

MINNESOTA TOWARD **ZERO** DEATHS

TZD Update

Association of Minnesota Counties Transportation & Infrastructure Policy Committee

March 3, 2022



Mike Hanson, Director, DPS Office of Traffic Safety
Brian Sorenson, MnDOT State Traffic Engineer

Agenda

1. Fatality Update
2. TZD 2.0

An Unfortunate National Trend Increased Speed and Fatal Crashes

State	2019-2021 PRELIMINARY 2-Year % Increase
Vermont	55%
South Dakota	43%
Louisiana	37%
Minnesota	37%
Utah	33%
Illinois	31%
Connecticut	30%
Montana	30%

 CAR AND DRIVER

U.S. Roads in 2021 Are Most Dangerous in a Decade, Says NHTSA

USNews

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US Road Deaths Rise at Record Pace as Risky Driving Persists

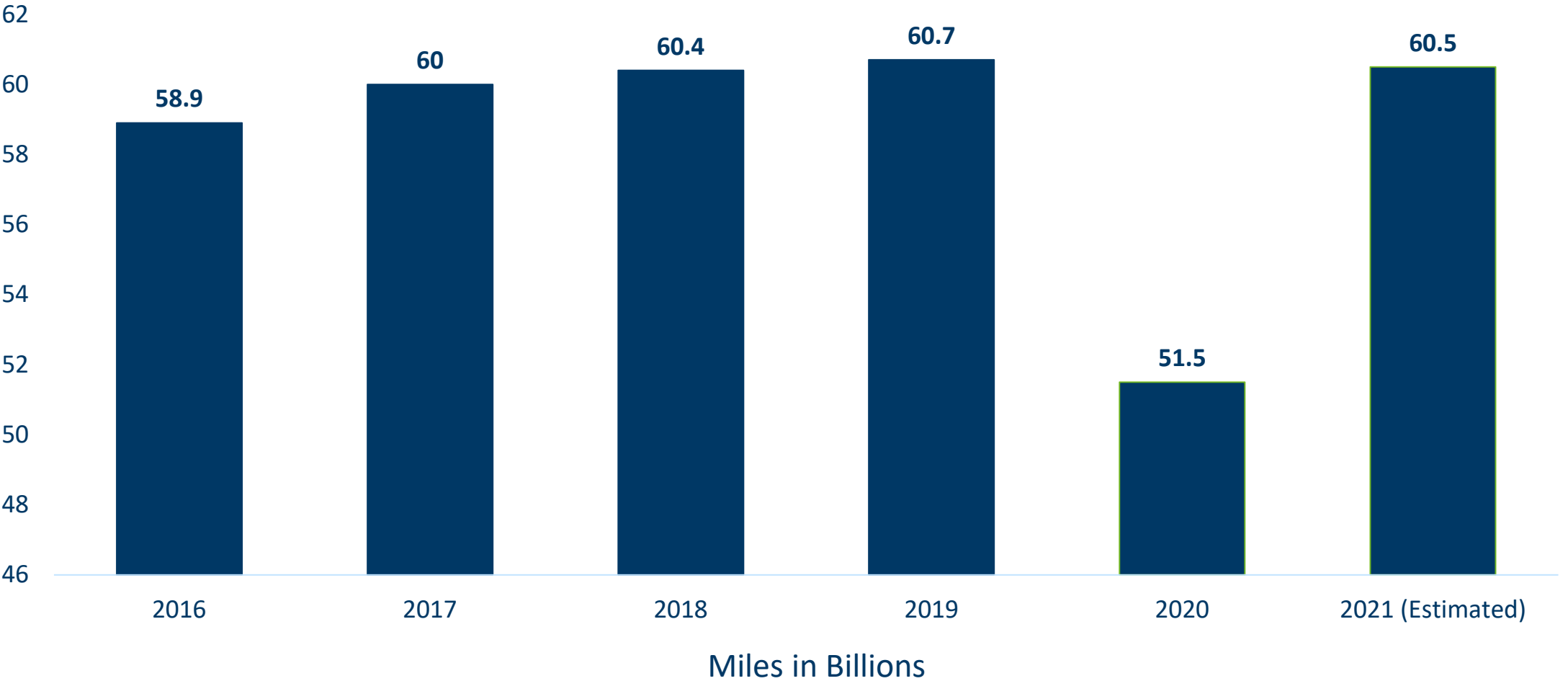
The government has reported that U.S. traffic deaths surged in the first nine months of 2021 to 31,720, keeping up a record pace of increased dangerous driving during the pandemic.

