Metropolitan Council

TWIN CITIES METRO FREIGHT INITIATIVE

OPPORTUNITIES TO STRENGTHEN FREIGHT PLANNING

December 2011

Prepared by: USDOT/Volpe Center
Cambridge, Massachusetts

Prepared for: MnDOT and Met Council
St. Paul, Minnesota

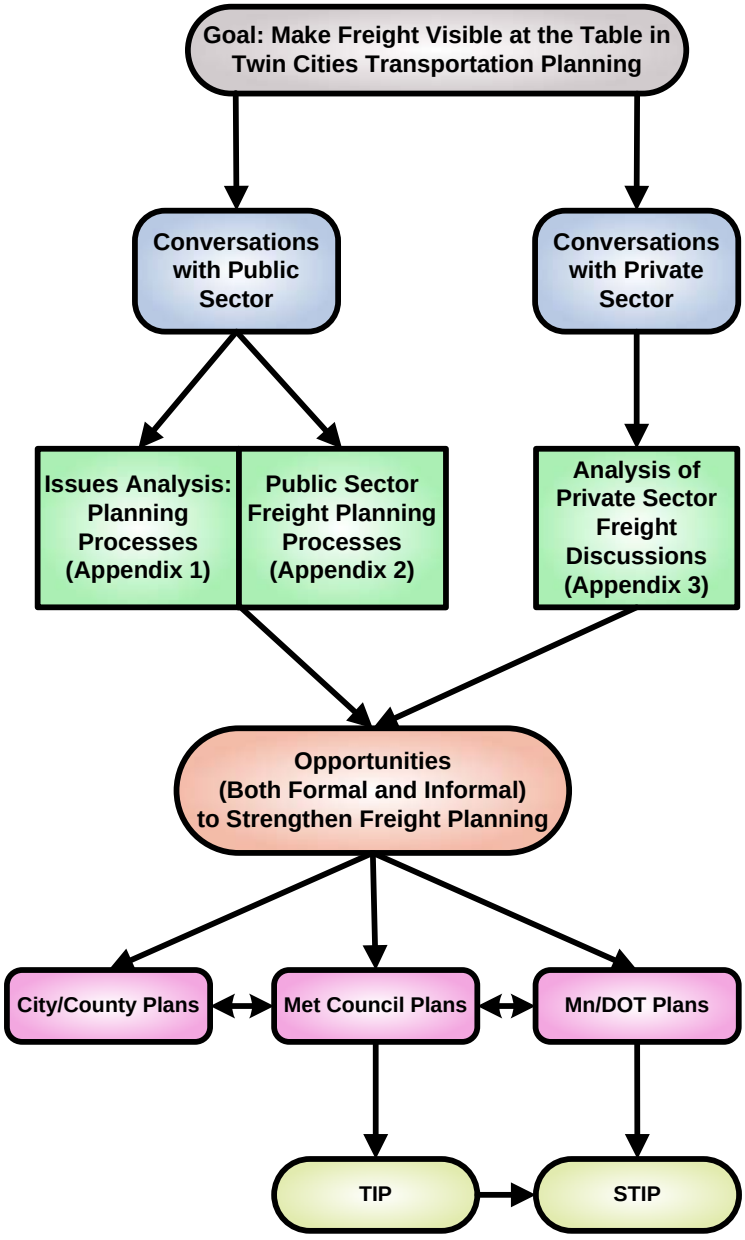
Table of Contents

1. Introduction

This document summarizes and ties together findings from interviews that a team from USDOT/Volpe Center's conducted with private and public sector representatives about ways to improve freight transportation planning in the Twin Cities metropolitan area. This document highlights opportunities to strengthen public sector planning processes, not only to get better on-the-ground results from the freight system, but also to improve collaboration among public and private freight interests in pursuit of those results.

Figure 1 shows how the components of this document relate to one another and to one of the primary goals of the Metro Twin Cities Freight Initiative: to make freight more visible in transportation planning processes. Pursuing that goal led USDOT/Volpe's team to conduct and analyze conversations with over 20 public and private sector stakeholders. These conversations focused on stakeholders' roles in existing public and private sector freight planning processes and proposed changes to these processes. These conversations led to the development of three documents, which are appended to this summary: 1) *Issues Analysis: Planning Processes* (Appendix 1): 2) *Public Sector Freight Planning Processes* (Appendix 2)*;* and 3) an *Analysis of Private Sector Freight Discussions* (Appendix 3).

Figure 1: Inter-relationships among project components



Opportunities to strengthen freight planning processes in the region are both formal and informal. Formal opportunities (discussed in Appendix 2 and summarized in Figure 2-1) include the use of more robust freight criteria and the need for stronger/more detailed freight components in the region's transportation plans. These improvements could in turn result in beneficial projects for freight in the Metro Transportation Improvement Program (TIP) and State

TIP (STIP). Informal opportunities include working with stakeholders to identify freight issues[1] and conducting outreach/education efforts targeted to counties and cities in the region that are interested in learning more about and/or expanding freight planning work and knowledge. As any of the opportunities are pursued, it will be helpful to clarify roles and responsibilities among participants (e.g., within MnDOT or between MnDOT and Met Council) as a way to ensure strengthening freight planning.

2. Opportunities to Strengthen Collaboration

Since the private sector owns and operates most of the freight transportation system (particularly modes other than highways), market forces largely determine how and where facilities are located, routes are chosen, and when, how, and what improvements are made. Nonetheless, the public sector has many points of influence for shaping the freight transportation system. Some of these are direct, such as in the case of highway infrastructure, since this infrastructure is built, managed and maintained using public funds. Other points of influence are indirect because private sector organizations own and control the assets. In both cases, points of influence often become visible in public sector planning processes.

As a result, this section is organized around five specific opportunity areas for interested organizations in the private and public sectors to work together to improve the regional freight transportation system. These five opportunity areas, which were identified as part of the U.S. DOT/Volpe Center's work on *Issues Analysis: Planning Processes* (Appendix 1), are:

A. Identifying needs;
B. Articulating problems and potential solutions;
C. Setting priorities;
D. Selecting and programming projects; and
E. Implementing projects.

For each of these five opportunity areas, the *Issues Analysis: Planning Processes* document (in Appendix 1) outlines a definition, problem statement, deliverable, and potential action steps for the Minnesota Department of Transportation (MnDOT) , Metropolitan Council (Met Council), and other stakeholders to pursue. The document also integrates the problem statement and action steps for each opportunity area with specific and more explicit opportunities/potential activities needing collaboration among all stakeholders. The most important of these activities are identified and discussed in the *Freight Planning Processes: Public Sector* document (Appendix 2).[2] The relationships among opportunity areas, action steps, and activities are illustrated in Table 1 below. While some action steps appear to repeat, each action step relates directly to the opportunity area under which it is listed. Conversations with the private sector, which are outlined in *Summary of Private Sector Freight Discussions* (Appendix 3), informed the project

[1] Aligns with the process outlined in "Figure 1: Metro Freight Readiness Assessment" in *Freight Issues and Solutions: Readiness Assessment Overview, Template, and Example.*

[2] The findings of the *Issues Analysis: Planning Processes* focused on needs priorities, selection and programming, and implementation. Accordingly, the ensuing discussion focuses on these topics: Identification, causes/solutions, priorities, selection and programming, and implementation. Accordingly, the ensuing discussion focuses on these topics.

team's recommendations that pertain to new opportunities for collaboration among public and private sector representatives in the freight planning process.

Table 1: Relationship among Opportunity Areas, Action Steps, and Component Activities

Opportunity Areas	*A. Identifying Needs*	*B. Clarifying problems and potential solutions*	*C. Setting Priorities*	*D. Selecting and programming projects*	*E. Implementing projects*
Action Steps	Defining freight needs	Defining "freight" projects	Developing criteria for prioritization	Modifying project selection criteria	Improving project delivery
	Identifying, evaluating, and sharing data sources	Conducting outreach	Assessing the efficiency of the freight system	Performing education/ outreach	Raising the profile of freight
	Performing data collection and analysis	Collecting data and performing analysis	Cross-promoting economic development		Increasing funding for freight
	Developing performance measures				
Activities	Detailed below in Appendix 1	Detailed below in Appendix 1	Detailed below in Appendix 1	Detailed below in Appendix 1	Detailed below in Appendix 1

A. Identifying Needs

"Needs identification" focuses on the early, largely informal stage in the planning process that involves surfacing and defining freight problems and challenges to address or consider as a point of departure in order to develop a regional freight agenda. There are a number of opportunities for public sector and private sector organizations to work together at this stage to address the problem the project team defined (click below to go to the text of the problem statement). For example, to establish a shared understanding of freight needs, stakeholders can work together to: 1) agree on basic definitions of freight terms, especially as they relate to freight needs, as well as approaches to freight planning; and 2) identify gaps in data collection and analysis, together with options and sources for filling them, particularly as a basis for creating and using freight performance measures.

