Highway – Railroad Grade Crossing Safety Project Selection

Slides from Julie Whitcher P.E., Rail Safety Engineer’s Presentation

Presented to the SW ATP on June 22, 2018 by Lindsey Bruer, D8 Planning Director
Process Overview

• Railroad Grade Crossing Improvement Project Process Change
  • OFCVO Staff Presented at the October SW ATP Meeting

• Formed a Statewide Work Group to Review:
  • Program Goals
  • Statewide vs. Area (ATP) Process
  • Program Funding Priorities
  • Investment Goals
Program Receives Section 120 Funds - $6,000,000 Annually, Statewide

1. Program Support:
   - Annual Inventory Data Collection - $200,000 per year
   - Statewide Action Plan – one time expenditure, up to $500,000

2. Consolidation of Crossings: Up to 50% of program funds
   - Will likely be less than 50% of program funds, unless a large project is funded
   - Eliminate local match as incentive for closure (state funded)

3. Replace Malfunctioning, Obsolete or Antiquated Systems: 25 - 50% of program funds

4. Evaluate & Revise Grade Crossings to Right Type of Control: 25 – 50 % of program funds
### SELECTED RISK FACTORS

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td><strong>Volumes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway AADT*</td>
<td>2500</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Total Trains per Day *</td>
<td>10</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Volume Cross Product *</td>
<td>20,000</td>
<td>Unlimited</td>
</tr>
<tr>
<td><strong>Speeds</strong></td>
<td></td>
<td></td>
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<tr>
<td>Roadway Speed Limit</td>
<td>45</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Maximum Timetable Speed *</td>
<td>31</td>
<td>Unlimited</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Mainline Tracks *</td>
<td>2</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Skew</td>
<td>≥15°</td>
<td></td>
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<tr>
<td><strong>Surroundings</strong></td>
<td></td>
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</tr>
<tr>
<td>Distance to Nearby Intersection</td>
<td>1 foot</td>
<td>99 feet</td>
</tr>
<tr>
<td>Distance to Nearest Crossing</td>
<td>0.5 mile</td>
<td>1 mile</td>
</tr>
<tr>
<td>Clearing Sight Distance</td>
<td>Any Quadrant Fails</td>
<td>Any Quadrant Fails</td>
</tr>
<tr>
<td>Approaching Sight Distance</td>
<td>Any Quadrant Fails</td>
<td>Any Quadrant Fails</td>
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* Data is also an input in the USDOT Accident Prediction Model
New Solicitation Steps

1. OFCVO pre-screens eligible locations based on risk factors and a preliminary site review for Grade Crossing Control Locations - May/June, 2019

2. Complete list of Grade Crossing Control Locations posted on MnDOT website, indicating which locations are eligible – June, 2019

3. Solicitation opens – July/August, 2019

4. RDCs, MPOs, Counties, Cities, Railroads and MnDOT Districts notified of solicitation

5. Local Road Authority or Railroad submits prioritized list of project locations (if multiple) – August, 2019

6. Solicitation closes – August, 2019

7. Submitted projects are posted to website

8. Project scoring begins

9. RDCs, MPOs, Counties, Cities, Railroads and MnDOT Districts are notified of selected projects – February, 2020
MnDOT OFCVO Project Scoring Process

1. Projects ranked
2. Field diagnostics performed
3. Initial project recommendations selected
4. MPOs notified of project funding recommendations, for inclusion in MPO TIP
5. MPO comment period
Solicitation Timeline

May-June
OFCVO Prescreens eligible locations list

July-August
Solicitation is Open

September-October
OFCVO performs field diagnostics

November
Project Scoring

December
Initial Project recommendations made

January
MPO comment period

February
Final Project recommendations made
Differences from Previous Process

• Local Road Authorities & Railroads have more control over projects and timing
  • Locals submit requests for funding

• Timing aligns with ATP project selection processes

• 10% local funding match is required
Questions
Thank you!

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