Minnesota Department of Transportation District 7 Freight Plan

Working Paper 2: Existing Document and Process Synthesis

Prepared by:

cpcs

In association with:

Short Elliott Hendrickson Inc.

ZAN Associates

Revised June 30, 2021

Table of Contents

Table of Figures

Acronyms and Abbreviations

Abbreviation	Definition
CEDS	Comprehensive Economic Development Strategy
CSAH	County State Aid Highway
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
MAPO	Mankato/North Mankato Area Planning Organization
MnSHIP	Minnesota State Highway Investment Plan
HSM	National Highway System
OFCVO	MnDOT Office of Freight and Commercial Vehicle Operations
PQI	Pavement Quality Index
RQI	Ride Quality Index
SRDC	Southwest Regional Development Commission
SR	Surface Rating
TH	Trunk Highway

Executive Summary

The District 7 Freight Plan will use prior plan and study data and findings to identify and close gaps in understanding through the creation of newer and deeper insights into District 7's freight needs and issues. This Working Paper documents the wide range of prior plans and studies that were reviewed, including the Minnesota Department of Transportation's (MnDOT) Statewide Freight System and Investment Plan (State Freight Plan), District 7 Manufacturers' Perspectives Study, other MnDOT studies, and local organization annual reports and comprehensive economic development strategies. The results of these plans have been synthesized to identify common needs and issues, and topics where further research may be required.

Common Findings

Most of the reviewed literature mentioned that District 7's transportation network is a critical component of the region's growing economy. Listed below are the most common findings listed among modes:

Road Network Findings: Three key issues for District 7's road network includes: 1) adequately maintaining road infrastructure (namely pavement and bridge conditions); 2) enhancing roadway safety at roundabouts, j-turns, and other intersections through education and infrastructure updates, and 3) addressing other trucking-related concerns, such as truck parking demand. These issues are further complicated due to the lack of funding and capital resources available to address infrastructure needs. An in-depth evaluation of these issues, as well as other freight impediments such as the need for four-lane highways will be required.

Railroad Network Findings: Three key issues for District 7's railroad network include: 1) lack of intermodal access for manufacturers and shippers; 2) poor track infrastructure conditions on portions of publicly-owned rail lines, and 3) addressing grade crossing safety. These issues may be caused by a lack of funding and private railroads' approach to market service, and will be further investigated during the development of the District 7 Freight Plan.

Economic Context Findings: One major issue for District 7's economic context is the threat of low agriculture prices to the economic well-being of the District's agricultural producers. A greater understanding of how access to rail and other transportation modes affects operations for agricultural and other manufacturers in the District is necessary and will be explored further.

Items to Bring Forward

In addition to the common findings, the District 7 Freight Plan will draw on guidance and specific data from other studies and plans, including:

- Freight plan vision and goal guidance from the Minnesota State Freight Plan.
- Data on highway and grade crossing safety from District safety plans and the Rail Grade Crossing Safety Project Selection.
- A list of programmed projects from county and state investment plans.
- Project concept evaluation and scoring criteria from the State Freight Plan, previous district freight plans, and other MnDOT Office of Freight and Commercial Vehicle Operations (OFCVO) guidance.

As work on the District 7 Freight Plan progresses, additional data sources or previous plans may be used to inform the work.

Areas for New or Updated Research and Analysis

The review and synthesis of prior plans and studies found several types of needs, issues, and trends that may require new or updated research or analysis specific to District 7. These topics include:

- Updating the estimates of freight transportation's importance to the District's businesses and economy through data from the Bureau of Labor, US Census Bureau, ReferenceUSA (or data provided by MnDOT), and US Department of Commerce's Cluster Mapping tool.
- Further research into the distribution of agricultural and manufacturing activity in District 7
- Distinctive links between the agricultural and manufacturing industries and the transportation assets through mapping of data sources like the US Department of Agriculture's CropScape data and Minnesota Department of Agriculture statistics.
- Qualitative and quantitative assessments of key freight corridors in District 7 to better understand the industrial sectors and types of trips that most utilize them. In this analysis, we will include "secondary corridors" that are not shown in the Minnesota Principal Freight Network.
- Analyzing and mapping traffic volumes, travel time index, and travel time reliability using MnDOT's subscription to StreetLight Data. This analysis will be supplemented with road performance data from the Federal Highway Administration's National Performance Management Research Data Set.
- Mapping truck-related and grade-crossing crash locations and the risk associated with specific locations using MnDOT data and the District safety plan.
- Analyzing and mapping road and railroad bridge locations, operational load capacity, condition, and clearances in the District using data from the National Bridge Inventory. This assessment will provide insight into conditions, mobility, and clearance of the District's bridges.
- Mapping railroad traffic volumes and speed limits using National Transportation Atlas data and crossing data from the Federal Railroad Administration.
- Mapping the locations of pipelines and pipeline terminals using data from the Pipeline and Hazardous Material Safety Administration and the US Energy Information Administration.
- Mapping wind farm locations in District 7 and potential locations for wind farms in the future as indicated by industry representatives.

This list of topics will undergo further refinement based on feedback from MnDOT as well as the Freight Plan's Advisory Committee and Technical Team

Next Steps

This synthesis of this Working Paper provides a starting point for Task 3 – Data Analysis. These findings will be presenting at upcoming Advisory Committee and Technical Team meetings to help guide the focus of research and analysis efforts.

1 Previous Research

Key Findings:

The District 7 Freight Plan's creation will be supported by findings and recommendations from previous freight-related plans and studies. Among the previous studies relevant to this plan, many of the findings are related to the road network, which MnDOT and its local partners have control over. In particular, truck parking, pavement conditions, and bridge conditions were identified common topics for needs and issues.

1.1 Introduction

The District 7 Freight Plan (Freight Plan or Plan) is being created to provide a clear understanding of District 7's freight system, how local industries use the system, and their needs and issues. This Plan is not being developed in isolation; there are a range of prior studies and plans relevant to the District freight system's context, needs, issues, and potential improvements. It is not the intent of the Plan to repeat this previous research and analysis. Instead, the Plan will leverage, validate, and expand on existing regionally relevant studies.

The District 7 Freight Plan uses prior plan and study data and findings to identify and close gaps in freight system understanding.

This Working Paper provides a synthesis of prior documents that are relevant to the District 7 Freight Plan. The goal of this synthesis is not to review every single document. Rather it reviews relevant plans and studies that inform the current conditions and needs of the District's freight system. This synthesis aims to ensure that information and processes relevant to the District provided in statewide local, and mode-relevant plans are brought forward into this planning effort. Utilizing existing insights and data (when relevant) from prior plans means that the District 7 Freight Plan can be focused on creating new insights.

1.2 Reviewed Materials

Figure 1 lists the studies and plans reviewed during the creation of this synthesis. This list was created with input from MnDOT District 7 and Central Office staff. An overview of these documents, their findings, and their relevance to the District 7 Freight Plan can be found in Appendix A. Additional studies and plans may also be incorporated in the District 7 Freight Plan based on feedback from MnDOT, the Advisory Committee, Technical Team, and other stakeholders.

