Integrating Freight in Statewide Planning and Programming Study

Steering Committee Team Meeting
March 15, 2013

MEETING AGENDA

I. Introductions

II. Statewide Freight Plan Overview

III. Integrating Freight in Statewide Planning and Programming Study Overview
   a. Role of Steering Committee
   b. Scope of Work (Handout)
   c. Key Deliverables

IV. Review Schedule (Handout)

V. Discuss White Paper #1 on Freight Goals and Objectives (Task 2: Handout)

VI. Discuss District Planner Survey (Tasks 3 and 5)
   a. Coordination with District Planners
   b. Survey Questions (Handout)

VII. Next Steps/Action Items
   a. Freight Data Tech Memo (Task 3)
   b. Scenario Planning Exercise (Task 4)
   c. Freight Friendly Terminology (Task 5; Handout of Draft Outline)
1.0 Project Management

1.1 Communicate frequently with internal project managers (daily and/or minimum of once per week) to update them on study progress, issues, budget and materials for upcoming meetings and/or products. Process, staffing and/or roles and responsibilities will be refined in consultation with the project manager to meet study needs.

1.2 Prepare for, attend and actively participate PMT meetings with the MnDOT and CDM Smith to review administrative, technical, and process issues (including project schedule, budget and scope) throughout project. This task assumes up to eight PMT meetings and/or telephone conference calls with MnDOT project staff.

1.3 Assist in identifying potential individuals that should be involved in discussing programing and project prioritization and how freight information may fit into STIP, HIP and CIMS process.

1.4 Prepare for, attend and facilitate meetings to review technical issues, process issues, findings and recommendations throughout the study (assume up to ten meetings). The timing of these meetings will allow for input, review and decision-making.

1.5 Administer our contract in accordance with MnDOT billing and accounting standards. SRF uses project management software to track and monitor project expenses on a daily basis. These expenses will be monitored and invoices submitted on a monthly basis along with progress reports.

1.6 Ensure the quality of our products. SRF has a long-standing internal quality control process that requires that all products and materials be reviewed by project managers and/or key technical staff.

2.0 Develop Goals and Objectives

2.1 Review policy goals and objectives from MAP21, Minnesota Go, MnDOT Multimodal plan and Minnesota State Highway Investment Plan; identify common goals and objectives of these plans as well as areas that are inconsistent. Identify areas where data and performance measures are available to support these goals and areas where there is limited information and/or measures.

Deliverables:

Preparation of a white paper that identifies how MnDOT plans to address the MAP-21 Freight Provision, and prepare a table/matrix illustrating gaps and/or areas of opportunities and challenges based on the MnDOT Plans listed above. Due Date: March 1, 2013

3.0 Assemble and Review Freight Related Data and Previous Studies

Assemble background materials including freight related data as well as previous and ongoing studies that pertain to MnDOT’s state highway network. Review and summarize the key aspects of these data/studies for further use in integrating freight elements into the future 10-year Highway Investment Plan.
Plan (HIP) as well as identifying ways to harmonize or better sync planning processes with MAP-21 legislation.

3.1 Discuss freight related data with District Planning staff and decision makers and determine what type of freight related data would be valuable in the programming and project prioritization process. Review and assemble freight data related to highway infrastructure. Data may include, but is not limited to, the following:

- Pavement and shoulder widths
- Road restrictions (road and bridge postings – weight and height)
- Rest area locations and truck parking information
- AADT and HCADT
- Roundabout locations
- Oversize and overweight network
- Value of goods moved
- Tons of goods moved
- Major freight generators
- Employment

3.2 Review and assemble relevant information from the following studies:

- IRC update and supplemental freight routes
- Safety rest area studies
- Regional Freight Plans
- Relevant information from CIMS meetings
- Minnesota Go
- Statewide Multimodal Transportation Plan
- Framework of Minnesota State Highway Investment Plan (MnSHIP) – under development

**Deliverables:**

*Memorandum identifying key information that should be considered in future analysis and study recommendations. This memo would include GIS information that identifies freight facilities and other freight attributes as it relates to MnDOT’s transportation network. Due Date: April 15, 2013*