MPRnews

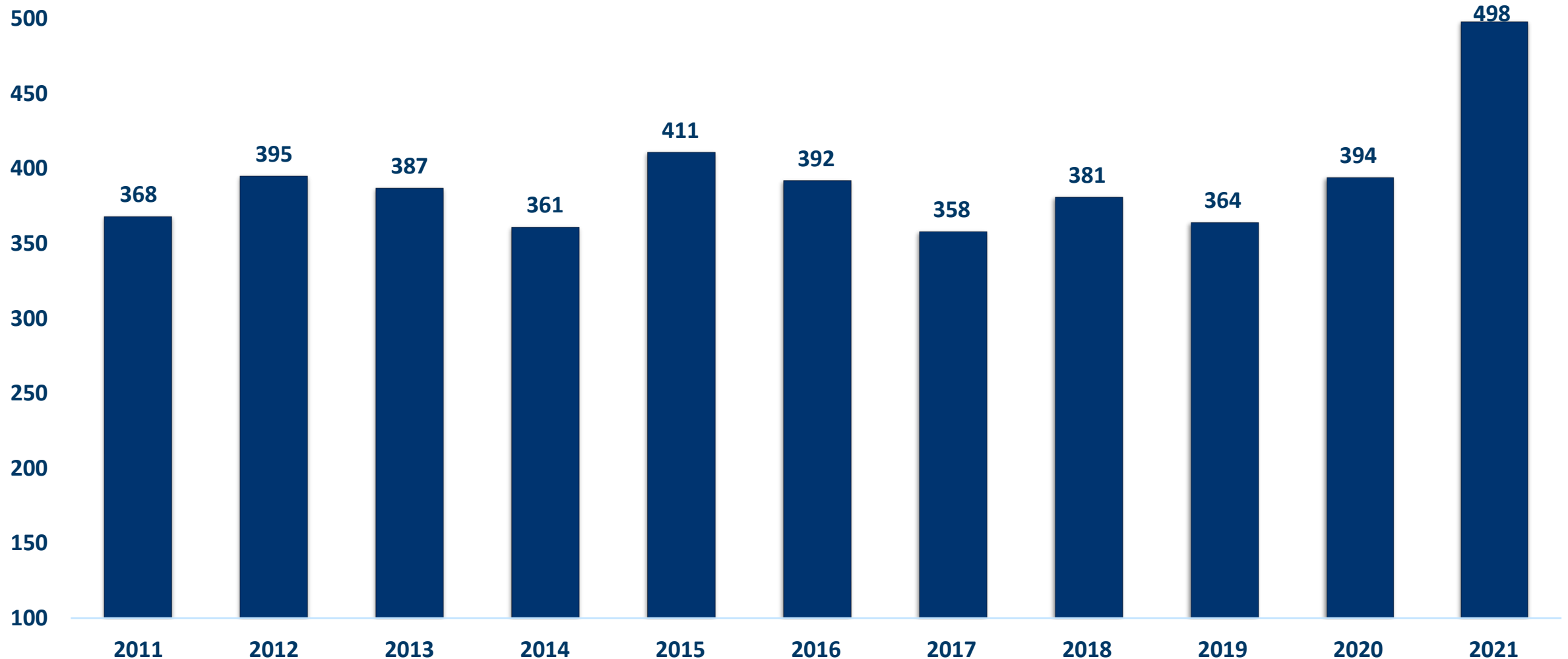
All Things Considered

'We've had enough': Law enforcement frustrated by continued speeding

Vehicle Miles Traveled



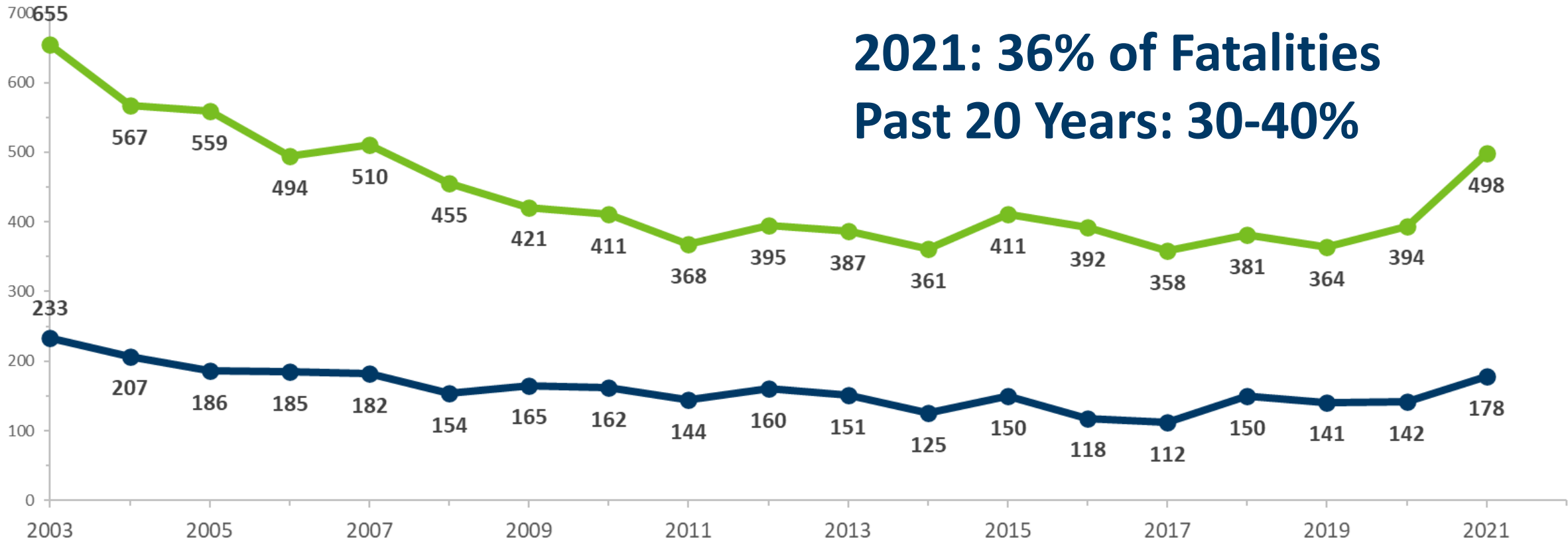
Minnesota Roadway Fatalities



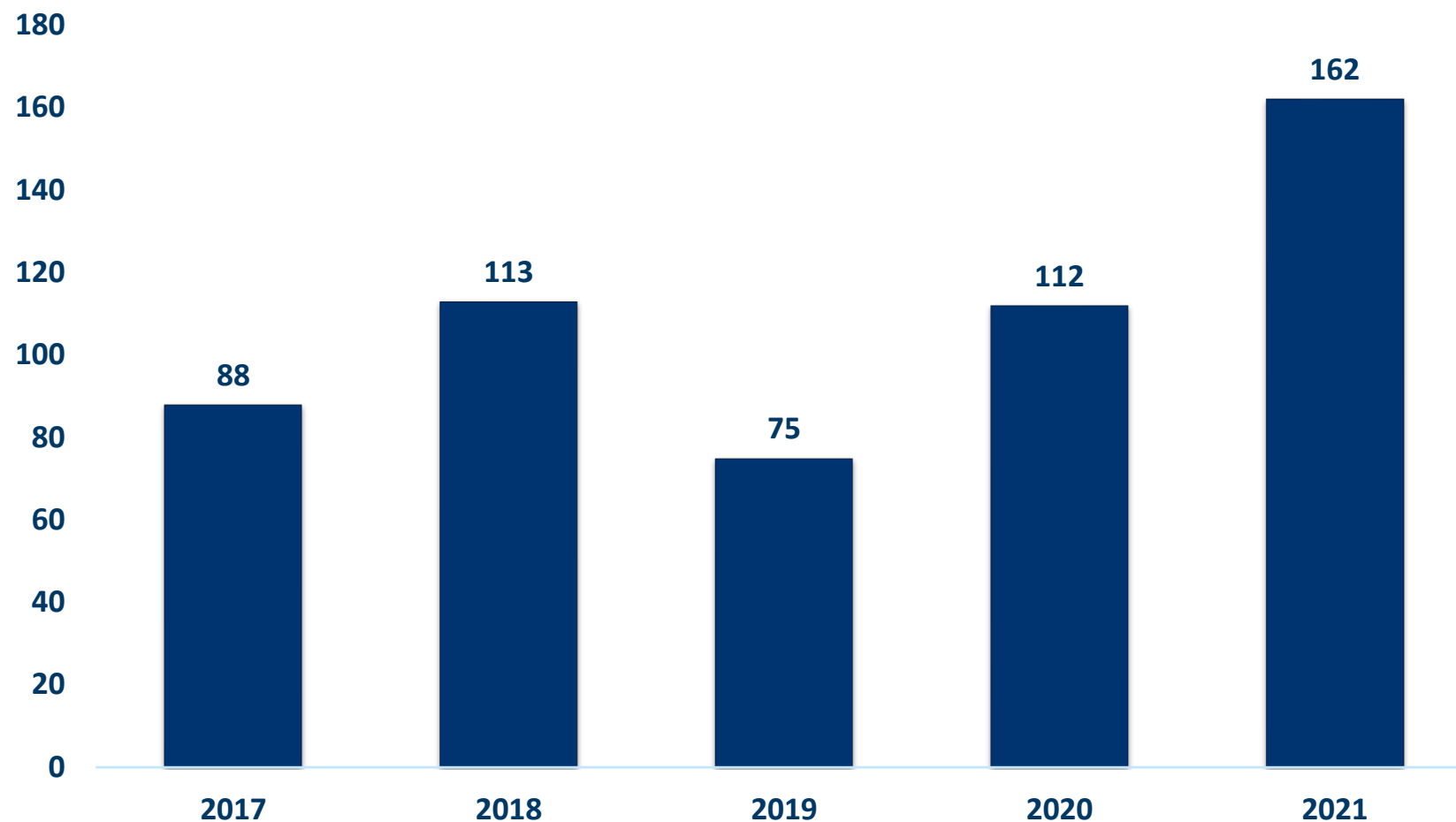
Minnesota Roadway Fatalities – County System

Traffic Fatalities by Roadway Jurisdiction

● All public roads ● County system



Speed-Related Fatal Crashes



At 162 speed-related deaths, this is a **33%** increase from last year and a **116%** increase from 2019. Speed was a factor in at least a third of all traffic fatalities in 2021.

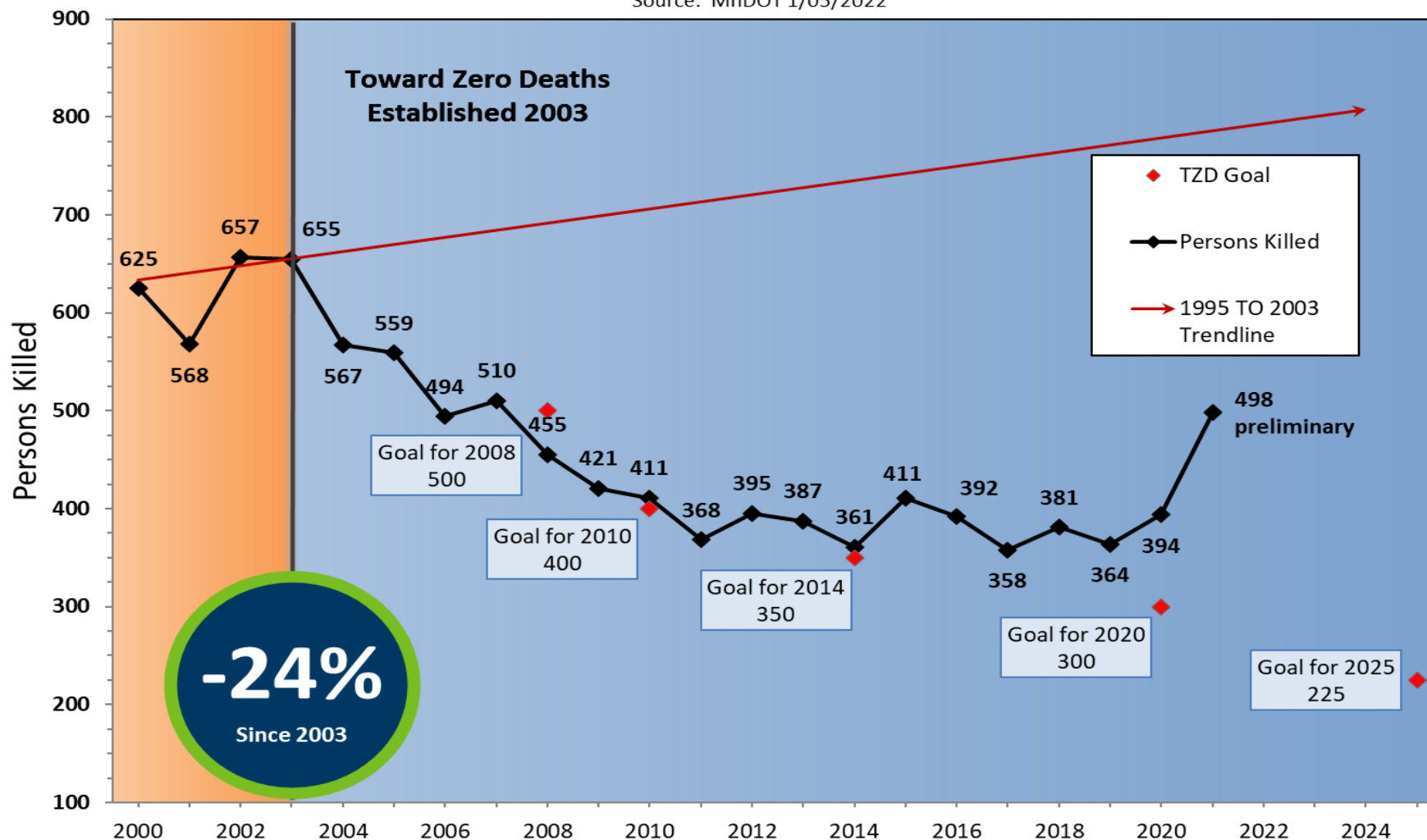
Public Safety's Response to this Problem

- 2021 & 2022 Speed and Aggressive Driving Safety & Enforcement Project
- The goal is to prevent fatal and serious injury crashes
- Since early 2021 State Patrol in conjunction with OTS dedicated resources towards speed enforcement
- OTS using federal funds has developed a statewide grant program enabling local law enforcement to participate in this effort
- Media engagement and education for the public