Figure 1: Plans and Studies Reviewed

Plan	Agency	Year
Minnesota Statewide Freight System and Investment Plan	MnDOT	2018
Manufacturers' Perspectives on Minnesota Transportation System – District 7	MnDOT	2019
Southwest Minnesota Regional Freight Study	MnDOT	2007
Minnesota State Highway Investment Plan (MnSHIP)	MnDOT	2017

Plan	Agency	Year
District Safety Plan Update	MnDOT	2016
Minnesota Weight Enforcement Investment Plan	MnDOT	2018
Minnesota Statewide Truck Parking Study	MnDOT	2019
Minnesota Improvements to Highway-Rail Grade Crossings and Rail Safety	MnDOT	2014
Minnesota State Rail Plan	MnDOT	2015
Rail Grade Crossing Safety Project Selection	MnDOT	2016
Highway 60 Windom Corridor Study	MnDOT	2020
Highway 22 Corridor Study	MAPO	2018
Mankato/North Mankato Area LRTP 2045 Update	MAPO	2020
Region Nine Comprehensive Economic Development Strategy	RNDC	2016
Region Nine Annual Reports	RNDC	2020
SRDC Comprehensive Economic Development Strategy	SRDC	2017
SRDC Annual Report	SRDC	2020

The reviewed plans and studies have some common findings and recommendations which can be grouped into two primary categories or "lenses" through which freight needs and issues can be examined. Common findings will be incorporated into District 7 Freight Plan activities, particularly as part of Task 3 – Data Analysis, and Task 4 – Strengths, Weaknesses, Opportunities, and Threats Analysis. The two categories or subject "lenses" are:

- **Transportation**. The characteristics of the transportation system (such as the assets themselves, their condition, and their level of performance), which are important because the safe, reliable, and cost-effective movement of freight supports the day-to-day activities of businesses that produce, distribute, or sell goods.
- **Economy**. The economic characteristics of a region (including demographics, natural resources, and industrial specializations) will influence what types of businesses are likely to operate in a region. In turn, the characteristics of these businesses and their cargo will influence what types of transportation services they prefer.

1.3 Road Network Findings and Recommendations:

District 7's road network is critical for freight movement as it has numerous major trucking corridors that link southwestern Minnesota to the Twin Cities. It is the 4th largest District in Minnesota from a trucking freight flows perspective. Consequently, many of the reviewed pieces of literature highlighted the importance of maintaining roads in District 7 and maximizing safety through infrastructure improvements and education.

Additionally, economic development and transportation coordination organizations (such as the Mankato / North Mankato Area Planning Organization (MAPO) and Region Nine Development Commission) in District 7 all recognize the integral role freight and transportation plays in driving regional economic growth and highlight that one of the District's major strengths is access to transportation. However, both economic development organizations noted that a major weakness in the region is the large volume of insufficient infrastructure and lack of future infrastructure funding available. It will be critical to address these issues in the District 7 Freight Plan.

Operations

Finding: Highway 169 is a major freight corridor in District 7 that links Mankato to the Twin Cities area and was frequently mentioned in multiple literature items. Consequently, the need to maintain and expand infrastructure, such as adding more lanes at certain segments, is vital along this corridor in the District. Also, Highway 169 needs added enforcement at its weight enforcement facility.

Finding: Safety and education at roundabouts and J-turns in District 7 was a high priority in the District 7 Manufacturers Perspective Study. The District 7 Safety Plan indicated that the District had 57 concerning intersections – some of which have roundabouts and J-turns present. Trunk Highway (TH) 14 and 71 had the highest amount of high-crash intersections, respectively, in District 7.

Recommendation: Address the need for more and expanded truck parking in District 7. This was a high priority in the District 7 Manufacturers Perspective Study. In particular, Highway 169 has an increasing demand for more truck parking services per the Minnesota Statewide Truck Parking Study completed in 2019, where Mankato was ranked #13 out of 15 high priority areas in Minnesota on the list for cities in need of truck parking.

Recommendation: Conduct snow and ice removal earlier. Many respondents in the District 7 Manufacturers Perspectives study needed roads cleared to support the arrival of workers on time, and poor road conditions could delay the start of work shifts. Beginning plowing or salting operations earlier was a suggested improvement.

Recommendation: Consider providing earlier notifications and other updates of road restrictions on the Minnesota use of 511 Travel Information. Many respondents in the District 7 Manufacturers study noted that they enjoy using the system, but there is room for improvement.

System Condition

Finding: Pavement conditions in District 7 are a major concern for many organizations and stakeholders. A large portion of the reviewed literature highlighted the importance of maintaining existing pavement. As outlined in the Minnesota Statewide Freight System and Investment Plan, District 7 received $300 million in Surface Transportation Improvement Program (STIP) Program funding between 2015 and 2018, and over $200 million of the funding was dedicated to pavement condition improvements. STIP funding fluctuates year to year. The District 7 Freight Plan will need to consider alternatives to further prioritize pavement condition improvement strategies.

Finding: Bridge infrastructure in District 7 should be prioritized as many of its current bridges' condition will transition from "fair" to "poor." The District 7 Freight Plan will need to consider these conditions along with other bridges in the District.

Policy

Finding: Approaches to best prioritize highway infrastructure investments are split among District 7 stakeholders. As noted in the Minnesota State Highway Investment Plan, MnDOT worked with District 7 staff and stakeholders to determine the best approach to statewide highway transportation investment. Participants had their choice of three approaches, and District 7 along with MAPO mostly preferred either Approach A or B – with a slightly higher interest in A. Approach A was to focus on investments on repairing and maintaining existing state highway pavements, bridges, and roadside infrastructure; and Approach B was to balance investment in repairing and maintaining existing state highway infrastructure with strategic investment in improving travel time reliability.

Finding: Changes to truck size and weight regulations are needed in the District. This issue was mentioned in both the District 7 Manufacturers Perspective Study and the Southwest Minnesota Regional Freight Study.

Finding: Electronic logging regulations and requirements for truck drivers are considered burdensome and inefficient. The District 7 Manufacturers Perspective Study noted that the regulations are causing delays in the system and "lost time on the road."

Linking Prior Findings to the District 7 Freight Plan: Road Network

The major challenges for District 7's road network include addressing the improvement of existing infrastructure, such as pavement and bridge conditions, along with the evolving needs and issues surrounding trucking. Of note, the District's ability to further prioritize infrastructure improvements is difficult due to limited available funding. The District 7 Freight Plan will investigate ways to potentially access more funding for infrastructure in addition to addressing trucking needs in the District.

1.4 Railroad Network Findings and Recommendations

District 7's railroad network is mostly privately owned by the Union Pacific and Canadian Pacific railroads, with some publicly-owned track in Sibley, Rock, and Nobles County. Since much of the District's railroad network is privately owned, development, operation, and maintenance of much of the network lie outside of the control of MnDOT and local public sector stakeholders. Therefore, prior plans and studies have generally given less attention to railroad-related topics, compared to publicly-owned highways.

Operations

Finding: Access to rail transportation is key to the feasible operation of some businesses in District 7. In particular, the rail network is critical for the rural economy, because it facilitates the cost-effective shipment of agricultural products over long distances.

Finding: Containerized shipments of identity-preserved agricultural products are becoming more important for agricultural producers, but District 7 is constrained by a lack of intermodal container terminals. Intermodal shipping access is available in the Twin Cities, but traffic congestion in the Metro District can make use of these facilities more expensive.

Finding: Class I railroads are seeking to increase frequently-run, long-haul unit train grain "shuttles" of 100 cars or more. The large volume of these trains, and Class I railroads' desire for low-effort switching operations have resulted in the creation of consolidated mega-elevator complexes that can store large volumes of grain needed to fill unit trains, and can support the long loop tracks needed to prevent trains from being broken down into smaller blocks of cars. In District 7, 13 elevators (in 2007) were identified as candidates for Class I grain shuttle service.

This shifting share of grain shipments to a small number of consolidated grain elevators has resulted in the closure of smaller local elevators and has the potential to increase the length of local truck trips from field to elevator.

Finding: Prior grade crossing safety studies have identified 15 grade crossings in District 7 with a high (rank 8 of 10 or higher) risk rating.

Condition

Finding: Marginal track conditions on smaller railroads and branch lines impedes efficient rail operations, and can prevent businesses from receiving adequate rail service. In particular, poor track conditions on publicly-owned rail meant that 10 mile-per-hour speed limits were required on some sections of track. Additionally, many smaller lines have railcar weight limitations that mean they cannot handle industry-standard 286,000-

pound railcars. Together, these restrictions mean that rail customers on these lines had less reliable or efficient service than would be possible if tracks were fully maintained or upgraded.

