Project Overview

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

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

• Outcomes:
  • Risk assessment maps for the region
  • Data-driven prioritization metric recommendation for Regional Solicitation funding
  • Countermeasure guidance for key crash patterns in the region
  • Additional policy and program recommendations
  • All recommendations will be grounded in Safe Systems, acknowledging the needs of all road users
Policy Context for Doing This Work

• The Minneapolis-St. Paul region tends to have over half of the pedestrian deaths in Minnesota, a much higher share than we see for all traffic fatalities where we average about 30% of the state total.

• Our region needs to take a bigger role in helping to address pedestrian safety

• Both the state and the region set annual targets for fatalities and serious injuries as part of our federally-required safety performance measures
  • These targets on our way to zero deaths and serious injuries are aggressive and require additional focus and action to reach
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 system 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
• Final Report – Early 2022
Key Findings so far

- Based on crash history for 2016-2019
Geographic Distribution
Pedestrian Crash Severity is Higher in Suburban Counties

- Hennepin and Ramsey have the highest numbers of both all severities and severe crashes
- Crash severity in other counties is generally higher

### SEVERE CRASH PROPORTION BY COUNTY

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Severe (KA) | Non-Severe (BCO)
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

- None/Unknown: 21%
- 1-2: 25%
- 3-4: 26%
- 5-8: 19%
- 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 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

Fatalities only, by individuals
- 16.5% of pedestrian deaths were Black people (vs. 9.6% of population)
- 3.7% of pedestrian deaths were Native people (vs. 0.48% of population)

All crashes, by geography
- 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

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

- Identify underlying systemic risk factors associated with crashes

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

- Develop funding prioritization criteria based on network screen
Next Steps

• June: Review proposed Regional Solicitation measure with Technical Advisory Group (TAG)
• July/Aug: Bring proposed measure through committees for consideration; review TAG comments on draft systemic analysis
• Fall: Countermeasure, policy & programmatic recommendations
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