

Self-Reported Speeding Behaviors Minnesota State Fair

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D2D: The Driven to Discover Research Facility

- Two data collection sessions at Minnesota State Fair
 - 8/28/21 & 8/29/21

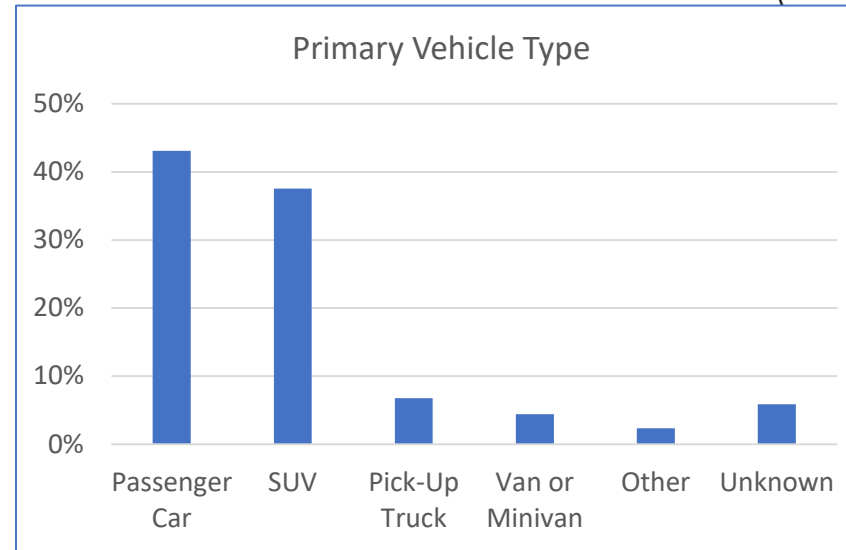


336 survey participants

- Gender
 - Female = 57.5%
 - Male = 35.8%
 - Gender Variant/Non-conforming = 1.5%
 - Unknown/missing = 5%
- Age
 - Mean Age = 38.2 (*SD* = 17.43); 15-77
 - Mean Driving experience = 22.36 yrs (*SD* = 17.70)
- Ethnicity
 - Not Hispanic or Latino = 90.3%
 - Hispanic or Latino = 4.4%
 - Unknown = 5.3%
- Race
 - White = 82%
 - Asian = 6%
 - Multiracial = 3%
 - Black or African American = 2%
 - American Indian or Alaska Native = 1%
 - Other = 1%
 - Unknown = 6%
- Education
 - Some high school = 5.9%
 - High school diploma or GED = 12.6%
 - Some college, No degree = 17.3%
 - Associate's degree = 7.03%
 - Bachelor's Degree = 30.8%
 - Graduate or Professional Degree = 21.4%
 - Unknown = 5%

Participant Demographics

- 32 participants out of state
 - (WI, IL, NE, PA, NC, IA, TN)
- 285 Minnesotans
 - 77 cities and townships
 - 82% Urban (pop. >10k)
 - 8% Small Town (pop. >2.5k <10k)
 - 9% Rural (pop. <2.5k)
 - 83% 7-County Metro
 - 17% Greater Minnesota