4.0 Freight Scenario Planning

Assist in reviewing freight scenarios prior to scenario planning exercise. Following the exercise, SRF will organize a meeting with MnDOT and its project partners to discuss potential outcomes and results of the scenarios with respect to freight priorities and how these priorities may influence other investments being planned for the transportation system.
**Deliverables:**

Assist in developing the freight scenarios and scenario planning workshop to be held. Upon completion of the scenario planning workshop, develop a white paper summarizing the key findings and discussion points. **Due Date: June 30, 2013**

**5.0 Project Development and Prioritization Process**

Projects are developed in many different ways throughout MnDOT’s organization. The focus of this task is to better understand and articulate the various processes for project development and prioritization and identify freight-related factors that are or should be considered when developing and prioritizing future projects. Note: there are numerous projects that benefit freight movement, but these are not normally characterized in freight terms. Part of this task is to identify where there are opportunities to better communicate the freight benefits of projects.

5.1 Review the various MnDOT programs and types of projects that are funded out of these programs. This will include identifying information that is used to help define and/or prioritize projects and determining the relationship to freight. For example, the IRC mobility target (speed) is evaluated using passenger car equivalents (PCE). This factor (PCE), accounts for the number of trucks on a particular segment of road and the impact on speed/travel time. Understanding and communicating how MnDOT is accounting for freight in the decision processes will help in communicating their overall investment decisions.

5.2 Identify various project types and programs and translate, where appropriate, the various project types/descriptions into language that is more “freight friendly”. For example, pavement replacement projects help improve operational performance and fuel efficiency as well as reduce damage to goods. Develop a guide or translation matrix to help communicate the benefits of different projects in freight friendly language. Test guide and/or matrix with various groups and refine.

5.3 Coordinate, attend and facilitate up to three meetings with district and central office planners to identify the programming process used for establishing STIP and HIP as well as how CIMS flows into this process. Sketch out this process and identify areas where freight has an opportunity interface and integrate input into the process. Identify the type of freight information that could be useful in this decision process.

5.4 From 5.3, identify freight factors or freight information that is not used, but could be used if it were available. Meet with various MnDOT staff to obtain input on the use of this information in the project development process to gauge their acceptance or willingness to use this information. Determine the point in the process where this information should be provided and by whom.

5.5 Meet and provide information to and seek input from the Minnesota Advisory Committee (MFAC) throughout the study process.
**Deliverables:**

*Memorandum identifying key information that should be considered in future analysis and study recommendations.*  
**Due Date: June 30, 2013**

### 6.0 Identify Freight Performance Measures

MnDOT uses performance measures to gauge and evaluate the effectiveness of their programs. Currently there is a lack of performance measures related to freight movement throughout Minnesota. This task would look at establishing some freight performance measures to gain further understanding of the volume, efficiency and effectiveness of freight movement over time.

**Deliverables:**

*Memorandum identifying potential freight performance measures and opportunities to integrate this into other MnDOT planning processes.*  
**Due Date: June 30, 2013**
Integrating Freight in Statewide Planning and Programming Study

<table>
<thead>
<tr>
<th>TASKS</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMT - Project Management Team Meetings</td>
<td>M1</td>
<td>M2</td>
<td>M3</td>
<td>M4</td>
<td>M5</td>
<td>M6</td>
</tr>
<tr>
<td>Steering Committee Meetings</td>
<td>S1</td>
<td>S2</td>
<td>S3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Develop Goals and Objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Assemble and Review Freight Related Data and Previous Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Freight Scenario Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Project Development and Prioritization Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Identify Freight Performance Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Schedule Key:
- Steering Committee Meetings
  - M1: February 15, 2013
  - M2: March 1, 2013
  - M3: March 15, 2013
  - M4: April 12, 2013
  - M5: April 26, 2013
  - M6: May 10, 2013
  - M7: May 24, 2013
  - M8: June 7, 2013
  - M9: June 21, 2013
  - M10: June 30, 2013

- Freight Scenario Planning
  - S1: March 15, 2013
  - S2: May 3, 2013
  - S3: June 18, 2013
  - S4: June 7, 2013

**Deliverables**
- Task 2: Major Freight Policies and Objectives
  - Due: March 1, 2013
- Task 3: Key Freight Data and Information
  - Due: April 15, 2013
- Task 4: Scenario Planning Summary
  - Due: June 30, 2013
- Task 5: Key Information for Project Development
  - Due: June 30, 2013
- Task 6: Freight Performance Measures
  - Due: June 30, 2013

