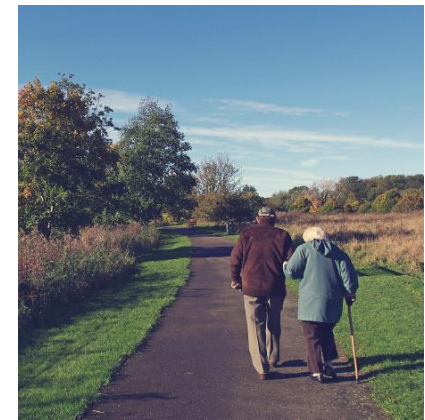
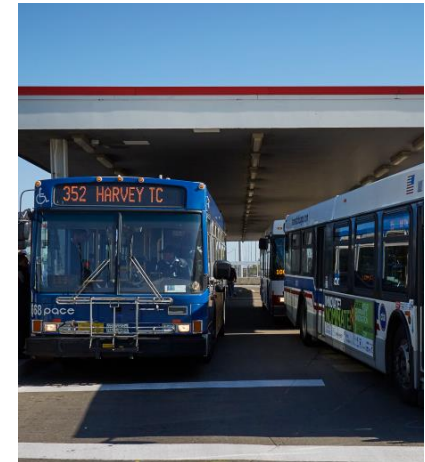


Transportation Technology and Operations Coalition

November 2, 2023

9:30 – 11:30 a.m.

When you are not speaking, please mute your microphone to reduce background noise.



1.0 Welcome

Stephen Zulkowski, KDOT (Chair)

2.0 Agency updates

Open discussion among TTOC members regarding current work projects, topics of interest for upcoming meetings, etc.

3.0 CMAP announcements

Aaron Brown and Noah Harris, CMAP

4.0 Congestion management process (CMP) update

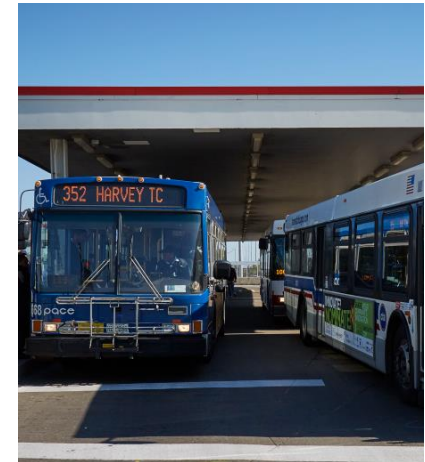
Jose Rodriguez, CMAP

Congestion Management Update

**Jose Rodriguez, Senior Planner (Project
Manager)**

Tom Murtha, Senior Planner

Chicago Metropolitan Agency for Planning



Illustrative transportation planning process



Regional
Vision

Public
engagement,
scenario planning



Transportation
Plan

Planning factors,
regional indicators,
forecasting



Congestion
Management

Objectives, measures,
monitoring, strategies



Programming,
Local Planning

Implementation,
fiscal constraint,
air-quality
conformity

Elements of a congestion management process (CMP)

1. Develop regional objectives for congestion management
2. Define the CMP network
3. Develop multimodal performance measures
4. Collect data and monitor system performance
5. Analyze congestion problems and needs
6. Identify and assess CMP strategies
7. Program and implement CMP strategies
8. Evaluate strategy effectiveness

Reasons for congestion management

1

Cost of congestion

2

Support planning for operations

3

Addressing travel demand

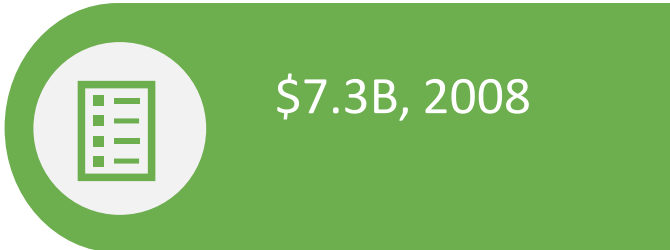
4

Consensus on our objectives, strategies.

Regional annual congestion cost estimates

1

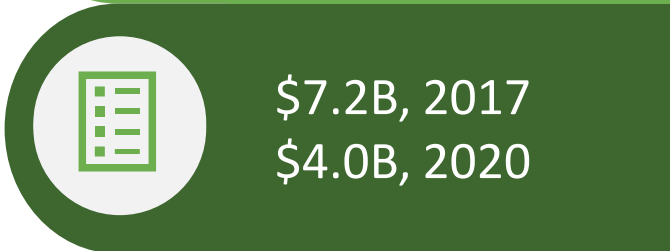
Metropolitan Planning Council



Moving at the speed of congestion

2

Texas Transportation Institute



Urban Mobility Reports

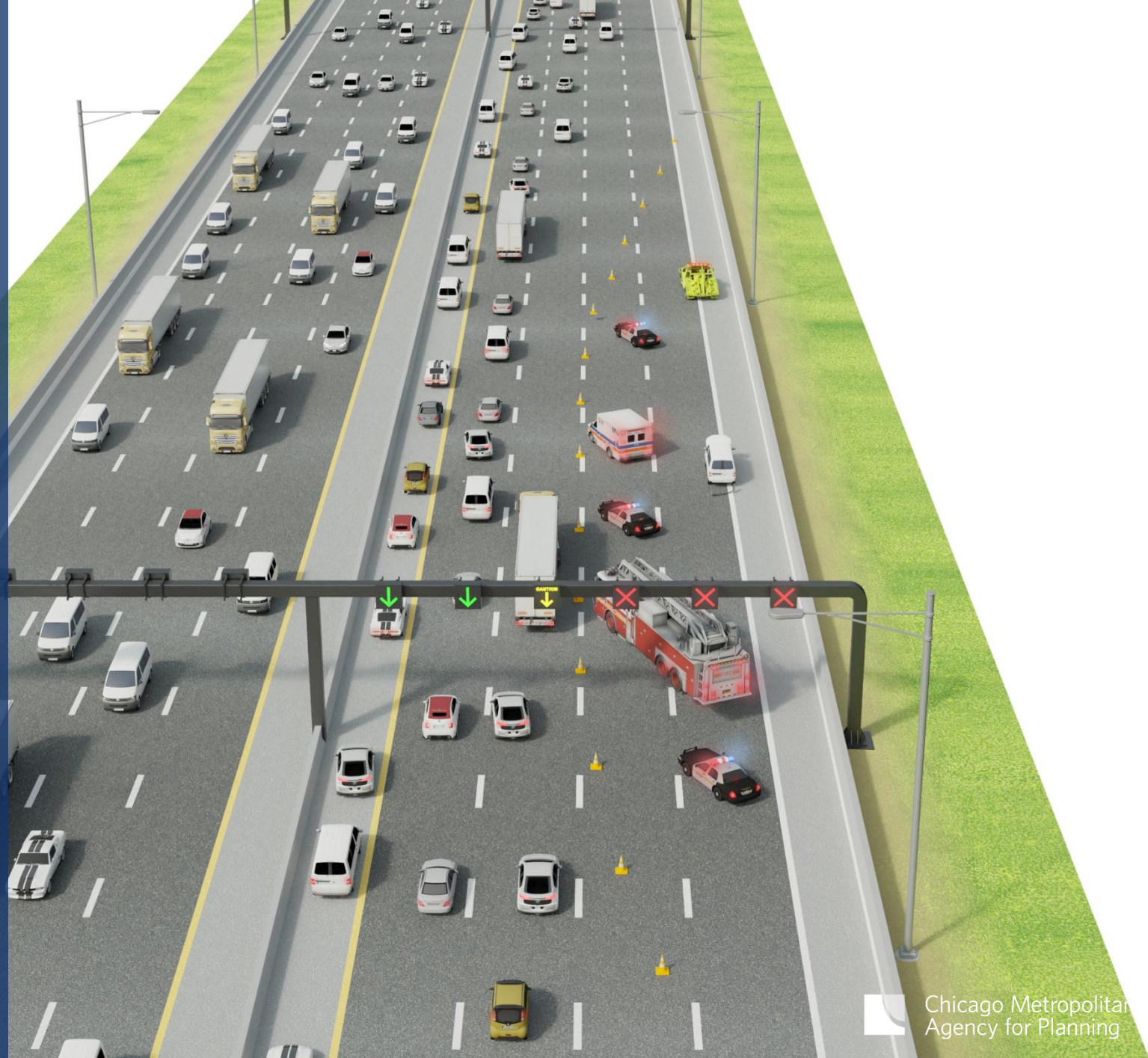
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INRIX



Global scorecard (with methodology problems)