Policy

Recommendation: Continued support for the Minnesota Rail Service Improvement Program is important because it can help fund the upgrade of rail assets on rail lines that are owned by public agencies. The program also helps shippers retain rail service by assisting with funding for upgrades or improvements to their rail-related facilities.

Linking Prior Findings to the District 7 Freight Plan: Railroad Network

Many of the District 7-specific rail findings came from projects that are now over 10 years old, including the Southwest Minnesota Regional Freight Study. The trends and needs discussed here (such as the rise of consolidated grain elevators, and need for short line infrastructure upgrades) are still relevant in a Minnesota and broader Midwestern context. The District 7 Freight Plan will seek to develop an understanding on how these trends or needs and issues have played out in District 7, while also seeking to identify any new or expected needs and issues.

1.5 Economic Context

District 7 has a strong manufacturing sector, with notable specialties in food production, metal products, electrical equipment, and printing. In addition to manufacturing, the region is a major agricultural producer. Therefore, District 7's regional economy is affected by the economic output and employment of both agriculture, manufacturing, and other important industries. However, some of the District's transportation-related economic strengths include connectivity to major rail and road networks, as well as the diversity of the region's manufacturing base.

Linking Prior Findings to the District 7 Freight Plan: Economic Context

Since the Manufacturers' Perspectives study focused on manufacturing industries, further analysis of the agricultural sector's transportation needs and issues will be incorporated into the District 7 Freight Plan. This is an important topic to study because transportation costs and shipping times are key elements of the cost competitiveness (or lack thereof) of agricultural producers.

2 Relevance to Current Work

Key Findings:

The District 7 Freight Plan will be developed in line with statewide guidance from the State Freight Plan, and MnDOT's OFCVO. In addition to this guidance, data from previous plans and studies will be used to aid in the identification and evaluation of potential freight-relevant investments for District 7.

2.1 Items to Bring Forth to the District 7 Freight Plan

In addition to the general insights highlighted in Chapter 1, specific data from prior plans and studies will also be used in developing the District 7 Freight Plan. Most important is MnDOT planning guidance, which influences the scope and process of plan work.

Guidance from the Minnesota Statewide Freight System Plan

The Minnesota Statewide Freight System and Investment Plan provides a guiding framework for the District 7 Freight Plan. It also builds upon the Minnesota GO plan. The statewide freight vision (policy) and goals will be applied at the District level to ensure that the District assessment is in sync with statewide guidance. The process that is being used to conduct the District Freight Plan, shown in Figure 2, ensures that District 7 freight investments and recommendations are linked to this overarching statewide guidance.

Figure 2: "Connecting the Dots" between Statewide Guidance and District 7 Freight Plan

Source: CPCS.

Minnesota's statewide freight vision (or policy) is 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."[1]

[1] MnDOT, Minnesota Statewide Freight System and Investment Plan, 2018.

This vision will also guide District freight planning activities. The statewide plan identified five goals to reflect those aspects of the multimodal freight system that are most important to the public and private sector freight stakeholders in the state. These statewide goal areas will remain the area of focus for the District 7 Freight Plan:

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

The statewide plan has also identified the following three key areas for monitoring the condition and performance of the freight system and supporting the achievement of the abovementioned goals:

1. **Safety.** These measures are aimed at improving the safety, security, and resilience of the freight system.
2. **Infrastructure Condition.** These measures are aimed at assessing the suitability of the transportation system for handling freight.
3. **Mobility.** These measures are aimed at assessing transportation system delay, congestion, and reliability for freight users.

These performance areas will be used as the starting point for Task 3 of this project, which focuses on data analysis. While the District 7 Freight Plan analysis will be linked to Federal- and MnDOT-required performance areas, based on stakeholder feedback received during plan development there may be cause to warrant examining the District's freight system through a "lens" not previously identified due to unique system needs.

In addition to the guidelines provided in the Minnesota Statewide Freight System and Investment Plan, the District 7 Freight Plan will also provide a high-level assessment of freight system needs, issues, and opportunities that will be brought forward and considered in Task 4 – Strengths, Weaknesses, Opportunities, and Threats. The investments identified in the State Freight Plan will also be considered in Task 5 – Implementation Plan activities in the District 7 Freight Plan.

Project Concept Identification, Scoring, and Ranking

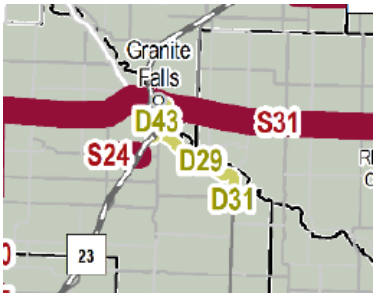
A key outcome of the District 7 Freight Plan will be a list of ranked project concepts that can be studied in greater detail and advanced for future funding through state, local, and potentially Federal opportunities. The creation of this list of project concepts will follow a uniform process developed by OFCVO for all of the District Freight Plans. The first step in this process is the identification of project "gaps" – where identified safety, condition, and mobility needs and issues do not align with programmed projects in the District. Figure 3 provides a visual of the process from the District 8 Freight Plan.

The evaluation approach is intended to:

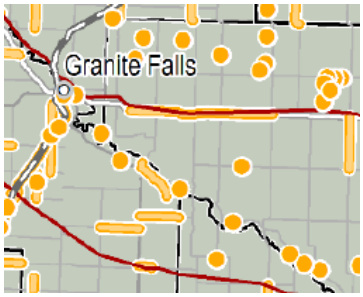
- Evaluate/screen "gaps" (potential project concepts), not concrete, defined projects.
- Focus on regional issues (i.e., known to be important to each District) vs. those that may be more important to the Metro District or more urban areas.
- Use as much data as available at the local level, as possible.

Figure 3: Gap Identification Process

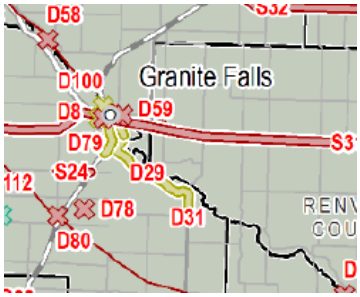
1. Map needs and issues



2. Map planned projects



3. Identify "gaps": issues not overlapped by planned projects.



Source: CPCS.

Once gaps in District 7 are identified, they will be screened against a standard set of measures established for all District Freight Plans, using data sets identified as part of previous District planning efforts. Figure 4 lists the categories and measures for each District plan's gap evaluation. Sub-set evaluations have also been included to highlight needs in safety, condition, and performance categories.

Figure 4: Categories and Measure for Gap Evaluation

Category	Ranking Score Measure/Performance Indicator	Safety	First/Last Mile (Condition)	Mobility
Truck Activity	HCAADT	X	X	X
	Truck percent (%) of total vehicles	X	X	X
Safety	Addresses a sustained crash location	X		
	A safety issue identified in a District or county safety plan (provide risk rating)	X		
	Addresses at-grade crossing safety risk	X		
Freight Mobility	Truck Travel Time Reliability			X
	Addresses a vertical clearance restriction		X	X
	Addresses a weight limited bridge		X	X
Condition	Bridge condition rating		X	
Stakeholder Need	Y/N if this issue overlaps with a stakeholder identified need	X	X	X

Based on this standardized ranking exercise, further work will be done in Task 5 – Implementation Plan to identify specific types of infrastructure need and issue "gaps" to be advanced to Task 6 – Project Feasibility.

2.2 Gaps for Further Research and Analysis

The existing and relevant studies and plans do not provide a full, up-to-date assessment of District 7's freight context, needs, and issues. Some of the gaps in understanding that the District 7 Freight Plan is expected to address are listed below. Much of this work will be conducted in Task 3 – Data Analysis.

