6.0 FREIGHT INVESTMENT PLAN

Introduction

The purpose of this plan is to identify freight investments within Minnesota resulting from new federal funding provided by the Fixing America's Surface Transportation Act of 2015, and to coordinate federal, state and local investments on the freight network over the next ten years. This plan builds on existing statewide policy and is informed by the Minnesota Highway Freight Program (MHFP) and the Minnesota Intermodal Freight Program (MIFP). These programs were developed as a way to spend the FAST Act money on critical freight related projects across the state. In accordance with federal law (49 U.S.C. 70202) this plan is required for the state to obligate funds provided for these projects through the FAST Act. This investment plan covers ten years (state fiscal years 2018-2027) and also complies with federal law by listing projects funded with federal money for the five years of the FAST Act (state fiscal years 2016-2020).

Table 6.1 National Highway Freight Program Funds

2016	2017	2018	2019	2020
$17.7M	$16.9M	$19.7M	$20.8M	$23.1M

Freight Investment Plan Development

Discussion of this new federal funding began in MnDOT's Programming Update Workgroup, which is made up of representatives from MnDOT and other federal, regional, and local government partners. The PUW's role is to discuss programming-related questions and make recommendations to MnDOT's Transportation Program and Investment Committee. TPIC's role is to recommend to the commissioner policy direction for state investment in transportation systems.

ADVISORY GROUP

An advisory group was formed out of the PUW to guide the development of this plan. This group's role was to act as a review and oversight body; represent wide array of interests; allow for discussion on freight investment strategies, policies and program operation; and recommend decisions to Department leadership (in this case, TPIC) for approval.[34] The group's membership included MnDOT planning, programming, policy, state aid and functional area staff and representatives from the Metropolitan Council, outstate Metropolitan Planning Organizations, Regional Development Commissions, counties, cities, and the Federal Highway Administration. The advisory group met nine times over the course of 2016 and 2017.

[34] From this point forward, any time it is mentioned that the advisory group recommended a decision or course of action, it is true that TPIC later agreed and formally approved the decision or course of action.

Table 6.2 Membership of the Freight Investment Plan Advisory Group

NAME	CATEGORY	ORGANIZATION	REPRESENTING
Mark Gieseke	MnDOT Central Office	MnDOT OTSM	Statewide Planning & Programming
Mark Nelson & Shelia Kauppi	MnDOT Central Office	MnDOT OTSM	Statewide Planning
Ed Idzorek	MnDOT Central Office	MnDOT Operations Division	MnDOT Portfolio Manager
Bill Gardner	MnDOT Central Office	MnDOT OFCVO	MnDOT Freight Office
Amber Blanchard	MnDOT Central Office	MnDOT Bridge Office	Bridge Program Planning
Peter Buchen	MnDOT Central Office	MnDOT Traffic Office	Traffic Safety
Glen Engstrom	MnDOT Central Office	MnDOT Materials Office	Pavement Program Planning
Ted Schoenecker	MnDOT Central Office	MnDOT State Aid	State Aid Counties and Cities
Jon Huseby	MnDOT Districts	MnDOT District 8 Engineer	Greater MN Districts
Bryan Anderson	MnDOT Districts	MnDOT District 1	Greater MN District Planners
Shiloh Wahl	MnDOT Districts	MnDOT District 4	Asst District Engineer, Program Development
Pat Bursaw & Lynne Bly	MnDOT Districts	MnDOT Metro District	Metro District Planning
Steve Peterson	Local Partners	Met Council	Large MPO
Ron Chicka	Local Partners	Duluth/Superior MIC	Greater MN MPOs
Annette Fiedler	Local Partners	Southwest RDC	Regional Development Commissions
Lisa Freese	Local Partners	Scott County	Counties
Steve Bot	Local Partners	City of St. Michael	Cities
Kris Riesenberg	FHWA	FHWA Minnesota Division	Federal Programs