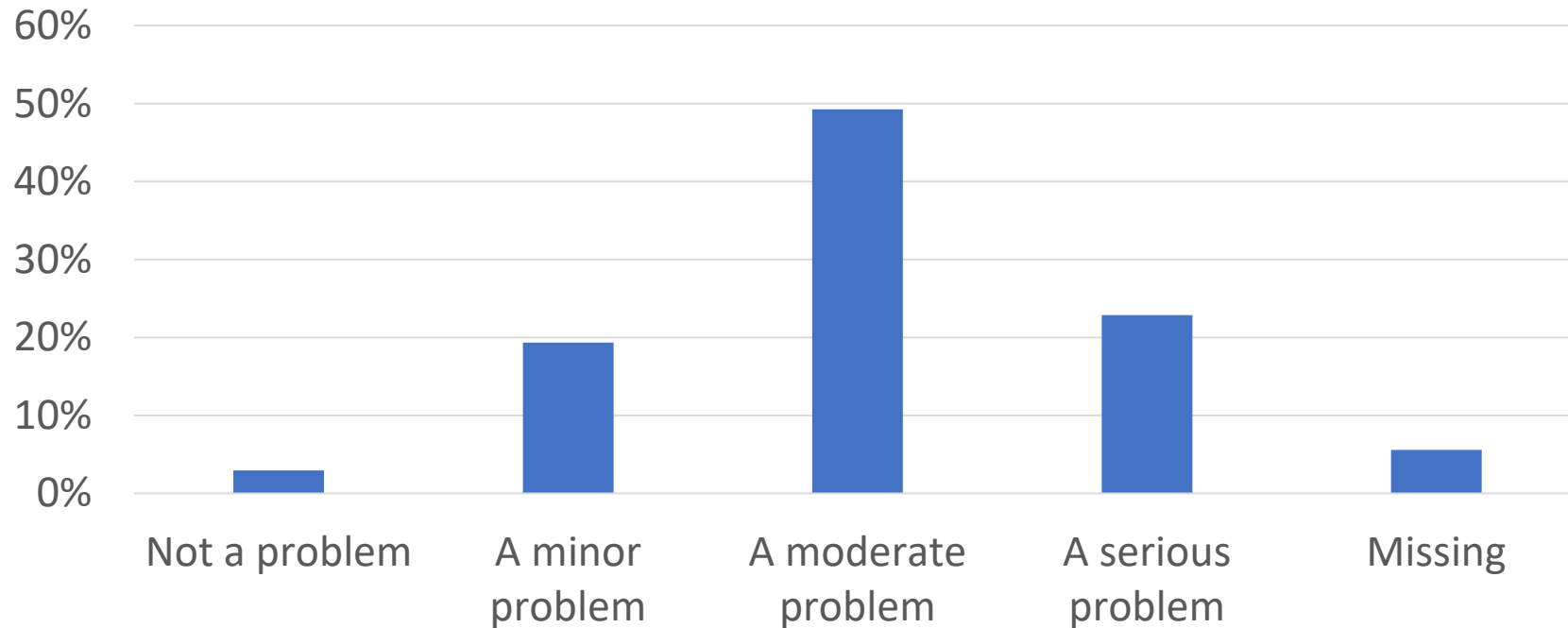


Last 3 Years

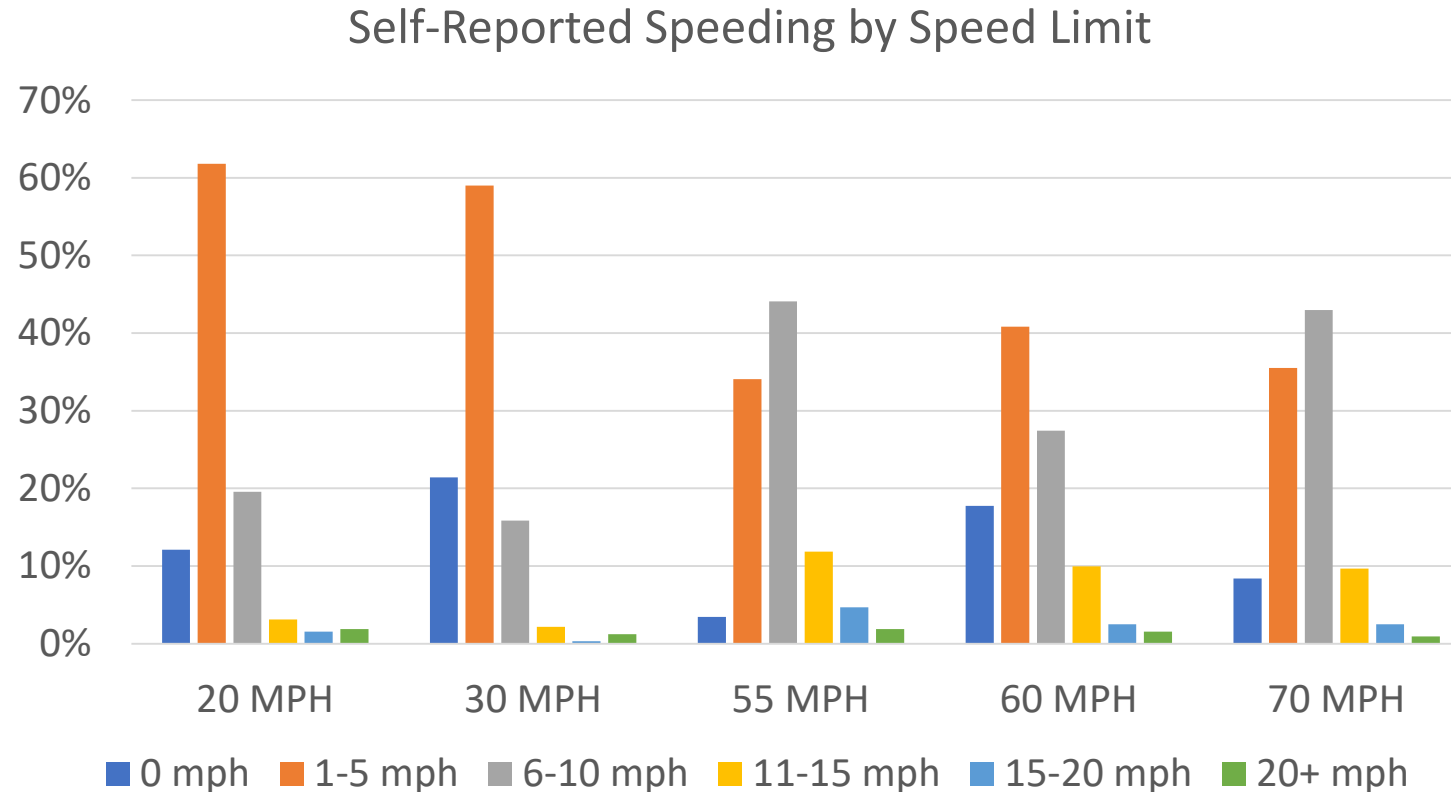
- 4.3% involved in minor at-fault crash
- 2.3% involved in major at-fault crash
- 10.9% received speeding ticket
- 1.2% citation for distracted or dangerous driving
- 0.6% citation for DUI

