Project Overview

• Goal: End pedestrian deaths and serious injuries on roads in the region

• Approach: Safe systems framework and data-driven, looking at both crash history and systemic risk factors

• Outcomes:
  • Risk assessment maps for the region
  • Data-driven prioritization metric for roadways Regional Solicitation funding category
  • Additional policy and program recommendations
  • Countermeasure guidance for key crash patterns in the region
  • All recommendations will be grounded in Safe Systems, acknowledging the needs of all road users
Draft Goal and Principles for Regional Pedestrian Safety Action Plan

**Overall goal**
- To reduce and ultimately eliminate pedestrian deaths and serious injuries from traffic crashes in the region

**Principles to guide this work**
- Use a safe system approach
- Ensure equity is incorporated into the work
- Make roadway and environment changes that encourage and support walking with safe and convenient crossings
A safe systems framework helps us proactively identify high risk areas and plan for roadway solutions that meet the needs of ALL road users.

- People make mistakes
- Human bodies are vulnerable
- Deaths or serious injuries are not acceptable
- Redundant safety measures create layers of safety
- Responsibility is shared
- Infrastructure is key
Project Timeline

• Kick-Off – Fall 2020
• State of Practice Review – Fall 2020
• Retrospective Crash Analysis – Winter 2020
• Systemic Crash Analysis and Network Screen - Spring 2021
• Develop Regional Solicitation Pedestrian Safety Criteria – Spring 2021
• Work with TAC/TAB and other stakeholders to refine Regional Solicitation criteria – Summer 2021
• Develop Policy and Programmatic Recommendations - Fall 2021
• Develop Countermeasure Recommendations – Fall 2021
• Draft Report – Winter 2022
Key Findings so far

- Based on crash history
Geographic Distribution
Pedestrian Crash Severity is Higher in Suburban Counties

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>CRASHES</th>
<th>Severe (KA)</th>
<th>Non-Severe (BCO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anoka</td>
<td>115</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Carver</td>
<td>18</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Dakota</td>
<td>138</td>
<td>46</td>
<td>92</td>
</tr>
<tr>
<td>Hennepin</td>
<td>1555</td>
<td>318</td>
<td>1237</td>
</tr>
<tr>
<td>Ramsey</td>
<td>708</td>
<td>152</td>
<td>556</td>
</tr>
<tr>
<td>Scott</td>
<td>31</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Sherburne</td>
<td>10</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Washington</td>
<td>55</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>Wright</td>
<td>9</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

- Hennepin and Ramsey have the highest numbers of both all severities and severe crashes.
- Crash severity in other counties is generally higher.
80% of Severe Pedestrian Intersection Crashes and 50% of Mid-Block Crashes Occur Near Transit Stops

Severe (KA) Intersection Crash Distribution by Transit Stop Count

- 21% None/Unknown
- 79% 1-2
- 25% 3-4
- 26% 5-8
- 19% 9+
- 9% 9+

Transit stops are a good proxy for high pedestrian exposure. There is no evidence that transit causes the crashes.

Intersections with transit nearby (within 500') comprise fewer than 25% of all intersections.
Severe Pedestrian Crashes Disproportionately Occur on Minor Arterial Roadways

- 64% of severe pedestrian crashes happen on Minor Arterials, which represent only 14% of the roadway network.

- 11% of severe pedestrian crashes happen on Local/Residential Roads (74% of the network).

- Functional class is a good proxy for roadway attributes linked to risk (e.g., vehicle speeds, volume, number of lanes)
  - We're looking at these other variables in Task 5.
Black and Native Communities Disproportionately Harmed by Pedestrian Crashes

- 14% of pedestrian deaths were Black people (vs. 9.6% of population)
- 2.3% of pedestrian deaths were Native people (vs. 0.48% of population)
- Tracts with higher shares of Black or Native residents have more pedestrian crashes
- Tracts with higher shares of white residents have fewer pedestrian crashes
- May be linked to exposure, but closely mirrors historic patterns of disinvestment and racially biased lending practices

Crash Severity Distribution by Black Population Proportion

<table>
<thead>
<tr>
<th>Black Population Proportion</th>
<th>Non-Severe (BCO)</th>
<th>Severe (KA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 1.15%</td>
<td>172</td>
<td>57</td>
</tr>
<tr>
<td>1.16% - 3.75%</td>
<td>251</td>
<td>66</td>
</tr>
<tr>
<td>3.76% - 7.5%</td>
<td>281</td>
<td>75</td>
</tr>
<tr>
<td>7.51% - 15%</td>
<td>562</td>
<td>139</td>
</tr>
<tr>
<td>&gt;15%</td>
<td>1373</td>
<td>285</td>
</tr>
</tbody>
</table>

Note: this analysis is based on demographics of the Census tract where the crash occurred, not on the crash victim’s actual race.
Next Steps
Systemic Analysis

• Identify underlying systemic risk factors associated with crashes

• Screen the roadway network, and produce maps to help:
  • Prioritize regional solicitation funding
  • Allow communities to better understand local safety issues
  • Support other safety recommendations and initiatives (e.g., countermeasure selection)

• Develop funding prioritization criteria based on network screen
Next Steps

• Draft Systemic Analysis – Spring 2021
• Draft/Final Regional Solicitation Criteria – Spring/Summer 2021
• Policy, Programmatic, and Countermeasure Recommendations – Fall 2021
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