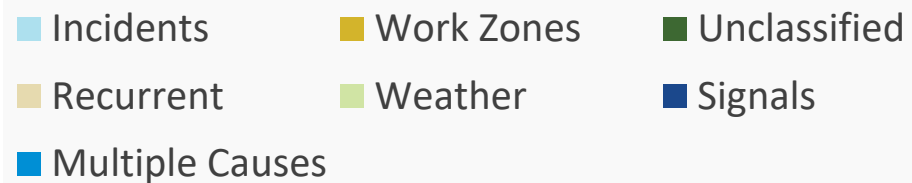
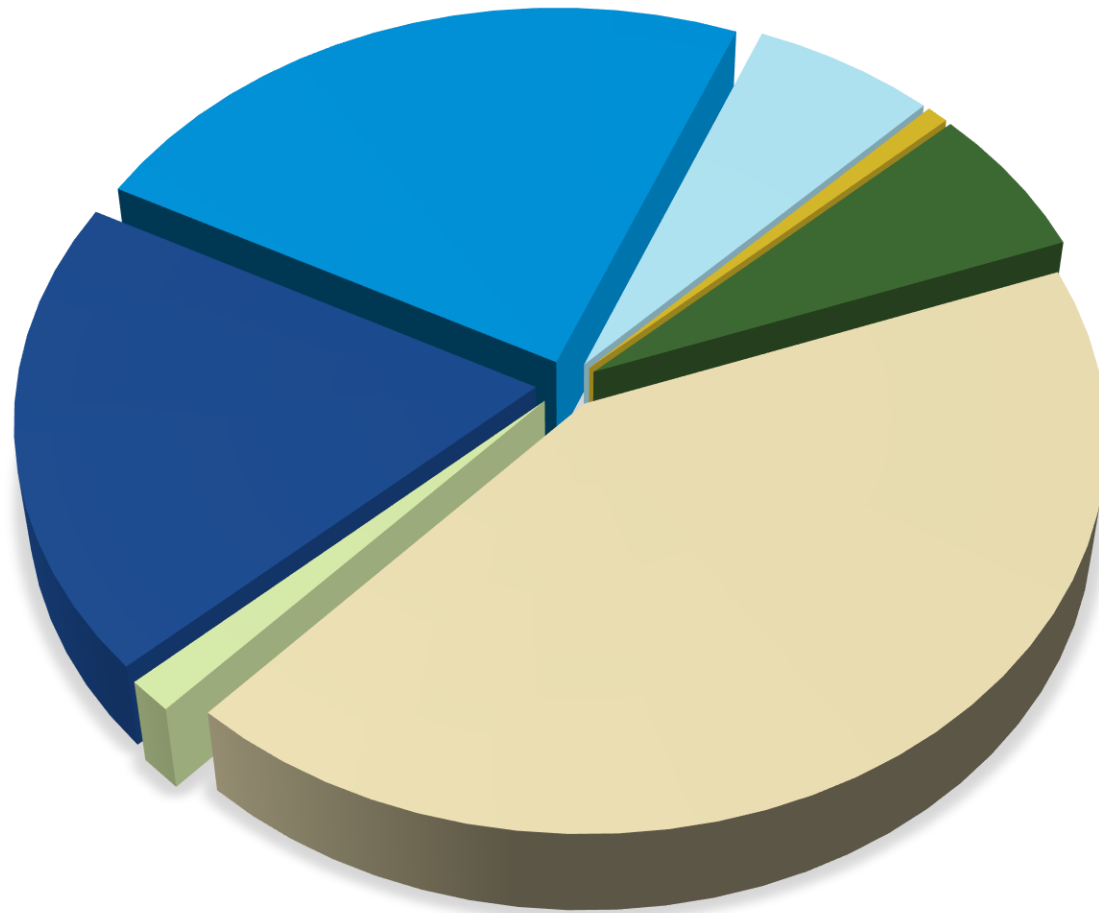
Planning for Operations



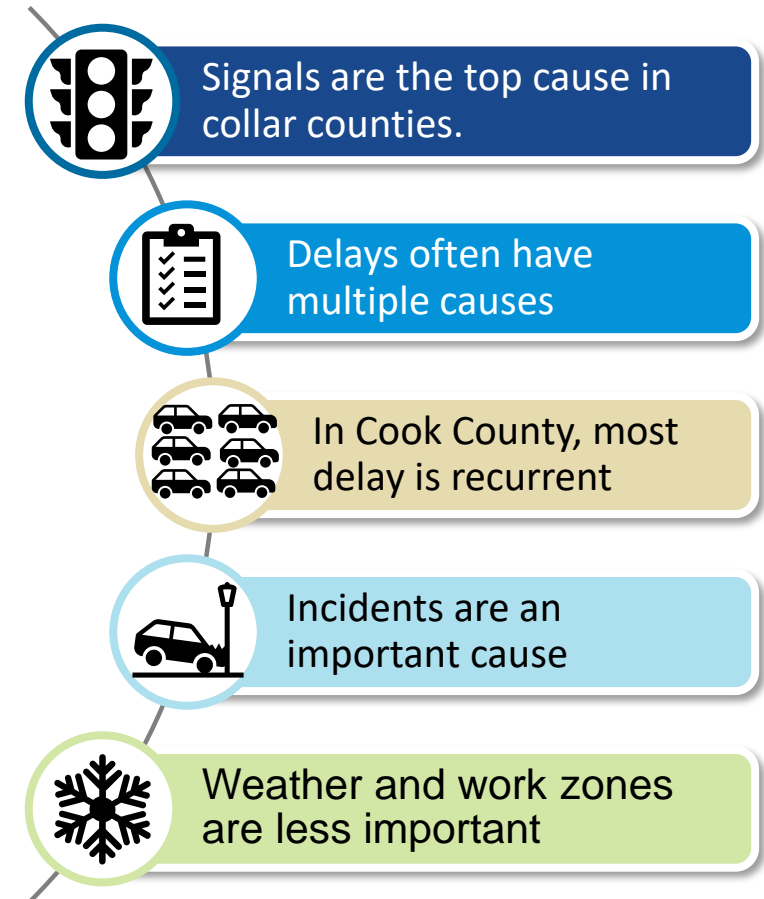


We may continue to address bottlenecks, but there's a need for operational improvements

