

# REGIONAL PEDESTRIAN SAFETY ACTION PLAN



**TAC PLANNING**

April 8, 2021

# 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

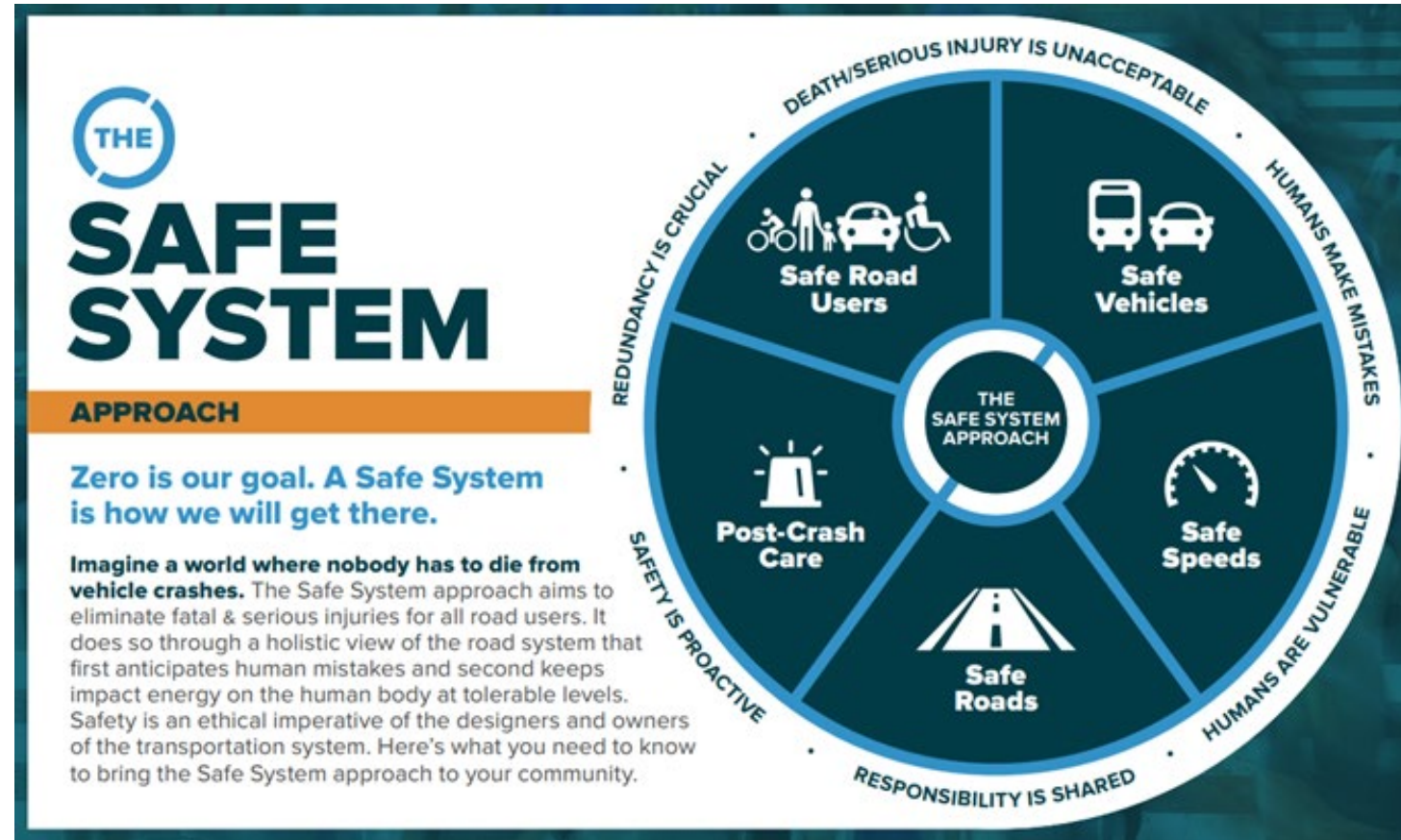
- To reduce and ultimately eliminate pedestrian deaths and serious injuries from traffic crashes in the region