TZD History

Minnesota Roadway Fatalities

Source: MnDOT 1/05/2022



TZD 2.0 - Moving to a New State

Structure and operations help TZD focus on what matters



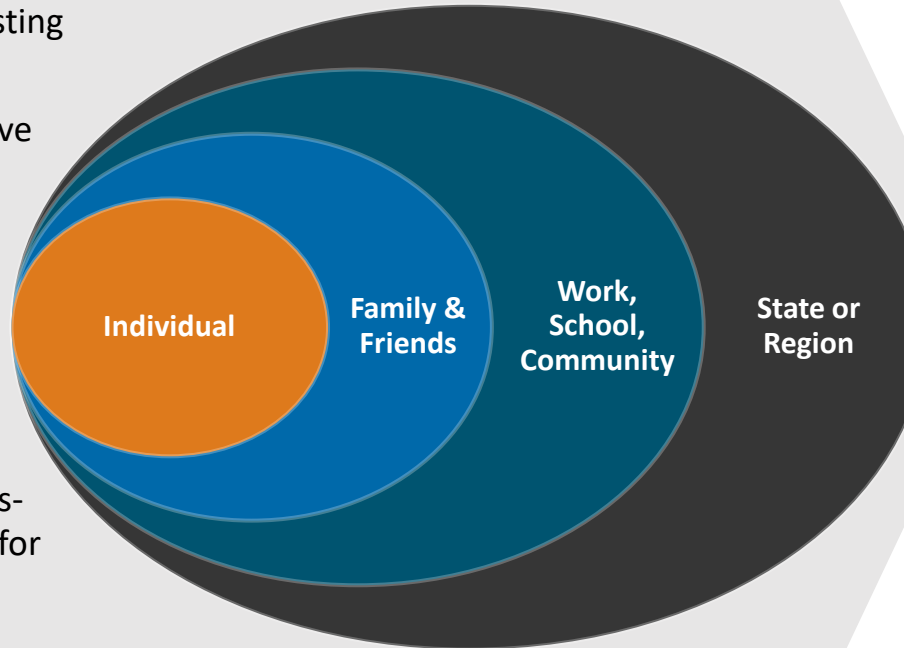
Building a Culture of Traffic Safety

A traffic safety culture is created through Positive Community Norming

A Social Ecological Approach

Using the environment to create lasting changes to beliefs and behavior

- Uses proven principles of Positive Community Norming
- Founded on the principle that the solutions exist
- Engages community and organizations to help drive individual behavior and beliefs
- Driven by hope from a strengths-based orientation and concern for critical issue
- Part of MN Strategic Highway Safety Plan



True, Lasting
Transformation to
Traffic Safety Culture



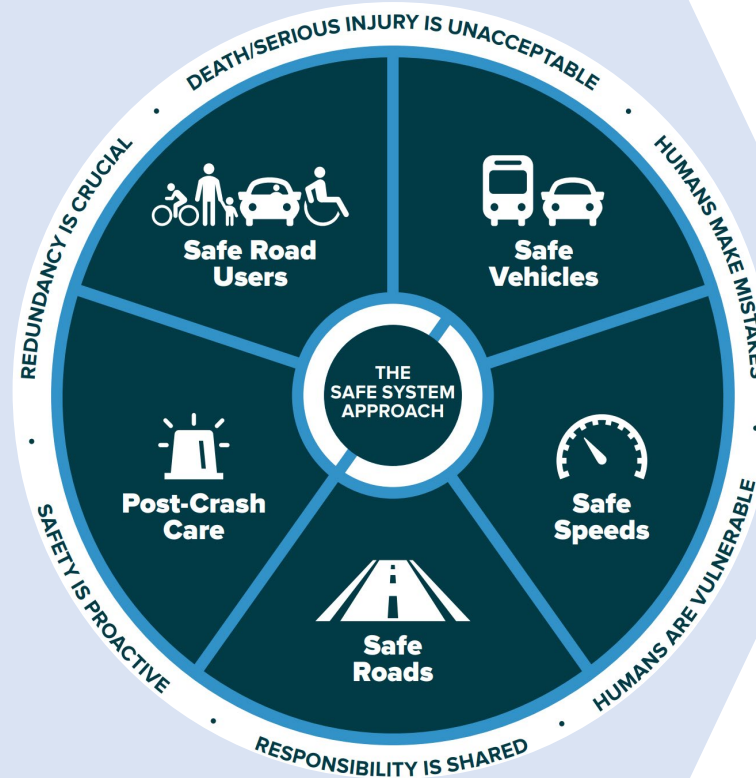
Designing and Operating a Safe System

Safe System provides a safety net when things go wrong

Safe System Approach

Designs and operates traffic systems and structures to protect against human mistakes and injury tolerances and avoid death and serious injuries

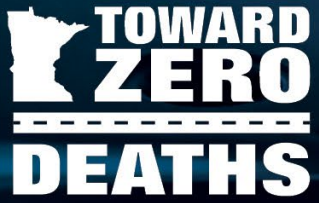
Focus of Federal Highway Administration Approach



“Safety net” to protect people when mistakes happen/they make poor choices

What's Next

1. Finalize implementation plan for TZD 2.0 recommendations
2. Considering legislation for a Traffic Safety Advisory Council that would more formally involve partners in guiding TZD program
3. Identifying regional funding needs



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Highway Safety Improvement Program (HSIP)

Bipartisan Infrastructure Law (IIJA) Adds \$9M - \$13M/Yr to HSIP through FY2026

- OTE/State Aid working on how best to make funding available to the counties

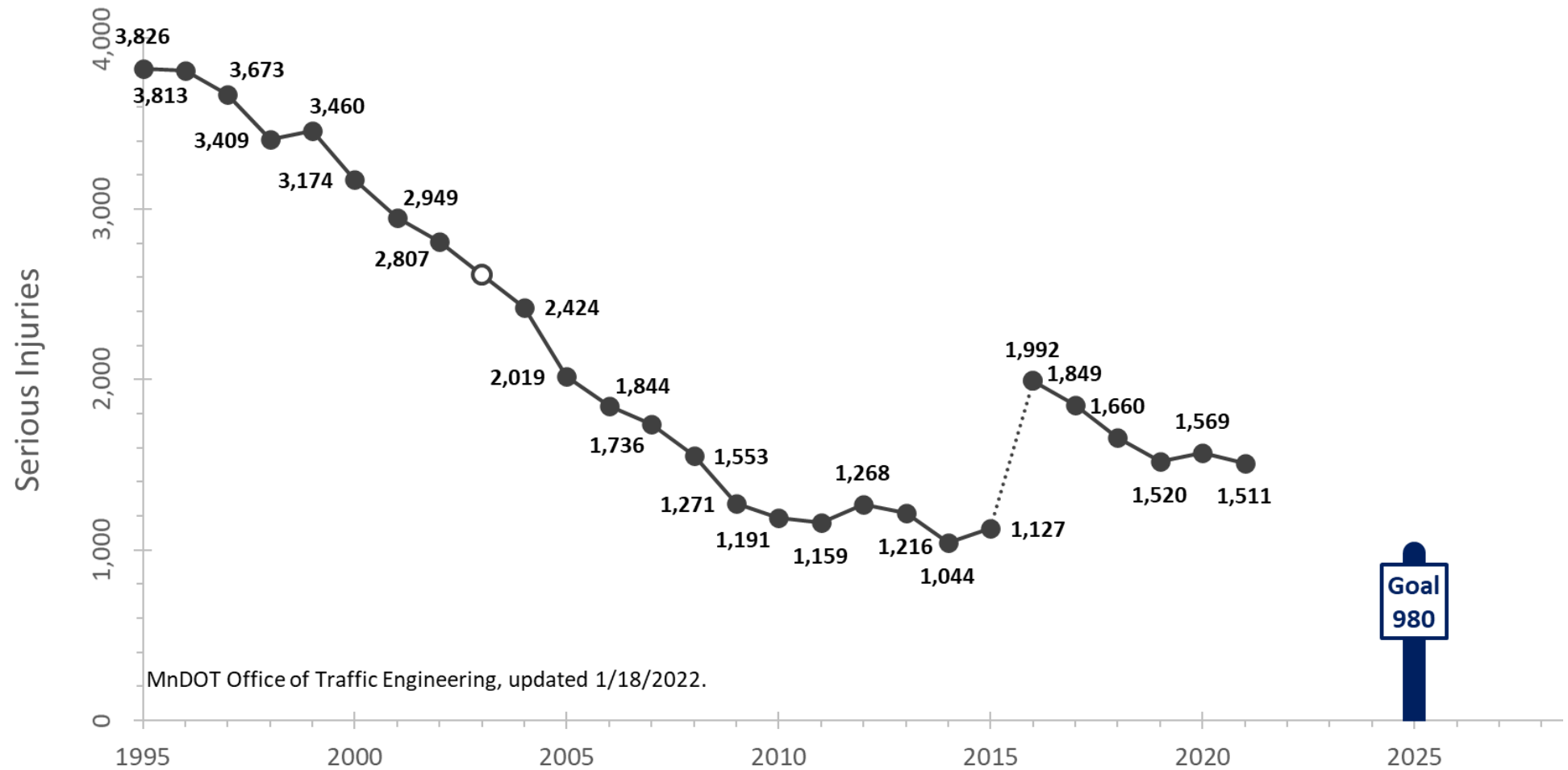
Local share has been adjusted to 65% for future solicitations (historically 60%)

