that in its present form, rail intermodal (the haulage of containers and trailers) services available in Minnesota are geographically and capacity limited.

Only the Twin Cities area has existing terminals, and they exist to provide direct service connections to Chicago and the Pacific Northwest. It noted that previous efforts to provide service in other parts of the state were not successful, with a public terminal opening and closing in the western part of the state at Dilworth, and a private intermodal operation at Montevideo handling grain products, but only intermittently.

Conversations with stakeholders revealed a desire for additional terminal capacity in the Twin Cities area and access to intermodal service in other parts of the state. According to the document, service from the Twin Cities to regions other than Chicago and the Pacific Northwest are either unavailable, circuitous or add significant costs when empty containers need to be positioned. Another key element is the desire for public ownership of intermodal terminals, which is contrary to the need of railroads to control their own terminals and operations as a private industry. All these factors have essentially made intermodal a relevant and economical choice for only a small subset of shippers.

Importance to the District 6 Freight Plan

While this document is largely focused on rail, it does provide some insights into how highways and trucks can coordinate with rail and provides some insight into what policies, programs and investments are needed to better coordinate interaction between the modes. It specifically mentions comments received related to intermodal investments, such as a need to:

- Make highway improvements to access roads for trucks entering and leaving the two Twin Cities intermodal rail yards
- Intermodal rail service needed to give Minnesota and the Twin Cities area access to LA/Long Beach container shipping ports. This includes, Union Pacific (UP) container rail service on the Spine Line through the Kansas City area to southern California

Project: Statewide Ports & Waterways Plan

Sponsor: MnDOT

Scope: Statewide

Year: 2014

The Statewide Ports and Waterways Plan focused on:

- Continued enhancement of the ports and waterways system's role in providing the global, national, statewide, regional, and local transportation connections essential for Minnesotans' prosperity and quality of life, and taking advantage of technological, logistical, and infrastructural advancements
- Improved and maintained ports and waterway connections, in order to maximize return-on-investment for freight shipping, especially in an era of constrained resources
- Better integrated planning within MnDOT and greater coordination with transportation partners

Importance to the District 6 Freight Plan

The plan identifies several opportunities, challenges and strategies. While many are focused statewide or only include issues on the maritime system, there are several key takeaways for the District 6 Freight Plan.

- **Aging Port Infrastructure:** Public and private ports are continuously making investments to maintain and upgrade their infrastructure. MnDOT will serve as a champion for these efforts or potential funding through the Minnesota Port Development Assistance Program (PDAP)
- **Land Use Compatibility:** Land in and near port areas that is considered ideal for freight shipping purposes is increasingly in competition with residential, commercial, and recreational land uses. Decisions regarding the potential closure of freight facilities on Minnesota waterways should consider a broad range of community and regional impacts, including transportation and job impacts, as well as alternative preservation, mitigation, and relocation strategies
- **Intermodal Connectors:** Existing intermodal links between the marine system and the road and rail freight systems are, in some cases, in poor condition and in need of repair. In other cases, additional links are needed. Concerns specifically include that intermodal connectors are adequate for rail track and road pavement condition, travel lane width, turning radii, and vertical and horizontal bridge clearance
- **Outreach and Education:** Broadly communicating the maritime sector's positive contributions to Minnesota's economic competitiveness, natural environment, and quality of life will advance understanding and appreciation of the marine system
- **America's Marine Highway Program:** Support continued development of this program focused on providing maritime options to relieve congestion on the interstate system

Project: Statewide Truck Parking Study

Sponsor: MnDOT

Scope: Statewide

Year: 2019

The Minnesota Statewide Truck Parking Study was a data driven, stakeholder informed effort to identify how truck parking issues impact Minnesota and identify what potential solutions could be undertaken to alleviate identified issues. The study identified public and private sector truck parking capacity statewide and used stakeholder outreach and GPS truck probe data to identify truck parking demand. While the study focused on statewide issues, the “Solutions and Opportunities” chapter undertook a deeper dive into truck parking offered several projects, operational and policy-level solutions.