Causes of delay in the region

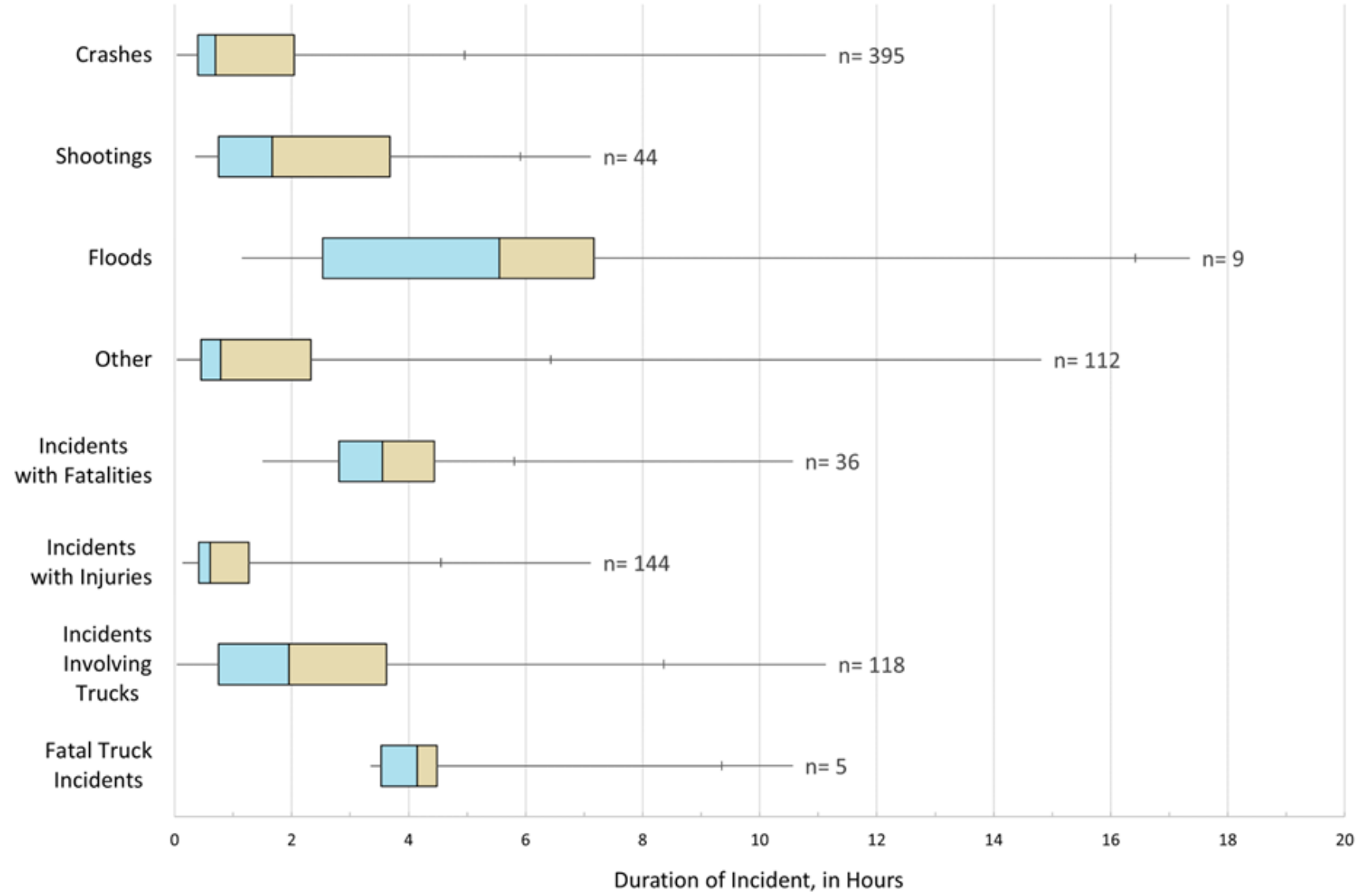


Source: CMAP analysis of RITIS data

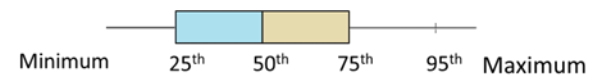


We saw on the previous slide that incidents are not the top cause of delay in the region, but incident durations are often substantial.

Duration of Expressway Incidents with Lane Closures
2017 IDOT Summary



Source: CMAP Analysis of 2017 IDOT Incident File.



Incident management - at the scene

Assure safety and
protect lives

Respond with all of
the right people and
equipment

Clear quickly

Active traffic management - on the roadway

Clear a path for
responders

Prevent secondary
crashes

Optimize
throughput

Integrated corridor management

Manage detours and
diversions

Provide information
about choices

Facilitate
interagency traffic
management



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Understanding and addressing travel demand



Vehicle-miles traveled trends



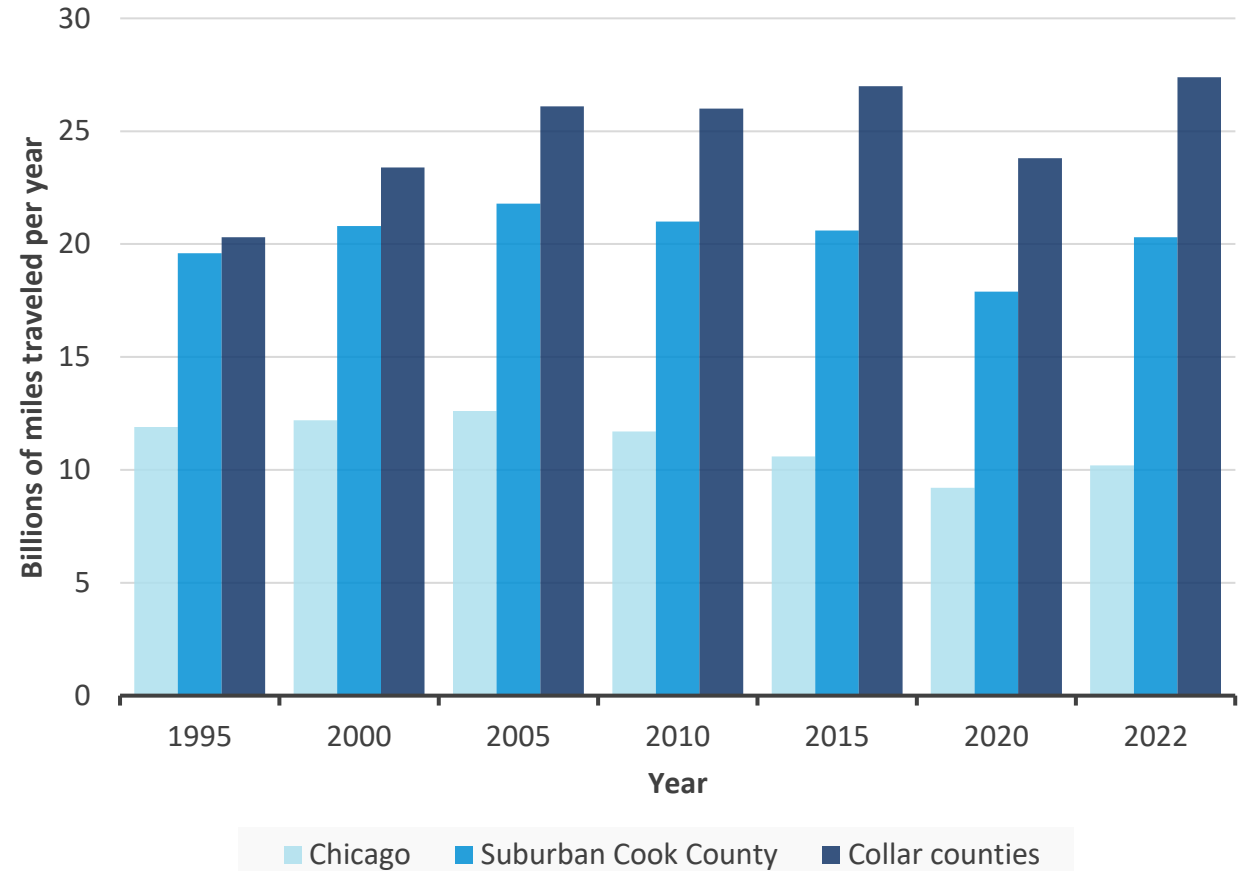
2022 regional VMT was 58.0 B., slightly below peak levels in 2005 and 2019 (60.5 B. VMT).



VMT in 2010 and in 2020 was limited by recessions.



VMT growth patterns in Cook County diverged from the collar counties.



Source: CMAP analysis of annual Illinois Travel Statistics Report

Vehicle registration trends



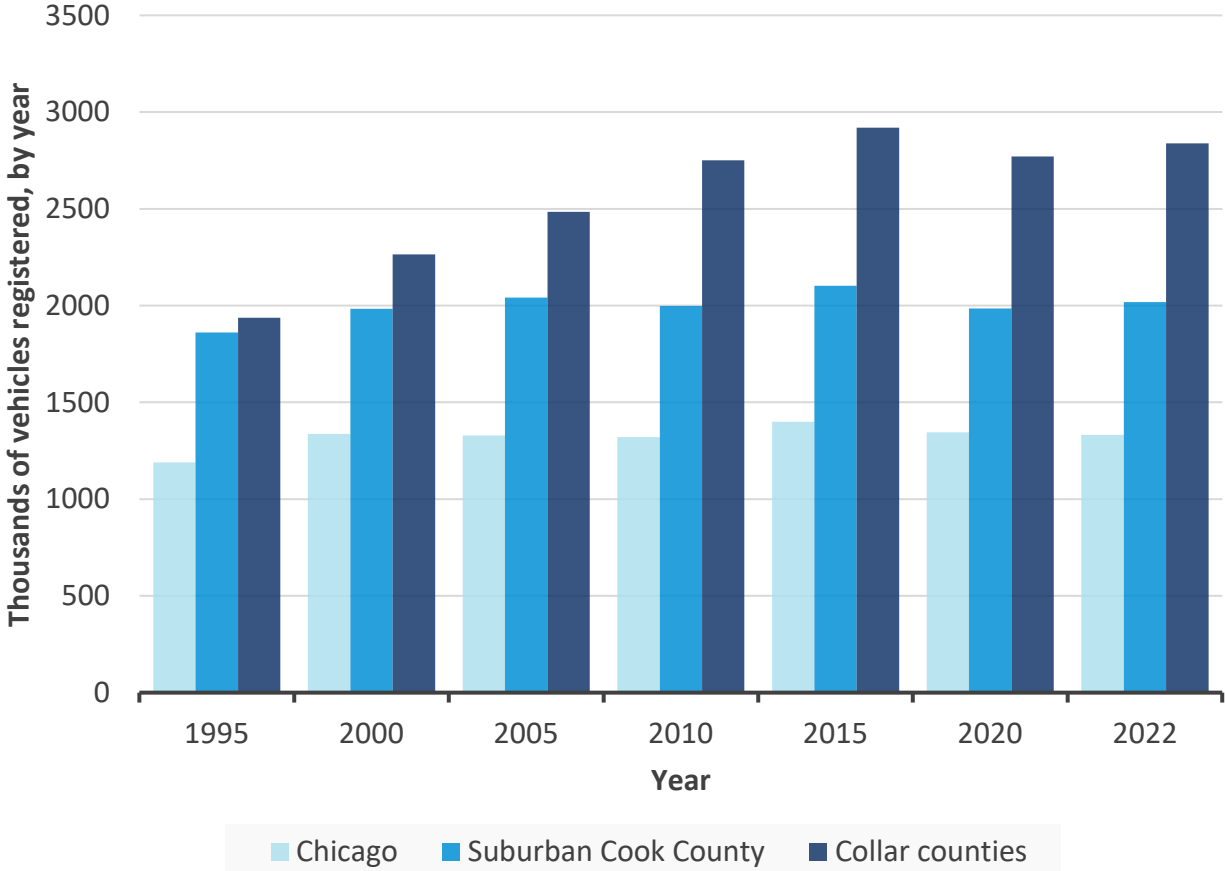
Regional vehicle registrations rose from 4.3 million in 1995 to 6.5 million in 2018.