Speeding Problem Perceptions

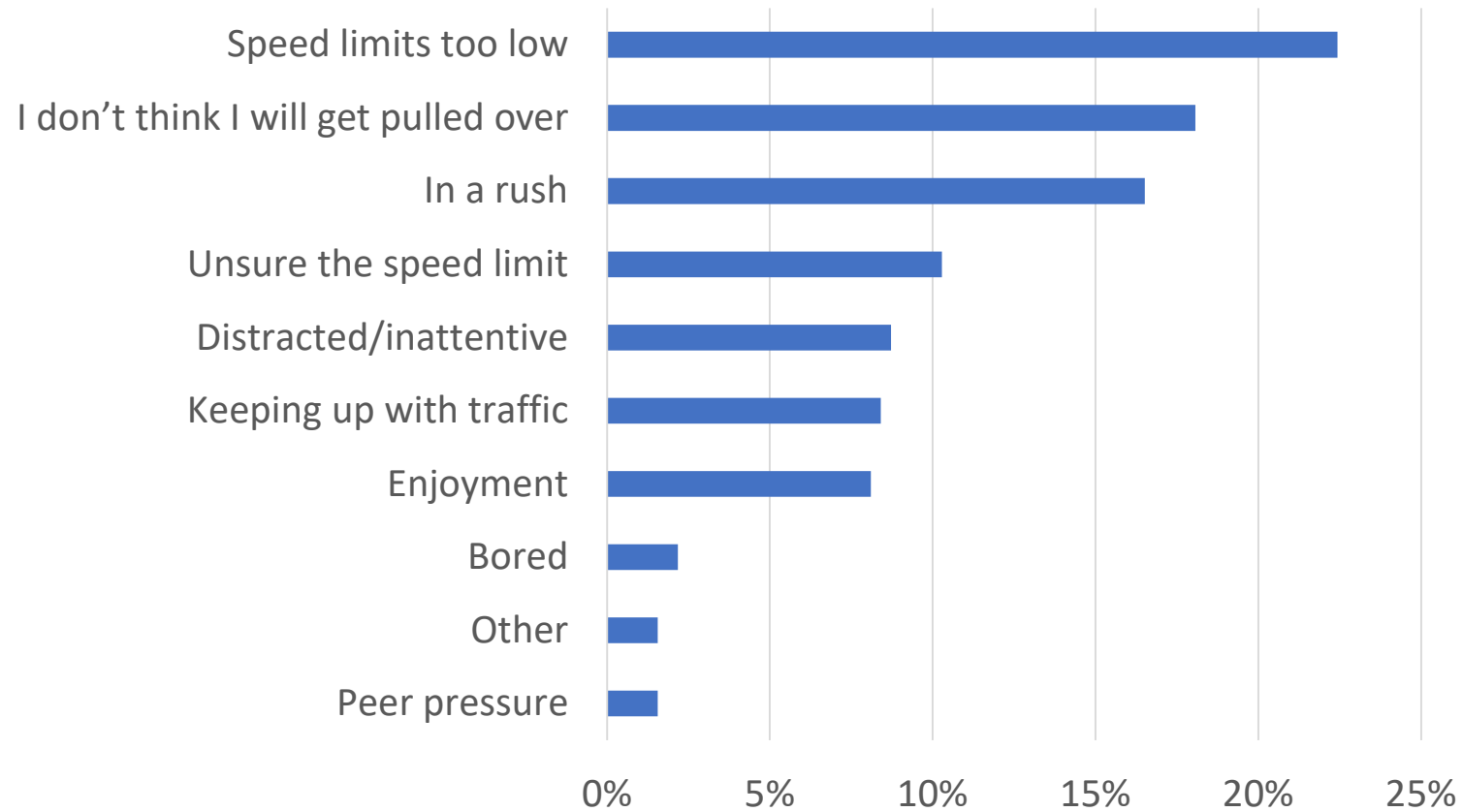
How big of a problem is speeding as it relates to transportation safety?