Importance to the District 6 Freight Plan

The study used a demand to capacity ratio to identify locations with highest likelihood of unmet demand. The Northfield Zip Code (55057) as the second largest demand/capacity ratio statewide. The Northfield area is served by the Flying J Travel Center #576 is located off I-35 at Exit 65 on County Road 46/Bagley Avenue. The study also identified several “Major Super-load Generators and Common Entry/Exit Points,” including:

- US 69/65: Alternative crossing points due to vertical clearance constraints on I-35 at the Minnesota/Iowa border
- US 63: Alternative crossing point due to vertical clearance challenges on I-90 in southeast Minnesota
- Other important alternative corridors include portions of MN 16, MN 44, and MN 56

Project: Minnesota Weight Enforcement Investment Plan (DRAFT)

Sponsor: MnDOT

Scope: Statewide

Year: 2018

A joint effort by MnDOT and the Minnesota State Patrol, the Minnesota Weight Enforcement Investment Plan developed a 10-year investment strategy of future needs and available resources to improve weight enforcement statewide. The project engaged truckers, trucking companies, law enforcement, cities, counties and others to understand truck safety needs statewide.

While the Plan identified new and enhanced facility needs, it also identified a \$96 million dollar funding gap over the next ten years. As a result, the major conclusion of the study was a recommendation to preserve existing weigh station facilities and equipment while seeking additional funding to make improvements to address this funding gap and increase the number of safety inspections across the state.

Importance to the District 6 Freight Plan

The study identified locations in District 6 that met state qualifications for new weight enforcement facilities.

- I-90: Between Rochester and Fremont
- I-90 Nodine Pull-Off Sites (EB & WB)
- US 52: Weight in Motion #32

Project: Rail Grade Crossing Safety Project Selection Study

Sponsor: MnDOT

Scope: Statewide

Year: 2016

This study was prepared to determine how well the two crash prediction models used by MnDOT staff fit the state's data needs and attempted to identify a set of grade crossing risk factors that would support an improved statewide systemic evaluation. The study determined that both the FRA Accident Prediction Model and the Texas Hazard Index were poor fits when paired with actual Minnesota's crash data. The study also identified an improved / new set of rail grade crossing features including volume, speed, design and surrounding area that were proven to be superior to existing ones that tended to over-represent crashes.

Overall, the study found that vehicle train collisions at rail grade crossings are rare in Minnesota. Over the 10-year study period, more than 4,000 public rail grade crossings in Minnesota averaged approximately 45 crashes and 5 fatal crashes per year. During that time, 91 percent of the grade crossings had no crashes at all, while 96 percent had no crashes resulting in injuries, and 99 percent had no fatal crashes.

The study recommended for consideration, two modified steps in the prediction methodology:
Consider adopting fatal plus injury crashes as the primary performance measure for the safety program managed by the MnDOT Rail Administration instead of fatal and total crashes (historic approach).
Consider supplementing the two predictive models with the systemic risk assessment results. The comparison of results for both applications indicates that the systemic risk assessment provides a better fit with Minnesota's crash data and produces a broader list of potential candidates for safety investment.

Importance to the District 6 Freight Plan

While this study is highly technical, deals with rail freight crashes, and is quite specific, it sets an overall statewide framework policy and methodology framework for identifying and addressing rail / highway safety project needs based on physical and operating characteristics of at rail grade crossings. In terms of applicability to the District 6 effort, the methodology used in this statewide process could certainly be used at the at grade rail crossings locations in District 6 to determine which locations are in most need of upgrades. This methodology and those locations identified by the process would be part of the project identification exercise if there's a need to identify specific safety related projects in the plan. Additionally, it also recommended to pursue practices that provided increased benefits to include:

- Rewarding local agencies for participating in safety projects that included closing crossing
- Investigating ways to partner with law enforcement to increase awareness regarding motorist behaviors at crossings that contribute to crashes
- Considering the replacement of STOP signs with YIELD signs at low-volume intersections
- Continuing the use of gates at actively controlled crossings
- Considering a return to a corridor approach to program more comprehensive improvements

Project: Freight Rail Economic Development (FRED) Study

Sponsor: MnDOT, DEED

Scope: Statewide

Year: 2013

The Freight Rail Economic Development (FRED) Study was mandated by the 2012 Legislature and mandates that the Minnesota Department of Transportation (MnDOT) and the Minnesota Department of Employment and Economic Development (DEED) cooperatively investigate ways to expand rail related business growth in the state. Key findings of the study included:

- Railroads are a preferred mode of transportation for large volume shippers of agriculture, industrial manufacturing, mining and consumer products
- Freight rail is important to the economic competitiveness of Minnesota
- The partnership between Class I and short line railroads is valuable and essential for the economic growth of Greater Minnesota
- Freight rail infrastructure and rail service is growing in importance because of increased motor carrier regulations, increased fuel costs and a current and growing truck driver shortage
- Intermodal freight transportation policy represents the next important area of progress for policymakers and industry professionals
- Minnesota's rail network is regional and international in scope and essential to support exports
- Public perception of freight rail's value generally lags its actual importance to the economy and communities that it serves