Vehicle registrations fell to 6.1 million in 2020, before rebounding to 6.3 in 2021.



Registrations grew much more rapidly in collar counties than in Cook County from 1995 to 2015.



Source: CMAP analysis of Illinois Secretary of State registration data.

Driver licensing trends (statewide)



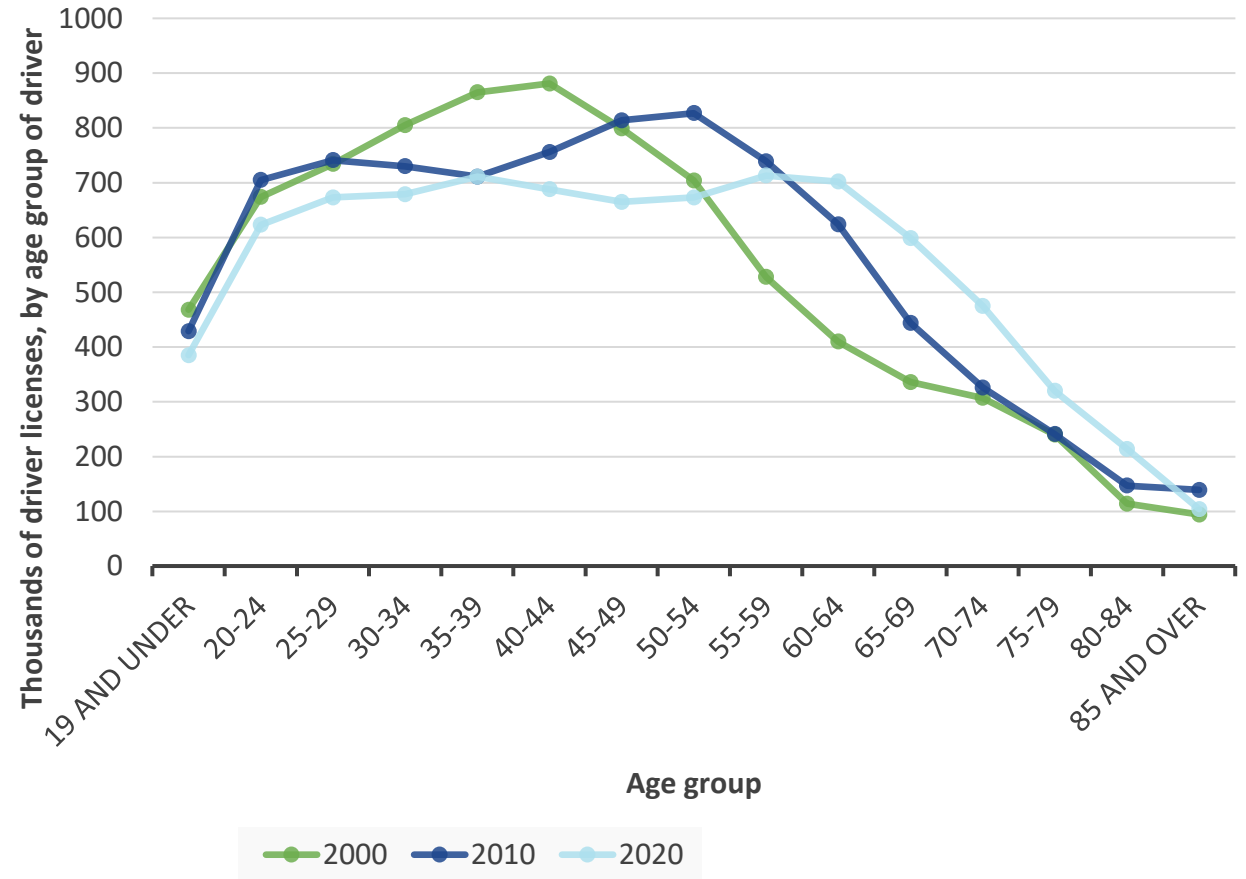
Licensed drivers in Illinois rose from almost 7.96 million in 2000 to 8.37 million in 2010, then fell to 8.23 million in 2020.



Fewer younger people are obtaining driver licenses than in previous years.



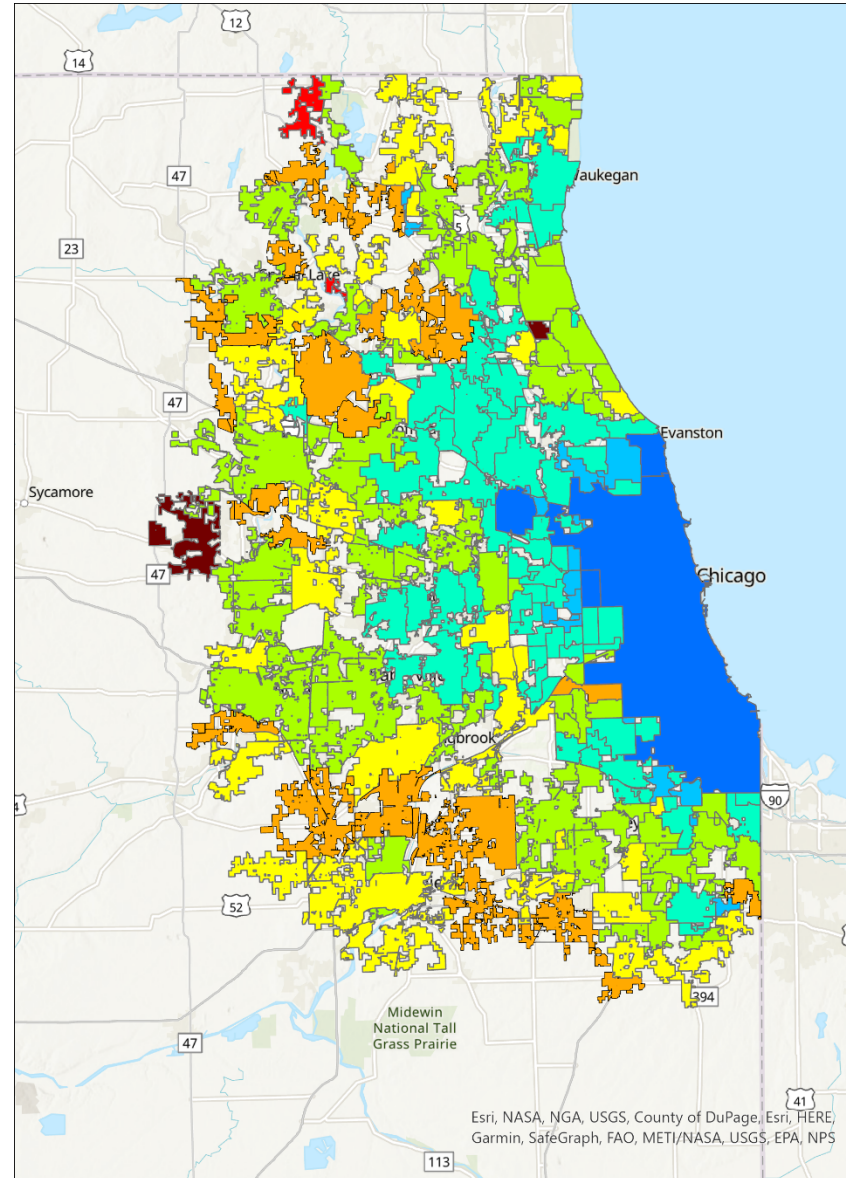
The number of elderly drivers is still increasing rapidly as baby boomers age.



Source: CMAP analysis of US DOT driver license estimates.

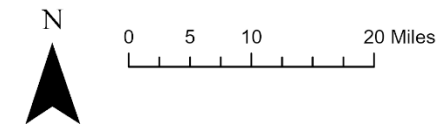
Travel per household varies substantially in the region, based on accessibility, alternative travel modes available, household characteristics, and vehicle ownership.

Source: CMAP analysis of IEPA, ILSOS, Here, and US Census data.