Economy

- Updating the estimates of freight transportation's importance to the District's businesses and economy through data from the Bureau of Labor, US Census Bureau, ReferenceUSA (or data provided by MnDOT), and US Department of Commerce's Cluster Mapping tool.
- Further research into the distribution of agricultural and manufacturing activity in District 7, and the links between these industries and the transportation assets through mapping of data sources like the US Department of Agriculture's CropScape data and Minnesota Department of Agriculture statistics.
- Qualitative and quantitative assessments of key freight corridors in District 7 to better understand the industrial sectors and types of trips that most utilize them. In this analysis, we will include "secondary corridors" that are not shown in the Minnesota Principal Freight Network.

Freight System Inventory, Demand, and Performance

- Analyzing and mapping traffic volumes, travel time index, and travel time reliability using MnDOT's subscription to StreetLight Data. This analysis will be supplemented with road performance data from the Federal Highway Administration's National Performance Management Research Data Set.
- Mapping truck-related and grade-crossing crash locations and the risk associated with specific locations using MnDOT data and the District safety plan.
- Analyzing and mapping road and railroad bridge locations, operational load capacity, condition, and clearances in the District using data from the National Bridge Inventory. This assessment will provide insight into conditions, mobility, and clearance of the District's bridges.
- Mapping railroad traffic volumes and speed limits using National Transportation Atlas data and crossing data from the Federal Railroad Administration.
- Mapping the locations of pipelines and pipeline terminals using data from the Pipeline and Hazardous Material Safety Administration and the US Energy Information Administration.

This list of ongoing work may be expanded to reflect feedback and questions provided by MnDOT, the Advisory Committee, and the Technical Team.

3 Conclusions and Next Steps

3.1 Conclusions

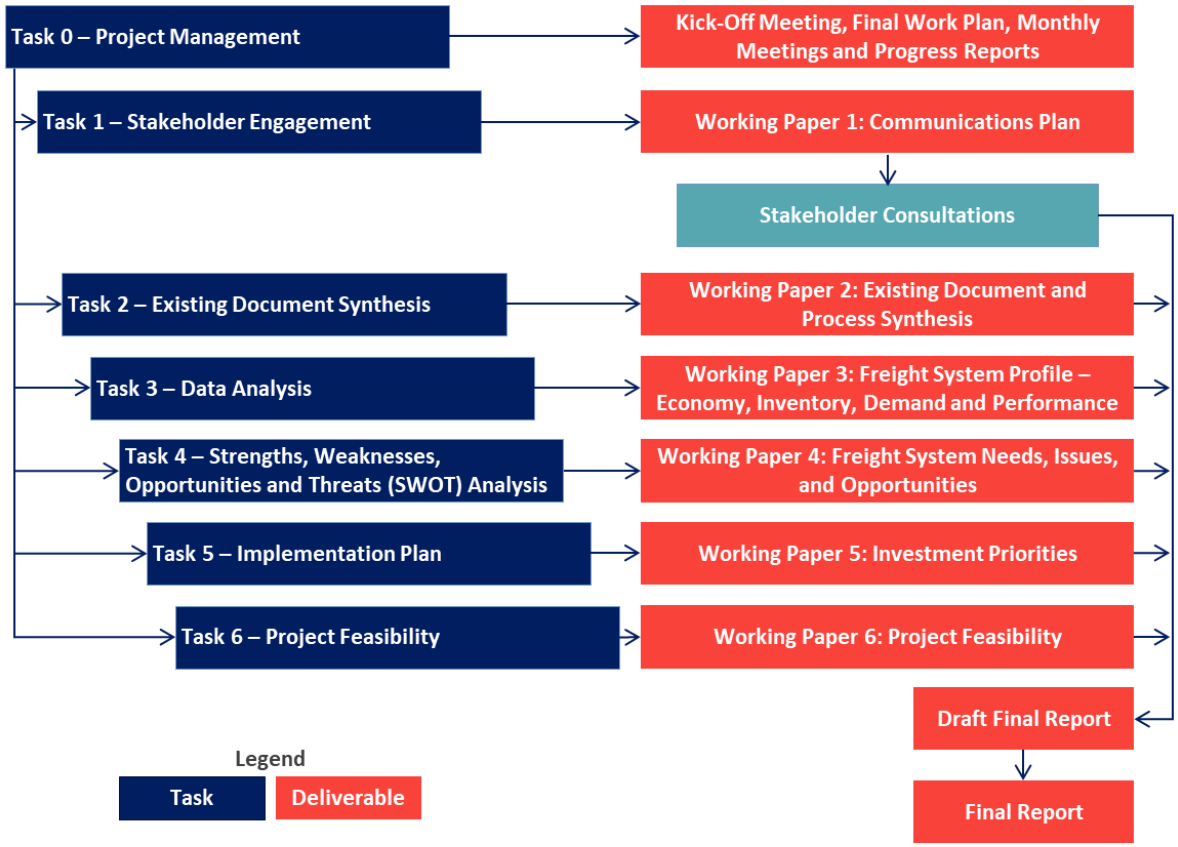
This synthesis of previous plans and studies relevant to District 7 suggests that infrastructure upgrades, trucking concerns (truck parking, weight regulations), and roadway safety are the most pressing freight-related needs and issues in the District. In addition to these concerns, there are areas where freight movement can be enhanced, such as added access to intermodal transportation.

Upcoming District 7 Freight Plan activities will focus on creating new insights on the performance of the District's multimodal transportation network, including assessments of safety, infrastructure condition, and mobility impediments such as weight limits and bridge clearances.

3.2 Next Steps

As shown in the figure, this Working Paper represents the output of Task 2 and provides a starting point for Task 3 – Data Analysis. Findings from this synthesis will be discussed at upcoming Advisory Committee and Technical Team meetings, and this discussion will help guide the focus of Task 3's research and analysis efforts.

Figure 5: District 7 Freight Plan Project Approach



Source: CPCS.

Appendix A Previous Plan Review and Summary

This appendix provides the profiles of previous studies and reports that were identified as relevant to District 7, and reviews as part of the creation of this working paper. Additional materials not profiled here may also be reviewed as necessary during plan development.

Minnesota Statewide Freight System and Investment Plan

Author: Minnesota Department of Transportation

Date: January 2018

URL: https://www.dot.state.mn.us/planning/freightplan/index.html

Overview

The Minnesota Statewide Freight System and Investment Plan was released in 2018. This plan provides an inventory of freight assets, an identification of freight needs and issues, and a set of strategies, actions, and next steps to help the state address identified needs and issues. The Freight Investment Plan element of the document lays out a strategy for investing in freight-related infrastructure and identifies specific freight investments, which would be partially funded through freight programs established in the 2015 Fixing America's Surface Transportation (FAST) Act.

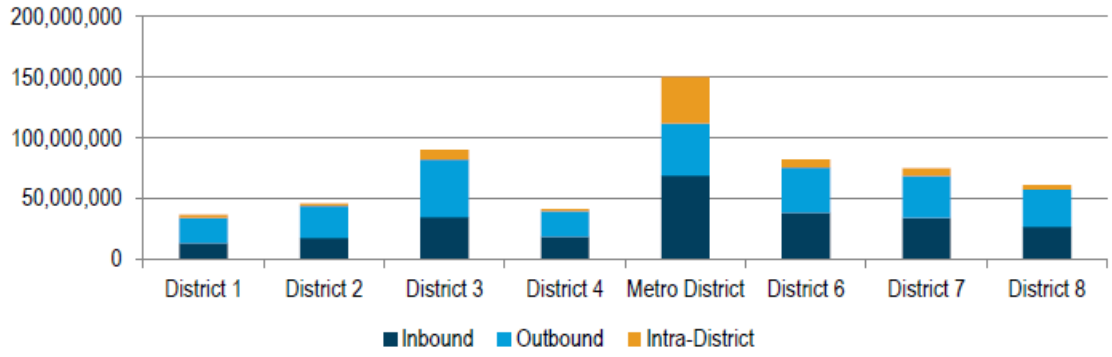
Findings

The 2018 State Freight Plan found that the safety of freight movements was increasing, while freight-relevant highway conditions were remaining consistent from year to year. Mobility was a concern, as freight mobility was declining. This decline was attributed to increased congestion, particularly in the Twin Cities. The plan's general strategies to improve freight performance include the potential to use the freight system as an economic growth driver, the use of public-private partnerships to provide freight-related infrastructure and services, the use of advanced technology to improve understanding of freight movements, and the integration of freight considerations into agency decision-making.