Self-Reported Speeding Behavior

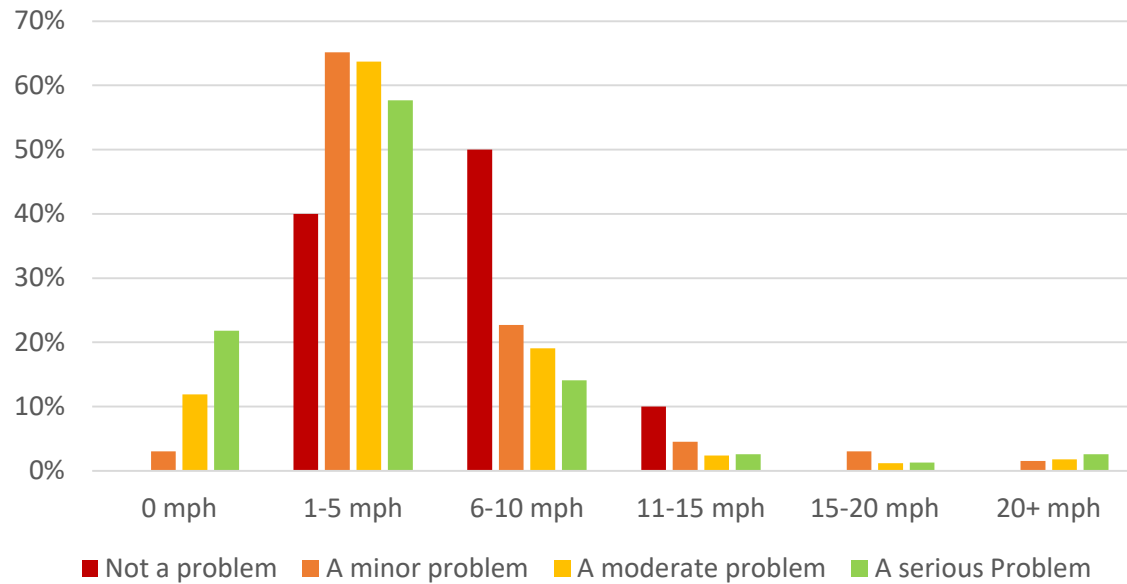


Reasons for Speeding

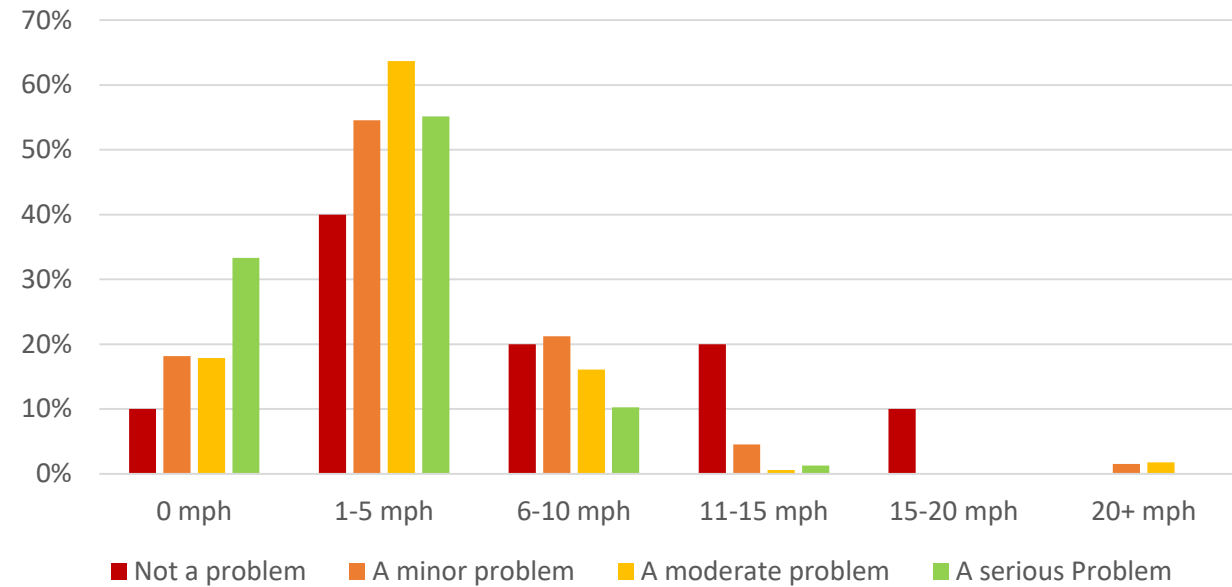


Speeding by Perceived Problem: 20/30 MPH

How many miles over the speed limit do you typically drive on a neighborhood street with a speed limit of 20 mph?