Updated: March 11, 2013
### Table 1: Comparison of 2005 Minnesota Statewide Freight Plan and MAP-21 Required Elements

<table>
<thead>
<tr>
<th>MAP-21 Required Elements</th>
<th>Consistency with 2005 Statewide Freight Plan</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> An identification of significant freight system trends, needs, and issues with respect to the State;</td>
<td><strong>Yes</strong></td>
<td>Chapter 6</td>
</tr>
<tr>
<td><strong>2.</strong> A description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;</td>
<td><strong>Partial</strong></td>
<td>Includes freight policies and strategies in Chapter 8, but excludes discussion of how they will guide investment; various performance measures have been discussed and identified, but further analysis is needed</td>
</tr>
<tr>
<td><strong>3.</strong> A description of how the plan will improve the ability of the State to meet the national freight goals established under section 167 of title 23, United States Code;</td>
<td><strong>No</strong></td>
<td>New requirement of MAP-21 and not applicable to previous Statewide Freight Plan</td>
</tr>
<tr>
<td><strong>4.</strong> Evidence of consideration of innovative technologies and operational strategies, including intelligent transportation systems, that improve the safety and efficiency of freight movement;</td>
<td><strong>Partial</strong></td>
<td>Chapter 8 (Policy Direction 3), but discussion could be expanded</td>
</tr>
<tr>
<td><strong>5.</strong> In the case of routes on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment, and timber vehicles) is projected to substantially deteriorate the condition of roadways, a description of improvements that may be required to reduce or impede the deterioration; and</td>
<td><strong>No</strong></td>
<td></td>
</tr>
<tr>
<td><strong>6.</strong> An inventory of facilities with freight mobility issues, such as truck bottlenecks, within the State, and a description of the strategies the State is employing to address those freight mobility issues.</td>
<td><strong>Yes</strong></td>
<td>Chapters 4 and 8</td>
</tr>
</tbody>
</table>

---

1 While the 2005 Statewide Freight Plan does not single-handedly cover all of the required elements included in the MAP-21 Freight Provisions, MnDOT’s current statewide planning documents; Minnesota GO, the Statewide Multimodal Plan, MnSHIP and the Statewide Freight Plan; together meet these elements. As new plans are developed efforts to account for these goals should be made and organize the information so it is readily apparent.
Table 2: Comparison of MAP-21 National Strategic Freight Goals and Minnesota Freight Related Measures (Draft March15, 2013)

<table>
<thead>
<tr>
<th>National Strategic Freight Goal</th>
<th>Minnesota Go Guiding Principle</th>
<th>Minnesota Statewide Multimodal Transportation Plan</th>
<th>Minnesota State Highway Investment Plan</th>
<th>General Investment Priorities (Draft)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reducing congestion on the freight transportation system</strong></td>
<td>Connects Minnesota’s primary assets—the people, natural resources and businesses within the state—to each other and to markets and resources outside the state and country</td>
<td>Work together to define priority networks for all modes based on connectivity and accessibility.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Improving the safety, security, and resilience of the freight transportation system</strong></td>
<td>Provides safe, convenient, efficient and effective movement of people and goods</td>
<td>Collaborate to provide greater accessibility and more efficient movement of goods and people throughout the Twin Cities metropolitan area.</td>
<td>Twin Cities Mobility: MAP-21 emphasizes reliability of movement on major state highways that move the majority of freight throughout the country. The Twin Cities have the most extensive congestion issues and carry the largest volumes as well as the most freight.</td>
<td>Critical Connections (Interregional Corridor Mobility): This category focuses on reducing delay and travel time on routes between regional trade centers. The NHS system is a priority in MAP-21 and the IRC overlaps the NHS system.</td>
</tr>
<tr>
<td><strong>Improving the state of good repair of the freight transportation system</strong></td>
<td>Strategically fix the system</td>
<td>Work together to improve freight operations and connections for better access to the transportation system.</td>
<td>Travel Speed on Greater Minnesota Interregional Corridors (IRC): Percentage of Greater Minnesota Interregional Corridor miles meeting or close to target speed</td>
<td>Traveler Safety: The Statewide Performance Program includes investments identified as part of the Highway Safety Improvement Program (HSIP).</td>
</tr>
<tr>
<td><strong>Using advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system</strong></td>
<td>% flexible and nimble enough to adapt to changes in society, technology, the environment and the economy</td>
<td>Increase participation of all road authorities in the collaborative safety initiative T2D and explore new opportunities to work together to improve safety for all modes.</td>
<td>None</td>
<td>Bridge Condition: MAP-21 has set a target of 10 percent poor for the bridge deck area condition on NHS roads.</td>
</tr>
<tr>
<td><strong>Reducing adverse environmental and community impacts of the freight transportation system</strong></td>
<td>Recognizes and respects the importance, significance and need for—not just as destinations, but also where people live, work, learn, play, and access services; Minimize resource use and pollution</td>
<td>Implement strategic and sustainable engineering solutions to improve travel safety.</td>
<td>None</td>
<td>Regional Community Improvement Program (RCIP): Investments that respond to regional concerns and collaboration opportunities, opportunities to deliver innovative and creative proposals (destination innovation), Transportation and Economic Development Program (TED), and the Corridor Investment Management Strategy (CIMS) Solicitation.</td>
</tr>
<tr>
<td><strong>Improving the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness</strong></td>
<td>Enhances and supports Minnesota’s role in a globally competitive economy as well as the international significance and connections of Minnesota’s trade centers</td>
<td>Work together to define connectivity for all modes in the region.</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
Impact of Freight in Statewide Planning and Programming Study