Elements Relevant to the District 7 Freight Plan

Analysis of the Federal Highway Administration (FHWA)'s FAF3 data disaggregated by county indicated that District 7 ranks 4th in terms of annual inbound, outbound, and intra-District truck tonnages. Subsequently, District 7 received the 3rd most STIP freight-related funding out of all MnDOT Districts from 2015-2018 with approximately $300 million. However, over $200 million of this funding was allocated to pavement condition improvements.

Figure 6: Truck Freight Flows by Direction, Tons, by District, 2012



Major District 7 projects listed in the plan include:

- Addition of new lanes on I-90 along with major pavement, drainage, and lighting rehabilitation
- Four-lane construction and bypass inclusion project on US 14 from Nicollet to North Mankato
- Expanding MN 60 from Windom to West of Mountain Lake
- Design-build of a bridge over the Minnesota River on US 14 to replace BR 9200 and 9294

Manufacturers' Perspectives on Minnesota Transportation System – District 7

Author: Minnesota Department of Transportation

Date: November 2019

URL: https://www.dot.state.mn.us/mps/

Overview

The Manufacturers' Perspectives study provides an assessment of freight transportation needs and issues in District 7. Since this study was exclusively focused on District 7, all of its information is relevant to this current freight plan. The study was conducted to better understand freight system users' perspectives and priorities, build better relationships with freight shippers, and support continuous improvement at MnDOT. Feedback was collected through consultations with 74 businesses in the District.

Findings

The study found that the primary areas of concern related to the transportation system include addressing ongoing infrastructure issues (safety and education regarding roundabouts/J-turns, and road pavement quality); improving roadway safety and efficiency; winter weather preparation; enhancing MnDOT's 511 road conditions information system; adding more truck parking; removing burdensome electronic log regulations; and harmonizing truck weight restrictions with neighboring states.

Additionally, the study found that District 7 can build stronger relationships and partnerships with businesses, city and county engineers, economic development professionals, and other stakeholders.

Elements Relevant to the District 7 Freight Plan

The major findings from the study are all relevant to the District 7 Freight Plan. However, the study highlighted the need for District 7 to further work with MnDOT's OFCVO to determine how to expand truck parking at existing rest stops, improve the inefficiencies of electronic log requirements, and address truck weight issues. This includes determining whether any federal funding is available to address these concerns. The District's relationship with the stakeholders established during this study forms the basis for future collaboration to receive ongoing inputs regarding improvements in the transportation system and economic development activities.

Southwest Minnesota Regional Freight Study

Author: Minnesota Department of Transportation

Date: August 2007

URL: https://www.dot.state.mn.us/ofrw/PDF/swmnrfs.pdf

Overview

The Southwest Minnesota Regional Freight Study was conceived as a multimodal and industry-oriented examination of freight movements specific to District 7. This includes highway (commercial vehicle operations), railroad, waterway, air cargo, and intermodal transportation. The study provides a better understanding of current economic and freight transportation trends, issues, and needs at the regional and local level (south/southwestern Minnesota). The study also identifies strategies and initiatives for improving the freight transportation system. Efficient and cost-effective movement of goods is essential for maintaining and enhancing the region's economic competitiveness.

Findings

The study resulted in eight key findings and recommendations:

- There is major growth in the region's renewable energy industry
- The growth of freight traffic in the region is significantly outpacing the rest of Minnesota and the United States.
- The use of larger farm equipment in the region, including 5-axle semi-tractor trailers, is increasing
- A limited 10-ton roadway network restricts freight transportation capacity in the region
- The rail network is an integral piece of the region's rural freight transportation system
- There is an increasing demand for localized access to intermodal/containerized freight
- Adjustments to truck size and weight regulations are needed
- To effectively address freight mobility issues, freight information and planning improvements are needed

Elements Relevant to the District 7 Freight Plan

Given that this study is specific to District 7, all of its content is relevant. The study does not delve into specific individual project needs and priorities.

Minnesota State Highway Investment Plan (MnSHIP)

Author: Minnesota Department of Transportation

Date: January 2017

URL:https://minnesotago.org/application/files/4815/5076/5789/MnSHIP_Final_Jan2017_With_Appendices_and_Update.pdf

Overview

The 2017 MnSHIP directs capital investment for Minnesota's state highway system over the next twenty years. This fiscally constrained plan identifies investment priorities given current and expected funding. MnSHIP describes how MnDOT will use capital investments to repair, replace and improve the 12,000-mile state highway system. The plan also includes an estimate of the investment needs for the highway system based on the costs required to meet performance-based targets and other key system goals.

Findings

The MnSHIP highlighted that Minnesota's conditions of roads, bridges, and roadside infrastructure on National Highway System (HSM) and non-HSM routes are poor in some areas. Additionally, the existing funding stream does not allow for increased mobility in the Twin Cities area and other growing areas in the state. Due to lack of adequate funding, MnSHIP predicts that pavement and bridge conditions will worsen between 2018 and 2037 even though these remain their top two priorities for capital highway investments.

Elements Relevant to the District 7 Freight Plan

MnSHIP does not expand upon freight needs and refers to the Minnesota Statewide Freight System and Investment Plan. Rather, MnSHIP reflects the funding provided in the U.S. Department of Transportation National Highway Freight Improvement Program (NHFP). However, MnSHIP reflects engagement activities in which MnDOT worked with District 7 staff and stakeholders to determine the best approach to statewide highway transportation investment. Participants had their choice of three approaches, and District 7 along with the MAPO mostly preferred either Approach A or B – with a higher interest in A. Approach A was to focus on investments on repairing and maintaining existing state highway pavements, bridges, and roadside infrastructure; and Approach B was to balance investment in repairing and maintaining existing state highway infrastructure with strategic investment in improving travel time reliability.

District Safety Plans Update

Author: Minnesota Department of Transportation

Date: May 2016

Overview

The 2016 District Safety Plans update the 2009 through 2012 safety plans for the seven districts in the Greater Minnesota region. The seven districts that participated are: District 1 (Duluth), District 2 (Bemidji), District 3 (Baxter), District 4 (Detroit Lakes), District 6 (Rochester), District 7 (Mankato), and District 8 (Willmar). District 5 (Metro) chose not to participate in developing further analysis and the district safety plan. The Office of Traffic, Safety, and Technology provides strategic oversight for the updated, comprehensive safety review and analysis across the state trunk highway system

Findings

The study provided an overview of Minnesota and District-specific crash data, safety strategies, sustained high-crash assessment areas, systemic risk locations, and other safety-related elements.

Elements Relevant to the District 7 Freight Plan

Regarding high-crash safety locations, District 7 has the lowest amount out of any MnDOT District with 9 out of the 212 statewide and the lowest number of severe sustained high-crash intersection crashes with 57 out of the 530 statewide. The study also conducted a system risk assessment to provide a comprehensive approach for identifying candidate locations for safety investment along the state system. There were 275 suggested projects for systemic investment related to intersections, roadway segments, and roadway curves that will cost approximately $15 million. 21% of the roadway system in District 7 is considered “at-risk.”