Estimated household-based VMT per household per year, 2019 - 2021

- Less than 12,500 miles per year
- 12,501 - 15,000
- 15,001 - 17,500
- 17,501 - 20,000
- 20,001 - 22,500
- 22,501 - 25,000
- 25,001 - 27,500
- Greater than 27,500



Esri, NASA, NGA, USGS, County of DuPage, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS



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Agency for Planning

Next steps



FY 2024 Activities

1. Review regional objectives for congestion management
2. Review the CMP network
3. Review multimodal performance measures
4. Collect data and monitor system performance
5. Analyze congestion problems and needs

FY 2025 Activities

1. Identify and assess CMP strategies

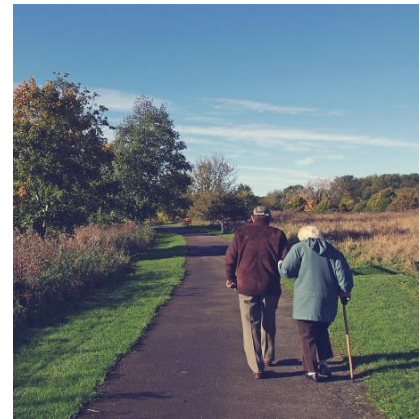
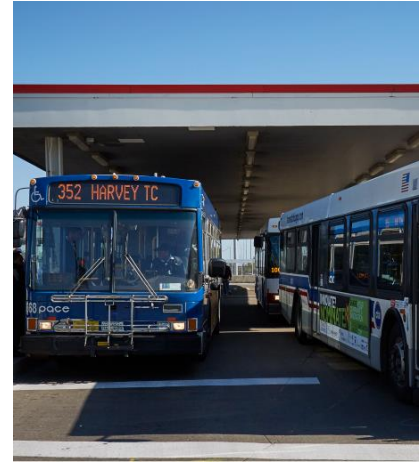
Jose Rodriguez

jrodriguez@cmap.Illinois.gov

Tom Murtha

tmurtha@cmap.Illinois.gov

[@cmapillinois](#) |    



Thank you!



Chicago Metropolitan Agency for Planning

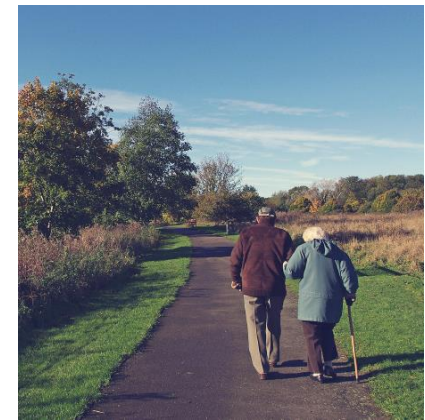
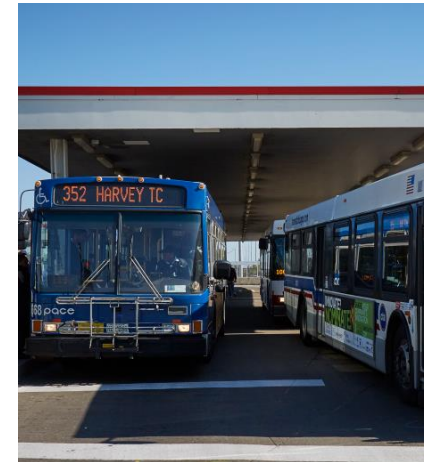
@cmapillinois |    

5.0 2024 roadway safety targets

Victoria Barrett, CMAP

Roadway Safety Targets

Victoria Barrett
Senior Transportation Planner



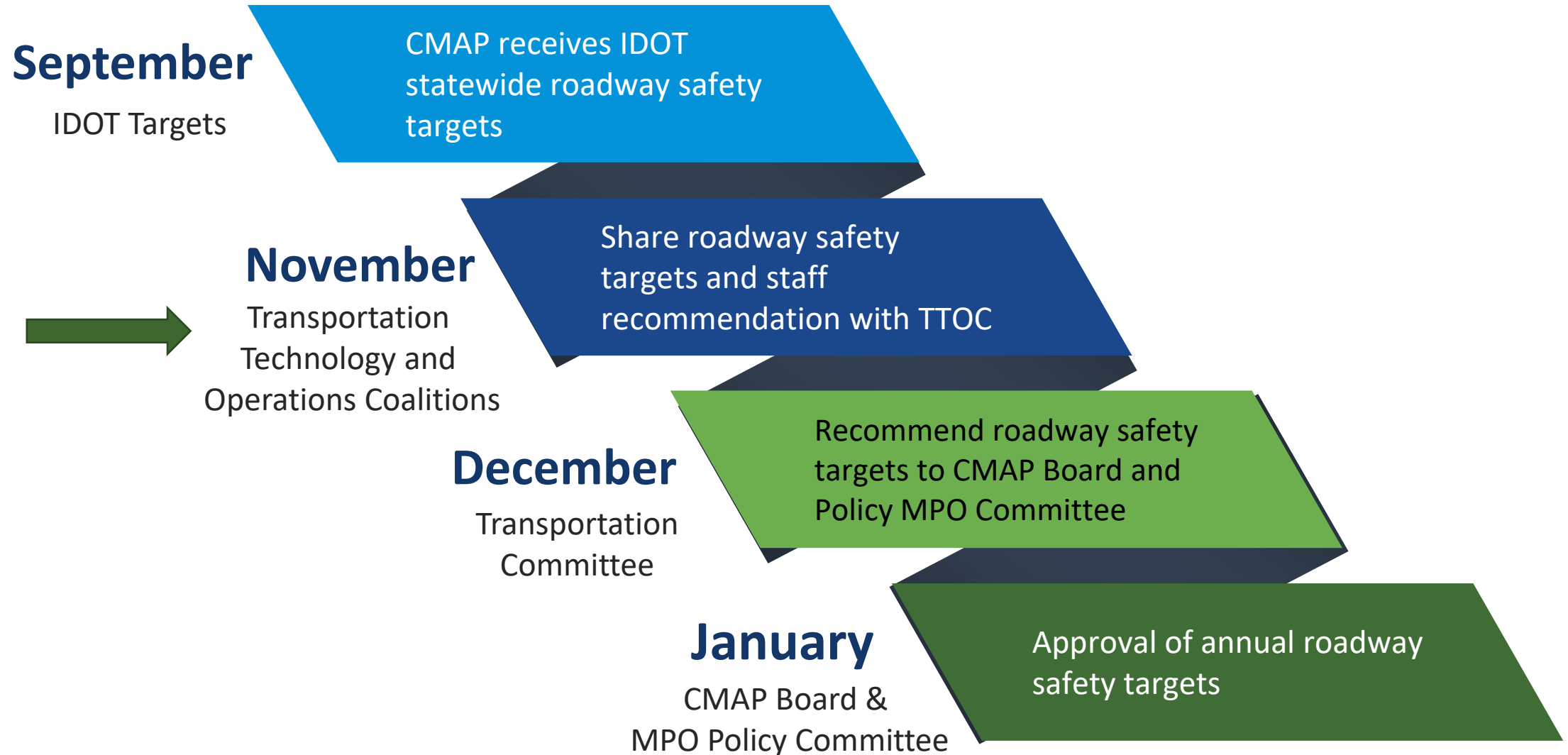
Today

1. Overview of target setting process
2. **2024 draft roadway safety performance targets**
3. Recommendations regarding approach to future target setting

Overview of safety targets

- FHWA transportation performance management (TPM) program
- Required within Highway Safety Improvement Program (HSIP) for IDOT
- MPOs required to identify targets with MAP-21
- Set annually
 - August 31 for IDOT
 - February 27 for CMAP

Process for roadway safety targets approval













Five safety targets

1. Number of fatalities
2. Rate of fatalities per VMT
3. Number of serious injuries
4. Rate of serious injuries per VMT
5. Number of non-motorized fatalities and serious injuries

Targets to date

- CMAP may support IDOT targets or identify regional targets
- CMAP has supported IDOT targets in 2018, 2019, 2020, 2021, 2022, 2023*

Performance Measure	Desired Trend	Current Trend	2018 Target	2019 Target	2020 Target	2021 Target
Fatlities			No	No	No	No
Fatality Rate			No	No	No	No
Serious Injuries			Made significant progress	Yes	Yes	Yes
Serious Injury Rate			Made significant progress	Yes	Yes	Yes
Non-motorized Fatalities and Serious Injuries			No	No	Made significant progress	Yes