Questions for District Planners Regarding Freight

1. What are most important freight related issues in your district?

2. Based on freight movements in your District, what type of transportation improvements would benefit these movements the most?

3. Do you feel freight is adequately represented in your project identification and prioritization process? Have you heard complaints from stakeholders in your District? Explain or provide examples.

4. Does your District take into account freight when identifying and prioritizing future projects in the STIP and HIP? How much weight are these factors given?
   
   a. What existing freight-related data/information is currently used when developing and prioritizing future projects?
   
   b. What existing freight-related data/information is available, but not used when developing and prioritizing future projects?
   
   c. What freight information is not available, but would you like to have?

5. How do you communicate the benefits of projects to stakeholders? Do you distinguish “freight” projects in this process? If so, how? Do you think this is necessary? If so, how would you do this?

6. What kinds of metrics or freight performance measures do you think should be tracked over time to determine how Minnesota is doing with respect to accommodating/moving freight?
<table>
<thead>
<tr>
<th>Investment Category</th>
<th>Allocation of Resources (% of Total Highway Funding)*</th>
<th>Type of Improvement</th>
<th>Years 1-10</th>
<th>Years 11-20</th>
<th>Type of Freight Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Operating Costs</td>
</tr>
<tr>
<td>Pavement</td>
<td>34%</td>
<td>Better Pavement Condition</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10-Ton Routes (Strengthening of Pavements)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bridges</td>
<td>17%</td>
<td>Bridge Replacements (No Posting on Structures)</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Roadside Infrastructure</td>
<td>9%</td>
<td>Improved Signage/Visibility</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replacing Guardrails &amp; Barriers</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rest Area Improvements/Upgrades</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>IRC Mobility</td>
<td>0%</td>
<td>Improved Capacity on Critical Connections (e.g., 2 – 4 lane conversions on IRCs, interchanges, etc.)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Critical Connections</td>
<td></td>
<td>MnPASS Lanes</td>
<td></td>
<td>✓</td>
<td>✓**</td>
</tr>
<tr>
<td>Twin Cities Mobility</td>
<td>10%</td>
<td>Metro Congestion Management Safety Program</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Bicycle</td>
<td>3%</td>
<td>Bicycle (Filling gaps, paved shoulders, wider bridges)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>2%</td>
<td>Pedestrian (ADA infrastructure, sidewalk, etc.)</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>RCIP</td>
<td>10%</td>
<td>RCIPs – Turn lanes, interchanges, intersection upgrades, etc.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Safety</td>
<td></td>
<td>Intersection upgrades, improved lighting, signing, etc.</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Allocation adds to approximately 90-92%; project support requires the remaining amount.

**Improved flow in MnPASS lanes results in improved flow for mixed lanes.