County Road Safety Plans

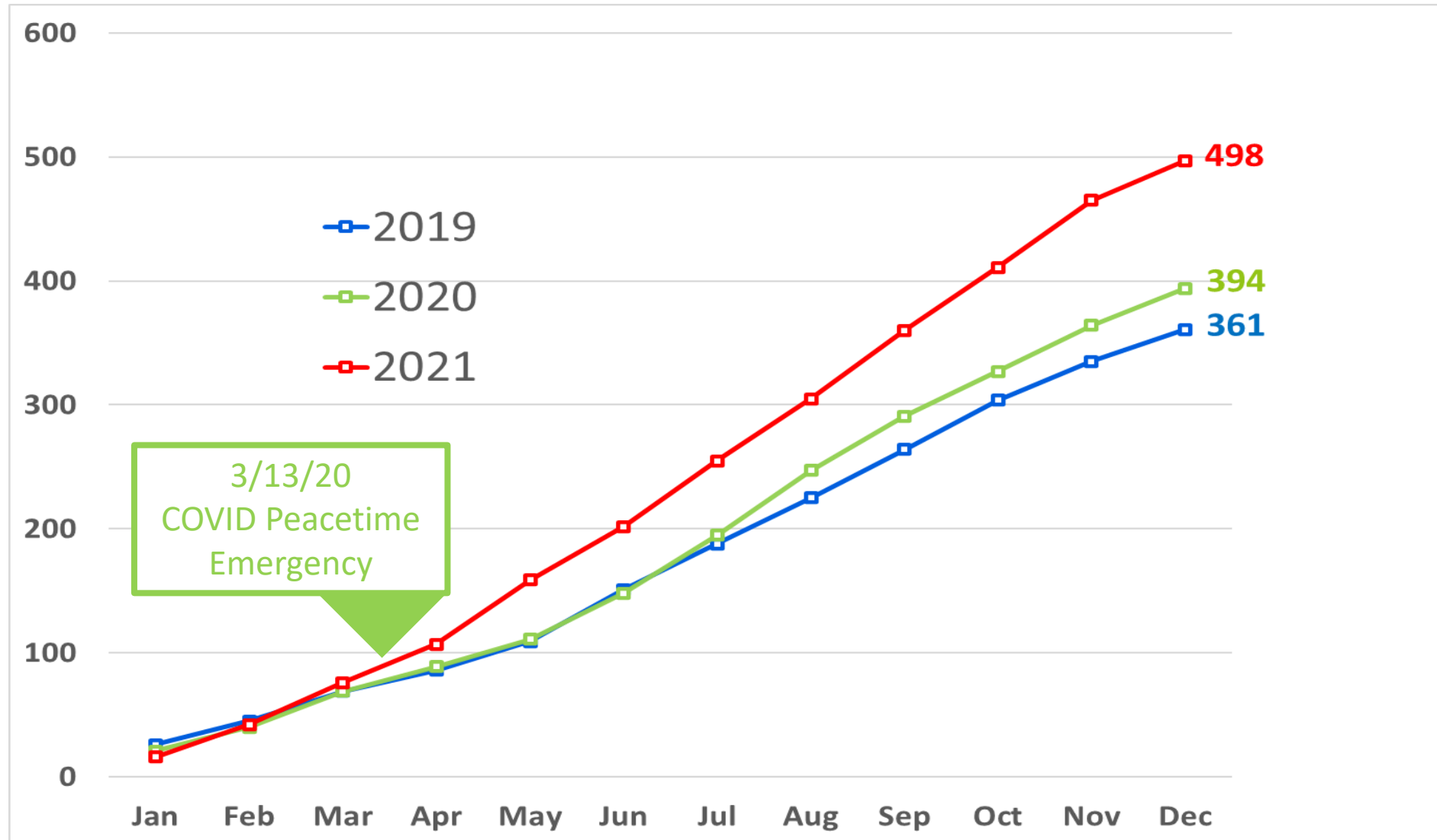
Phase 2 Underway

- Phase 2, Round 2 plans (17) will be completed this year
- Will be looking for counties interested in being part of Round 3 in 2023
- 80% federal, 20% local match

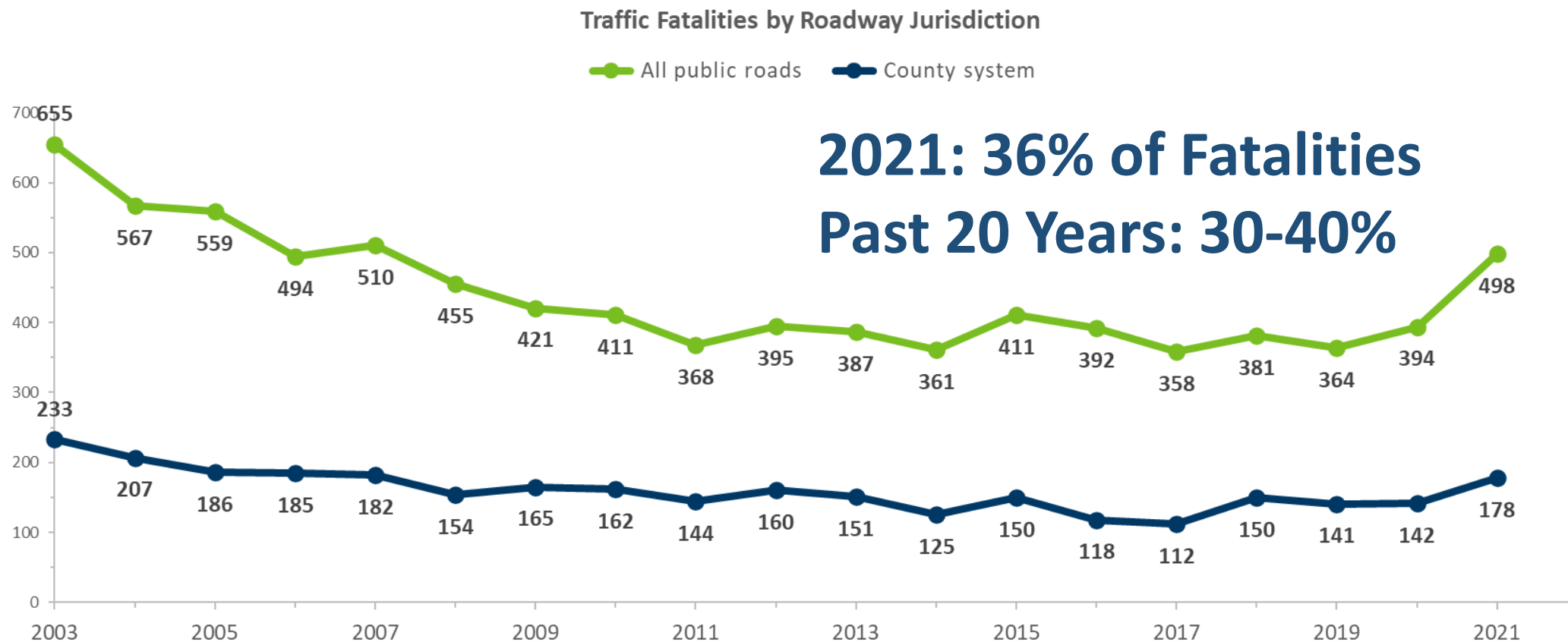
Statewide Serious Injuries Since 1995



Statewide Fatalities By Month (2019-2021)



County System Fatalities



Fatal crash trends by system

Roadway system	2017-2019 average	2020	2020 % change	2021 (preliminary)	2021 % change
State	157.0	163	+4%	206	+31%
County	124.0	135	+9%	158	+27%
City	43.0	51	+19%	58	+35%
Township	14.0	16	+14%	15	+7%
Other*	3.0	4	+33%	27	+800%
Total	341.0	369	+8%	464	+36%

* Preliminary “other” includes ramps and connectors which will be adjusted to corresponding networks

Fatality Update

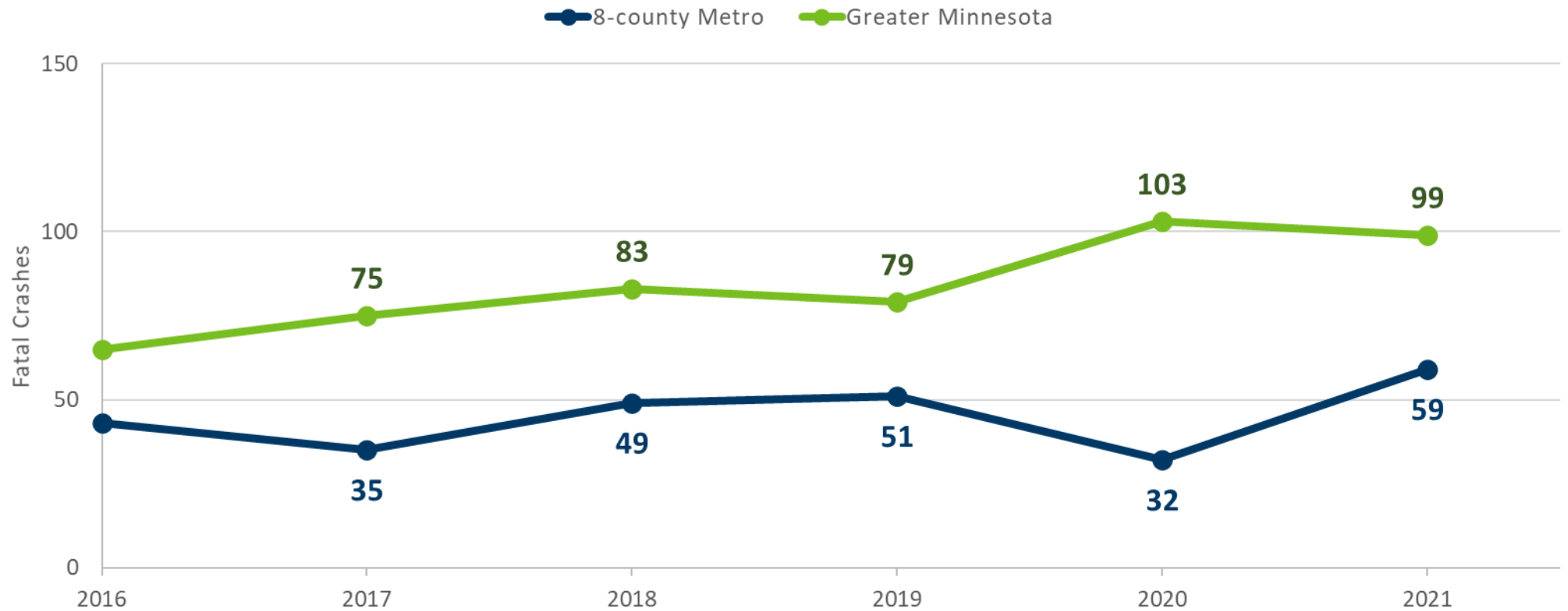
Why have fatalities jumped?