Initial action ideas for identifying needs are detailed in Appendix 1 (click below). The four primary action steps for this first opportunity area include:

1. **Defining freight needs** – MnDOT and Met Council are likely to be significantly involved in taking this action step; avenues for other public sector agencies and the private sector stakeholders to provide input need to be created and used. Further, MnDOT could find ways to tap into research projects in which end results often involve defining freight needs as part of providing recommendations.

2. **Identifying, evaluating, and sharing data sources** – MnDOT and Met Council could work closely with the private sector as well as other public sector agencies to build a common foundation for planning, particularly with respect to public sector "points of influence."

3. **Performing data collection and analysis** – MnDOT and Met Council could work closely with the private sector as well as other public sector agencies to structure and carry out this action step.

4. **Developing performance measures** – MnDOT and Met Council could work closely with private sector representatives as well as colleagues in other public sector agencies to take this action step, in close coordination with any data collection and analysis.

A primary goal for collaboration in this stage is finding ways to increase sharing and using freight data at the regional level. For example, while MnDOT's Metro District has some truck count data, they might be used more fully to articulate the locations of highway-based freight congestion. Further, since truck counts during peak congestion times are scarce, it is not possible to determine the extent of congestion impacts on freight flows. Other problems include the fact that count data only provide an indication of volume and do not provide information about routes and travel speeds. Many private sector companies now have vehicle tracking technologies that populate large databases of information on routes and travel speeds. These data, especially when combined with truck count data, could build a much more holistic understanding of freight travel and issues in the region. A more comprehensive database could be the foundation for public and private stakeholders to draft freight-related performance measures. Data-driven performance measures could help to identify and quantify freight issues more strongly, creating a stronger foundation for joint development of potential solutions and actions in later stages of the planning process. Performance measures are also a prerequisite for sound freight criteria and a transparent project prioritization process.

B. Clarifying Problems and Potential Solutions

Freight problems and potential solutions are respectively defined as the primary factors underlying problematic freight conditions and the actions best suited to addressing them individually and system-wide. There are several opportunities for a range of stakeholders to work together at this stage to clarify problems and potential solutions. The need for public-private coordination and action steps, which flow from these opportunities, is reflected in the problem statement (click below) that the project team articulated. For example, MnDOT and Met Council could systematically reach out to private sector partners and to planners and engineers in cities and counties (who can be champions for freight) to explore and analyze observed underlying causes and capture ideas for workable solutions. Additionally, opportunities exist for Met Council and MnDOT to enhance freight planning and programming by integrating freight considerations into near-term and ongoing planning activities. Examples of these activities in Metro District include the STIP and Congestion Management Safety Plan (CMSP); other opportunities exist in MnDOT such as with the NexTED (Transportation Economic Development) program.

Initial ideas for each action step are listed in detail in Appendix 1 (click below).The three primary action steps for this opportunity area include:

1. **Defining 'freight' and 'freight project'** for the Twin Cities – as MnDOT and Met Council take a leading role in this action step, it is essential to solicit and reflect the input of other public sector agencies and private sector stakeholders.

2. **Conducting outreach** – this is a core part of MnDOT's and Met Council's efforts to ensure a close match between actual, on-the-ground freight needs and the projects and other actions they take to address those needs. As result, MnDOT and Met Council should target both private sector organizations and other public sector agencies to educate them about where public sector points of influence lie and where there are opportunities for improving the freight system.

3. **Collecting and analyzing data** – with MnDOT's and Met Council's coordination, both private sector and other public sector agencies have important roles to play in creating and using an evidence-based approach to define feasible solutions. This is particularly useful in integrating freight performance measures into the transportation planning processes.

C. Setting Priorities

Once options for responding to particular freight needs are clear (as described in Section "B" above), MnDOT and Met Council can use available processes and mechanisms to set priorities among these options (click below to see the text of this problem statement). For example, within their public sector domain (e.g., with respect to highways/truck movement), MnDOT and Met Council can design ways to consider freight systematically in specific projects or actions. With respect to the primarily privately owned freight system, (e.g., rail), MnDOT and Met Council can express clear strategic direction needed in the public interest, rather than comment on specific projects that are the domain of private owners.

Initial ideas for activities in each action step are listed in Appendix 1 (below). The three primary steps in this opportunity area include:

1. **Developing criteria for prioritization** – MnDOT's Central Office, its Metro District, and Met Council could articulate and take into account freight factors when evaluating options for public sector actions. In addition to the already included heavy commercial annual average daily traffic (HCADT) on arterials near regional freight terminals, freight criteria could include average daily truck volume or, if the data are available, average truck speed as a proportion of the posted speed limit.

2. **Assessing the efficiency of the freight system** – MnDOT and Met Council could lead an effort to compare and contrast the likely benefits and costs of addressing congestion at strategic locations on the roadway system. For highway projects, this assessment could be achieved through Active Traffic Management (ATM) systems or through lower-cost/ high-benefit projects that improve freight operations. For non-public portions of the system (e.g., rail, water, air), owners need to understand how public policies do and could affect levels of efficiency.

3. **Cross-promoting economic development** – pivoting off economic impact information supplied by the Minnesota Department of Employment and Economic Development (DEED) and the private sector, MnDOT and Met Council need to coordinate an effort to both understand and factor into their planning the ways in which freight improvements do and can make a positive difference in terms of regional economic development.

The result of MnDOT's and Met Council's work in this opportunity area with a range of stakeholders – a collaborative approach to setting priorities among potential freight improvements – can be directly linked to the formal transportation planning and programming process in the region (see Appendix 2: *Freight Planning Processes: Public Sector*). Within a newly conceived planning process, freight criteria can link to data-driven freight performance measures.

D. Selecting and Programming Projects

This opportunity area focuses on processes for selecting and programming freight or freight-significant projects to which priorities have been assigned. It also references the policy framework identified in the Transportation Policy Plan (**TPP**), potentially including projects in the categories of active traffic management (ATM); lower-cost/high-benefit (as understood in the Congestion Management Safety Plan, CMSP); managed lanes; and strategic capacity enhancements (SCE). There are a number of issues to address in this area (click below to go to the text of this problem statement).

Some freight problems are definitely solved through general road improvements. However, without a more targeted freight project selection process—ideally tied to related and agreed upon performance measures, as well as criteria more strongly associated with freight, public sector agencies such as MnDOT and Met Council may miss opportunities to address freight problems directly. Further, without an understanding of how current activities do or could affect freight mobility, programming is likely to generate less than optimal results. MnDOT and Met Council could also miss opportunities to enlist the support of cities and counties when building the details of a regional freight agenda. As a result, MnDOT and Met Council might consider working with city and county engineers and planners to integrate freight projects into project selection processes by promoting the use of freight performance measures and freight criteria.

Initial ideas for action steps are listed in detail in Appendix 1 below. The two primary steps for this opportunity area include:

1. **Modifying the selection criteria** – MnDOT and Met Council need to identify specific points of influence within existing formal project selection and programming processes, in addition to leveraging existing mechanisms to highlight freight (see Appendix 2: *Freight Planning Processes: Public Sector*).
2. **Conducting education/outreach** – Drawing on successful practices among peer agencies, MnDOT and Met Council need to reach out, primarily to the region's cities and counties, to enlist their support for freight-oriented project development, prioritization and selection through their comprehensive plans and capital improvement programs.

