Regional Solicitation Before & After Study Phase II

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Project Team

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Study Objectives

- Refine the approach for monitoring “after” conditions of projects that have received federal transportation funds

- Research Ways to Streamline the Application Process
  - Focus Groups
  - Bicycle and Pedestrian Usage Measure
  - Projects Not Funded by Regional Solicitation
  - Risk Assessment
  - Best Practices for Crash Modification Factors (CMFs)
538

Combined, the 2014, 2016, 2018, and 2020 Regional Solicitations have garnered over 538 grant applications

$1.87 Billion

totaling over $1.87 billion in federal funding requests

$782 Million

Regional Solicitation process has awarded nearly half (42%) of these requests granting over $782 million over the four cycles
Before/After Database Development

Database includes after conditions for:

• Congestion
• Crashes
• RBTN changes
• Transit Ridership
• Connections to
  – Populations
  – Jobs
  – Activity Centers
Measuring Before & After Conditions

• Explored New Methodologies
  – Streamline the reporting process
  – Utilize “Big Data” sets

• Developed How-To Manuals
  – The congestion methodology refined to use StreetLight Data
  – Crash Modifications Factors
  – Developed a tailored crash reporting system (using GIS and MnCMAT data) to monitor after conditions
## Congestion Measure: Use of StreetLight Data

<table>
<thead>
<tr>
<th>2014 Regional Solicitation: Funded Roadway Expansion Projects</th>
<th>AM</th>
<th>PM</th>
<th>All Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH 41 Expansion (Carver County)</td>
<td>14%</td>
<td>29%</td>
<td>20%</td>
</tr>
<tr>
<td>70th St and Robert Trail Roundabout (Dakota County)</td>
<td>6%</td>
<td>15%</td>
<td>7%</td>
</tr>
<tr>
<td>CSAH 42/52 Interchange (Rosemount)</td>
<td>5%</td>
<td>6%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Travel Time Reduction
Safety Measures

• A customized Geographic Information System (GIS) tool was created to automate monitoring and reporting results

• The following is reported for the 2014 Roadway Expansion and Reconstruction/Modernization projects:
  – Total crashes
  – Cost of crashes
  – Fatal and serious crashes
  – Pedestrian/bike crashes
  – Crash rate
  – Fatal and serious crash rate

Developed “How To Guide” for more efficient before and after data collection
Safety: Crash Analysis Tool
## Safety: Crash Analysis Summary

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Total Crashes</th>
<th>Crash Cost</th>
<th>Total K &amp; A</th>
<th>Total Ped &amp; Bike</th>
<th>Crash Rate*</th>
<th>K &amp; A Crash Rate**</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAH 3/Lake Street Reconstruction (Hennepin County)</td>
<td>-40</td>
<td>-$2.5M</td>
<td>-2</td>
<td>-2</td>
<td>-7.31</td>
<td>-32.61</td>
</tr>
<tr>
<td>CSAH 31/Pilot Knob Road (City of Eagan)</td>
<td>-31</td>
<td>-$400K</td>
<td>0</td>
<td>+1</td>
<td>-4.07</td>
<td>0</td>
</tr>
<tr>
<td>CSAH 65/White Bear Ave Reconstruction (Ramsey County)</td>
<td>-26</td>
<td>-$97K</td>
<td>0</td>
<td>+1</td>
<td>-1.55</td>
<td>0</td>
</tr>
</tbody>
</table>

*Crash rate is per million vehicle miles traveled

**K&A is per 100M vehicle miles traveled
Projects Not Awarded RS Funds

- **42%** of the funding requests fulfilled over past four cycles; amounting to **$782** million
- **313** projects remain unfunded
- Some projects move forward without Regional Solicitation funding, often projects are being scaled back (e.g., fewer amenities/enhancements) or delayed until funding is secured
- Applications that did not receive funding for a given solicitation but re-submitted at a future Solicitation had varying success in their resubmittal efforts, with approximately **29%** eventually receiving funding.
Non-Motorized Summary

• Total of 74.4 miles of RBTN bikeway miles have been built or programmed using RS funds

• Region could consider changing the bicycle/pedestrian measures by incorporating a scoring criterion that considers the project’s design and its ability to improve one’s comfort level and safety

• This approach is used by other MPOs (e.g., Dallas and St. Louis)
Risk Assessment Summary

• Since 2014, 25 projects have been delayed or not built
  – 14 program year extensions
  – 11 withdrawals
  – Total includes HSIP funded projects

• Program year extensions are requested to better align awarded projects with other projects.
  – 50% of the program year extensions were requested to help align a project’s delivery/construction schedule with other programmed projects in the area

• There is no need to eliminate the risk assessment measure
Crash Modification Factors

• Applicants are currently using a wide range of CMFs to determine the safety benefits for similar projects
  – Result has led to challenges in scoring projects.

• Recommend using the CMF Guide for future Regional Solicitation and HSIP applications
  – Additional training or directions on how to use this guide will be provided
Key Takeaways

• Provide clarity on the goals of the Regional Solicitation program
• Funding is being spread across too many funding categories, which may make it unclear as to what the Regional Solicitation process is trying to accomplish
• It is also unclear how some of the measures relate to the funding categories
• There may be a need for greater transparency on how projects are scored and selected
• Continue to reevaluate the process to ensure funds are going towards projects with the greatest regional benefit
Questions?