Importance to the District 6 Freight Plan

While the study makes several recommendations that are more focused on addressing the issue statewide, the spirit of these recommendations would be useful to include in the overall plan's recommendations (as appropriate):

- Collaboration and education. Most EDAs and RDCs around the state have little or no knowledge of rail transportation and the importance of access to this mode
- Think big. Rail access often involves large capital-intensive investments. Turnouts may run from \$75-250K, and constructing new track is \$1 million per mile.
- Rail renaissance. Railroads have reversed decades of decline and are more competitive and productive due to deregulation
- MnDOT and Minnesota Department of Employment and Economic Development program enhancements
- Freight Rail Economic Development Study takeaways should be integrated into MnDOT's Transportation Economic Development Program
- Host annual executive planning meetings with Class Is and Transportation Commissioner
- Public money invested in privately owned rail facilities has created public benefits for rail users and reduces transportation maintenance costs for public roadways in other states

Project: Connected and Automated Vehicle Strategic Plan

Sponsor: MnDOT

Scope: Statewide

Year: 2020

The Plan outlines strategies and recommendations for MnDOT to harness the benefits and manage the risks of a changing transportation system to better the quality of life for all Minnesotans. The strategies outlined in the Plan were the result of a year of research, statewide workshops, community conversations and analysis. These recommendations will help MnDOT – and the state – prepare for the opportunities and challenges with this revolution in transportation.

Importance to the District 6 Freight Plan

The CAV strategic plan is a multimodal plan. The plan has three freight-related recommendations that have direct relevance to the District 6 effort, including:

- **Develop Truck Platooning Network Plan:** While this plan would be statewide, the recommendation mentions that District Freight Plans could assess how to improve truck platooning corridor pavements and bridges to improve and maintain oversize overweight corridors and Critical Urban and Rural Freight Corridors
- **Research and Pilot CAV Freight Technologies:** After the development of a Truck Platooning Network Plan conduct industry outreach to encourage the research and testing of CAV freight platooning and automation in Minnesota. Monitor state and federal legal challenges to freight automation
- **Review and Update MnDOT Plans:** This recommendation was aimed at updating statewide planning efforts to include truck platooning and related behavior, patterns, vehicle types, these could be considerations for the District 6 Plan as well

Project: Minnesota State Highway Investment Plan (MnSHIP)

Sponsor: MnDOT

Scope: Statewide

Year: 2017/18

The 20-Year Minnesota State Highway Investment Plan directs capital investment for Minnesota’s state highway system. The Plan must identify investment priorities given current and expected funding. It is updated every four years, as required by Minnesota Statute. This MnSHIP update spans the 20-year planning period from 2018 to 2037. The Minnesota Department of Transportation considers many factors in developing MnSHIP. The Plan prioritizes future investments to address the widening gap between highway revenues and construction costs. MnSHIP also considers federal and state laws, MnDOT policy, and current and expected future conditions on the state highway system. MnSHIP describes how MnDOT will use capital investments to repair, replace, and improve the state highway system. The Plan does not address how MnDOT funds the operation of the system or day-to-day maintenance.

In the 2017 Legislative Session, MnDOT received \$804 million for state road construction from additional Trunk Highway bonding authority and a transfer from the State’s General Fund to the Highway Use Tax Distribution Fund, from which MnDOT receives a portion for state road construction. The Legislature also authorized Trunk Highway bonding and funds for the Corridors of Commerce program in both the 2017 and 2018 sessions. MnDOT has revised the 20-year state highway funding projection in MnSHIP to account for this additional funding. The Freight investment category is funded by the National Highway Freight Program.