E. Implementing Projects

Implementation translates the outputs of the planning and programming process into tangible activities that result in measurable improvements to the freight system (click below to go to the text of this problem statement). In the absence of a regional freight agenda, it is difficult to identify what is ready to implement to improve the freight system. Because MnDOT's and Met Council's planning functions do not include the responsibility to implement or track the results of prioritizing or programming freight actions, their activities do not readily link to actual freight improvements. As a result, explicit linking of planning and implementation is essential to establish a closer match between intent and actual results.

Initial ideas for each action step are listed in detail below in Appendix 1. The three primary action steps for this opportunity area include:

1. **Improve project delivery** – MnDOT and Met Council could work internally to more explicitly link planning and implementation of freight improvements (e.g., the design phase of projects) to ensure maximum benefit for freight.

2. **Raise the profile of freight** – with MnDOT's and Met Council's leadership scope, there are many concrete opportunities to get freight more clearly "at the table," for example, in scoping the details of the STIP or in educating decision-makers about when implementing particularly types of projects makes a significant difference for freight.

3. **Increase funding for freight** – MnDOT and Met Council can be the focal points for drawing on peers' experiences with a range of funding options and arrangements when engaging other public sector agencies and the private sector stakeholders to maximize investment benefits.

MnDOT and Met Council could pursue a number of actions to strengthen the implementation of freight projects once they have emerged from the planning and programming process stage (see Appendix 2: *Freight Planning Processes: Public Sector*).

These include the actions listed below:

- At the stages of planning and determining investment levels, MnDOT can develop a freight investment plan or can at least enhance the visibility and depth of freight planning work as part of the Statewide Multimodal Plan.
- MnDOT and Met Council can work with counties and cities to develop freight components of their comprehensive plans.
- After passing through the project selection process (where freight criteria would be applied, see Appendix 2: *Freight Planning Processes: Public Sector*). funding for these projects could be leveraged with other public sector or private sector funds, perhaps as part of public-private partnerships.

3. Private Sector Views of Opportunities

To ensure that the viewpoints of private sector owners and users of the freight system are factored into the analysis of planning process and region-wide collaboration, USDOT/Volpe Center reached out to a cross-section of representatives. Coming out of these conversations, six areas of recommendation emerged for MnDOT and Met Council to consider. (See Appendix 3: Summary of Private Sector Freight Discussions). This section briefly describes each of these areas, who needs to be involved, current or potential mechanisms or planning processes that can be used to address the issue, and how the recommendation connects or complements the opportunity areas discussed in Section 2. The areas of recommendations are:

A. Increasing funding and resources for rail;
B. Addressing roadway congestion;
C. Educating the public and decision-makers;
D. Supporting short line rail;
E. Preserving land use to support freight; and
F. Accommodating overweight container movements.

A. Increasing Funding and Resources for Rail

Private sector stakeholders would like MnDOT to allocate more funding and resources to freight rail. To make this change, MnDOT would need the state legislature to change its funding allocations so that more funding would be directed to MnDOT to fund additional projects. Additional freight rail staff would likely be required to support a larger program. Similar to other states (and the status quo in Minnesota), these additional resources would be available at the state level for freight railroads and not through a regional entity (e.g., Met Council). Freight railroads would benefit by using these additional resources to make infrastructure improvements in their rights of way (ROW). This change does not relate to any of the opportunity areas discussed in Section 2 since freight rail planning is done privately by each freight railroad; there was no discussion with the state about what specific projects will be funded.

B. Addressing Roadway Congestion

Private sector stakeholders would like MnDOT and Met Council to work on addressing roadway congestion. In general, any roadway project that eases congestion, including transit service improvement or expansion projects, will help over-the-road freight operations. Additionally, stakeholders suggested that MnDOT and Met Council could work with the private sector to encourage and coordinate off-peak deliveries. A "Freight Constraints and Opportunities" workshop with truckers and trucking dispatchers might be one potential appropriate venue for discussions among private and public sector stakeholders about specific congestion locations that significantly impact freight and how best to address them. Coordination of off-peak deliveries could also be discussed at these meetings. Mitigating freight-specific congestion would be addressed by the public and private sectors working together on all of the opportunity areas discussed in Section 2.

C. Educating the Public and Decision-Makers

Several private sector stakeholders indicated that they would like MnDOT and Met Council to work on educating the public and decision-makers about the benefits of freight. These benefits include freight's important role in economic development, value of freight to move a wide array of everyday consumer goods, and how freight can contribute to environmental goals. Freight railroads would also like MnDOT and Met Council to help them educate the public and decision-makers about how important it is for them to preserve their ROW and, due to safety concerns, restrict access to it.

This recommendation most directly relates to the implementation opportunity area discussed in Section 2 (pages 7-8). Specifically, potential activities listed under "raising the profile of freight" call for MnDOT and Met Council to make the business case for freight and educate decision-makers about what projects would benefit from considering freight issues, as well as why freight is important to the Twin Cities region.

There are currently no direct mechanisms or processes for MnDOT and Met Council to work with the private sector to educate the public and decision-makers on these matters. However, MnDOT and Met Council have discussed the idea of holding workshops for city and county staff in the region as well as potentially holding workshops for a group of private sector transportation managers who are interested in better understanding and addressing freight needs. These workshops would be an appropriate venue for educating participants about the benefits of freight and the preservation and protection of freight rail ROW. Another of USDOT/Volpe Center's products in this Initiative, *The Story of Freight in the Twin Cities,* would be a useful reference in educational activities.

D. Supporting Short Line Railroads

Some private sector stakeholders would like MnDOT help short line railroads preserve their rail, ROW, and operations, primarily through public education and allocation of more resources. Stakeholders also hoped that MnDOT and Met Council work with freight rail, particularly short lines, to ensure continuation in their level of service if and when more passenger rail service comes to the region, especially during any rail reconstruction/rehabilitation periods. This support could be garnered by pursuing: 1) increasing funding and resources for rail recommendations (discussed above); and 2) educating the public and decision-makers about the benefits of freight recommendations (also discussed above).

E. Preserving Land Use to Support Freight

Private sector stakeholders would like MnDOT and Met Council to work with cities and counties to preserve industrially-zoned land with access to all primary modes of freight (rail, water, and trucking) and industrial land uses in central locations of the metro area. Several stakeholders noted how important it was to have their businesses – and customers – in the metro area and not

far outside of the I-494/694 ring, while also mentioning being "priced out" of central locations by users willing to pay more for land. Though currently no direct mechanisms exist for MnDOT and Met Council to work with the private sector to promote and preserve freight-related land uses, workshops for city and county staff (discussed above) could be helpful in starting to address this concern. Since this is a complex issue with no consensus among planners on where industrial land uses should be preserved (central versus satellite locations), nor is there consensus on the role of the public sector in addressing the issue, significant study and analysis are necessary to identify the most useful response to this concern.

F. Accommodating Overweight Container Movements

Several private sector stakeholders would like MnDOT and Met Council to help truckers by establishing pre-approved routes to a scale and warehouse from each rail terminal for overweight import containers. These stakeholders also suggested that MnDOT could begin a program to more closely monitor shippers that purposely and continually overload their containers. This could be a significant issue for railroads since they may be liable for overweight containers drayed on public streets. Also, there may be customs requirements if containers are imported from Canada.

While there are currently no mechanisms or processes for MnDOT and Met Council to work on these kinds of issues pertaining to weight restrictions, as a first step MnDOT could work with Met Council to identify the magnitude of the problem. MnDOT could then work with the private sector (as well as with cities and counties that have jurisdiction over these potential routes) to establish pre-approved routes for overweight import containers. MnDOT could also take the lead in developing a program to closely monitor shippers who regularly overload their containers and the private sector could work with MnDOT to identify "problem" shippers.

4. Next Steps

For MnDOT and Met Council to take action on the opportunities described in this report, a three-step process could be followed:

1. MnDOT and Met Council should meet internally to determine which of the above opportunities to pursue. The agencies should map out a timeline, key partners necessary to involve, and any constraints to realizing each opportunity. The agencies should also consider setting up a regular, standing meeting (perhaps monthly or bi-monthly) to discuss the status of the actions and any challenges to realizing the opportunities.