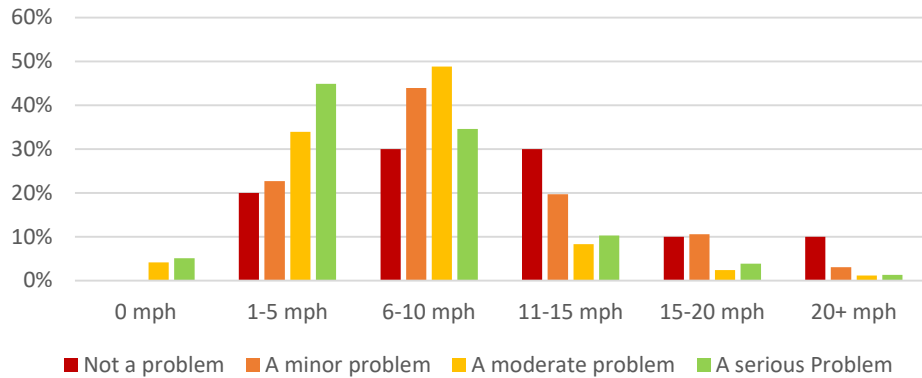


How many miles over the speed limit do you typically drive on a neighborhood street with a speed limit of 30 mph?

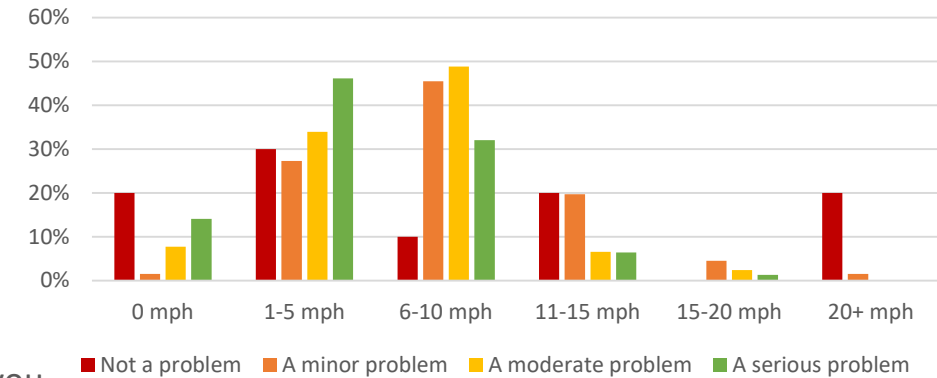


Speeding by Perceived Problem: 55/60/70 MPH

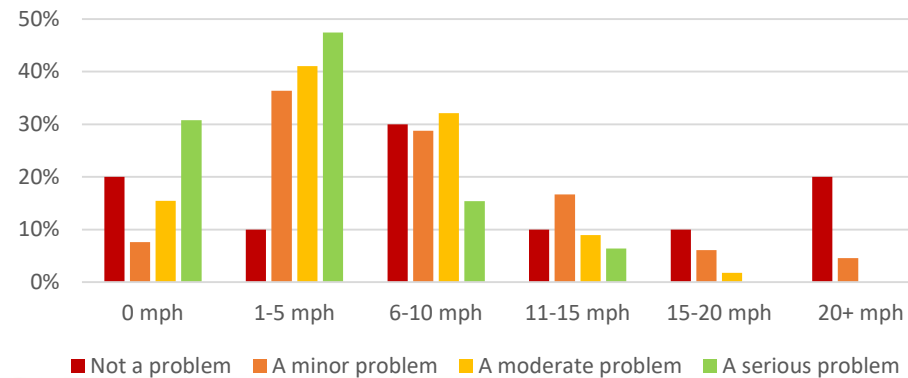
How many miles over the speed limit do you typically drive on a highway with a speed limit of 55 mph?



How many miles over the speed limit do you typically drive on a freeway with a speed limit of 70 mph?