*CMAP has identified a goal of zero traffic deaths by 2050 in ON TO 2050

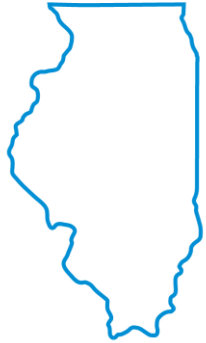


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2024 Targets

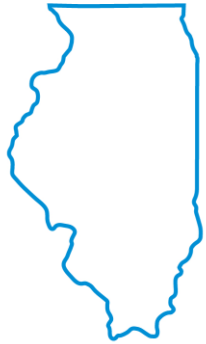


2024 HSIP Roadway Safety Targets

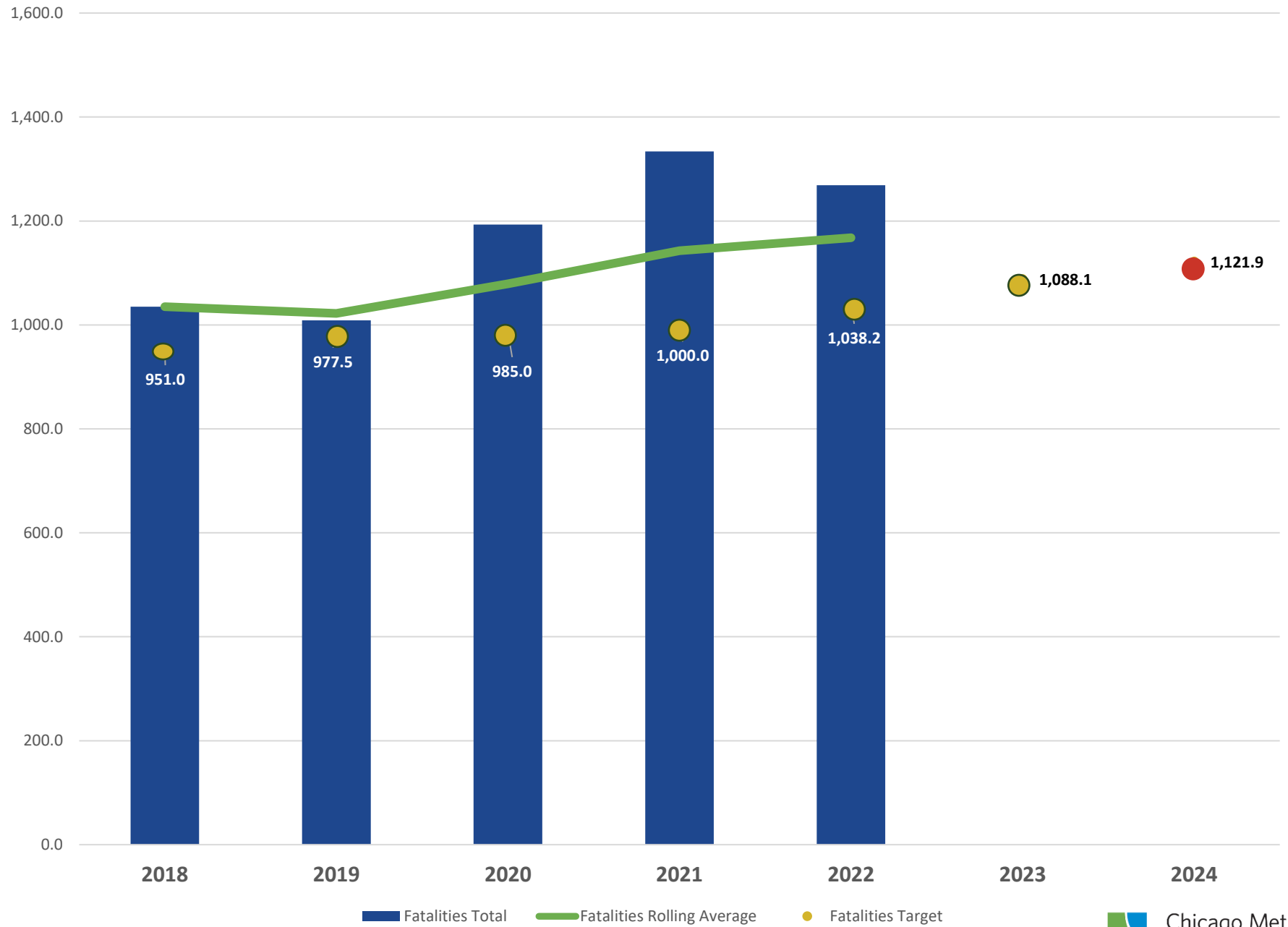


Performance Measure	Base Years (5 Year Average)					Target
	2018	2019	2020	2021	2022	2024
Fatalities	1,025.0	1,042.0	1,081.0	1,132.2	1,168.2	1,121.9
Fatality Rate	0.960	0.972	1.036	1.108	1.151	1.105
Serious Injuries	11,967.2	11,566.8	10,713.4	10,251.6	9,618.4	8,418.0
Serious Injury Rate	11.222	10.795	10.177	9.923	9.401	8.498
Non-motorized Fatalities and Serious Injuries	1,561.8	1,584.0	1,492.0	1,496.8	1,459.4	1,375.7

Fatalities with targets 2018 – 2024



● 2024 target



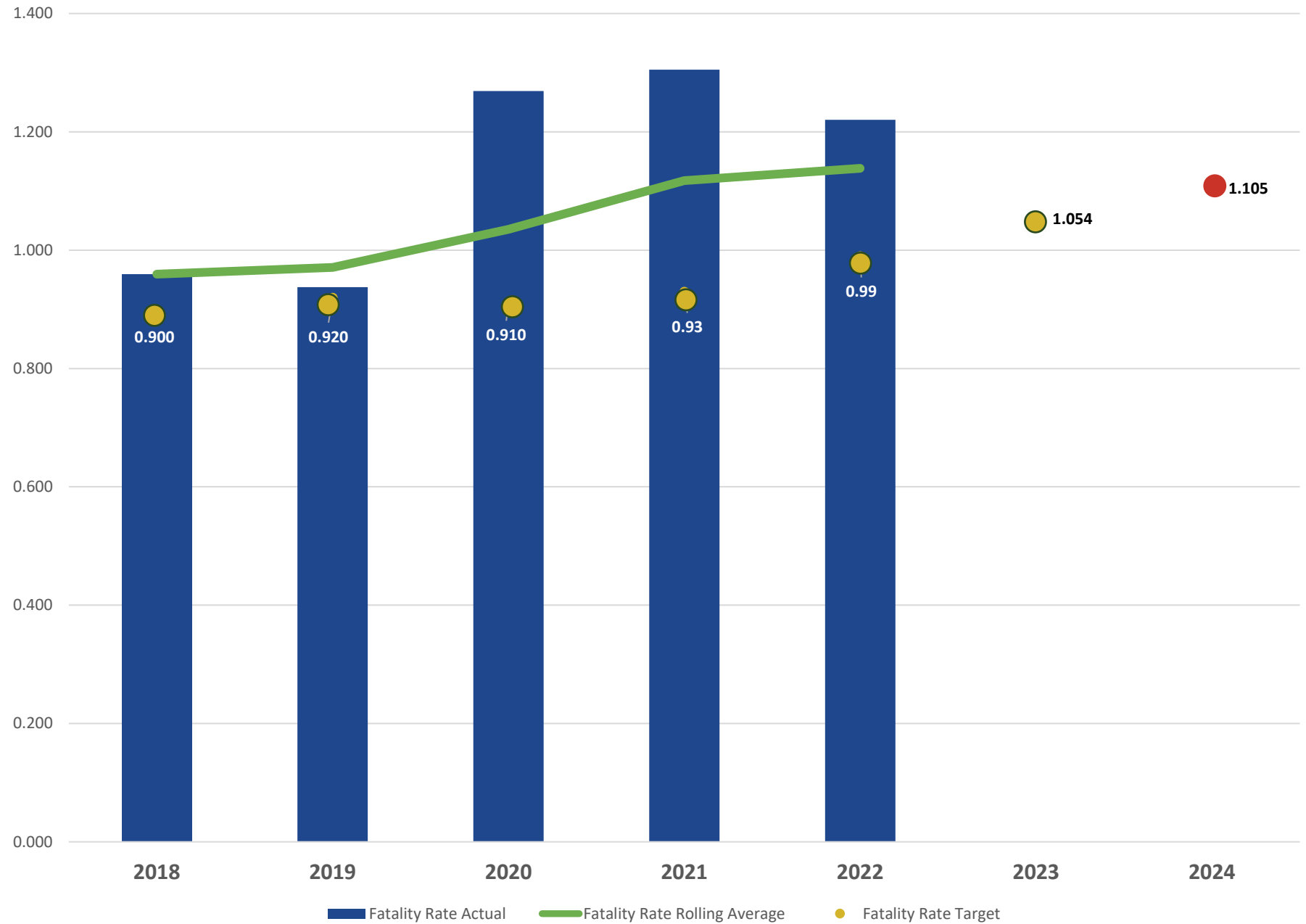
Source: FARS for 2018-2020, IDOT for 2022, 2023