2. MnDOT and Met Council should engage with other public sector stakeholders. MnDOT and Met Council could hold regional freight meetings specifically geared toward realizing the opportunities listed above that require input and support from colleagues in other public agencies. Topics to be covered in the meetings could include: 1) discussing the benefits of freight to metro cities and counties; 2) the need to share data to identify congested locations that affect freight flows; and 3) the importance of recognizing the relationship between land use and freight.

3. MnDOT and Met Council might consider holding multiple meetings with specific issue- and location-oriented freight stakeholders, particularly carriers and shippers. Where appropriate, meetings could be jointly held with public and private sector representatives and be devised to articulate a few, well-targeted issues and surface potentially viable solutions. Over time, the meetings could help MnDOT and Met Council articulate and take many of the action steps summarized in Table 1: Relationship among Opportunity Areas, Action Steps, and Component Activities, including developing a list of freight projects that would benefit the region as a whole. With input from these meetings, MnDOT and Met Council could develop freight criteria, performance measures, and freight components for regional and local plans that could be integrated into the region's and state's transportation planning processes.

Appendix 1: Issues Analysis: *Planning Processes* (February 18, 2011):

A. Definition of Planning Processes Cluster

Issues associated with required or mandated activities (because of formally adopted laws, policies, or organizational guidelines or conventions), which together make up the processes and steps through which freight physical system needs are identified and understood, and freight projects are defined, prioritized, programmed, and implemented.

B. Overview

Material for these summaries was derived from interviews in the fall of 2010 with Met Council and MnDOT managers and staff with an interest in freight, together with information gathered by scanning recent freight-relevant plans, as well as notes from the freight peer exchange held in St. Paul on December 1, 2010. Participants from Met Council and MnDOT met twice in the first half of February, 2011 to review and comment on successive drafts. All comments and suggestions are reflected in this draft.

For each of the five components in this cluster, the following summaries outline the definition of the topic covered and provide a brief problem statement, deliverable to pursue, and initial ideas for action steps. These, together with the summaries for strategic context and the physical freight system "action strategies," are intended to provide a foundation for developing a coherent regional freight agenda.

C. Components

A. Summary by Component: Needs Identification

1. **Definition:** Freight problems, challenges, and strengths that must be addressed or considered as part of developing a regional freight agenda.

2. **Problem Statement:** Current understanding of how well the regional freight system works and the system's unmet requirements are based on sometimes conflicting definitions of "need" (including thresholds of "needs") and data that are not necessarily indicative of specific Metro issues. Some existing data are not finely tuned enough to the Metro area (e.g., through a clear definition of "truck trip") or are not sufficiently reliable or consistent to be the basis for well-grounded analysis of root causes or identification of workable solutions. At the same time, some available metro freight data sources (e.g., shippers and local governments) have not yet been well tapped or analyzed. Closely associated with data concerns is the absence of usable performance measures or other ways to identify and validate metro freight needs in the context of industry standards. In this context, the link of freight needs to key factors such as regional economic development and support for particular industries is often not evident.

3. **Deliverable:** Plan for systematically and collaboratively defining, identifying, tracking, and validating existing and emerging freight needs (whether location-specific or system-wide) and strengths in the region, including the use of performance measures and analytical tools to support this work.

4. **Action Summary:** In order to establish shared understanding of freight needs, agree on basic definitions and approaches, identify gaps in data collection and analysis, together with options and sources for filling them, particularly as a basis for creating and using freight performance measures.

5. **Possible Action Steps:**

Definitions

a. Define what a "need" is with reference to existing freight activities and strategic goals.
b. Identify system-level freight needs and the broader implications for freight movement in the region/state.
c. Develop mechanisms to validate data on needs and obtain agreement on thresholds, targets, and metrics.
d. Revisit freight criteria that were established 6-8 years ago.
e. Develop a better understanding of the rules for what roads are conducive for freight (e.g., highway state-aid rules, with respect to speeds, lane widths, etc.).
f. Assess whether a follow-up study to MIRTS (Minnesota Intermodal Railroad Terminal Study) is necessary; if yes, determine if anything has changed regarding the need for consolidation of intermodal facilities, as well as the benefits and beneficiaries of consolidation.

Sources

a. Prioritize use of data sources that are already available.
b. Talk to county and city engineers or do a survey of metro engineers and ask if they are aware of freight-related problems.
c. Reference data when talking to industry about their needs; share data with industry partners, including shippers and receivers.
d. Partner with shippers to analyze and understand different industries' freight-related needs and challenges.
e. Partner with carriers that may have metro-relevant freight data – for example, BNSF is working on a national data initiative that is setting a new stage for how the public sector works with railroads;
f. Organize educational events (e.g., "freight for a day" workshop, freight immersion course, tours of freight facilities) for public sector partners to build up more "eyes and ears" to recognize and identify emerging freight needs.
g. Identify where there are freight congestion issues.
h. Monitor the regional solicitation process (e.g., STP funding) for identifying regional needs related to freight.
i. Design an organizational structure to tie freight needs identification to a review process – perhaps linked to performance measures.
j. Determine the balance between focusing on "hinterlands" access to the metro area versus on freight improvements to specific metro locations.

Data collection and analysis

a. Identify data necessary to assess location of congestion "hot spots" as well as which freight stakeholders are most affected and interested in addressing these issues.
b. Resolve issues inhibiting more targeted analyses of metro freight needs (e.g., "endpoints" of a truck trip, how trucks impact various levels of congestion).

c. Identify and plan for cost-effective collecting and analyzing highest priority metro freight data in targeted locations to improve understanding of existing or emerging needs.
d. Determine whether existing communication structures will support interpretation and analysis of data; create new mechanisms or processes to ensure data interpretation to allow needs identification.
e. Ask the Regional Traffic Management Center what they can extract from available data.
f. Identify portion of highway demand that is freight-related.
g. Assess benefits, costs and feasibility of tracking real-time movements using global positioning system (GPS) data, cell phone detection systems, or fleet management systems.
h. Call out qualitative data, especially for proposed projects for which agencies do not yet have credible quantitative data.

Performance measures

a. Create freight-related performance measures that indicate where and how freight needs are being met or not, tied to:
    i. Key areas of congestion.
    ii. Economic development.
    iii. Reliability of travel by time of day.
    iv. Speed.
b. Tie indicators (e.g., how many dollars in weekly revenue) to performance.
c. Learn from staff focusing on safety issues about how they have used performance measures to get visibility, priority consideration, and funding for safety.

B. Summary by Component: Causes/Solutions

1. **Definition**: The primary factors underlying problematic freight conditions and the actions best suited to addressing them individually and system-wide.

2. **Problem Statement**: While MnDOT and Met Council have started to refine the list of freight issues and needs in the metro area (e.g., by developing freight action bundles), significant gaps remain in understanding causal factors underlying observed conditions, and therefore which solutions to pursue. Further complicating the creation of workable solutions is a lack of consensus on what constitutes a freight "project," a freight element of a project, or benefits/impacts of freight or freight-significant projects. MnDOT's Central Office and Metro District have limited data available to help them better understand freight issues (such as peak hour congestion impacts to trucks and truck speeds), private sector supply chains are not well documented and associated data are often proprietary and unavailable.

3. **Deliverable**: Draft proposal for systematically generating and using a list of situations or issues that are problematic for freight in the region and solutions to address these issues.

4. **Action Summary:** After clarifying the threshold for a project to be considered "freight" or "freight-significant" in relevant planning processes, systematically reach out to metro partners who can be champions for freight and help explore and analyze observed freight issues' underlying causes to capture ideas for workable solutions.

5. **Possible Action Steps:**

Defining freight

a. Clarify thresholds for a project to be considered "freight" or "freight-significant" and therefore when it needs to be included in planning processes; develop definition of "freight project" to use in all relevant planning documents.
b. Develop a clear understanding of when/if it would be appropriate to consider freight as a standalone issue and when it would be appropriate to consider freight elements within each mode.
c. Develop a list of current and planned freight projects within each mode.
d. Assess the Statewide Transportation Improvement Program (STIP), the Transportation Improvement Program (TIP), and Highway Investment Plan (HIP) to identify what the freight projects are; develop freight chapter/table for TIP to emphasize freight projects; consider non-highway freight projects in the TIP (as done in some other regions), in order to make them easier to defend and have status.
e. Assess whether to expand the freight component of the Met Council TPP as an educational strategy to increase understanding of the freight system as a whole.
f. Identify why and for whom freight is important; make roles and responsibilities explicit.