Table 6.3 Meeting Dates of the Freight Investment Plan Advisory Group

MEETING NUMBER	DATE	LOCATION
Meeting 1	November 4, 2016	MnDOT Central Office and Remotely
Meeting 2	January 13, 2017	MnDOT Central Office and Remotely
Meeting 3	February 10, 2017	MnDOT Central Office and Remotely
Meeting 4	March 24, 2017	MnDOT Central Office and Remotely
Meeting 5	April 21, 2017	MnDOT Central Office and Remotely
Meeting 6	May 19, 2017	MnDOT Central Office and Remotely
Meeting 7	July 19, 2017	MnDOT Central Office and Remotely
Meeting 8	September 25, 2017	MnDOT Central Office and Remotely
Meeting 9	October 4, 2017	MnDOT Central Office and Remotely

SIGNIFICANT DECISIONS

The FAST Act and National Highway Freight Program provided great flexibility and latitude to each state in determining how to spend their federal money. As such, MnDOT was faced with several large decisions regarding its portion of funding; these decisions are detailed in this section.

Overall Approach

MnDOT programs money in a variety of ways, with two main ways being via a statewide program that is centrally managed, and via direct allocations to each operating district. The advisory group recommended that this money be handled via a statewide program.

Timeline

The FAST Act was signed into law on December 4, 2015, making federal freight money immediately available to Minnesota for fiscal years 2016 through 2020. Since December 2015 was already halfway through state fiscal year 2016, department leadership deemed it necessary to allocate the fiscal year 2016 money quickly, swapping funds with a freight-related Interstate project. The advisory group acknowledged the tight timeline necessitated this quick action, but recommended that future years' funding be allocated to new projects, not projects that already had full funding identified.

Acknowledging the time needed to develop an investment plan and strategy, funds for fiscal years 2017 and 2018 were also applied to freight-specific projects that were already in position.

Table 6.4 Project Selected Fiscal Years 2016-2018

FISCAL YEAR	PROJECT	AMOUNT (IN MILLIONS)
2016	I-35 Unbonded Overlay – District 1	$17.7
2017	I-94 Bridge Anti-icing Replacement – District 4	$1
2017	I-90 Unbonded Overlay – District 7	$3.3
2017	I-35W 86th Street Bridge Clearance – Metro District	$4.1
2017	I-35W Anti-icing Replacement – Metro District	$0.5
2017	I-94 St. Croix Truck Parking Increase – Metro District	$1.3
2018	Freight Planning - Statewide	$0.2
2018	Weigh Station Upgrades – District 6	$3.6
2018	I-35 Goose Creek Truck Parking Increase – Metro District	$0.2
2018	I-35W Minnesota River Crossing – Metro District	$19.5

*Note: MnDOT may shift the funding for Project Development on MnDOT projects to expedite the process

ELIGIBLE PROJECTS

The FAST Act allows for a wide array of uses of the federal freight funding. Broadly, planning, project development and delivery, and construction activities are all eligible, along with specific, identified uses such as truck-only lanes and electronic cargo and border security technologies that improve truck movement (cite specific section in law: Sec 167 of title 23, section (i), (5), (C)). The advisory group recommended certain types of projects not be eligible for the federal funding, even though the law allowed for them:

- Acquisition of equipment
- Highway ramp metering
- Diesel retrofit

In addition, the advisory group recommended that, in order for project delivery to be funded, the cost must be included with the construction cost of the project, in order to ensure that the project was built.

The advisory group also recommended that up to ten percent of the money be eligible for spending on intermodal projects, as the law allows.

Critical Urban Freight Corridors and Critical Rural Freight Corridors

The FAST Act created a new national network called the National Highway Freight Network (NHFN). Notably, the federal funding may only be spent on projects located on the NHFN. All interstates are were designated part of the network by the US Department of Transportation as part of a subset called the Primary Freight Highway System. The state and metropolitan planning organizations were responsible to identify other roads to add to the network by designating them as Critical Urban Freight Corridors or Critical Rural Freight Corridors. The law established mileage limits for each state when designating these corridors; Minnesota is limited to 75 urban miles and 150 rural miles. The law defines "urban" as the urbanized area of a Metropolitan Planning Organization. At a high level rural areas are everywhere else besides urban areas.

The freight investment plan advisory group played an important role by identifying potential strategic approaches to the statewide approach of how to designate miles on the Critical Urban Freight Corridors and the Critical Rural Freight Corridors.