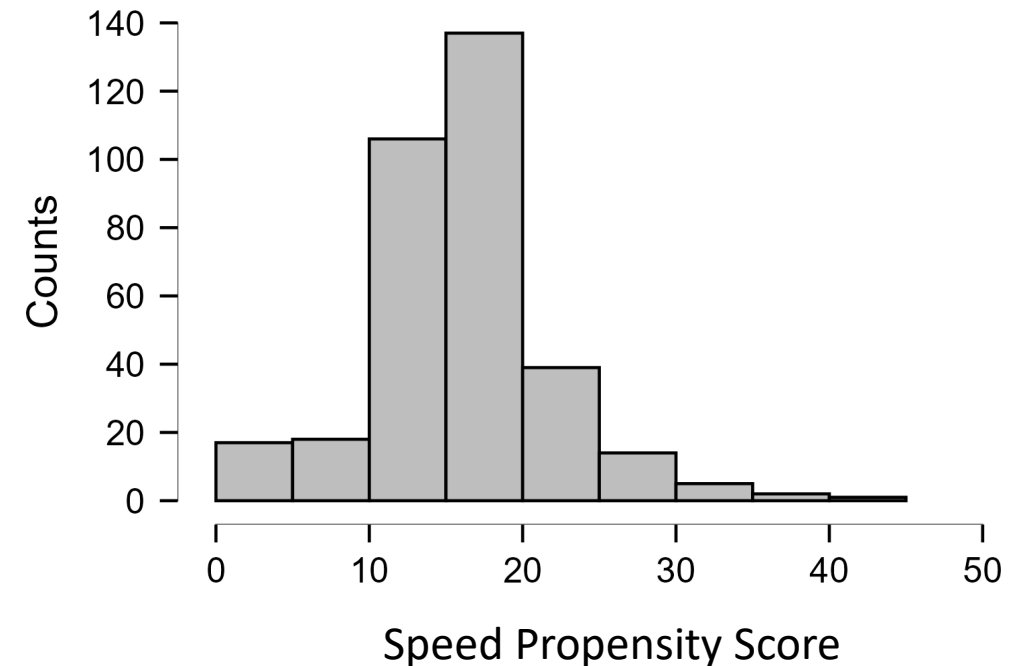


How many miles over the speed limit do you typically drive on a country road with a speed limit of 60 mph?



Speed Propensity

- Self-reported speeding converted into a propensity score
 - Each speed bin assigned a number from 1-6
 - Sum of speed scores across all categories
- Mean speed propensity score = 16.38 ($SD = 6.2$)
 - Min = 0; Max = 42



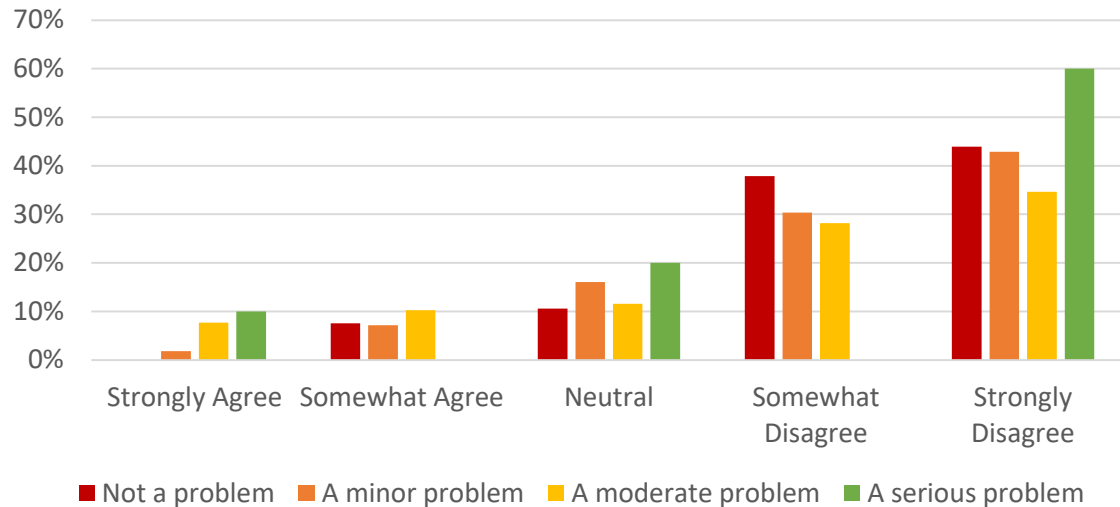
Predicting Speed Propensity

- More numerous reasons for speeding tended to result in higher speeding propensity scores
- Agreeing that speeding is a problem resulted in lower speeding propensity
- Age protective, resulting in lower speeding propensity with greater age