Outreach

a. Educate decision-makers about what projects would benefit from consideration of freight issues and vice versa;
b. Identify potential champions who can help emphasize the importance of freight issues to other functional areas within MnDOT and Met Council, as well as the metro area as a whole.
c. Assess the major characteristics of types of freight projects, including solicitation of stakeholders' views.
d. Determine how to integrate freight concerns into planning processes so that freight is "at the table" even if someone representing freight is not in the room.
e. Assess best ways to partner with private sector to address bottlenecks.
f. Obtain and use input from freight system users via meetings (e.g., the Minnesota Freight Advisory Committee (MFAC) or other mechanisms).
g. Identify stakeholders to participate in a metro roundtable or new committee that could help in understanding root causes of and high payoff solutions to metro freight-related issues.
h. Consider media – such as "trucker alerts" on websites – to publicize freight projects/efforts; use websites more strategically to publicize project updates.

Data and analysis

a. Assess options to obtain (e.g., from University of Minnesota or purchased from INRIX) and use GPS data (e.g., interstate and non-interstate).
b. Assess options to obtain and use information from the private sector (e.g., via the Chamber of Commerce or the Midwest Shippers Association).
c. Assess how data are currently obtained and communicated (especially to overweight truck permitees) and how to improve these processes.
d. Streamline process for obtaining data on overweight truck movements.
e. Do special truck counts and analyze data for certain areas.
f. Select a few key freight-related bottlenecks in the region and carry out root cause analyses on them in order to generate initial ideas for solutions; be sure to include data on routes and times of day.
g. Identify which solutions to metro bottlenecks have statewide impact.

h. Evaluate low-cost intelligent transportation systems (ITS) solutions system-wide to alleviate bottleneck issues.
i. Develop indicators or performance measures to assess planned or programmed projects' impact on freight activities and vice versa.
j. Assess lessons learned from process used to analyze intermodal connectors and apply them to future assessments of metro freight connectors.

C. Summary by Component: Priorities

1. **Definition**: The processes and mechanisms available to MnDOT and Met Council to set priorities among possible freight solutions.

2. **Problem Statement:** Absent a shared understanding of what constitutes a freight or freight-significant project, setting priorities among potential projects is often driven by political interests and the availability of funding mechanisms suited to a proposed improvement. Even within well-defined state and regional planning processes, freight projects tend to be buried among a host of other types of projects and frequently do not rise to the top. While some information linking freight and strategic benefits (e.g., efficiency or economic development) is available and has been used, it is not a systematic or formalized part of existing priority setting in which freight projects (whether infrastructure or not) are considered. A further complication is that not all freight issues or proposed projects are in public sector organizations' domain or ability to set priorities (e.g., most freight rail assets are in private hands). In those situations MnDOT and Met Council can at most set priorities among strategies (not specific projects) to improve the metro region's freight system.

3. **Deliverable:** Plan for how MnDOT and Met Council will jointly define and set strategic priorities and obtain resources for pursing freight improvements in the region.

4. **Action Summary:** Develop a prioritized list of freight projects and work with stakeholders to promote these projects within and across their organizations; focus on improving the efficiency of the system as well as bolstering economic development in the region.

5. **Possible Action Steps:**

Criteria for priorities

a. Define criteria for defining, identifying, and validating "priority" freight projects, including the connection of projects to the needs of specific metro locations (micro level) as well as to strategic goals for the region (macro level).
b. Identify project selection criteria that could make freight "bubble to the top" and stand out from other projects.
c. Conduct risk assessments of specific parts of the freight system and link the results to performance measures used to develop priorities.
d. Define an approach to affecting priorities among needs and solutions outside the public domain (e.g., via the rail service assistance program).
e. Develop a list of priority freight projects through collaborating with MnDOT modal offices, others in Met Council, local governments, and other appropriate stakeholders.
f. Assess macro-level benefits of improvements to the metro freight system.
g. Assess how freight fits in as part of other public sector organizations' missions or agendas, and their interest to incorporate freight.
    i. Find sensible ways for MnDOT and Met Council to help cities and counties include freight in their comprehensive plans.

ii. Identify appropriate decision-makers to conduct outreach to cities and communities.
iii. Assess activities conducted by regional development organizations (RDOs) and regional transportation commissions (RTCs) to identify potential opportunities for collaboration.
iv. Assess criteria used by other organizations or offices to identify priority projects; evaluate how these criteria could help address and identify priority projects with freight elements.

h. Inform the public about what freight modes work best for various commodities.

Efficiency

a. Assess freight level of service at critical locations in the metro transportation system and then the benefits and beneficiaries of improvements.
b. Conduct a benefit-cost analysis of bottlenecks and identify fixes that are relatively easy in comparison with redoing an interchange.
c. Assess critical questions for addressing bottlenecks:
   i. With whom do we need to negotiate?
   ii. What are the different programs that could be used to leverage resources to address specific types of freight issues?
d. Obtain more information on Puget Sound Regional Council's intermodal Freight Action STrategy (FAST) projects and how they established priorities.
e. Assess potential for modal transference.

Economic development

a. Develop mechanisms to better assess contributions of freight projects to economic development; conduct freight economic analyses/studies (e.g., economic development benefits of different types of freight improvements).
b. Educate decision-makers on the range of ways freight improvements can support economic development.
c. Collect/identify data conducive for developing freight-related economic performance measures and for quantifying freight benefits.
d. Assess interest in developing a statewide economic plan with a freight component.
e. Assess DEED's interest in working more closely with MnDOT and Met Council on freight issues and priorities.

D. Summary by Component: Selection and Programming

1. **Definition:** System-oriented mechanisms or processes for selecting and programming freight or freight-significant projects to which priorities have been assigned.

2. **Problem Statement:** With no formal regional freight "program," public sector organizations miss opportunities to select and plan for freight projects systematically. For example, not having a systems approach reduces the visibility of how and where currently planned or programmed projects might link to or benefit from freight considerations. Without explicit, well-defined freight selection criteria, it is hard to know the extent that a project might benefit the freight system, whether it is explicitly "freight" or not. Not having a clear understanding of how current activities (e.g., statewide freight plan) or available funding can be leveraged to improve freight mobility (or other strategic objectives) results in selecting a sub-optimal project set. At the same time, the absence of a regional freight program and a system-oriented project selection process results in incomplete support from the Metro area's cities and counties when later implementing programmed projects.

3. **Deliverable:** Summary of current and potential mechanisms, assessment of what mechanisms work well now, and processes best suited to selecting and delivering freight or freight-significant projects for the region, including visuals of how the processes and mechanisms fit or might fit into state, regional, or local planning processes. This summary would include a list of priority freight projects that are "ready to go."

4. **Action Summary:** Build off existing processes to sharpen freight-specific selection criteria; work with stakeholders to integrate freight projects into their project selection processes.

5. **Possible Action Steps:**

Selection process and criteria

a. Assess where freight is currently represented in planning processes; e.g., analyze the Metro District's project scoping process and determine how freight projects are represented
b. Agree on how to work with needs/solutions that are clearly part of the Metro freight system, but not in our domain – for example, where the private sector leads and there may not be any public funding – how to assign these to a process in our system (e.g., an intermodal yard is not going to go through an ATP process).
c. Pinpoint steps in each other's planning processes in which joint or coordinated efforts might result in better freight outcomes; identify current "thresholds" that could be met to include freight projects as part of the review process for other transportation projects.
d. Assess what mechanisms are successful now in selecting freight projects in the region; evaluate programs (e.g., MRSI, rail improvement program, roadway improvement program) that could provide opportunities for programming and selecting projects with freight elements; assess whether there is a need to create new programs that can support MnDOT and Met Council in more effectively addressing freight issues and projects.
e. Assess whether new mechanisms are needed to select freight projects that differ from conventional projects in their delivery model (i.e., more reliance on the private sector).
f. Emphasize existing criteria to help formalize how freight is addressed in long-range planning and help match projects to potential funding sources.
g. Identify data that might be needed to create/support new criteria; identify new project selection criteria that could make freight "bubble to the top" and stand out from other projects.
h. Identify, collect, and analyze appropriate data to develop appropriate selection criteria/performance measures; consider data from vehicle class count sites and whether this information could help to focus on freight needs.
i. Evaluate the potential usefulness of including large private sector projects in the TIP's project selection process (e.g., as Seattle has);
j. Encourage other organizations to build freight into performance measures or project selection criteria.
k. Focus efforts to look at current and future truck traffic in the region in order to bolster the use of performance measures in selection criteria.
l. Make clear through a range of examples the distinction between freight projects (e.g., truck parking) and freight-enhancing projects, including the implications for selecting among them.