## 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



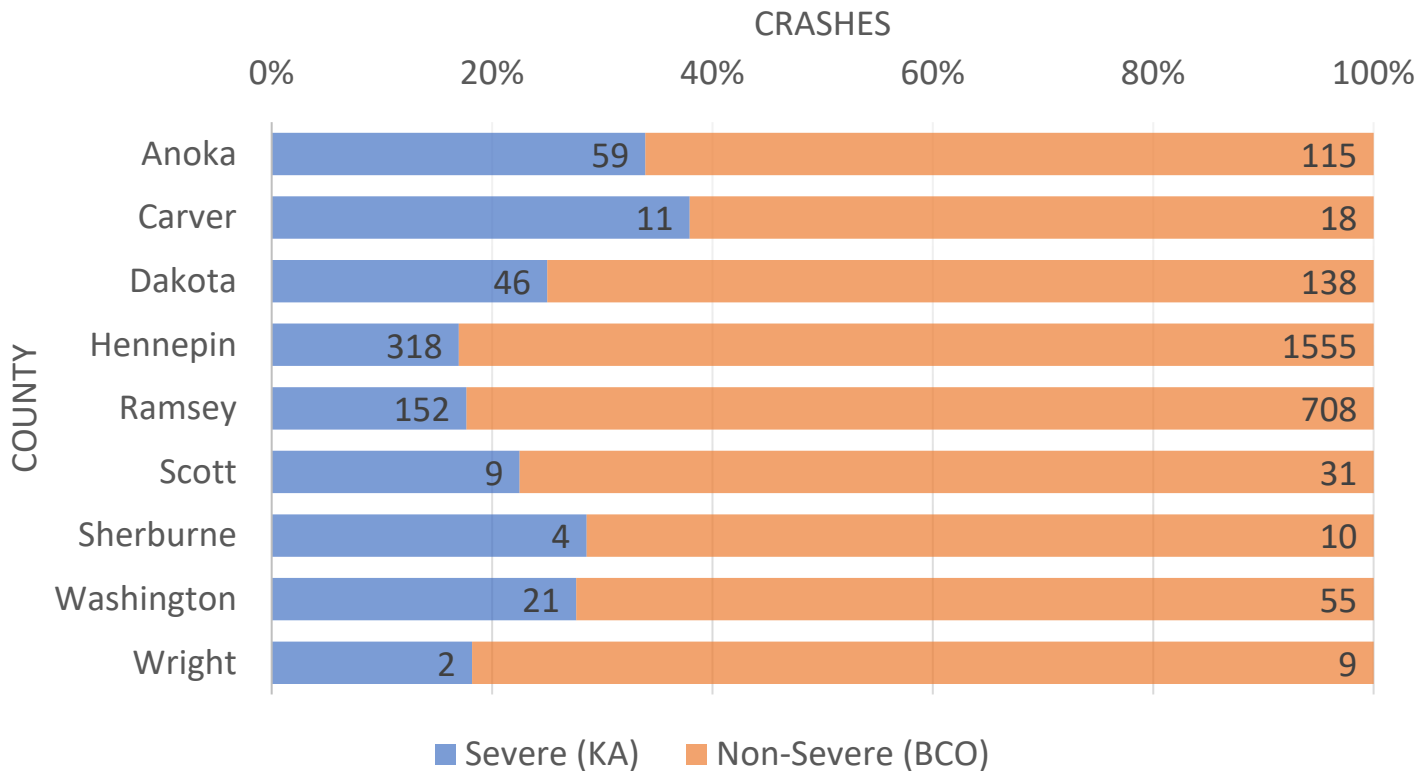
# Key Findings so far

- Based on crash history



# Geographic Distribution Pedestrian Crash Severity is Higher in Suburban Counties

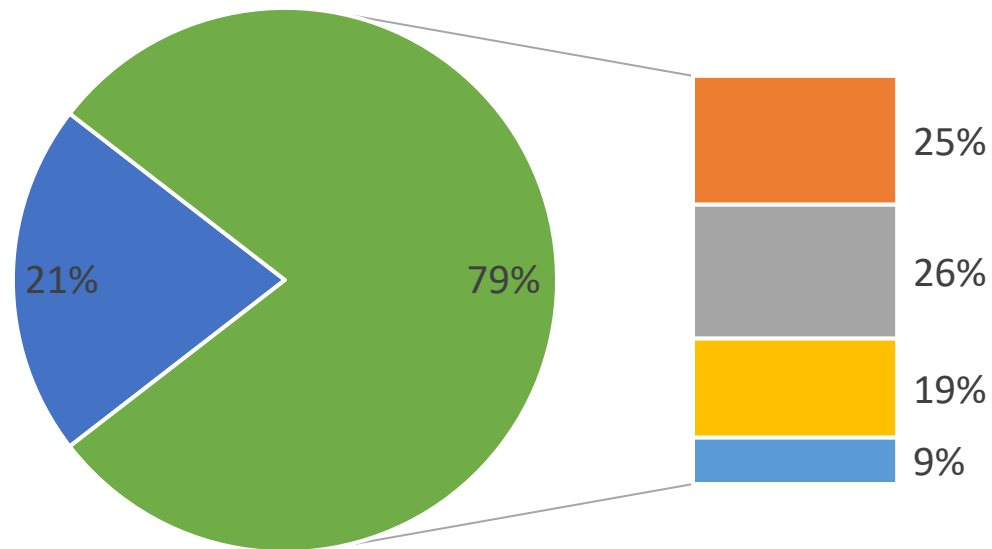
SEVERE CRASH PROPORTION BY COUNTY



- 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



■ None/Unknown ■ 1-2 ■ 3-4 ■ 5-8 ■ 9+

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

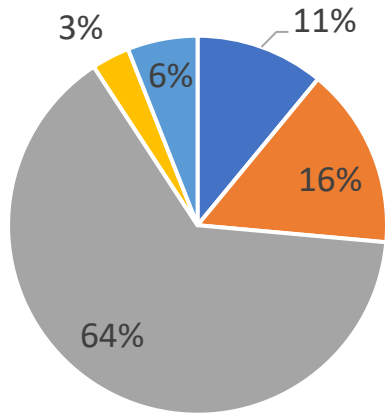
Intersections with transit nearby (within 500') comprise fewer than 25% of all intersections.





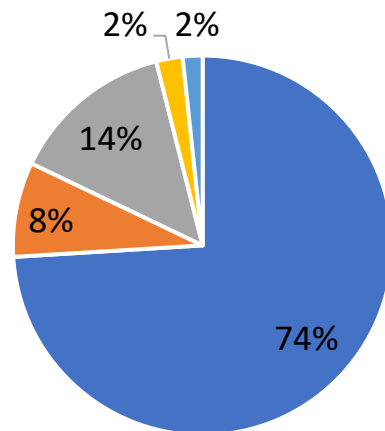