Investment Categories	Original 20-Year MnSHIP Investment Direction	Percent	Expected MnSHIP Investment Direction Based on Legislative Impacts	Percent	Difference in Dollars	Difference in Percentage
Pavement Condition	\$10.31 B	49.4%	\$10.09 B	48.3%	-\$220 M	-1.1%
Bridge Condition	\$2.38 B	11.4%	\$2.30 B	11.0%	-\$80 M	-0.4%
Roadside Infrastructure	\$1.60 B	7.7%	\$1.71 B	8.2%	\$110 M	0.5%
Jurisdictional Transfer	\$90 M	0.4%	\$90 M	0.4%	\$0 M	0.0%
Facilities	\$80 M	0.4%	\$85 M	0.4%	\$5 M	0.0%
Traveler Safety	\$680 M	3.2%	\$740 M	3.5%	\$60 M	0.3%
Twin Cities Mobility	\$230 M	1.1%	\$830 M	4.0%	\$600 M	2.8%
Greater Minnesota Mobility	\$25 M	0.1%	\$25 M	0.1%	\$0 M	0.0%
Freight	\$610 M	2.9%	\$580 M	2.8%	-\$30 M	-0.2%
Bicycle Infrastructure	\$130 M	0.6%	\$120 M	0.6%	-\$10 M	-0.1%
Accessible Pedestrian Infrastructure	\$530 M	2.5%	\$500 M	2.4%	-\$30 M	-0.2%
Regional and Community Improvement Priorities	\$310 M	1.5%	\$330 M	1.6%	\$20 M	0.1%
Project Delivery	\$3.27 B	15.6%	\$3.06 B	14.7%	-\$210 M	-1.0%
Small Programs	\$620 M	3.0%	\$430 M	2.1%	-\$190 M	-0.9%
Total	\$21 B	100.0%	\$21 B	100.0%	\$25 M	0.0%

Project: MAASTO Connected and Automated Vehicle eSummit

Sponsor: Mid America Association of State Transportation Officials

Scope: U.S. Midwest

Year: 2020

The 2020 MAASTO CAV eSummit was held virtually on October 22-23rd. The annual summit focused on how MAASTO states collaborate to advance some of the more challenging areas in planning for CAV, including addressing labor and workforce development and promoting educating and outreach. A memorandum of understanding was signed in June 2020, memorializing the region’s commitment to convening, collaborating, and planning together. This MOU – the first of its kind in the country – commits the region to:

- Ongoing information sharing of best practices
- Collaborating on regional projects
- Developing a regional CAV strategy
- Hosting an annual summit

The Summit identified a mid-term strategy that focuses on truck platooning, focusing on consistency across state lines and in the terms that we use. Participants outlined how State DOTs could help make this happen:

- Define a network where these operations can take place
- Work on uniform legislative efforts on following distance
- Uniform registration for truck platooning and AVs for DMVs/law enforcement
- Formally reach out to other modes: rail, air, etc. on how they already use or have integrated CAV technology

Importance to the District 6 Freight Plan

District 6 shares a border with Wisconsin and is home to two major Interstates. The District Freight Plan must be mindful of the role it plays in multijurisdictional planning for CAVs.

Project: Greater Minnesota Mobility Study

Sponsor: MnDOT

Scope: Greater Minnesota

Year: 2018

The primary goal of the Greater Minnesota Mobility Study was to identify locations on the NHS in Greater Minnesota with the greatest mobility or reliability issues and develop a toolbox of low-cost, high-benefit solutions for future investment consideration. Key inputs from the study for future planning were identified as follows:

- Incorporate the study findings into transportation policy and investment plans
- Support project funding decisions
- Provide a reference for local planning

Importance to the District 6 Freight Plan

Based on the study's methodology, the following projects were identified as high priority projects in District 6:

- US 61 (MN 16/CSAH 6): Intersection related. PM weekend issues; commuter traffic. Southbound left turn lane is very long which may be taking a lot of green time
 - Potential Solution: Geometric improvements Signal timing/modifications
- US 61 (CSAH 19 to Downtown Red Wing): Reconstruction in 2012-14. Issues likely related to downtown environment. Look into signal timing or coordination opportunities. District and City decision to not sacrifice pedestrian mobility/safety for NHS mobility through a downtown
 - Potential Solution: Signal timing/coordination
- I-90 (US 14): 70 mph posted speed may not be comfortable for most drivers. Left exits, curves, weaving/merging
 - Potential Solution: Additional Study
- MN 19 (I-35): Speed issues with trucks going to/from Flying J. CSAH 46 will be realigned west of interchange
 - Potential Solution: 20XX Project Potential for auxiliary lanes
- I-90 (US 63): Short merge and deceleration areas. 2020 interchange improvement planned and will include redesign and access changes. Keep on list to confirm both issues are addressed (eastbound to northbound loop)
 - Potential Solution: 2020 Project
- US 61 (US 14 to CR 129): 2018 signal replacement at Huff Street. Known issues on segment to south that include CSAH 43
 - Potential Solution: Additional study
- US 218 (I-90 to CSAH 27): Reliability and Speed Index Issues
 - Potential Solution: None listed
- I-90 (Oakland PL SE): Issues related to short weave area
 - Potential Solution: Additional study, potential ramp consideration
- US 52 (MSAS 118/Armstrong Ave to MN 3): Speed and safety issues
 - Potential Solution: None listed