Education/outreach

a. Disseminate freight peer exchange report and/or other reports on state of the practice in freight project selection and programming.
b. Promote MnDOT statewide freight plans and disseminate to broad audiences.
c. Develop Met Council freight-specific plan or longer chapter in next transportation policy plan update.
d. Assess how freight issues could be incorporated into existing projects/processes, or how currently available funding can be leveraged for freight projects.
e. Encourage and/or initiate more opportunities for others within MnDOT, Met Council, and other organizations (e.g., DEED and the Office of Statement Multimodal Planning (OSMP)) to consider freight a key part of programs, agendas, and daily planning activities.
f. Encourage cities and counties to develop a list of ranked freight issues, including intermodal facilities, so that these are taken into account in the selection process.
g. Develop a template, worksheet, or checklist to help guide cities and counties in what to include in local comprehensive plans.
h. Develop sub-area plans; the information in these plans could become part of counties' and cities' comprehensive plans and reflected in the selection phase.

E. Summary by Component: Implementation

1. **Definition:** Methods, mechanisms, or processes suited to delivering and building freight or freight-significant projects and improvements and ensuring linkages between freight planning and implementation.

2. **Problem Statement:** In the absence of a long-term agenda for freight improvements in the region, there is no clear way of identifying "ready to go" freight or freight-significant projects. While there appears to be a national interest in making freight-specific resources available in the future to address high priority freight bottlenecks and other concerns, the implications of this interest are not yet clear. Further, resources that currently exist are sometimes accompanied by constraints that limit their use and application in programming and implementation. Currently, MnDOT's freight office (OCVFO) is primarily chartered to focus on planning and has limited authority in project delivery and Met Council does not have delivery responsibilities for non-highway projects in the TIP (beyond transit). As a result, there are disconnects between planning for and implementing freight projects.

3. **Deliverable:** Action approach to improve delivery and implementation of freight projects and improvements.

4. **Action Summary:** After defining specific ways to connect project planning to implementation, target specific opportunities to raise the profile of freight among key decision-makers, as well as identify innovative ways to finance freight projects.

5. **Possible Action Steps:**

Project delivery

a. Develop mechanisms or processes to track freight priorities and how they are incorporated into implementable projects (e.g., in the STIP and TIP).
b. Develop the means and identify specific people to take the lead in communicating internally between planning and implementation offices/stakeholders to ensure linkages among project identification, selection, and implementation phases.

c. Identify the right stakeholders internally at MnDOT who need to be involved in conversations about linking planning to implementation; identify situations where planning for freight has successfully led to implementation and direct lessons learned to future activities.
d. Get more freight input into the design phase of all selected projects, since the standards used in high benefit/lower cost projects (e.g., changing the widths of shoulders or lanes) potentially have implications for freight flows.
e. Identify ways to direct attention or funding to freight specifically.
f. Determine what freight investments are most cost-effective given funding constraints (i.e., develop a high benefit/lower cost program for freight).
g. Develop a systems freight investments plan to identify priority projects for implementation.
h. Identify feasibility of developing a freight program delivery area for highways.

Raising profile of freight

a. Determine what kinds of projects impact freight and how freight impacts projects for which a freight element might not be currently explicitly defined.
b. Develop freight component for STIP scoping document.
c. Assess willingness of MnDOT to revise STIP scoping document including what components of freight to have in scoping document.
d. Develop/initiate a committee to shepherd freight issues "up the chain."
e. Identify the key stakeholders to whom MnDOT and Met Council need to make the business case for freight;
f. Educate decision-makers about what projects would benefit from considering freight issues, as well as why freight is important to the metro region.
g. Identify if there is an opportunity to develop a freight investment plan or include elements of freight in existing investments plans (or those being developed); identify appropriate freight performance measures to include in the investment plans.
h. Identify and assess what data might be needed to develop a freight investment plan and how these data could be used to develop performance measures.

Funding

a. Demonstrate how flexible freight funds could be effectively used in the region, if available.
b. Assess how currently available funding (e.g., funding through Congestion Mitigation and Air Quality (CMAQ), RRAs, private sector, etc.) can be leveraged for freight projects and factored into the selection process.
c. Identify the state of the practice in discussions on flexible freight funds and how these funds could be used; assess best uses of these funds.
d. Assess the likelihood of a federal freight-specific funding source; if likely, assess what projects might be able to benefit from use of these funds.
e. Explore an analog to Minnesota's general obligation (GO) port bonds for all freight modes in the state.
f. Focus on specific projects (in the absence of a central freight funding category) and create a mechanism and/or group to
    i. document needs,
    ii. determine a process and direction, and
    iii. maneuver through the system to implement changes.
g. Develop formal mechanisms to distinguish between passenger and freight congestion issues, in order to leverage specified funding for freight if/when it becomes available.
h. Consider how stakeholders might differ depending on the freight mode and project's funding source.

Appendix 2: Freight Planning Processes: Public Sector (September 14, 2011)

1. Context

As part of their work on the Twin Cities Metro Area Regional Freight Initiative, MnDOT and Met Council asked the USDOT/Volpe Center to examine current public sector transportation planning processes in the region. The purpose of this examination is to identify opportunities for MnDOT and Met Council to work with each other and their partners to integrate, strengthen and make visible freight considerations in these processes. This document summarizes opportunities for MnDOT and Met Council to enhance freight planning in the public sector. A later companion document will summarize opportunities for these agencies to engage with the private sector on freight issues in the public interest. Taken together, these opportunities will serve as important input to the Initiative's end product, a regional freight agenda aimed at identifying and implementing the highest payoff, cost-efficient actions to improve the movement of goods in the region over the coming years.