- Changes in enforcement have resulted in significant increases in speed and unbelted as factors in fatal crashes
 - 116% increase in speed-related fatalities from 2019-2021
 - 49% increase in unbelted fatalities from 2019-2021
- Overall, more people are more willing to engage in risky driving behaviors

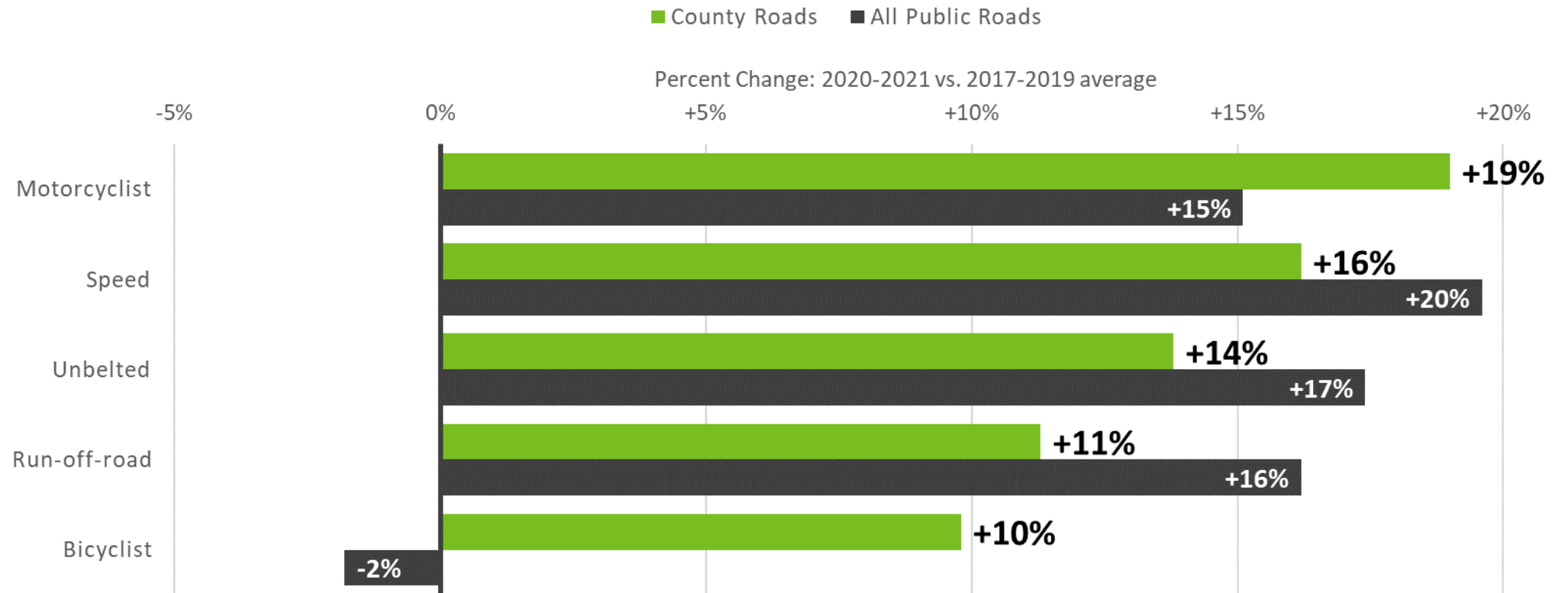
What can we do about it?

- Short Term
- Long Term

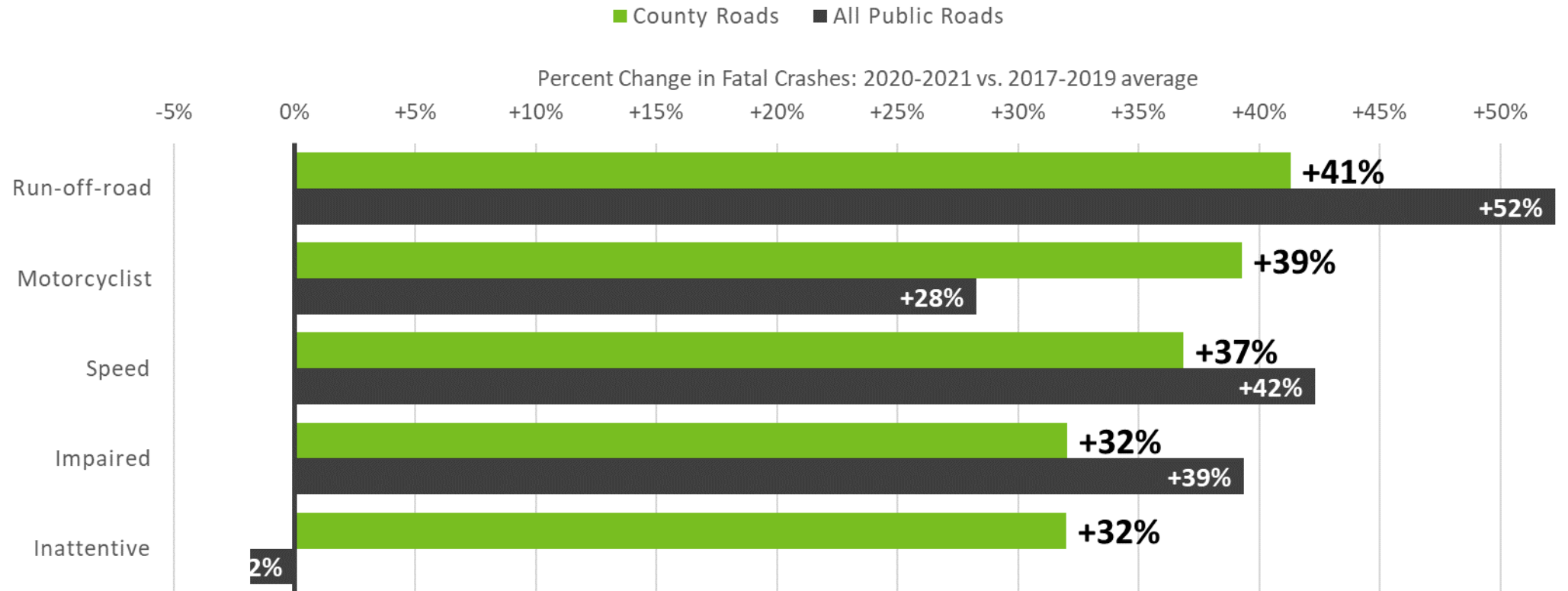
Fatal Crashes on County System



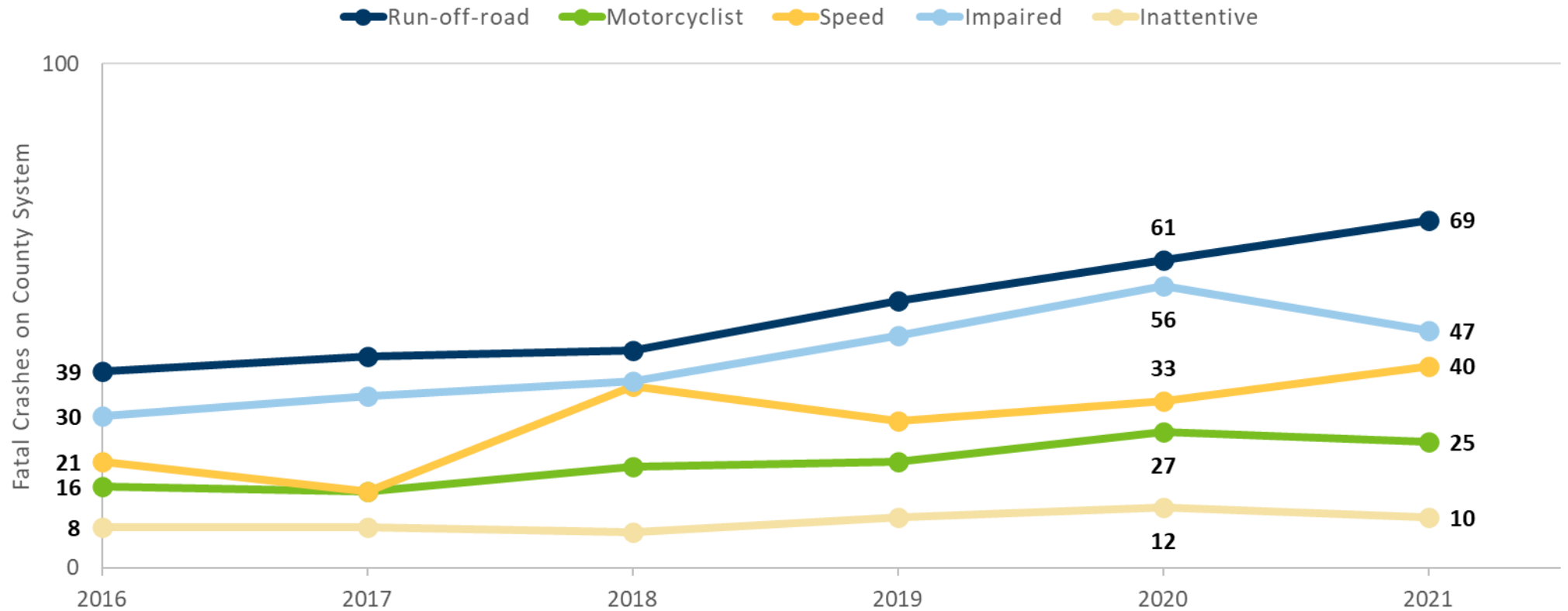
Strategic Highway Safety Plan Focus Areas: Top Five by Increase on County System