Project: Develop MN: Comprehensive Development Strategy for Greater Minnesota

Sponsor: Minnesota Association of Development Organizations

Scope: Greater Minnesota

Year: 2019

Develop MN provided a common framework for regional economic development in Greater Minnesota. It identifies strategies to address the special challenges and opportunities in the region. This initiative was designed to enhance and support economic development efforts on all levels and engage local, regional, state and federal partners. In 2016, 40% of Minnesota's Gross State Product was dependent on freight-related industries, a higher percentage than many of its neighboring states. The Truck Travel Time Reliability Index (TTTRI) measures the consistency of commercial truck travel times on the interstate system, with 1.0 being the highest measure of reliability. Statewide, Minnesota's TTTRI value has remained fairly consistent at 1.43 in 2017 and 1.44 in 2018 on average. The Plan identified a performance measure of reducing the TTTRI score statewide to 1.40 (or lower) by 2021.

Importance to the District 6 Freight Plan

Develop MN identified three transportation related strategies to address freight challenges in Greater Minnesota:

- Partner with MnDOT to help identify potential freight enhancement projects that have increased potential for a positive return on investment while also calculating the environmental costs
- Help local units of government with planning and preparing needed documentation on the merits of freight infrastructure projects
- Explore the use of public-private partnerships (formal or informal) in helping to finance freight infrastructure projects. These actions may include needs determination and project development, as well as funding and implementation

Southeast Minnesota Regional Freight Study

Sponsor: MnDOT

Scope: District 6

Year: 2012

The Southeast Minnesota Freight Rail Study describes the unique industrial transportation characteristics and potential for economic growth in southeastern Minnesota.

Importance to the District 6 Freight Plan

The study identified several issues that should be updated and when appropriate integrated into District Freight Plan:

- Road surface and smoothness of ride: Current road conditions were good but had shippers had concerns about a possible future decline in highway maintenance because of funding issues
- Access Management and Connections: Shippers noted that truck routes and local connections to businesses were adequate for today's need. Concerns were shared about recognizing the size of semi-tractor-trailer rigs now in common use, often with a total rig length of 70 feet or more, and a total wheelbase of up to 67 feet (WB67) and designing safety features and turn geometry
- Innovative Design: The trucking community has been generally very receptive of innovative intersection design innovations, with the caveat that design should be monitored and given public review in order to easily handle long, heavy commercial vehicles safely, and that crossing traffic consisting of heavy trucks (on the minor route) not be compromised by these installations
- River Crossings: Good access to Wisconsin should be a priority. A 10-day shutdown of the Winona Bridge in 2011 for preventive maintenance highlighted the fact that almost a fourth of Winona's labor force commute from Wisconsin, and the concentrated manufacturing and transportation business in Winona faced reduced transportation options, significant cost increases for detours, and reduction in business levels
- Ports and Waterways: South East Minnesota has direct access to two of the five river ports in the state, Red Wing and Winona. The region also has easy access to another major port in La Crosse, WI. Both Minnesota ports have good commercial access via State Trunk Highways, local arterials, and Class 1 railroads
- Railroad Intermodal Access: Minnesota's two major intermodal container terminals are in the Twin Cities, using BNSF and CP's Chicago-to Pacific Northwest corridors. Many businesses truck containerized cargo to Chicago or Kansas City to access the Ports of Long Beach/Los Angeles. A private intermodal terminal in Winona has been built on a similar business model but continues to face challenges of attracting major customers and having only limited support from the servicing railroad
- Oversize/Overweight Permitted Truck Transport: Southeast Minnesota terminates an unusually large number of over-size/over-weight truck loads that require special permits for routes and curfews, and often require special services including escorts and heavy equipment such as cranes to accomplish their moves. This includes virtually all moves needed for wind turbine installations
- Frac Sand: Area is home to significant mining operations for Frac Sand

Manufacturers' Perspectives on Minnesota's Transportation System

Sponsor: MnDOT

Scope: District 6

Year: 2018

MnDOT collected and analyzed information on manufacturers' perspectives in MnDOT District 6 to:

- Better understand their perspectives and priorities
- Build relationships to better align the transportation system in the long-term with shippers' needs
- Support continuous improvement at MnDOT with ongoing input from this customer segment

Businesses were identified using an analysis of traded regional industry clusters, with additional input from economic development professionals and from District 6 staff. To the extent that MnDOT can better understand and respond to specific transportation challenges that shippers face, this can lower shippers' costs, improve their competitiveness, and better support the regional and state economy. To identify low-cost/high-benefit transportation improvements that can be made in the near-term, with existing or limited additional resources the project team interviewed freight users and major generators.