First, the advisory group recommended that road systems other than state-owned highways be eligible to use the federal money. While there are great freight needs on Minnesota's high-volume interstates, U.S. and State highways, the advisory group recognized that county, city and other road systems play an important role in connecting the state highway system with freight-generating locations, and their needs are also an important use of this money.

Second then, the advisory group recommended the state adopt a project-based designation approach, as opposed to a designation-first approach. Identifying projects and their specific mileage lengths first ensured the state's limited available mileage was designated only where there are projects identified and, in the case of projects off MnDOT's system, supported by the roadway owner. Also, the project-based designation approach allowed MnDOT to begin the project identification process quicker, and allowed roadway owners more time to identify their specific needs and determine where the money may be best spent on their system.

For a list of Critical Urban Freight Corridors and Critical Rural Freight Corridors resulting from this plan please see Table 6 and Table 7.

INVESTMENT CATEGORIES, SCENARIOS, OUTREACH PROCESS, AND INVESTMENT DIRECTION

There was a desire to obtain input and guidance from stakeholders on an overall investment strategy for this money. Using the existing structure of the Minnesota State Highway Investment Plan as a guide and model, several investment categories and scenarios were created in order to decide on an investment direction for Minnesota's National Highway Freight Program money.

Investment Categories

Five investment categories were created. Each project must fall within a primary investment category. The National Highway System was used to distinguish whether a project was considered first/last mile or not. The categories are listed below:

Highway Project Categories:

- Safety (NHS)
- Freight Congestion/Freight Efficiency Improvement (NHS)
- First/last mile connections (non-NHS)

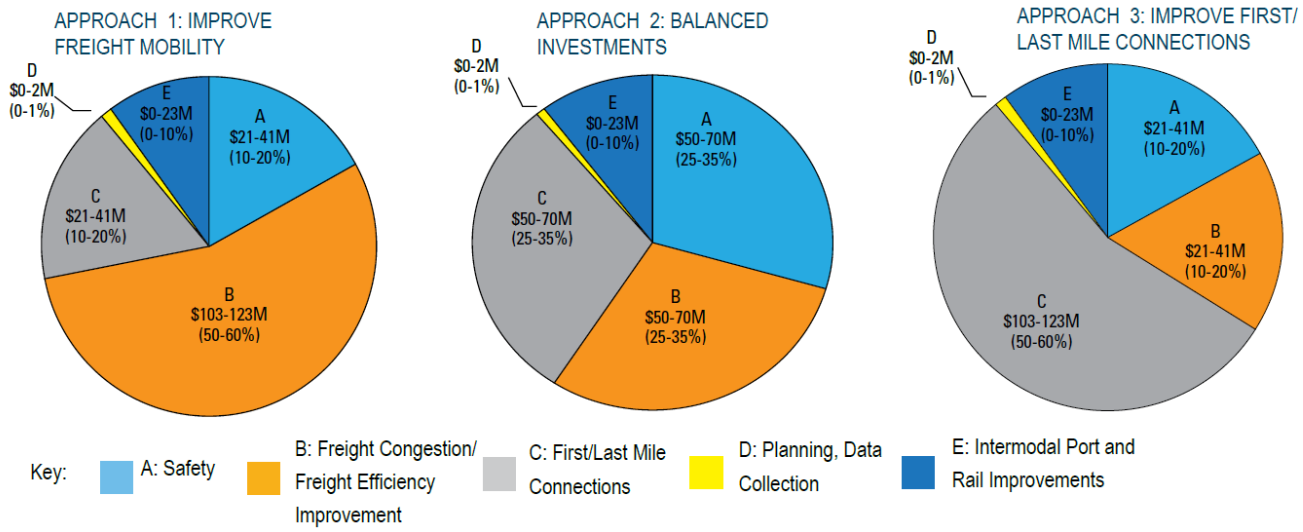
Other Categories:

- Planning, data collection
- Intermodal port and rail

Investment Scenarios

Several investment scenarios were created, with each scenario targeting a certain percentage range of spending toward each category (Figure 1). These scenarios were used in an outreach process to guide stakeholders in indicating their preference toward an eventual investment direction.