Minnesota Weight Enforcement Investment Plan

Author: Minnesota Department of Transportation and Minnesota State Patrol

Date: November 2018

URL: http://www.dot.state.mn.us/ofrw/weightplan/pdf/WEIP.pdf

Overview

The Draft Minnesota Weight Enforcement Investment Plan is a 10-year plan to address weigh station improvements and maintenance to ensure future compliance with federal requirements and maximize public safety related to commercial vehicle operations.

Findings

The draft plan identified eight categories of needs, which include investment in existing facilities, additions of inspection buildings, coordination of enforcement pull-off areas, improved weigh-in-motion use, portable scale replacement planning, increased Minnesota State Patrol Staffing, further education, and outreach, and additional weight enforcement facilities. Specific to freight, the plan indicates that the rise of e-commerce and the shift of consumer spending away from brick-and-mortar retailers have increased the amount of truck traffic to distribution centers and residential/commercial end-users. Consequently, additional investment is needed to address the outcomes of these changes.

Elements Relevant to the District 7 Freight Plan

The draft plan identified a few specific project needs related to District 7. Regarding the need for additional weight enforcement facilities, the study highlighted a dire need for a virtual enforcement presence at the facility located on US 169, which is a main link between Mankato and the Twin Cities. Additionally, the draft study highlighted the need for additional weigh-in cameras at the Weigh-in-Motion site on TH 60 in Watonwan County. This is a key truck corridor that links I-90 to the west with the Twin Cities through Mankato.

Minnesota Statewide Truck Parking Study

Author: Minnesota Department of Transportation

Date: October 2019

URL: https://www.dot.state.mn.us/ofrw/freight/PDF/truckparking/final-report.pdf

Overview

The Minnesota Statewide Truck Parking Study was designed to build a better understanding of how truck parking issues impact Minnesota and MnDOT can address them. It provided a 10-year vision for truck parking through data and stakeholder-driven analysis.

Findings

The study comprised of numerous opportunities, including integrating truck parking in all MnDOT planning efforts (where applicable), leveraging public and private sector truck parking investment, creating innovative planning and zoning initiatives, and enhancing the state's truck parking and management system involvement. Also, the study provided 9 recommendations that addressed funding, policy engagement, new physical and data infrastructure, and collaboration with local/national partners.

Elements Relevant to the District 7 Freight Plan

The study revealed that Mankato is ranked #13 in the list in the list of 15 of Minnesota cities that have the most truck parking demand in relation to existing facility capacity. In particular, US-169 through Mankato is a major truck corridor that has increased demand for truck parking services. Additionally, the study performed a field review of 20 existing rest area facilities, which includes the Clear Lake rest area on I-90 near Jackson. Throughout the review, Clear Lake had an average utilization of 47%.

Minnesota Improvements to Highway-Rail Grade Crossings and Rail Safety

Author: Minnesota Department of Transportation

Date: December 2014

URL:https://www.dot.state.mn.us/govrel/reports/2014/CBRCrossingStudy-December2014/ReportonHwy-RailXingsandRailSafety-2014.pdf

Overview

This study was prepared by MnDOT under direction from the State Legislature to assess safety conditions at highway-rail grade crossings along rail corridors carrying crude oil.

Findings

The study identified 683 at-grade crossings along 700 miles of rail tracks carrying Bakken crude oil across Minnesota to the Gulf Coast or the US East Coast. A prioritized list of crossing safety improvement projects was developed as a result of this study. The strategies provided include:

- Closing at-grade crossings
- Upgrading passive warnings to active signals
- Improving active protection with more effective safety treatments
- Constructing grade separations
- Improving the condition and signage of passive crossings
- Signal interconnects at adjacent traffic signals to reduce backups across grade crossings
- Programmed education and enforcement

The study also estimates the future risks associated with HAZMAT movements by rail through Minnesota due to continued growth in demand for Bakken oil, Alberta heavy oil production growth, and potential capacity improvements in pipeline and rail transport systems.

Elements Relevant to the District 7 Freight Plan

District 7's rail lines primarily run north-south instead of east-west and thus are not the corridors identified as having crossings with high potential for conflict with crude oil shipments. However, the general strategies presented in this document are relevant to improving grade crossing safety more generally and may be leveraged as part of the project pre-feasibility work conducted in Task 6.

Minnesota State Rail Plan

Author: Minnesota Department of Transportation

Date: March 2015

URL: https://www.dot.state.mn.us/mps/

Overview

The 2015 draft of the Minnesota Statewide Rail Plan is intended to guide the future of both passenger and freight rail systems in Minnesota. The plan includes an inventory of rail assets and commodity shipments, a discussion of issues affecting performance, and an action plan to achieve the vision laid out in the Minnesota GO family of plans.

Findings

The Rail Plan found that infrastructure constraints, a lack of intermodal service, positive train control implementation, and HAZMAT transport were the top issues for Minnesota's rail network. The plan also laid out four-year and 20-year action plans for freight rail, which included investments in additional plans and grade crossing improvements for safety, investments to improve rail service for businesses and upgrade of service levels to support higher speeds and weights.

Elements Relevant to the District 7 Freight Plan

The State Rail Plan does not provide data or forecasts specific to District 7. However, the plan offers general rail improvement recommendations for corridors across the state, including corridors that pass through the District. Additionally, the plan highlights the Canadian Pacific Railroad's $77.5 million freight rail upgrade at their Dakota, Minnesota, and Eastern Waseca facility.

Rail Grade Crossing Safety Project Selection

Author: Minnesota Department of Transportation

Date: June 2016

URL: https://www.dot.state.mn.us/research/TS/2016/201625.pdf

Overview

This study analyzes the safety conditions at Minnesota's public rail grade crossings to identify potential risk factors that appear at the grade crossings with fatal/injury crashes, provides a prioritized list of active- and passive-controlled crossings, and compares the list to the crash prediction models.

Findings

The study finds that train collisions at rail grade crossings are relatively rare in Minnesota. Over the 10-year period of the study, more than 4,000 public rail grade crossings in Minnesota had an average of approximately 45 crashes and five fatal crashes annually, with 91% of the crossings having no crashes, 96% having no crashes resulting in injuries, and 99% having no fatal crashes.

In addition to crash histories, the study looks at crash risk factors such as traffic speed, traffic volume, the presence of protective measures, and crossing geometry to identify the relative risk of specific crossings.

Elements Relevant to the District 7 Freight Plan

The high-crash grade crossings located in District 7 and assessed in this study are shown in the following table. A risk rating between 0 and 10 is assigned to the crossings, with 10 representing the highest risk level.

Figure 7: Risk Factors at District 7 Grade Crossings

City	County	Crossing	Control Device	Risk Rating (of 10)
	Blue Earth	631 Avenue	Stop Sign	8
	Blue Earth	589 Avenue	None	8
	Blue Earth	549 Avenue	Stop Sign	8
	Blue Earth	Lime Valley Road N	Stop Sign	8
	Blue Earth	583 Avenue	None	8
	Blue Earth	194 Street	Stop Sign	8
Springfield	Brown	County Road 5	Stop Sign	8
Springfield	Brown	O Connell Avenue	Stop Sign	8
Springfield	Brown	Burns Avenue S	Stop Sign	8
Springfield	Brown	Washington Avenue N	Stop Sign	8
	Brown	CSAH 10	Stop Sign	8
	Faribault	430 Avenue	Stop Sign	8
	Faribault	70 Street	Stop Sign	8
Fairmont	Martin	Pioneer Drive	Stop Sign	8
Fairmont	Martin	Fairlakes Avenue	Stop Sign	8

Source: MnDOT, Rail Grade Crossing Safety Project Selection, 2016.

Highway 60 Windom Corridor Study

Author: Minnesota Department of Transportation

Date: April 2020

URL: http://www.dot.state.mn.us/d7/projects/hwy60windomstudy/images/conditionsreport.pdf

Overview

This study evaluates segments of TH 60 and 62, and US 71 in Windom in addition to 28 different intersections along these segments. Ultimately, the goal of the study is to create a long-term vision for TH 60 that incorporates and supports community values, public participation, economic development, safety, mobility, and sustainability.