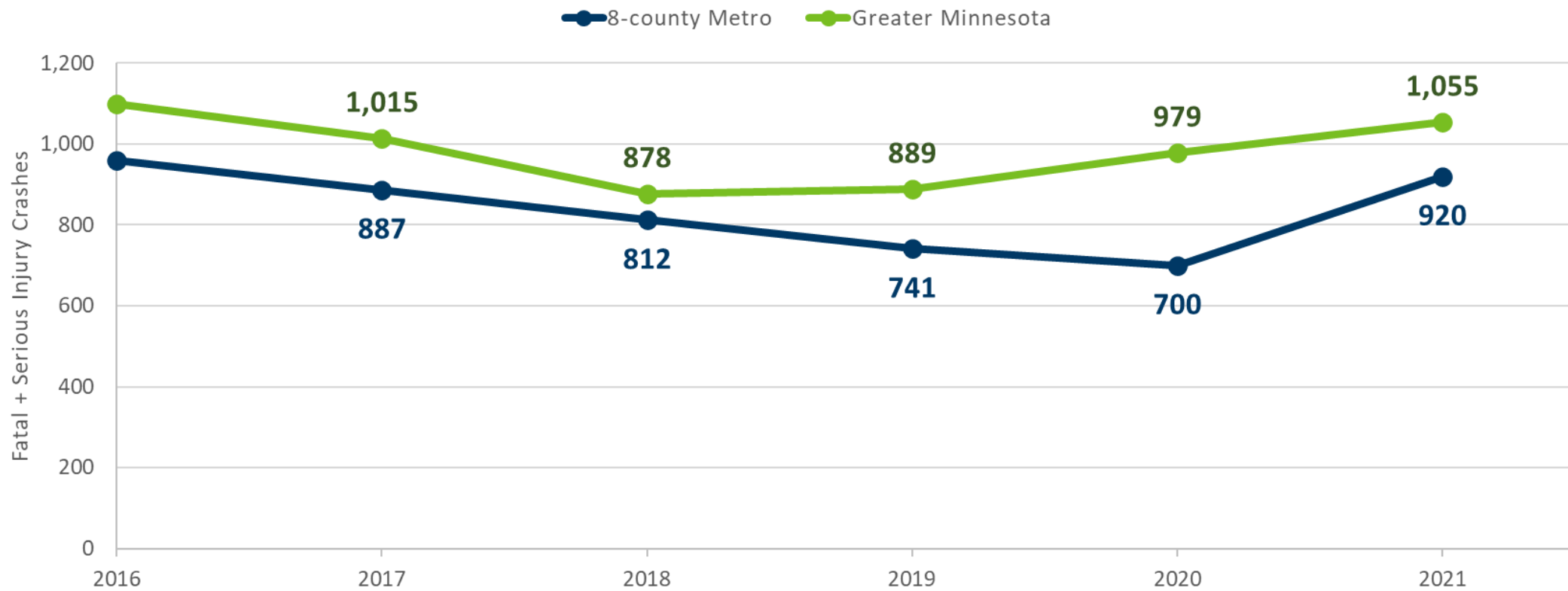
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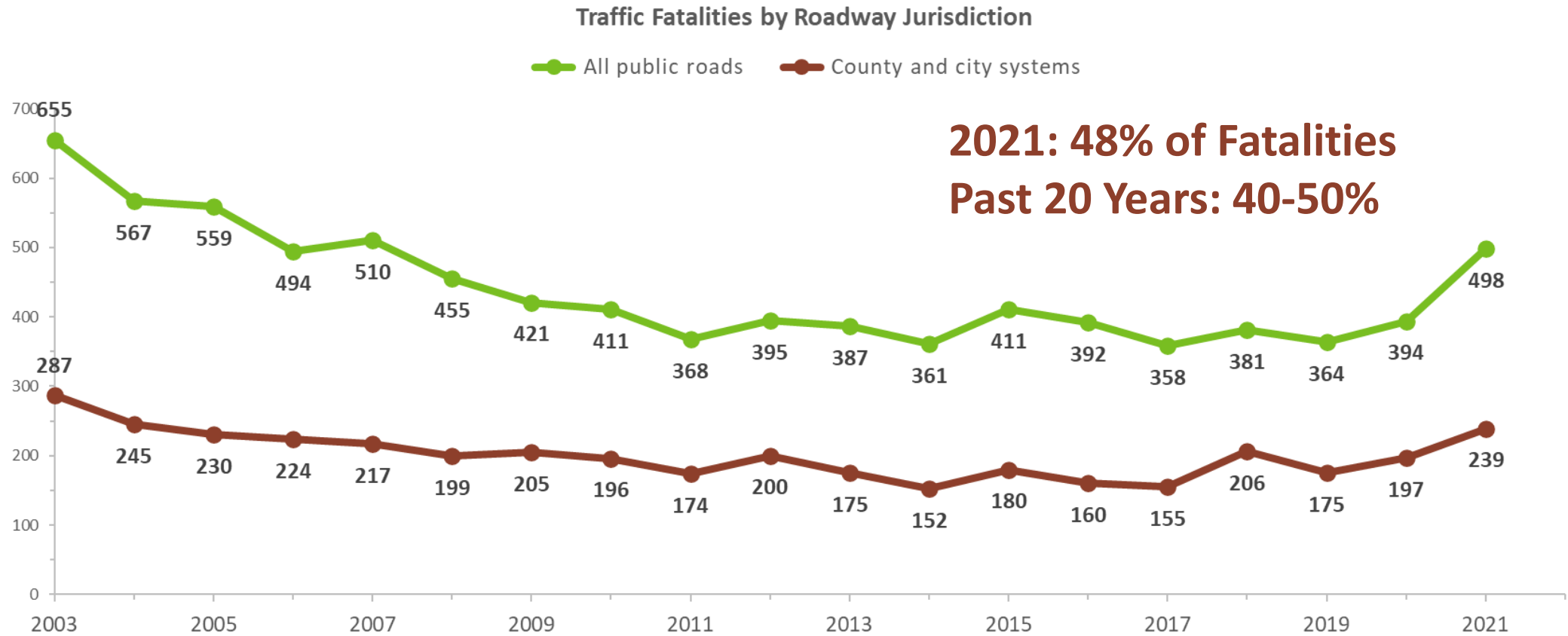
Strategic Highway Safety Plan Focus Areas: Top Five by Increase on County System