Rate of fatalities per VMT* with targets 2018 – 2024

*per 100 million VMT



● 2024 target

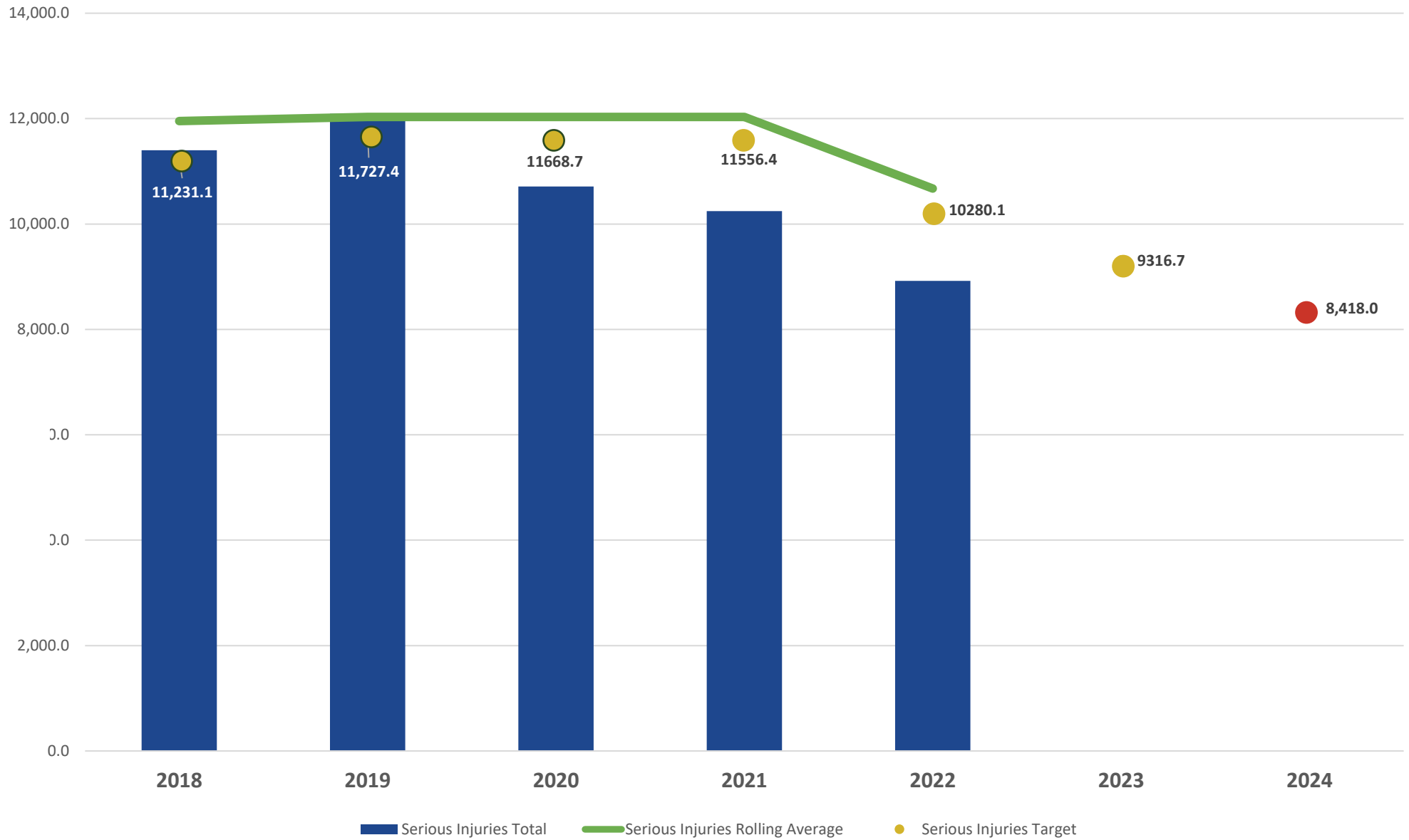


Source: FARS for 2018-2020, IDOT for 2022, 2023

Serious injuries with targets 2018 – 2024



● 2024 target



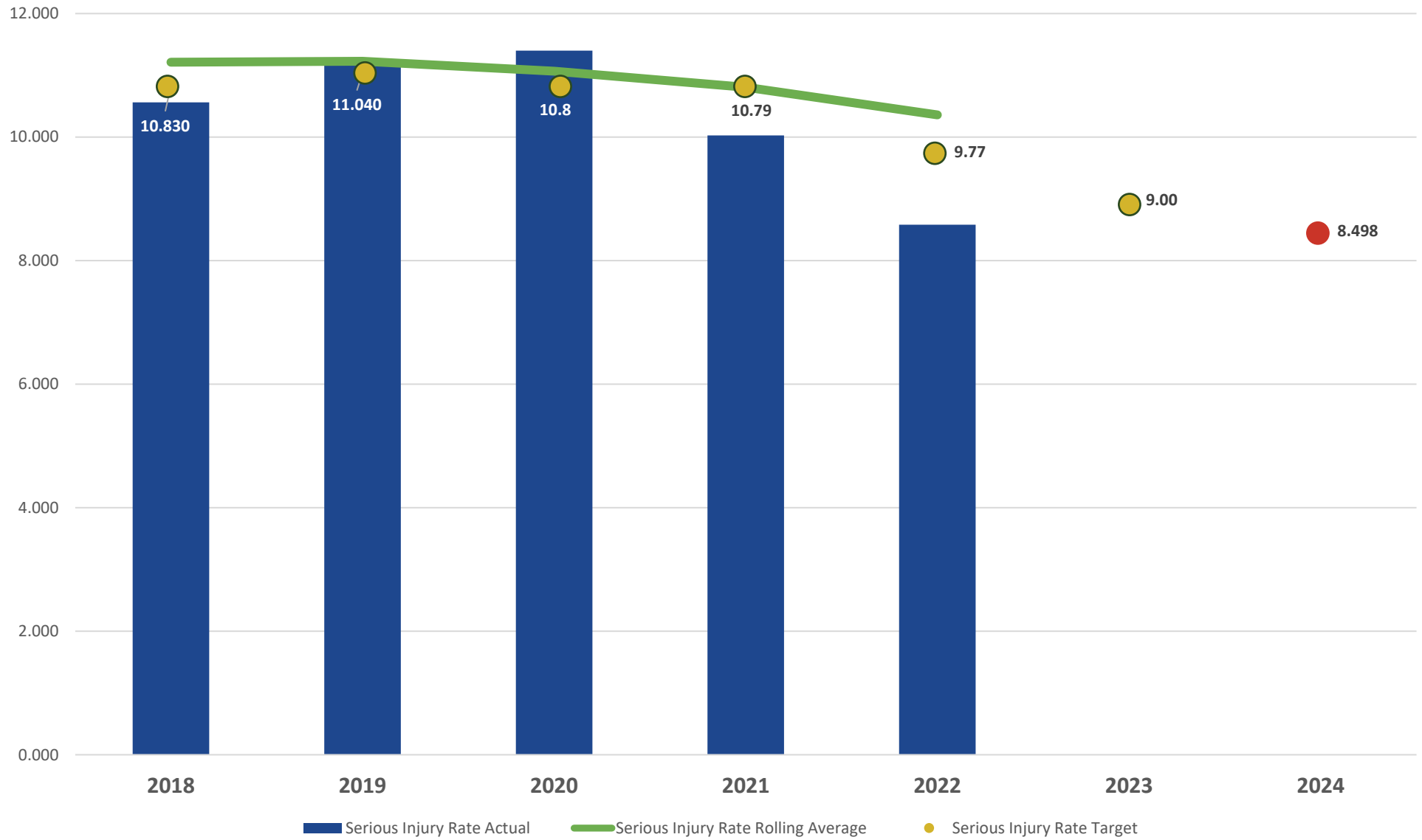
Source: FARS for 2018-2020, IDOT for 2022, 2023