Findings

The study is near completion as MnDOT has crafted an existing and future conditions report in addition to draft design concepts for infrastructure improvements in the area.

Elements Relevant to the District 7 Freight Plan

Given that the study is solely focused on an area located in District 7, everything is relevant. However, there are a few specific areas in the study that are especially pertinent. One of these areas is a pavement conditions report for the segments considered in the study where MnDOT found that 3 of the 5 segments had a "poor" rating for their pavement remaining service life.

Figure 8: Pavement Conditions Along Highway 60 Corridor

Segment	Ride Quality	Surface Rating	Pavement Quality	Remaining Service Life
TH 60 – Northern terminus to TH 62	Good	Good	Good	Fair
TH 60 – South of TH 62	Fair	Good	Good	Poor
US 71 – North	Fair	Good	Good	Poor
US 71 – South	Fair	Good	Good	Poor
TH 62	Poor	Good	Fair	Fair

Source: MnDOT, Highway 60 Windom Corridor Study, 2020 (ongoing).

Additionally, the study identified the existing conditions of the three bridges and one culvert within the study area. Generally, all bridge structures are considered "sufficient" besides the TH 60 bridge, which is being considered for replacement in 2025. Below are all four bridge structures and their dedicated sufficiency ratings (out of 100):

- US 71 S (Bridge 17008), one mile southeast of TH 60, was built in 2010. This 188-foot bridge crosses the Des Moines River with a main span length of 62 feet and a roadway width of 48 feet. The 2016 inspection found this bridge structure to have a good deck condition, and very good superstructure and substructure condition. It has a sufficiency rating of 97.70.
- TH 60 (Bridge 17001), 0.3 miles south of TH 62, was built in 1971. This 208-foot bridge crosses the Des Moines River with a main span length of 78 feet and a roadway width of 52 feet. The 2016 inspection found this bridge structure to have a fair deck condition, fair superstructure condition, and satisfactory substructure condition. It has a sufficiency rating of 69.20.
- TH 62 (Bridge 17002), 0.2 miles west of TH 60, was built in 1974. This 278-foot bridge crosses the Des Moines River with a main span length of 76 feet and a roadway width of 44 feet. The 2016 inspection

found this bridge structure to have a satisfactory deck condition, a good superstructure condition, and a good substructure condition. It has a sufficiency rating of 97.20.

- US 71 N (Bridge 8701), west of Langley Street, was built in 1940. This 12.5-foot culvert crosses a local stream. It has a sufficiency rating of 94.50.

Highway 22 Corridor Study

Author: Mankato/North Mankato Area Planning Organization and Minnesota Department of Transportation

Date: November 2018

URL: https://mnmapo.files.wordpress.com/2018/12/TH22_Report_Final.pdf

Overview

This study evaluates three segments (see below) of the TH 22 Corridor between Saint Peter and Mapleton, Minnesota.

- Segment 1 – US Highway (US) 169 to County State-Aid Highway (CSAH) 2 (Le Sueur/Blue Earth County Line) (Approximately 5.3 miles)
- Segment 2 – CSAH 2 to CSAH 90 (Approximately 9.3 miles)
- Segment 3 – CSAH 90 to Highway 30/CSAH 29 (South of Mapleton) (Approximately 15.4 miles)

The goal of the study was to identify and address current and future transportation issues along the corridor and TH 22 alternatives to be carried forward in environmental and transportation planning.

Findings

The study outlined the existing and future conditions of the corridor from a multimodal perspective (freight, transit, mobility/accessibility, pavement/bridge conditions, road safety, and environmental/cultural). Also, the study recommended numerous highway alternatives and projects along the corridor that satisfied the goal of providing a safe and efficient transportation system that serves Highway 22 users through 2045.

Elements Relevant to the District 7 Freight Plan

Given that the study is solely focused on an area located in District 7, everything is relevant. However, there are a few specific areas in the study that are especially pertinent. One of these areas is a pavement conditions report for the segments considered in the study. The study used the Ride Quality Index (RQI – scale of 0-5.0), Surface Rating (SR – scale of 0-4.0) and Pavement Quality Index (PQI – scale of 0-4.5) to provide a summary of pavement conditions along each segment of the study. See below the results:

<u>Segment 1</u>

- 2017 RQI for the pavement on Highway 22 is fair condition
- RQI predicted to be 2.0 by the year 2022
- Remaining service life for 2017 is 0-4 years

<u>Segment 2</u>

- CSAH 2 to CSAH 57 (North Riverfront Drive) – 2017 RQI is in fair condition, RQI predicted to be 2.0 by year 2023 and the remaining service life in 2017 is 0-4 years.
- CSAH 57 (North Riverfront Drive) to CSAH 26 (227th Street) – 2017 RQI is fair condition, RQI predicted to be 2.0 by year 2029 and the remaining service life in 2017 is 0-4 years
- CSAH 26 (227th Street) to CSAH 3 (North Victory Drive) – 2017 RQI is in fair condition, RQI predicted to be 2.0 by year 2029 and the remaining service life in 2017 is 0-4 years.
- CSAH 3 (North Victory Drive) to US 14 – 2017 RQI is fair condition, RQI predicted to be 2.0 by year 2030 and the remaining service life in 2017 is two years

- US 14 to Highway 83/CSAH 60 (Stadium Road) – 2017 RQI is good condition, RQI predicted to be 2.0 by the year 2027 and the remaining service life in 2017 is five years
- Highway 83/CSAH 60 (Stadium Road) to CSAH 90 – 2017 RQI is good condition, RQI is predicted to be 2.0 by the year 2029 and the remaining service life in 2017 is 5-12 years.

Segment 3

- 2017 RQI for the pavement on TH 22 is fair condition
- RQI predicted to be 2.0 by the years 2021-2024
- Remaining service life for 2017 is 0-2 years

Additionally, the study identified the existing conditions of bridges in the three segments. All bridges were considered sufficient besides the below two bridges in Segment 2:

- Bridge number 8436 (~Reference Point 58.447) was classified as structurally deficient (elements requiring monitor or repair) with a sufficiency rating of 48.2 during the last inspection period.
- Bridge number 7033 (~Reference Point 55.830) was classified as ADEQ (not structurally deficient, not obsolete) with a sufficiency rating of 78.8 during the last inspection period.

Mankato/North Mankato Area Long Range Transportation Plan 2045 Update

Author: Mankato/North Mankato Area Planning Organization (MAPO)

Date: November 2020

URL: https://mnmapo.files.wordpress.com/2020/11/mapo_lrtp_2045_update_final.pdf

Overview

This federally compliant plan translates identified multimodal transportation needs into actionable projects for the Mankato/North Mankato Area (Blue Earth and Nicollet Counties, and the City of Mankato, North Mankato, Eagle Lake, and Skyline). It prioritizes improvements to support the preservation of the area's infrastructure, mobility, freight movements, vehicular capacity and safety, and corridor expansions.