Fatal and Serious Injury Crashes on County System



County and City System Fatalities

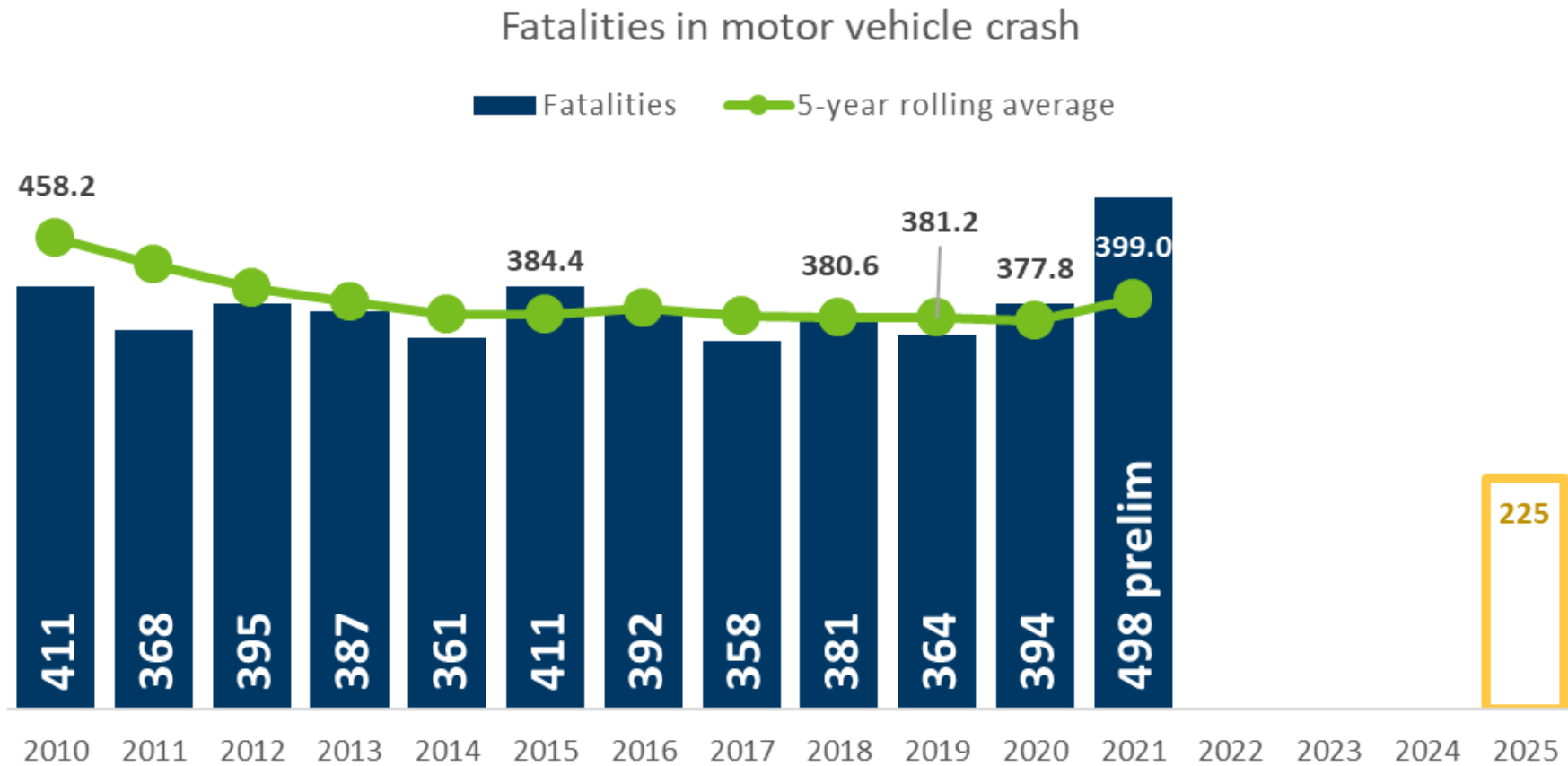


Serious injury crash trends by system

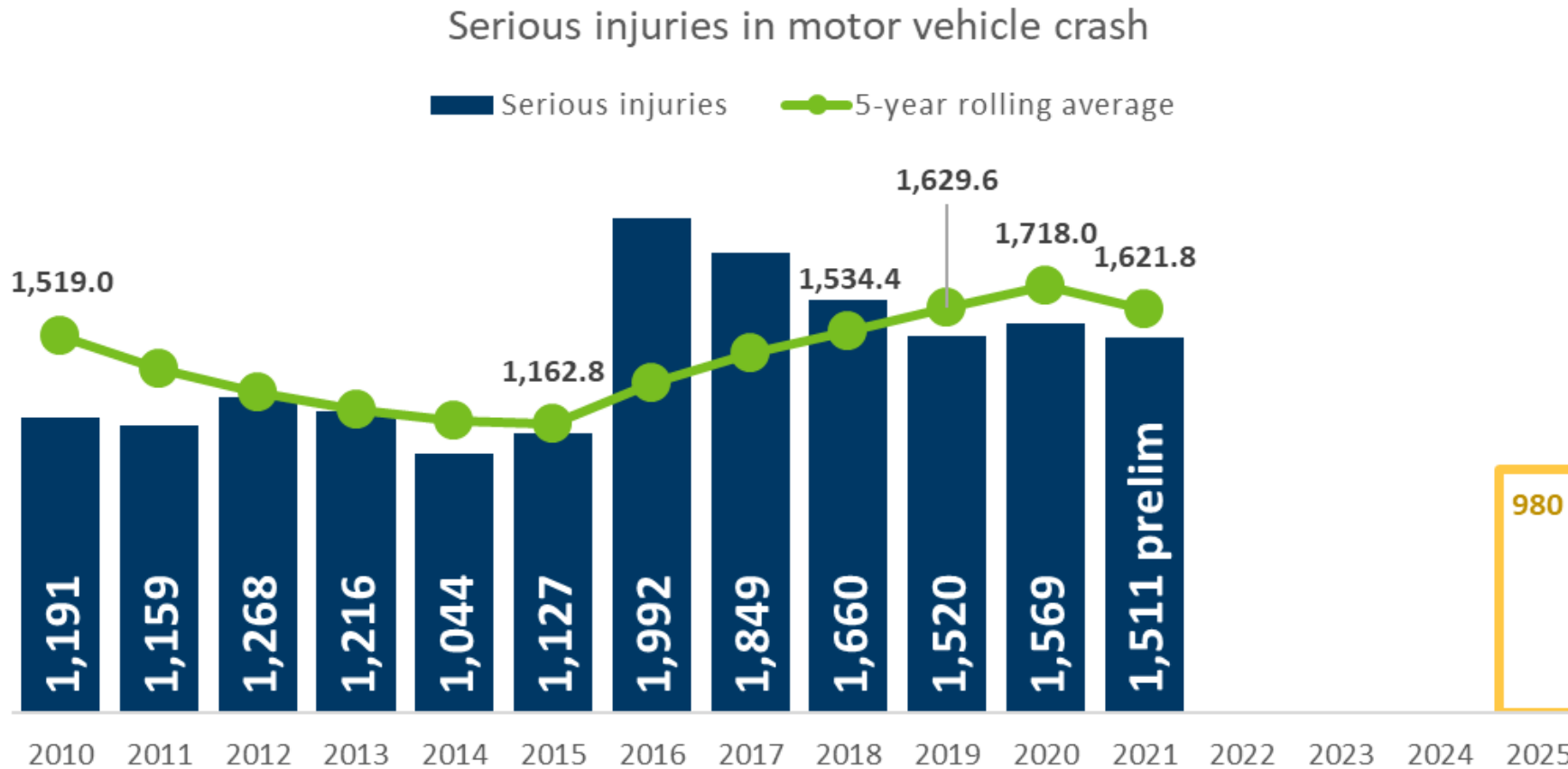
Roadway system	2017-2019 average	2020	2020 % change	2021 (preliminary)	2021 % change
State	355.0	322	-9%	352	-1%
County	549.7	541	-2%	618	+12%
City	407.7	345	-15%	373	-9%
Township	66.3	78	+18%	60	-10%
Other*	21.0	24	+14%	108	+414%
Total	1,399.7	1,310	-6%	1,511	+8%

* Preliminary “other” includes ramps and connectors which will be adjusted to corresponding networks