Rate of serious injuries per VMT* with targets 2018 – 2024

*per 100 million VMT



● 2024 target

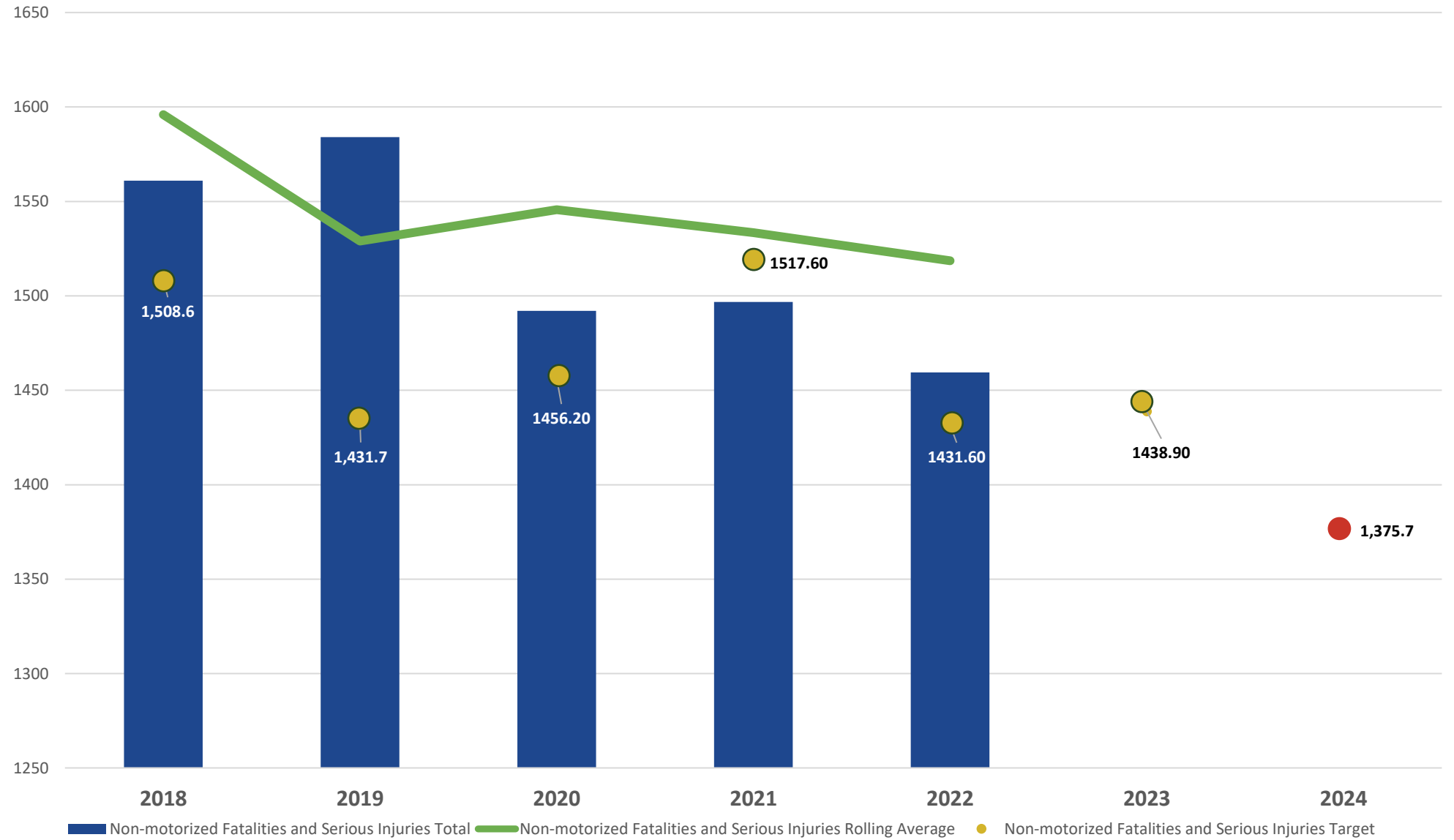


Source: FARS for 2018-2020, IDOT for 2022, 2023

Non-motorized fatalities and serious injuries with targets 2018 – 2024



● 2024 target



Source: FARS for 2018-2020, IDOT for 2022, 2023

Recommendations for 2024 Targets

- **Support targets identified by IDOT for 2024**
- **Continue to work toward goal of zero traffic deaths by 2050**

Questions



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Future Target Setting



Moving toward regional targets

- Federal partners encourage regional targets (data-driven not aspirational)
- Ongoing safety work and evaluation metrics can be leveraged to address emerging regional safety issues: SS4A Safety Action Plans



Challenges

- There is no consensus on target-setting methods
 - Policy-based: % reduction
 - Trendline: based on recent history
 - Statistical or probabilistic models
- Data-driven targets attempt to quantify the impacts of *many* disparate inputs and efforts in safety
 - Infrastructure improvements
 - Educational and training programs
 - Enforcement activities
 - Laws and policies
 - Travel demand



SS4A Safety Action Plans

- \$4.8 million over the next 24 months
- County-level safety action plans
- Progress and Transparency requirements
 - Develop a strategy for evaluation plan performance using outcome data (based on project/program implementation)
 - Report annually on the progress towards reducing roadway fatalities and serious injuries, including performance measures identified in the plan

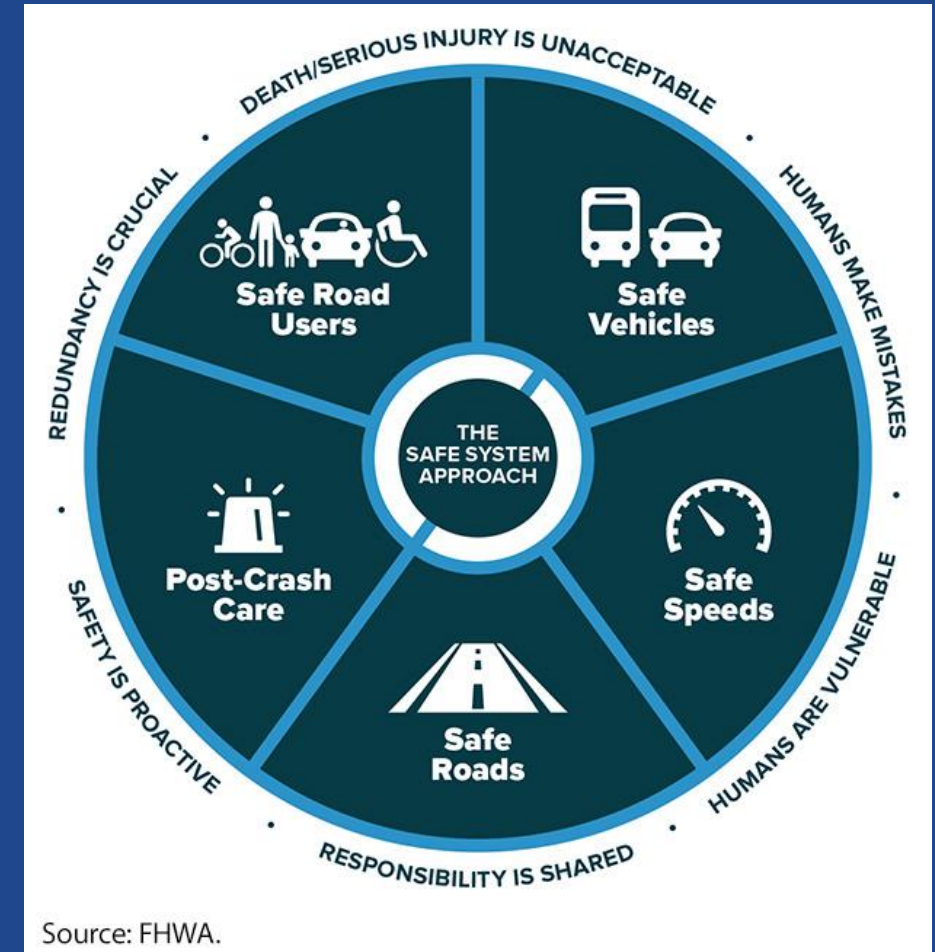


Each plan will identify county targets and actions to achieve them.

Recommendations

Future Target Setting

1. Develop regional targets that are informed by SS4A safety action plans and the Safe System Approach
2. Coordinate regional target-setting method with existing and planned safety work:
 - CMAP long-range transportation plan
 - IDOT safety targets and programs
 - Safety Action Plans – county and local



Recommendations continued

Future Target Setting

2. Support IDOT targets for 2024 and 2025.

- Policy-based 2% reduction, or trendline method (whichever is more aggressive)

3. Continue to work towards the ON TO 2050 goal of zero traffic deaths by 2050.



Speed Management

Addressing our regional traffic safety crisis

Overview



Key takeaways

- Improve design guidance around self-enforcing streets
- Address speed limit setting processes that result in unsafe speeds
- Establish a regional traffic safety culture around safe speeds
- Align enforcement practices with safety and equity goals

Next Steps

- Continue agency work on STAR, including SS4A regional work and other local safety action plans
- Develop data-informed target setting process for the SS4A plans
- Present 2024 targets to TC, Board and MPO Policy Committee

Thank you!

6.0 Tentative 2024 meeting dates

February 1st

May 2nd

August 1st

November 7th

(all are Thursdays at 9:30am)

7.0 Adjournment

Transportation Technology and Operations Coalition

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