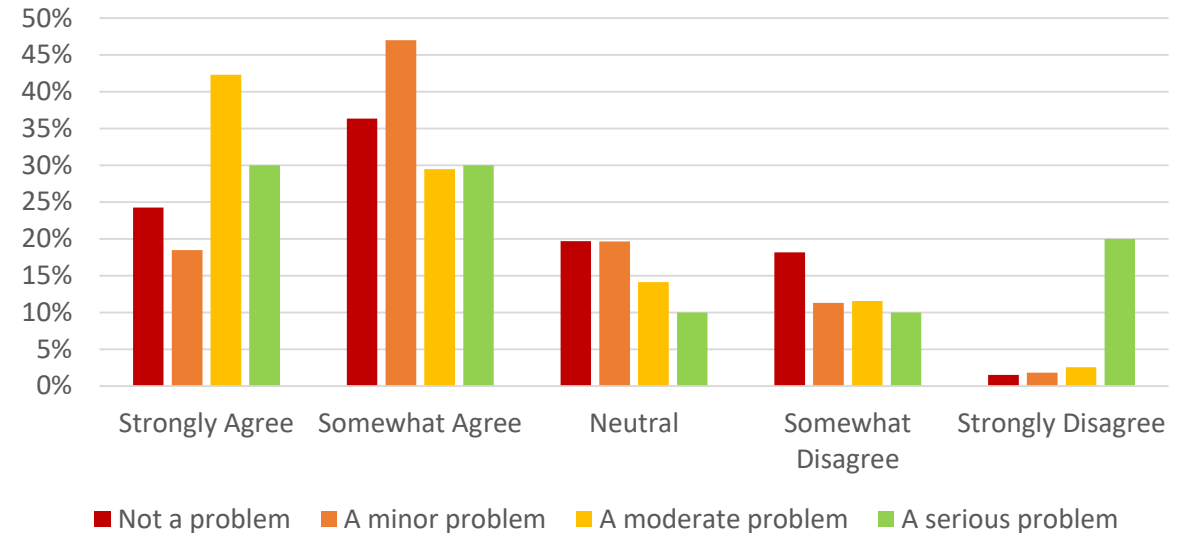
	β	SE	<i>p</i>
Speed reasons	1.086	0.237	<.001
Speed is a problem	-1.539	0.350	<.001
Age	-0.048	0.015	0.002

Perceived Law Enforcement on Highway by Speed Problem

How strongly do you agree that law enforcement would pull you over for going 5 over on the highway?

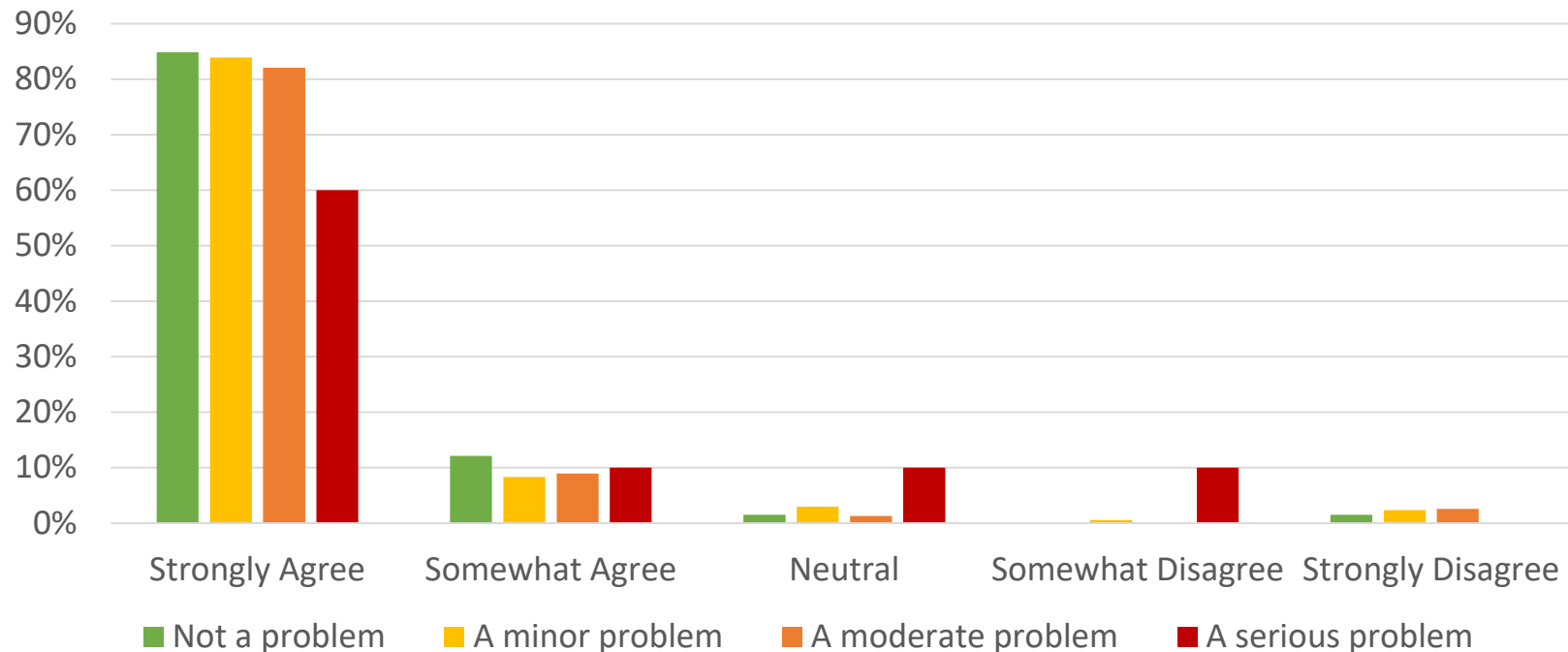


How strongly do you agree that law enforcement would pull you over for going 10 over on the highway?