Figure 6.1 Investment Scenarios



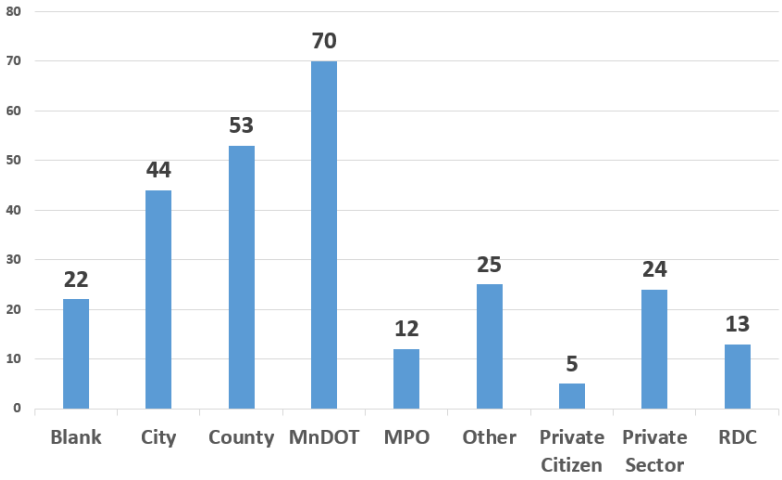
Outreach Process

Outreach, where participates were able to vote on the scenarios, was performed via multiple formats. Attendance at in-person meetings involved a presentation and either a paper survey or an interactive voting process using Mentimeter software. For stakeholder populations that could not be reached in-person, an online survey using Surveymonkey was created and distributed.

Outreach was focused on transportation stakeholders and MnDOT staff, and included outreach to groups such as the Minnesota Freight Advisory Committee, Minnesota cities and counties, metropolitan planning organizations, tribal governments, and regional development commissions. Over 260 individuals were surveyed—to see the number broken down by group see Figure 1.

Detailed outreach and survey results are available on request.

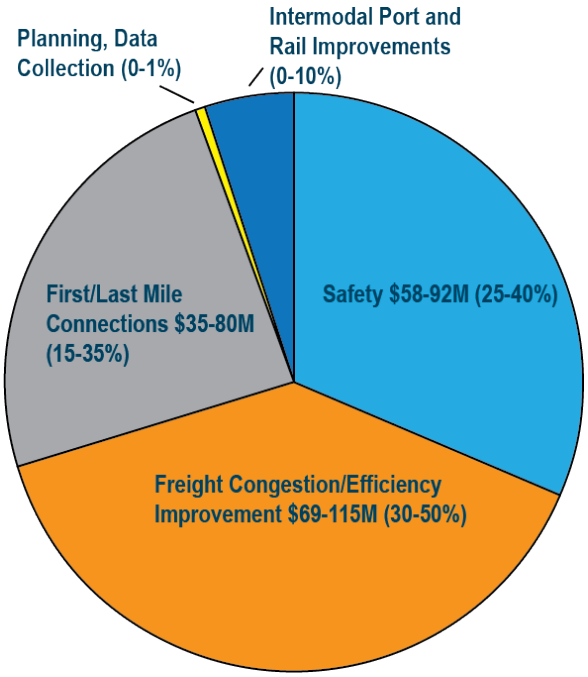
Figure 6.2 Affiliation of those surveyed



Investment Direction

The outreach results showed a slight preference for Approach 2: Balanced Investments. Based on qualitative comments, respondents liked that the investment approach targeted an about equal amount of money to each of the three highway-project categories and invested in both safety and freight congestion. However, there was disagreement over the safety funding percentage range, with some saying it should be higher, and others preferring safety lowered and the freight congestion/freight efficiency percentage be higher. In the end, Approach 2 was adjusted slightly to reflect the qualitative comments, with the upper bounds of the safety and freight congestion/freight efficiency improvement ranges raised and the lower bound of the first/last mile category dropped. (See Figure 2)

Figure 6.3 Final Investment Direction



SOLICITATION

The Department decided that the federal money would be best programmed in the form of a solicitation, allowing all entities, including MnDOT districts, counties, cities and others to submit projects and compete for funding. Staff developed two programs, the Minnesota Highway Freight Program and the Minnesota Intermodal Freight Program, with application documents and evaluation criteria, as a structure for the solicitation. The programs will solicit for projects in fiscal years 2019-2022. Once projects are selected, they will join the already-selected projects for fiscal years 2016-2018 in a specific project list, shown at the end of this plan. Funding for the last five years of this plan (fiscal years 2023-2027) shall follow the final investment direction.