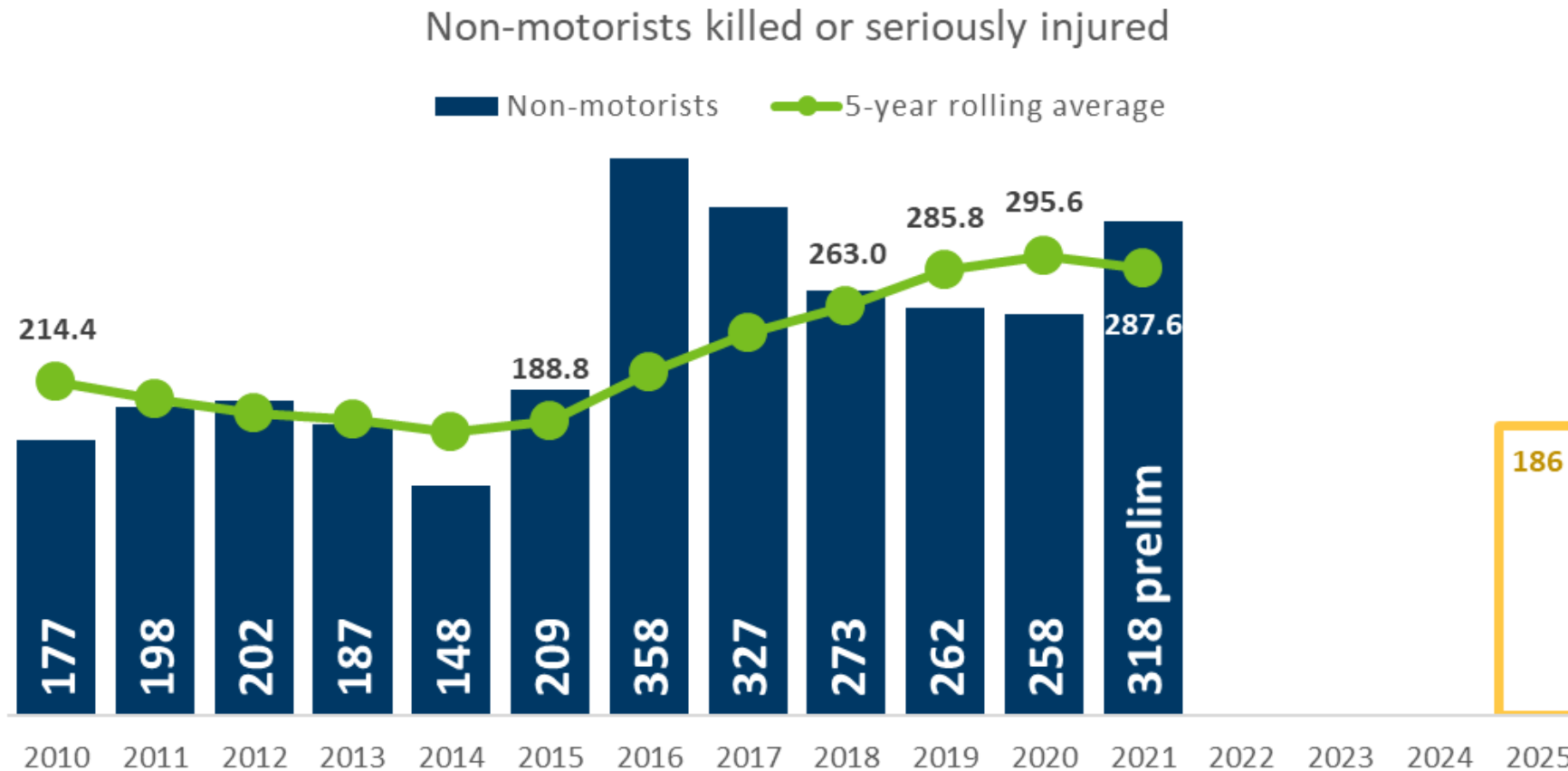
PM1 Trends: fatalities



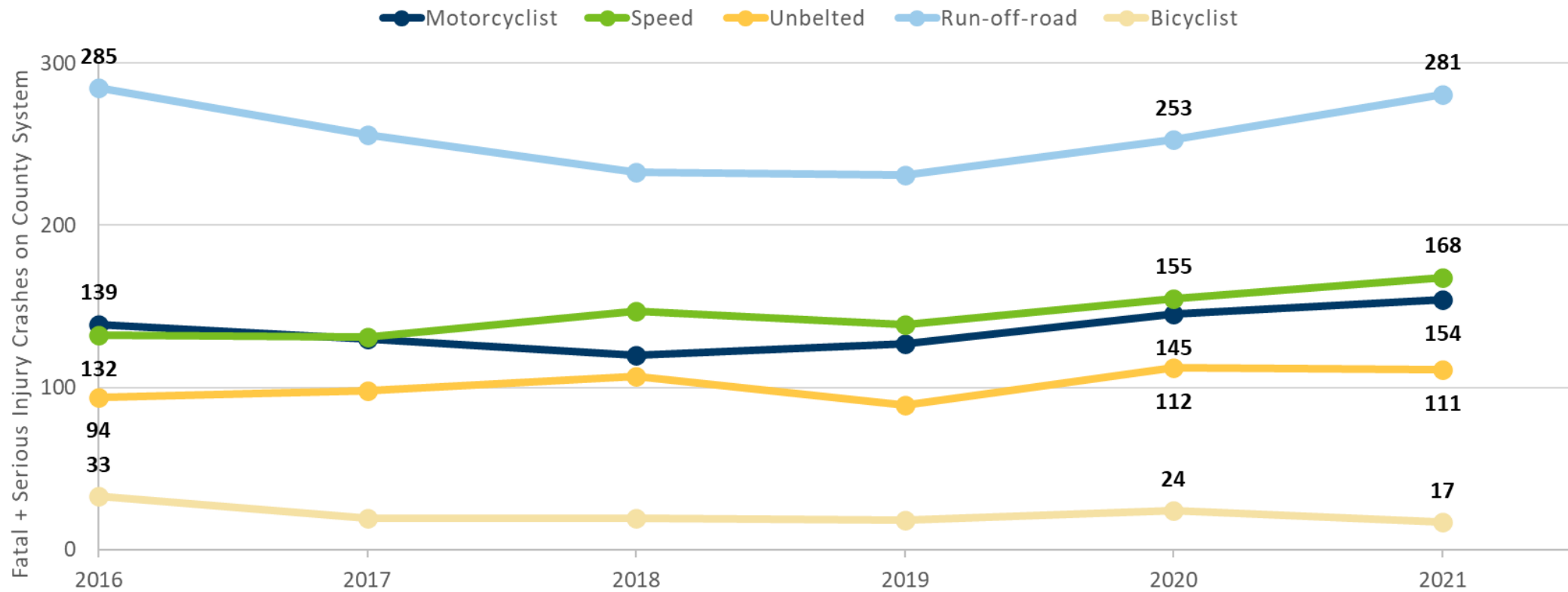
PM1 Trends: serious injuries



PM1 Trends: non-motorist fatalities & serious injuries

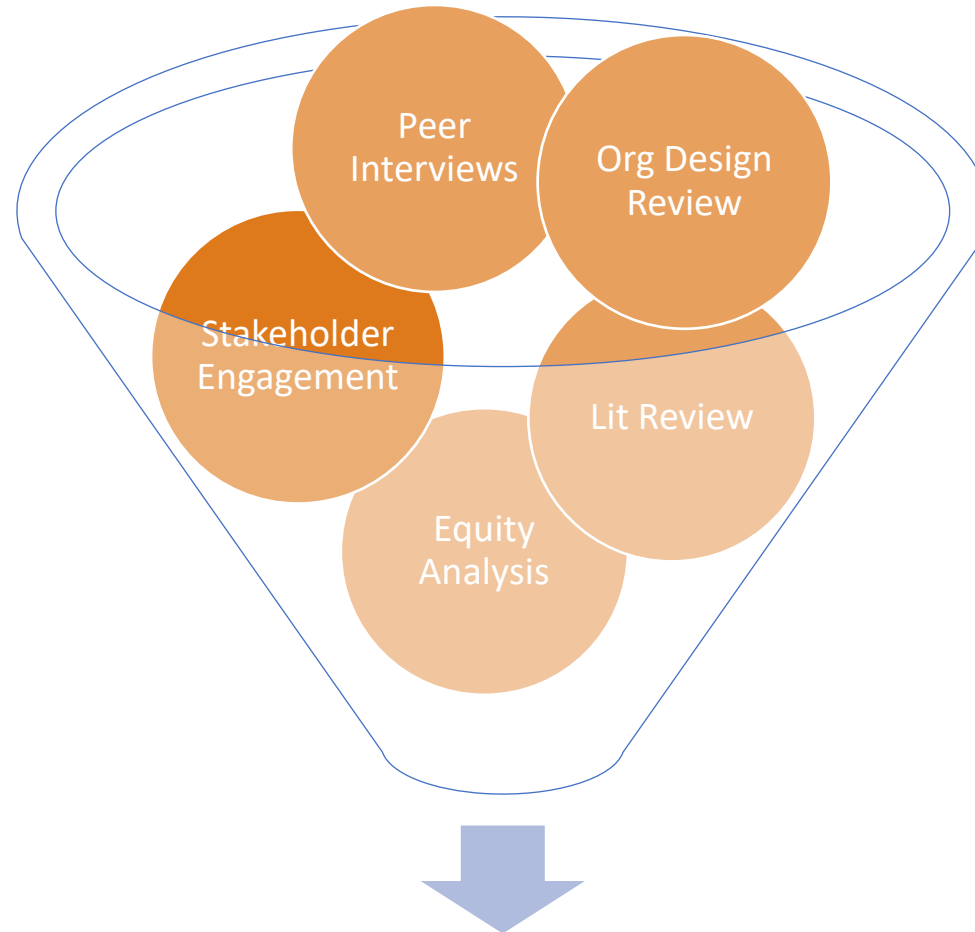


Strategic Highway Safety Plan Focus Areas: Top Five by Increase on County System



TZD 2.0

Identifying opportunities areas for TZD



TZD 2.0 Engagement Tactics



**TZD Regional
Workshops**
(292 participants)



**Steering
Committee**
(21 members)



**Existing Stakeholder
Interviews**
(~40 participants)



Statewide Survey
(138 responses)



**New Voices Stakeholder
Interviews**
(~25 participants)

TZD 2.0 - What We Heard

Aspects of TZD to keep and enhance

What's Working

- Cross-agency collaborations
- Multi-disciplinary approach (5Es working together)



Innovative strategies



Opportunities to share ideas and learn from others



Local empowerment, leadership and ownership



Funding opportunities



Effective education and communication materials for current focus



Good tools and resources for partners

TZD 2.0 - What We Heard

Aspects of TZD to address and improve

Key Challenges

- Culture and individual behavior is hard to change
- Lack of public understanding / awareness
- Imbalance between agency influence
- Unclear decision making



Not enough staff support or not the right skillsets in the right place



Lack of diversity and cultural sensitivity



Not enough political support



Climate towards enforcement



Not enough participation or buy-in



Not enough reliance on data in decision making



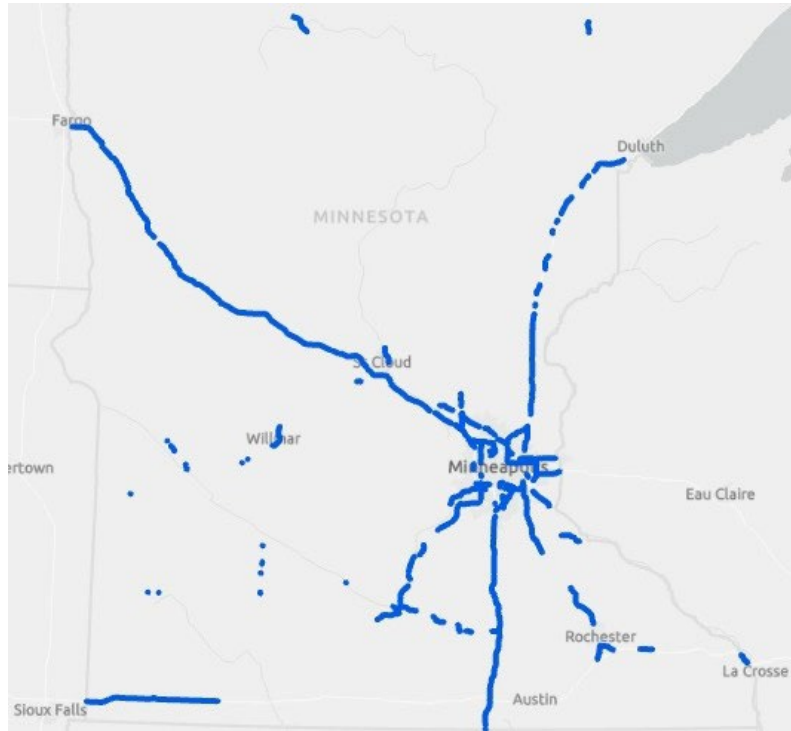
Need different/better messaging and communication strategies



Funding – difficult to use

High Tension Cable Median Barrier

- **95% Reduction**
in Fatal Head-on
Crashes



2003: None
2014: 450+ miles
2018: 705 miles
2021: 1173



Roundabouts



- Removed Right Angle Crash potential (T-bone crashes)
- Reduced severe crashes by 80-90%
- Reduced pedestrian crashes by 60% when compared to other intersections

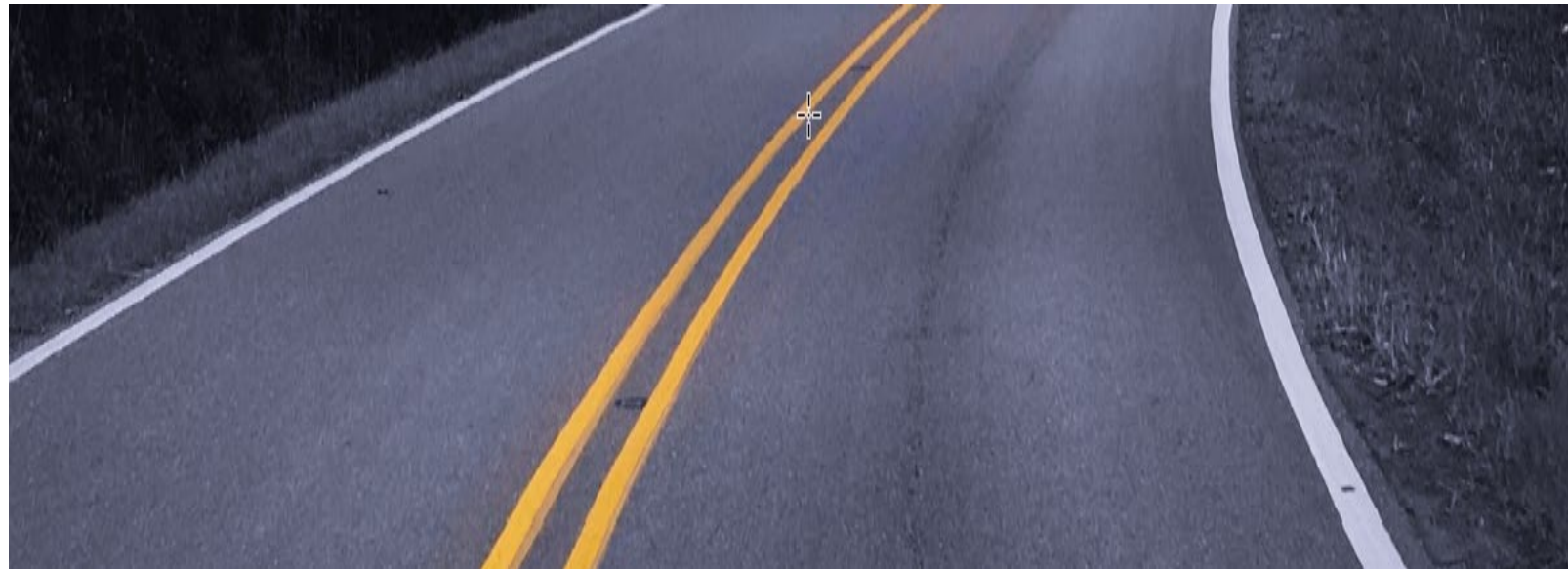
Reduced Crossing Intersection (RCI)



- Have shown an 69% reduction in death & serious injury crashes.
- Over 50 now installed in Minnesota

6" Edgelines

- Studies have shown 20-40% reduction in run off the road fatal/serious injury crashes
- All new edgelines placed on State roadways will be at least 6" beginning in 2022



Rumblestrips

- Studies have shown 13-51% reduction in fatal/serious injury crashes
- 2011: required on all rural projects
- 2017: Noise-reduced option developed