Importance to the District 6 Freight Plan

District Manufacturers' Perspective studies lay the groundwork for the District Freight Plan process. It is important to capture key takeaways from this extensive effort to ensure these two processes when combined more freight forward in District 6. Specific findings that must be considered include:

District Characteristics

- Second-highest population density of the MnDOT districts
- Strong manufacturing presence
- The eastern part of the district has hilly terrain along the Mississippi River
- Western part has flat agricultural plains prone to blizzards
- Second-most interstate miles in the state
- Prime location for truck traffic moving across the state and country
- Infrastructure
- Because of curvier roads in the east and slow-moving agricultural equipment elsewhere, freight users value passing opportunities to keep safe and stay at speed
- Intersections designed for easy merging into fast-moving traffic (including good sight lines)
- Several businesses complimented MnDOT for incorporating safety enhancements, such as stoplights and advance warning lights, into recent road projects
- Commuting traffic mixed with general traffic through District 6 can easily create congestion
- Winter Weather
- Snow and ice removal were the most mentioned safety and employee commute issue
- Truck Parking
- District 6 businesses often said that trucks park in inconvenient or unsafe locations and pointed to a need for traffic management around private truck stops
- Parking is likely an issue due to the prevalence of manufacturers and the presence of I-35 and 90

Project: Advancing Transportation Equity

Sponsor: MnDOT

Scope: District 6

Year: 2020

As part of its 20-year Statewide Multimodal Transportation Plan, MnDOT sought to better understand how transportation systems and policies affect and are affected by equity. In 2017, MnDOT launched an effort in its districts to engage with communities to inform equitable transportation planning and practice. These conversations in District 6—and other districts—have helped MnDOT develop a deeper understanding of the impact transportation systems and policies have on the communities that live in the districts. These efforts have also helped MnDOT identify organizations and provided pathways to build relationships and continue engagement.

Importance to the District 6 Freight Plan

Equity is an important part of the freight planning process. While freight moving is a sign of a growing economy, the negative externalities of that movement are often felt by our most vulnerable populations. The report specifically calls out three safety issues in the District that relate to freight:

- A lot of trucks drive through to and from Hormel, making it hard to cross Main. This is most concerning near the school where kids must cross in this area
- At I-35 and County Road 46 in Freeborn County, there are a lot of semi-trucks trying to turn. A light or stop sign would probably help
- In Winona, trains delay people trying to cross the tracks and there is only one overpass (on Pelzer) on the far west end of the town. The overpass benefits industry more than residents because it was created for port access

Project: Capital Highway Investment Plan

Sponsor: MnDOT

Scope: District 6

Year: 2021

The 2021 District 6 Capital Highway Investment Plan (CHIP) details how the District plans to invest over \$970 million in highway infrastructure improvements over the next decade. The CHIP is updated annually and feeds into the larger Minnesota State Highway Investment Plan (MnSHIP). Investment decisions are based on the following overall strategies. The first Figure below highlights six overall objectives and specific areas of focus, while the second Figure represents how future programming plans align with those strategies and the relative investments dedicated to them.

System Stewardship

- Continue to assess pavement condition and evaluate options to respond to those highways that display the highest needs that are cost effective and will optimize pavement life.
- Continue to coordinate roadside infrastructure investments (culverts, guardrail, signing) with other preservation projects.
- Pursue turnbacks of non-NHS roadways by working closely with local jurisdictions and optimizing funding sources.

Transportation Safety

- Implement strategies identified in the District Highway Safety Plan that would be eligible for funding from the HSIP program.
- Maintain the flexibility to react to changing conditions within the statewide safety emphasis areas.
- Coordinate safety investments, as appropriate, with other preservation projects to minimize disruption to travelers.