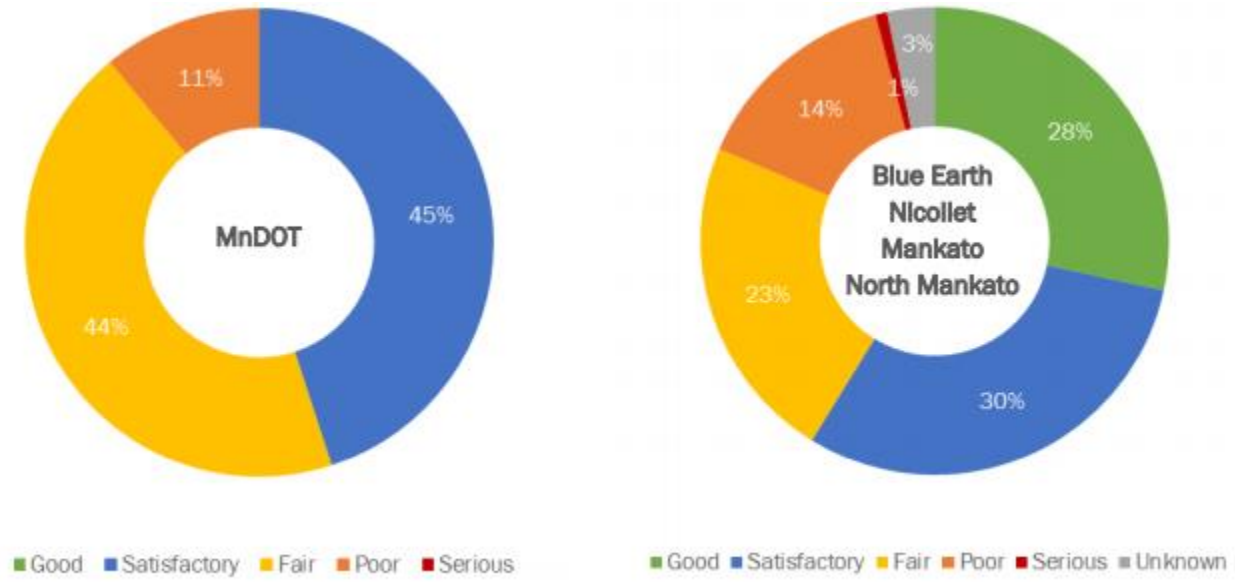
Findings

The plan is broken down into three main sections, including the existing transportation network in the area, goals, objectives, and performance measures, and the future of the transportation network through 2045.

Elements Relevant to the District 7 Freight Plan

Given that the plan is solely covering areas in District 7, everything is relevant. However, there are a few specific areas in the plan that are especially pertinent. One of these areas is a pavement conditions assessment where MAPO used Ride Quality Index (RQI) and Pavement Condition Index (PCI) to measure the existing pavement conditions in the plan area compared to Minnesota statewide.

Figure 9: Pavement Conditions by Jurisdiction



Source: MnDOT RQI (2019), City of Mankato PCI (2019), City of North Mankato PCI (2019)

Additionally, the plan identified a total of 237 projects across seven categories, including freight, that were needed in the plan area. In the freight category, five projects were highlighted.

Figure 10: Freight Projects Identified

Facility	Location/Terminal	Project Description
3rd Avenue (CSAH 5)	Railroad Crossing	Upgrade existing signal system
County Road 117 (547th Avenue)	Railroad Crossing	Install gates and lights
Sibley Parkway	Railroad Crossing	Expand railroad bridge to allow roadway expansion and new trail
Freight projects	MAPO Planning Area	Review future recommendations per the District 7 Manufacturers' Perspectives Study
Freight projects	MAPO Planning Area	Review future recommendations per the District 7 Freight Plan

Region Nine Comprehensive Economic Development Strategy (CEDS)

Author: Region Nine Development Commission

Date: 2015

URL:https://www.rndc.org/download/community_economic_development/2016-2021-region-nine-comprehensive-economic-development-strategy.pdf

Overview

The CEDS develops a foundation for Region Nine economic development from 2016-2021 and captures the unique regional perspective related to economic development. It will ultimately enhance and support current and future economic development efforts in the region and engage local, regional, state, and federal partners. The Region Nine Development Commission serves nine counties in south-central Minnesota, including Blue Earth, Brown, Faribault, Le Sueur, Martin, Nicollet, Sibley, Waseca, and Watonwan – all in District 7.

Findings

The CEDS highlighted numerous strengths and weaknesses in the Region pertaining to transportation:

Strengths

- The Region has adequate access to major rail and highway transportation networks (US 169 and I-90)
- There is a strong and diverse manufacturing base
- Transportation and warehousing employment in the Region is projected to increase 3.8% from 2012 to 2022

Weaknesses

- Public infrastructure (roads and bridges) condition is insufficient in many areas around the Region
- Lack of planning for future infrastructure improvements (specifics not provided in CEDS)

Elements Relevant to the District 7 Freight Plan

The CEDS identified a goal for the Region to increase local transportation economic development projects. As part of this strategy, they highlighted the importance of maintaining infrastructure on identified important freight routes to ensure safety and maximize economic impacts. Also, the CEDS suggested that Region Nine should partner with MnDOT to identify freight enhancement projects that have the potential to generate a positive return on investment.

Region Nine Annual Performance Report

Author: Region Nine Development Commission

Date: 2020

URL: https://www.rndc.org/wp-content/uploads/2021/01/APR-2020-w-resolutions.pdf

Overview

The Region Nine Annual Performance Report serves as an update to the 2016-2021 CEDS and is in accordance with the U.S. Economic Development Administration (EDA). Essentially, the report provides an update of the economic and employment-related changes in the year for the Region in addition to an updated strengths, weaknesses, opportunities, and threats (SWOT) analysis.

Findings

2020's report highlighted the impact of COVID-19 on the Region, including the unemployment rate, which increased to nearly 8% in May of 2020 from under 4% in March of 2020. Regarding the updated SWOT analysis, below are the added strengths and weaknesses that were not included as part of the CEDS.

Strengths

- The TH 14 expansion enhanced access to transportation in the Region
- The use of renewable energy is continually increasing

Weaknesses

- Infrastructure upgrades are more challenging for small, rural areas with a lower tax base

Elements Relevant to the District 7 Freight Plan

The report did not particularly highlight freight. Thus, the only relevance of the document is the ongoing issue of prioritizing existing and future infrastructure improvements.

SRDC Comprehensive Economic Development Strategy

Author: Southwest Regional Development Commission (SRDC)

Date: 2016

URL: http://www.swrdc.org/wp-content/uploads/2014/07/CEDS-16-FINAL.pdf

Overview

The SRDC Comprehensive Economic Development Strategy a locally-based, regionally driven planning process designed to enhance the economic growth of the southwest region in Minnesota. The SRDC is an organization that represents the nine counties of Cottonwood, Jackson, Lincoln, Lyon, Murray, Nobles, Pipestone, Redwood and Rock. The strategy conducts a review of the existing economic development conditions in the region, undergoes a SWOT analysis for the region, identifies the region's goals through 2021, and establishes performance measures for these goals.

Findings

Of note in the strategy, below are a few outcomes of the SWOT analysis that are freight-related:

Strengths

- Manufacturing is the largest employment category in the region

Weaknesses

- Infrastructure funding and other financing opportunities are limited

Opportunities

- Increase trade with neighboring states and Canada

Threats

- Resource-based industries are susceptible to changes in the global commodity markets and energy prices

Elements Relevant to the District 7 Freight Plan

Most of the counties that the SRDC represents lie in MnDOT District 8. Thus, there is not much directly relevant to the District 7 Freight Plan. However, given the increasing presence of wind farming in Cottonwood and Rock Counties, some of District 7's roads (I-90, US-14, and TH-60) are increasingly accommodating wind-related freight movements.

SRDC Annual Report

Author: Southwest Regional Development Commission

Date: 2020

URL: http://www.swrdc.org/wp-content/uploads/2020/09/Annual-Report.pdf

Overview

The SRDC Annual Report provides an overview of the commission's operations and results from July 2019-June 2020.

Findings

The report highlights the creation of a Transportation Coordination Council to provide coordination between transportation providers and service agencies to fill transportation gaps, provide more service with the same or fewer resources, streamline access to transportation, and provide customers more options of where and when to travel.

Elements Relevant to the District 7 Freight Plan

The report did not particularly highlight freight; thus, there is no portion of the report that is relevant. Once the SRDC's Transportation Coordination Council begins operation, District 7 can begin to work with them to discuss freight issues pertinent to counties within SRDC's jurisdiction.