# Severe Pedestrian Crashes Disproportionately Occur on Minor Arterial Roadways

Severe (KA) Crash Distribution by Max Functional Classification (Intersection)



- Local & Other/Unknown
- Major Collector
- Minor Arterial
- Principal Arterial - Interstate/Freeway/Expressway
- Principal Arterial - Other

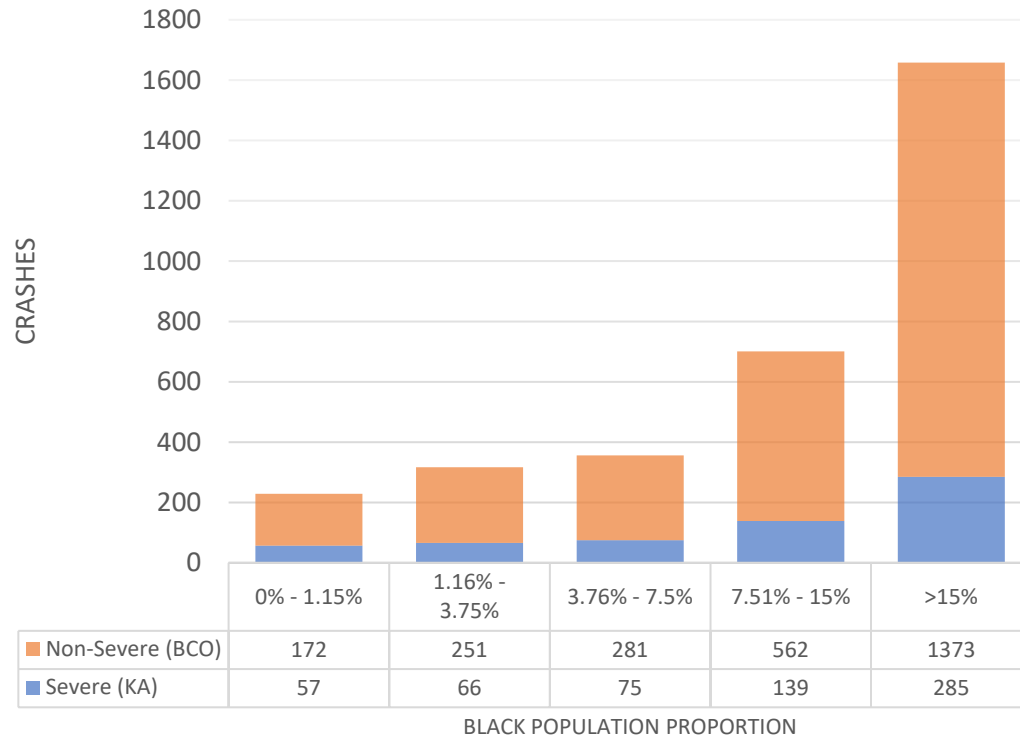
Centerline Miles Distribution by Functional Classification (7 County)



- 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

Crash Severity Distribution by Black Population Proportion



- 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**

# Next Steps



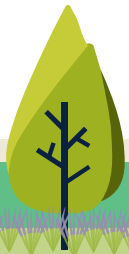
# Systemic Analysis

- 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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