Critical Connections

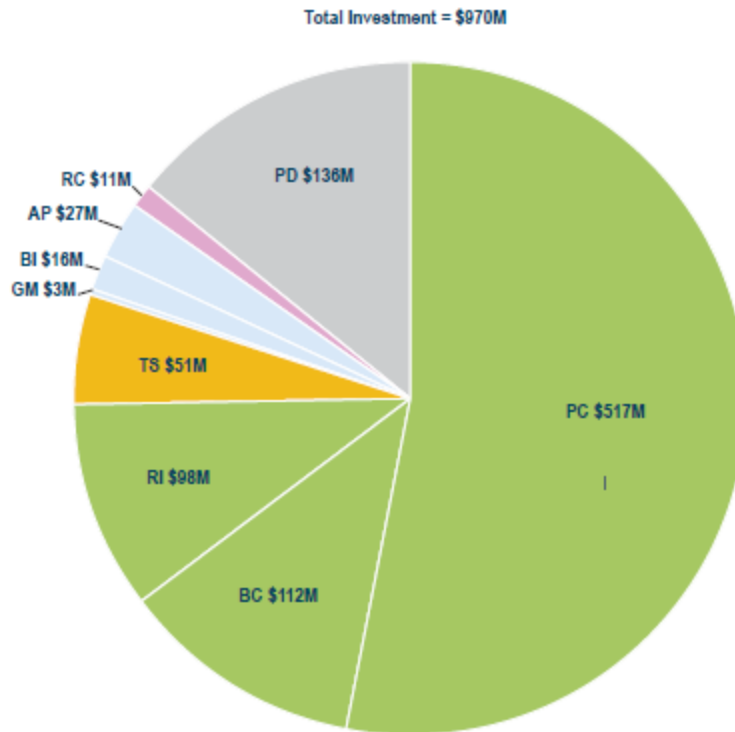
- Continue District Municipal Agreements program to strategically improve the bicycle network by partnering with local units of government.
- Implement bicycle accommodations, as identified in the District 6 Bicycle Plan, as part of pavement and bridge projects.
- Continue addressing identified ADA needs in communities through standalone and preservation projects.

Healthy Communities

- Coordinate bicycle and pedestrian improvements with local planning efforts such as State Health Improvement Partnership, Active Living, and Safe Routes to School.

Project Delivery

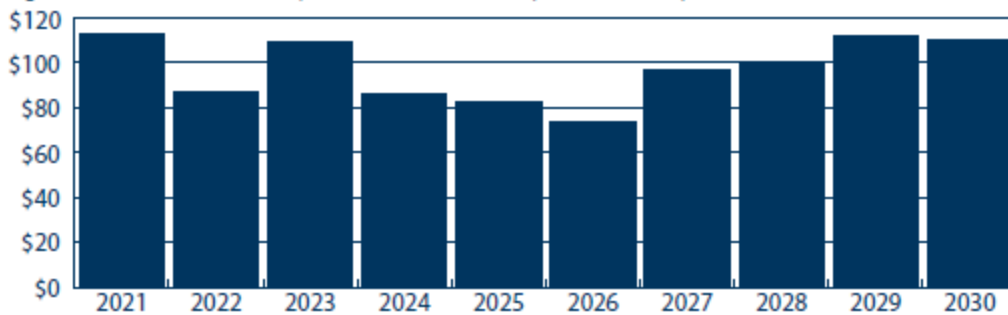
- Anticipate and provide funding for supplemental agreements, cost overruns, incentives, right-of-way, and consultants to support and deliver the district program.



Note: No investment for Facilities, Jurisdictional Transfer, Small Programs or Freight

System Stewardship	PC	Pavement Condition	Critical Connections	TC	Twin Cities Mobility	Other	TS	Traveler Safety
	BC	Bridge Condition		GM	Greater Minnesota Mobility		RC	Regional + Community Improvement Priorities
	RI	Roadside Infrastructure		FR	Freight		PD	Project Delivery
	JT	Jurisdictional Transfer		BI	Bicycle Infrastructure		SP	Small Programs
	FA	Facilities		AP	Accessible Pedestrian Infrastructure			

Figure 6-3: District 6 10-Year CHIP, Total Investment Per Year (millions of dollars)



Project: ROCOG Long Range Transportation System Plan/Transportation Improvement Program

Sponsor: Rochester-Olmstead Council of Governments

Scope: Rochester-Olmstead Metropolitan Area

Year: 2020

The Rochester-Olmsted Council of Governments (ROCOG) is the designated Metropolitan Planning Organization (MPO) for the Rochester urbanized area. It is federally charged with developing a long-range regional transportation plan (also known as a Metropolitan Transportation Plan). This Plan presents the region's vision for a multimodal transportation system needed to respond to future growth and demographic trends.