Program Operation Details

The following details on Minnesota Highway Freight Program operation were recommended by the advisory group and approved by TPIC.

- Eligibility:
  - Project must be on a public road and must provide a clear benefit to highway-based freight transportation
  - Regarding construction projects: new projects, as well as add-ons and up-scopes to existing projects are eligible
  - Design costs are eligible as long as they are included with the construction cost of the project
  - The project recipient/sponsor must be qualified to administer a federal aid construction contract.
- Metro Specific Eligibility Criteria:
  - All projects within the Metropolitan Council planning boundary must be a Tier 1, Tier 2, or Tier 3 corridor on the Metropolitan Council's Highway Truck Corridor Study or the project must provide a direct connection to one of these three tiers.

    - Applications for new or modified interchanges in the 7-county Minneapolis-St. Paul metropolitan region will not be considered unless they have successfully completed the Metropolitan Council's interchange approval process
- Match requirement: Applicants are required to identify other public and/or private funding sources that will contribute to the cost of the proposed project. The Minnesota Highway Freight Program may provide federal funds for up to 80 percent of the eligible project cost. Projects on the Interstate may receive up to 90 percent of the eligible project cost of the project.
- Minimum and maximum award amounts: For new construction projects, the minimum award provided to any one project in this solicitation will be $500,000. There is no minimum award amount for add-ons or up-scopes to existing projects. The maximum award provided to any one project in this solicitation will be one fiscal year's worth of NHFP funding (~$20 M).
- Geographic split: No less than twenty percent of the total FAST Act funding may be identified for projects in either Greater Minnesota or the Twin Cities Metro (MnDOT Metro District in this case).

To view the full application documents and evaluation criteria, please go to http://www.dot.state.mn.us/ofrw/mhfp/.

PROJECT SELECTION

Overall, the agency received 36 total applications for evaluation under the project selection process. From this amount 35 applications were highway focused submittals and one application was for intermodal improvements. The total requested through the solicitation was approximately $250 million, with a majority of the requests coming from applicants in the Twin Cities Metropolitan area.

Scoring committees, staffed by technical experts from MnDOT, were formed to evaluate, score and rank project applications. These were assembled for each of the following assessment categories: Mobility, Safety, and Project Readiness. Please see Table 4 for score team membership.

Table 6.5 Scoring Committee Members: Mobility, Safety, Project Readiness, Eligibility

CRITERIA	MEASURES	MNDOT STAFF
Truck Volume	• HCAADT	TDA – Gene Hicks
Safety	• Crash rate reduction • Addresses a sustained crash location (Y/N) OR Not sustained crash location, but addresses a safety issue identified in a district or county safety plan (Y/N). If so, provide risk rating. • For truck parking projects: truck parking utilization at existing rest stop	OTST –Brad Estochen & Eric DeVoe State Aid – Joel Ulring OFCVO – Ted Coulianos
Freight Mobility	• Truck Travel Time Reliability (NPMRDS) • Removes a geometric or temporary (e.g. flooding) barrier or avoids future load restriction on a OSOW route (Y/N) • Upgrades a roadway to 10-ton standards	TDA – Mike Iacono OTSM – Josh Pearson OFCVO - Julie Whitcher Design - Doug Carter M&RR - Steve Henrichs State Aid – Joel Ulring