2. Methodology

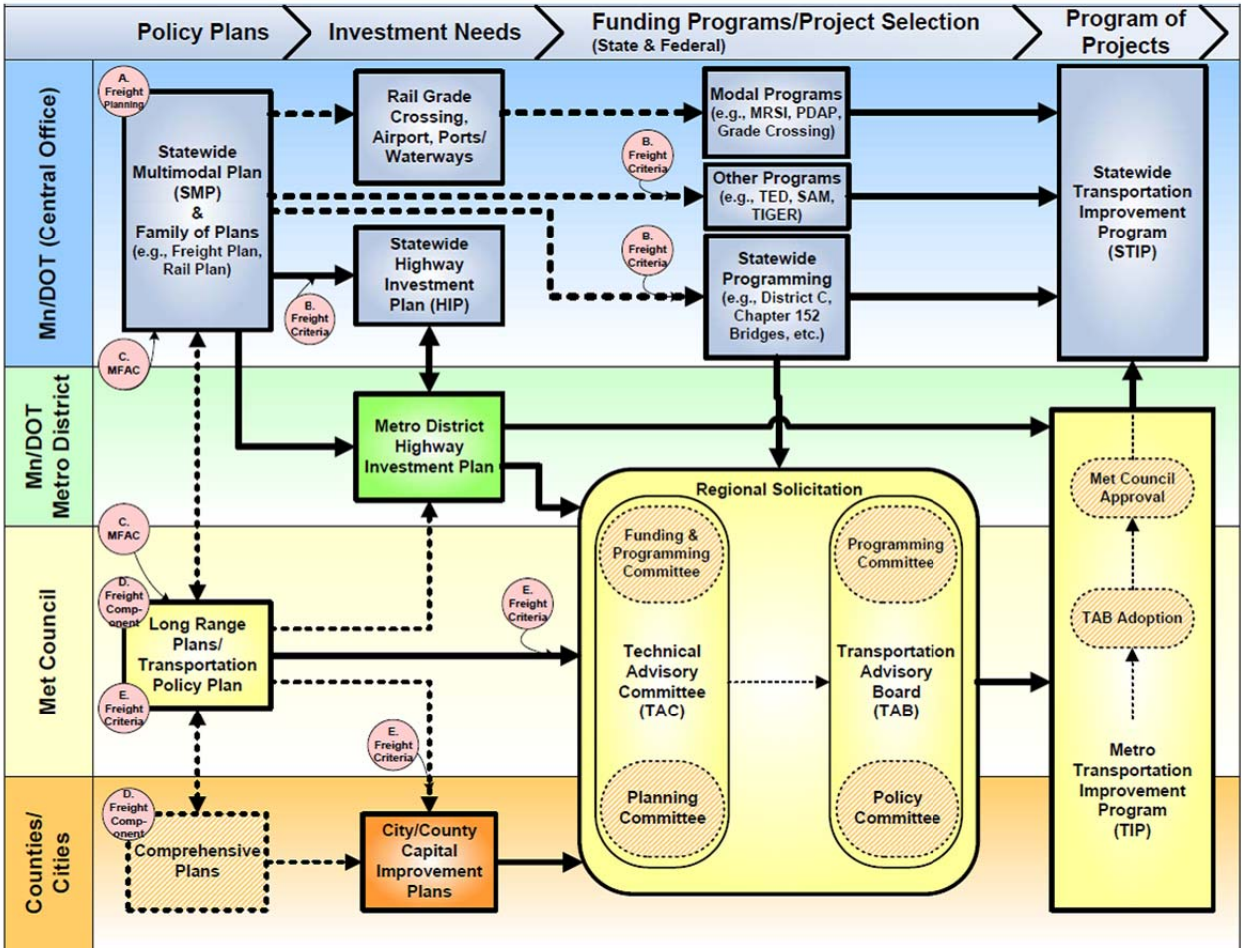
The public sector freight planning diagram was developed by USDOT/Volpe in consultation with MnDOT and Met Council in two phases. In the first phase, USDOT/Volpe worked with MnDOT and Met Council to diagram the current public sector transportation planning process. The USDOT/Volpe team adopted a diagram originally developed by MnDOT, which outlines the state's general transportation planning process, for this phase. The sequencing of the planning process from policy plans, to investment plans, to project selection, and finally to programs, is consistent with MnDOT state's initial diagram.

In the second phase, the USDOT/Volpe team used the diagram from phase one as a starting point for discussion as it worked with MnDOT and Met Council to identify opportunities for freight planning considerations to enter into the existing transportation planning process. On posters of the phase one diagram, participants in the discussions pinpointed these opportunities and provided detail about each of the opportunities. Figure 1 reflects the results of the pinpointing exercise.

3. Analysis of Opportunities

The letters next to freight planning "opportunities" in Figure 1 are meant to aid in the discussion of the details surrounding each opportunity. Though the discussion generally follows the sequence of the general planning process (for example, from policy plans to investment plans), the letters themselves are not meant to denote a sequential or chronological order to the opportunities. As outlined in the diagrams, freight planning could be linked across processes at the state, regional and local levels. This approach would ensure that freight planning processes are connected, coordinated and mutually supportive among local, regional and state planning organizations.

Figure 1 – Freight Opportunities in the Transportation Planning and Programming Process



1. MnDOT Central Office and MnDOT Metro District

A. **Freight Planning** – MnDOT's Central Office can perform more freight planning work and include more freight information in its Statewide Multimodal Plans (SMP) and Family of Plans. As part of this planning work, MnDOT can introduce freight performance measures, which can in turn establish the context for freight criteria. Freight performance measures can bring projects that have benefits for freight more visibility in the transportation planning process. MnDOT can work with Met Council to ensure that the freight components and freight criteria and/or performance measures in Met Council's long range plans and Transportation Policy Plan (TPP) dovetail with MnDOT's freight planning activities.

B. **Freight Criteria** – MnDOT's Central Office and Metro District can introduce freight criteria into the Central Office's Statewide Highway Investment Plan (HIP), statewide programs (such as District C and Chapter 152 Bridges), and other programs (such as TED, SAM, and TIGER). The criteria could improve how well projects that benefit freight score in these plans and programs. The criteria between the HIP and these programs should be coordinated to be the same.

C. **MFAC** – The Minnesota Freight Advisory Committee (MFAC) or a related group could be charged with providing input and feedback to MnDOT's and Met Council's freight policy planning work. This group could also pull together private sector freight data that could be shared with MnDOT and Met Council so that those agencies can better identify the region's freight needs and can develop consistent freight criteria for use in state and regional transportation planning and programming processes.

2. Met Council and Counties/Cities

D. **Freight Component** – City and county comprehensive plans could include a section focusing on freight. This section could identify and discuss any freight issues and projects that are important to the city or county. If a city identifies a certain freight-related issue as critical, the TPP could reference that issue in its freight section. The county in which the city resides could also reference the issue in their plan. MnDOT offered to help build interest in developing freight components in local plans by hosting or participating in workshops focusing on freight planning at the local level.

E. **Freight Criteria** – Similar to how MnDOT can introduce freight criteria into their SMP and Family of Plans, Met Council can introduce new freight criteria into its long range plans and TPP and cities and counties can introduce freight criteria into their city and county capital improvement plans. The improved freight criteria would inform Met Council's regional solicitation process. The criteria could improve how well projects that benefit freight score in these plans, thereby improving the likelihood of these projects receiving funding. The criteria between MnDOT, Met Council, and the cities and counties should be developed and coordinated to be similar, or ideally, the same.

4. Acronyms

MFAC – Minnesota Freight Advisory Committee
MRSI – Minnesota Rail Service Improvement
PDAP – Port Development Assistance Program
SAM – Safety and Mobility
TED – Transportation Economic Development
TIGER – Traveler Information Guidance and Evacuation Route

Appendix 3: Summary of Private Sector Freight Discussions (August 19, 2011)

1. Context

As part of their work on Twin Cities Metro Area Regional Freight Initiative, Minnesota DOT (MnDOT) and the Metropolitan Council (Met Council) asked the USDOT's Volpe Center (Volpe) to examine current public and private sector transportation planning processes in the region. The purpose of this examination is to identify opportunities for MnDOT and Met Council to work with each other, their partners, and the private sector to integrate, strengthen, and make visible freight considerations in these processes.

A previous document (circulated in mid-May) summarizes opportunities for MnDOT and Met Council to give freight planning in the public sector more visibility and impact. This document – the Analysis of Private Sector Freight Discussions – summarizes freight-related issues on which MnDOT and Met Council can potentially work with partners in the private sector to address. A final document will tie together the public sector document, the private sector document, and relevant pieces from the Planning Processes document with a "rough out" of actions steps to serve as a basic implementation guide for the public sector to work with the private sector on freight issues in the region. The final document will serve as important input to the Initiative's end product, a regional freight agenda aimed at identifying and implementing the highest payoff, cost-efficient actions to improve the movement of goods in the region over the coming years.

2. Methodology

MnDOT and Met Council prepared an initial list of over 30 private sector stakeholders who represent a wide range of participants in the Metro freight system including shippers, carriers, third party logistics companies, and land developers. These firms also represented most modes of freight transportation in the region – trucking, railroads, ports, air, and intermodal. USDOT/Volpe then worked with MnDOT and Met Council to prioritize the stakeholders into tiers of whom to contact first. Volpe scheduled conversations with the top two tiers of stakeholders, which amounted to over a dozen conversations.

USDOT/Volpe held each conversation with one or two stakeholders from each company for between a half hour and an hour. Some stakeholders elected to have the conversation over email; USDOT/Volpe emailed these stakeholders a list of questions to which the stakeholders then responded. For the rest of the conversations, which were all held on the phone, USDOT/Volpe emailed lists of questions, tailored to each type of company, in advance of each call to each stakeholder. To ensure candid discussions, USDOT/Volpe told each stakeholder that though USDOT/Volpe would take notes on the conversation, the stakeholders would not be quoted or associated with any information shared. To ensure accuracy, USDOT/Volpe then verified the notes with each stakeholder after each conversation.