Incorporated within this Plan is a discussion on freight planning, key takeaways include:

- The primary mode for moving goods associated with the economy of Olmsted County is truck travel
- Accessibility and mobility are key concerns affecting truck travel, as they are with other vehicular traffic, though vehicle weight and size present further considerations for heavier truck travel
- Primary roads and bridges need to be strengthened sufficiently to withstand the added loads of heavy truck travel, and geometric design features need to accommodate the restricted handling capability of large trucks. Local municipalities, Olmsted County, and MnDOT all monitor 10-ton route needs on a regular basis
- Truck crash frequency correlates with Heavy Commercial Average Daily Traffic (HCADT) levels, with most crashes found on the Interstate and Trunk Highway network

The MPO's Transportation Improvement Program outlines that the region is meeting and exceeding the system reliability performance targets. In the 2021-2024 TIP, over \$19 million is programmed for projects that involve freight movement. These projects include:

- High tension cable barrier projects on I-90 (from US 52 to MN 42 and TH 42 to CSAH 10) and US 14 (CSAH 34 to US 52)
- Replacing the I-90 bridge over US 52
- Bituminous mill and overlay/traffic signal improvements (MN 30 from US 63 to US 52 and US 63 at the junction of MN 30)
- Reduced conflict intersection at US 14 and CSAH 3

Importance to the District 6 Freight Plan

Because of the significant freight volumes in and around the Rochester/Olmstead county region, the MPO is a key partner in delivering the 3C transportation planning process. This includes the freight planning process. Ensuring that the lessons from this plan are both produced from and integrated into the MPO's efforts are key to this project's success.

Project: Beyond Coulee Vision 2040

Sponsor: La Crosse Area Planning Committee

Scope: La Crosse, WI-La Crescent, MN Urbanized Area

Year: 2020

The La Crosse Area Planning Committee is the designated Metropolitan Planning Organization (MPO) for the La Crosse, WI-La Crescent, MN Urbanized Area. It is federally charged with developing a long-range regional transportation plan (also known as a Metropolitan Transportation Plan). This Plan presents the region's vision for a multimodal transportation system needed to respond to future growth and demographic trends.

Incorporated within this Plan is a section on freight planning, key takeaways include:

- Importance of oversized/overweight/super load corridors like MN 19, MN 26, MN 16 and I-90
- Recommended traffic signals on the major arterials to be timed so that trucks are not stopping at every signal.
- Importance of cross-state border movements for freight to access rail yards and port facilities
- Plan also identifies major freight transfer and barge fleeting sites

Importance to the District 6 Freight Plan

The La Crosse Area Planning Committee is a key partner in solving freight challenges and leading bi-state coordination efforts. Similarly, the plan identifies major freight and riverport facilities that are key to sustaining the economy in this portion of District 6.

Project: Destination Medical Center Strategic Plan & Integrated Transit Studies

Sponsor: Destination Medical Center, City of Rochester, Olmstead County, State of Minnesota

Scope: Greater Rochester Area

Year: 2018

The Destination Medical Center (DMC) Initiative serves as a public-private partnership, combining private development by Mayo Clinic and other developers, as well as public funding from the City of Rochester, Olmsted County, and the State of Minnesota to facilitate and support public infrastructure. DMC promotes the City of Rochester, and more broadly, the County, and the State as a world destination medical center, to assist the patients, caregivers, residents, employees, and visitors in fully experiencing Rochester as a premier destination medical center, while providing extended economic development and opportunities for the City, the region, and the State.

The DMC developed an overarching strategic plan for development of the area around Mayo Clinic. This strategic plan included freight-related strategies for the area.

- The area will not be designed to promote high-speed trips, through traffic that doesn't have a destination in or near downtown, or large truck traffic that is not delivering goods to the downtown or adjacent neighborhoods. Basic principles for street investments recommended in the DMC include:
- Low speed design through pedestrian volumes, textured materials and placemaking features, and other visual cues will still permit easy loading and unloading for delivery trucks, as these corridors largely serve commercial land uses

In 2018, the DMC published a series of integrated transit studies to rethink mobility in the Rochester area.

Among options explored was the acquisition of a low volume CP rail spur to provide a transit corridor and the use of other rail right-of-way to provide transit service.

Importance to the District 6 Freight Plan

The MnDOT District 6 Manufacturers' Perspectives Study mentions the development of the DMC and the impact it may have on overall freight and passenger volumes. A significant amount of growth has been forecasted for this area, which will result in increased freight movement throughout the district to not only support the medical industry but resident's lifestyles as well.