CRITERIA	MEASURES	MNDOT STAFF
Freight Facility Access	• Daily truck load equivalents entering and exiting a freight facility or facilities	OFCVO – Andrew Andrusko (Metro) OFCVO – Nicole George (Greater MN)
Cost-Effectiveness	• Divide amount of points awarded above by amount of requested funds divided by 1000	OFCVO – Andrew Andrusko (Metro) OFCVO – Nicole George (Greater MN)
Project Readiness	• Environmental Documentation • Review of Sec 106 Historic Resources • Review of Sec 4f/6f Resources • Right-of-Way • Construction Plans/Documentation • Railroad Involvement • Funding	OES - Deb Moynihan State Aid – Joel Ulring OFCVO – Tim Spencer & Nicole George

Applications were reviewed in each of the scoring committees and the scores were assembled into a singular score table with final totals. These final scores were used to develop two Funding Scenarios that prioritized the highest scoring projects from each project category. Each of the scenarios followed the investment direction and identified a program of projects that would be evaluated as a recommendation by the Freight Investment Plan Advisory Group.

The Freight Investment Plan Advisory Group acted as a review body, with all groups coming together to produce a final revised Funding Scenario that would be sent as a recommendation for final approval by the MnDOT Transportation Programming and Investment Committee. Table 5 shows the final project list. Appendix A includes the Final Approved Funding Scenario approved by the Transportation Programming and Investment Committee on October 19th, 2017.

Table 6.6 Projects Selected Fiscal Years 2019-2022

FISCAL YEAR	PROJECT	NHFP (MILLIONS)	OTHER FEDERAL (MILLINOIS)	STATE OR LOCAL (MILLIONS)	TOTAL PROJECT COST (MILLIONS)	PREVIOUSLY ON NHFN
2019	Freight Planning – District Plans & Other	$0.2	NA	$0.05	$0.25	No
2019	Sherburne County CR 45 at 125th Street/9th Avenue Circle Intersection Improvement	$0.8	NA	$0.35	$1.15	No
2019	Detroit Lakes Randolph Road Improvements	$1.5	$1.5	$1.57	$4.6	No

FISCAL YEAR	PROJECT	NHFP (MILLIONS)	OTHER FEDERAL (MILLINOIS)	STATE OR LOCAL (MILLIONS)	TOTAL PROJECT COST (MILLIONS)	PREVIOUSLY ON NHFN
2019	Duluth Port Intermodal Container Terminal Expansion	$1.9	NA	$0.47	$2.37	Yes
2019	Winona Riverview Drive Reconstruction	$2.8	NA	$0.7	$3.5	No
2019	Sherburne County CSAH 8 Reconstruction	$3	NA	$3.08	$6.08	No
2019	District 6 Rest Area Improvements	$3.6	NA	$0.4	$4	Yes
2019	District 1 Twin Ports Interchange Reconstruction	$6	$4.22	$193.95	$204.17	Partially
2020	Freight Planning – District Plans & Other	$0.2	NA	$0.05	$0.25	No
2020	Chaska MN41 Downtown Improvements	$4	$9.27	$6.73	$20	No
2020	Dakota County CSAH 70 Expansion	$7	NA	$14.86	$21.86	No
2020	Brooklyn Center MN 252/66th Avenue North Interchange Improvements	$10	$7	$5.3	$22.3	No
2021	Freight Planning – District Plans & Other	$0.2	NA	$0.05	$0.25	No
2021	Scott County CSAH 83 Reconstruction	$0.59	$5.55	$3.8	$9.95	No
2021	South St. Paul Concord Street Improvements	$7.56	NA	$1.89	$9.45	No
2021	Anoka US 10/US 169 Safety and Mobility Improvements	$20	$14	$51.4	$85.4	No
2022	Freight Planning – District Plans & Other	$0.2	NA	$0.05	$0.25	NA
2022	Scott County MN 13 Port Access and Mobility	$15	NA	$7.7	$22.7	No
2022	Carver County US 212 Freight Bottleneck Improvements	$15	$1.2	$25. 09	$41.3	No

Table 6.7 FY16-20 Fiscal Constraint Summary

FISCAL YEAR	ANNUAL	PROJECT	CARRY OVER	AVAILABLE
2016	$18,633,494	$18,633,494	$0	$18,633,494
2017	$17,055,435	$7,516,008	$9,539,4267	$17,055,435
2018	$19,350,449	$23,500,000	$5,389,876	$28,889,875
2019	$21,769,255	$19,800,000	$7,359,131	$27,159,131
2020	$24,174,757	$21,200,000	$10,333,888	$31,533,888
Total	**$100,983,390**	**$90,649,502**		

IMPLEMENTATION

Moving forward into implementation, MnDOT will work with local partners to develop projects selected as part of the Minnesota Highway Freight Program and Intermodal Program. Based on the direction of the Freight Investment Plan Advisory Group key corridors within the National Highway Freight Network were identified at the locations of the selected projects and connections to the projects to create a unified freight system within the state.