3. Identification of Opportunities

Based on the stakeholder conversations, USDOT/Volpe identified six possible opportunities or issues on which MnDOT, Met Council, and the private sector could work together to pursue or address. These included

- Increasing funding and resources for rail;

- Addressing roadway congestion;
- Educating the public and decision-makers;
- Supporting short line rail;
- Promoting land use to support freight; and
- Reworking weight restrictions.

Points from the stakeholder conversations are summarized under six topics, listed below. Interestingly, many of these items only pertain to MnDOT and not Met Council. In the course of the conversations, it was clear that while most of the stakeholders were familiar with or had worked with MnDOT, some stakeholders had not heard of Met Council or were otherwise not familiar with Met Council or its operations and purview, especially with regard to freight.

1. Increasing Funding and Resources for Rail

In the opinion of several stakeholders, more funding in the state should be directed toward rail freight. Similarly, some stakeholders believed that more MnDOT staff should be focused on freight and particularly rail. As part of their current project work, one stakeholder is working with state DOTs from across the country. This stakeholder said that with regard to working with railroads, MnDOT is in the middle of the spectrum – some DOTs have more resources and funding available for railroads, other DOTs have less. Stakeholders cited two examples of DOTs with more funding and/or more staff.

- According to one stakeholder, Wisconsin DOT (WisDOT) really works to maintain and enhance rail service in the state. Also according to this stakeholder, WisDOT:
  - "Bends over backwards to help railroads": they buy old trackage, they fix the track at their expense, and then they find railroad companies to operate on these updated tracks.
  - Has eight or nine people on staff in Madison plus regional staff that support rural rail service.
  - Annually awards $30 million in loans or grants (through two programs, the FRIIP and the FRPP); by contrast, MnDOT's MRSI funds only about $3 million in improvements each year.
  - Has their own high rail truck and conducts rail inspections twice a year; by contrast, MnDOT conducts its inspections sporadically and the railroad has to provide a high rail for them.
- In Oregon, Connect Oregon provides a dedicated funding source for rail – funding comes from a lottery (about $40 million total per year). Recipients generally use this funding for smaller projects, but there are no restrictions.

2. Addressing Roadway Congestion

According to several stakeholders, roadway congestion creates significant economic issues: congestion drives freight prices up, which are then passed on to their customers. One stakeholder said, "Congestion is death by paper cuts – you notice it after five years of incremental worsening, so prices are raised incrementally as well." Similarly, another stakeholder said that "When

something is late, someone's pocketbook is affected" – either the customer or the freight company, especially if they lose the customer at a later time.

Increasing congestion can increase the cost of freight in any metropolitan area. One stakeholder mentioned a specific study by the Texas Transportation Institute that determined that the Twin Cities metropolitan area is the fifth fastest growing metro area in the country in terms of congestion (from six yearly hours of delay per auto commuter in 1982 to 43 hours in 2009). One stakeholder noted that drivers for in town deliveries now leave earlier in the day to miss congestion – 5:30 AM and are home at 3:00 PM. Afternoon rush hour now starts earlier and lasts longer than it used to (3:00 PM to 6:30 PM today vs. 4:00 to 5:30 PM in the past).

Stakeholders fear that these kinds of trends may cause companies to choose to relocate outside of the state. To counter congestion in the metro area, stakeholders suggested that MnDOT and Met Council could promote more transit projects and service in the region to get more automobiles off the road, thereby increasing capacity for trucks, and work with the private sector to encourage and coordinate off-time deliveries.

3. Educating the Public and Decision-Makers

Several stakeholders mentioned the need to educate the public and decision-makers about freight. Specifically, the public and decision-makers need to understand freight's vital role in economic development and that freight moves almost everything on which people rely, from food to computers. In addition to this economic perspective, stakeholders mentioned that the public and decision-makers need to know that it is more "green" to have freight – rail, water, and truck – located centrally; if warehouses and distributors are pushed further away from the center of the metro area, then trucks will have to travel farther, thereby adding pollution and congestion to the region.

A couple of stakeholders mentioned that they take a long-term view in their planning; one railroad stakeholder said that their long-range plan extends 50 years. According to this stakeholder, this timeframe does not coincide well with decision-makers/elected officials since they are usually focused on the short-term, namely from election to election. Railroad stakeholders thought that MnDOT and Met Council could help inform the public that the railroads own their own rights of way (ROW) and that they are therefore very concerned about trespassers and safety on their property. Also, railroads want people to understand that they are able to maintain their ROW as they deem necessary; the public does not always understand this when they see trees being trimmed by the railroads near their homes or businesses.

4. Supporting Short Line Rail

A handful of stakeholders agreed that short line railroads "are the lifeblood" of the region's rail service. One stakeholder said that though customers depend on them and, as another stakeholder/customer attested, they perform great service for their customers, they are viewed as a "total nuisance" by the public. According to these stakeholders, decision-makers and the public need to know about the important role short lines play in the region – Class I's have had to

reduce service, and short lines have filled this void. Without them, there would be many more trucks on the road, and associated congestion and pollution as well.

Due to short lines' importance to the region, stakeholders thought that MnDOT and Met Council might be able to help them preserve their rail, ROW, and operations, primarily through public education and the allocation of more resources. Currently, track is being dug up and is not being rebuilt in other areas. Accordingly, rail service and capacity is not only finite, but is shrinking. A couple of stakeholders also expressed frustration that they are hassled when they store their cars on their property – seemingly wherever they park them, adjacent landowners, especially in residential areas, raise objections to their city, and the short lines are asked to relocate their cars.

Stakeholders also hoped that MnDOT and Met Council could work with freight rail, and particularly short lines, to ensure their level of service is continued if and when more passenger rail service comes to the region, particularly during any rail reconstruction/rehabilitation periods. In areas where passenger service will overlap with current freight service, some track will need to be ripped up and rebuilt: short lines operate at 10 MPH on winding, marginally maintained tracks whereas passenger rail will need to operate at least at 30 MPH on streamlined tracks. Though short lines might benefit in the long-term by having new and improved rail, their service might be significantly impacted in the short-term during the reconstruction phase.

5. Preserving Land Use to Support Freight

MnDOT and Met Council could work with cities and counties to preserve access to all freight modes (rail, water, and trucking) and industrial land uses in central locations of the metro area. Several stakeholders noted how important it was to have their businesses – and customers – in the metro area and not far outside of the I-494/694 ring. Having their business within the ring allows them to travel shorter distances. If they were located outside of one part of the ring and had to travel to the other part, the distance traveled would be over twice that when located in the central metro area. However, freight companies and industry, which rely on transportation connections and freight service, are feeling pressure from neighboring businesses and residential areas and, by extension, some cities to re-locate or expand outside of the metro area. [It is important to acknowledge that location decisions are usually market-driven, and that other stakeholders have also made the case for multiple satellite facilities in the much less congested outer suburbs.]

6. Reworking Weight Restrictions

One stakeholder, who often works with containers, asked his colleagues to identify – in their experience – the most pressing issue in freight. Regarding imports, one trucker said that MnDOT and Met Council could help by providing "us pre-approved routes to a scale and warehouse from each rail terminal for import containers that may be too heavy, either gross weight or perhaps just over on a set of axles. The railroads have no way of scaling, transloading, or correctly re-loading imports on site. As much as we would all prefer to have these come into the country correctly loaded and legal in the first place, that is not always the case." Regarding exports, this trucker said that MnDOT could "begin a program more closely to monitor shippers that

purposely and continually overload their containers. Putting all the responsibility on the trucker, without making an attempt to prevent this at its beginning, does very little to solve the problem. The trucker is the only one held accountable for weight issues."

According to this stakeholder, the ocean-importing customer community needs to be able to move overweight containers to a facility to offload them to make the container legal on the roads. Many countries overseas do not have road weight restrictions so it is not uncommon for an overweight container to arrive in the U.S. and the trucker, trying to serve the importer, sometimes hopes they can deliver the container without being caught by the authorities. Weight is not an issue for rail or boat, but it is for trucking. For example, a container is coming over from China to Pennsylvania that is 3,500 lbs. overweight. When it arrives in the U.S., they have to lease a special quad-axle chassis to take it over the road, and that has an extra fee that is passed along to the customer, thereby making freight transport more expensive.