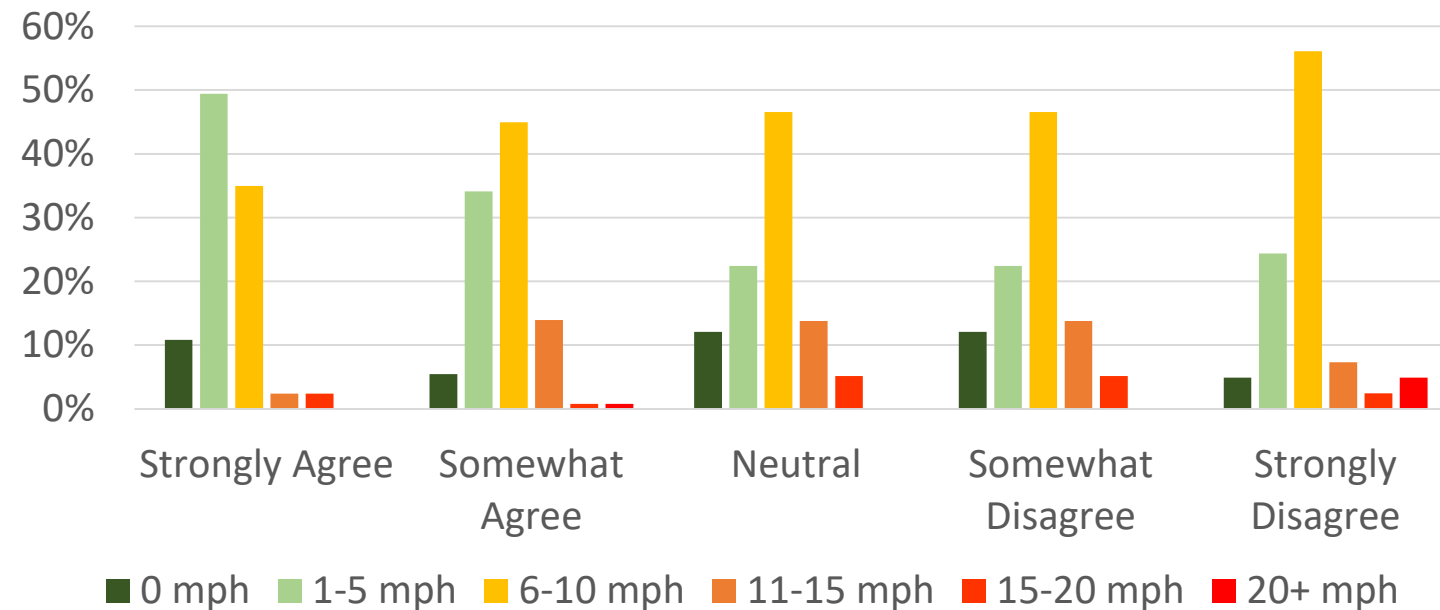
Perceived Law Enforcement on Highway by Speed Problem

How strongly do you agree that law enforcement would pull you over for going 20 over on the highway?



Perceived Law Enforcement on Highway by Speed Problem

Self-Reported Speeding in 70 MPH by Perceived Chance of Law Enforcement at 10 over



Speed limiters*

- Voluntary installation
 - 9% Favor
 - 19% Neutral
 - 65% Oppose
- Manufacturer installation
 - 14% Favor
 - 21% Neutral
 - 59% Oppose
- Government mandate
 - 12% Favor
 - 18% Neutral
 - 64% Oppose

*5.5% missing



Discussion

- The seriousness of our speed-related fatal crashes in Minnesota does not appear match public perception of the problem
- Few drivers report that they typically follow the speed limit on any roadway
 - Greater speeding reported with greater speed limits
- Those that speed the most tend to least believe that speeding is a problem for safety
 - Tend to have a disregard for the speed limit
- Perception of enforcement does appear to motivate behavior
 - Some perceptions of enforcement may indicate frustration with the lack of speed enforcement rather than a free pass to speed

Future Directions

- Examine regional differences in speeding behaviors
 - Examine vehicle differences
- Determine what motivates people to follow the speed limit
 - Rather than capture why they violate
- Further examine speed limiters within manufacturer installations
 - CAV implications

Thank you!

Discussion
Questions

The logo for HumanFIRST, featuring a stylized red and white circular emblem with four curved segments meeting at the center.

HumanFIRST

The University of Minnesota logo, a red block letter 'M' with a white outline.

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