Figure 1 shows a map of the locations of selected projects and each of the designated corridors statewide. It also shows the locations of selected projects and each of the designated corridors in the Twin Cities Metropolitan area. Table 6 includes a list of the Critical Urban Freight Corridors and Table 7 includes a list of the Critical Rural Freight Corridors.

Future efforts will be focused on the incorporation of these improvements into statewide programming processes as well as linking to and carrying out the strategic goals from the Freight Action Agenda. Freight planning staff will continue to meet with the Freight Investment Plan Advisory Group to discuss future needs, issues, investments, policies or concerns.

Table 6.8 Critical Urban Freight Corridors

AUTHORITY	ROUTE	FROM	TO	LENGTH (MILES)
MnDOT District 3	MN Highway 101	I-94 near Rogers	US Highway 169	6.82
MnDOT District 3	US Highway 169	MN 101	Sherburne CR33 (205th Ave NW)	3.50
Dakota County	County State Aid Highway 70	I-35	Cedar Ave	3.99
MnDOT Metro District	MN Highway 156	US-494	Annapolis St E	3.45
MnDOT Metro District	MN Highway 13	I-35W	US-169	7.15
MnDOT Metro District	US Highway 169	MN 13	MN 41	7.70
Scott County	County State Aid Highway 83	4th Ave E	US169	1.10
MnDOT Metro District	MN Highway 41	US-169	County Road 61	2.15

AUTHORITY	ROUTE	FROM	TO	LENGTH (MILES)
Carver County	County Road 61	MN 41	County Road 11 (Jonathan Carver Parkway)	2.80
MnDOT Metro District	US Highway 10	I-35W near Mounds View	0.5 Miles west of Thurston Ave	14.20
MnDOT Metro District	MN Highway 252	I-694	70th Ave N	0.70
MnDOT District 1	US Highway 53	West 6th Street	0.1 Mile North of Helberg Street	0.75
City of Duluth	Courtland Street	I35/S 27th Ave SW	Garfield Ave	0.92
MnDOT District 4	MN Highway 336	I-94 near Moorhead	US-10	2.07
			Total Mileage	**57.3**

Table 6.9 Critical Rural Freight Corridors

AUTHORITY	ROUTE	FROM	TO	LENGTH (MILES)
Carver County	Jonathan Carver Parkway (CR11)	Carver County Road 61	US Highway 212	0.20
MnDOT Metro District	US Highway 212	Jonathan Carver Parkway	Tacoma Ave	4.40
MnDOT Metro District	US Highway 212	Tacoma Ave	Carver County Road 34	8.50
MnDOT District 3	US Highway 169	205th Ave NW in Elk River	South Rum River Dr	18.9
Sherburne County	County Road 45	South Rum River Dr	125th St/9th Ave Circle	0.20
MnDOT District 3	MN Highway 24	I-94 near Clearwater	Sherburne CSAH 8	1.71
Sherburne County	County State Aid Highway 8	MN 24	MN 25 / US 10	7.20
MnDOT District 6	MN Highway 43	I-90	Huff Street in Winona	9.27
City of Winona	Riverview Drive	Huff Street	Theurer Blvd	2.10
MnDOT District 4	US Highway 10	MN 336	Randolph Road in Detroit Lakes	40.10
City of Detroit Lakes	Randolph Road	US Highway 10	Highland Drive	1.04
MnDOT District 6	Rest Area	Rest Area Ramps Near Austin and Albert Lea	0.50	0.75
			Total Mileage	**94.12**

Figure 6.4 National Highway Freight System in Minnesota and Project Locations Statewide