

Central Ohio Transportation Safety Forum

Thursday, September 21, 2023



MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION

WELCOME

WILLIAM MURDOCK

EXECUTIVE DIRECTOR

MID-OHIO REGIONAL PLANNING COMMISSION



MORPC

WELCOME

**COUNCILMEMBER LOURDES
BARROSO DE PADILLA**

CITY OF COLUMBUS



MORPC

WELCOME

COUNCILLOR JOHN BARTH

*DISTRICT 7 COUNCILLOR
CITY OF INDIANAPOLIS*



MORPC

DISCUSSION



City of Columbus

- **Population:** 907,310 (ACS 2021)
- **Size:** 220.1 square miles
- **Density:** 4,122 people per square mile
- **Median Age:** 33.1
- **Median Household Income:** \$58,202
- **Mean Travel Time to Work:** 22 minutes
- **Drive Alone Commuters:** 75%

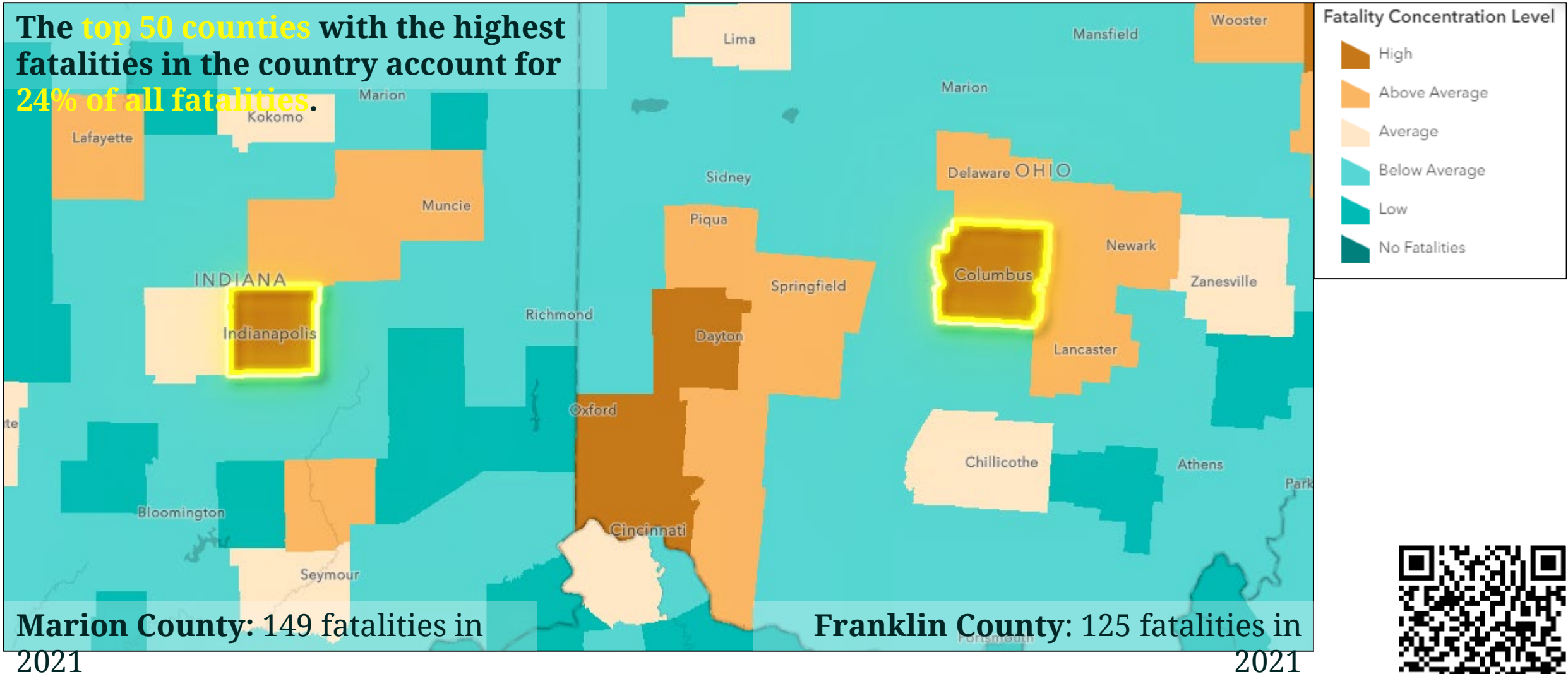
City of Indianapolis

- **Population:** 882,327 (ACS 2021)
- **Size:** 361.6 square miles
- **Density:** 2,439.8 people per square mile
- **Median Age:** 34.5
- **Median Household Income:** \$58,479
- **Mean Travel Time to Work:** 23.6 minutes
- **Drive Alone Commuters:** 70%

<https://censusreporter.org/profiles>

NATIONAL ROADWAY SAFETY STRATEGY

The **top 50 counties** with the highest fatalities in the country account for **24% of all fatalities**.



**PLEASE
RETURN BY
10:45 AM**



MORPC

Panel Presentations and Discussion

Moderator: Lauren Cardoni, MORPC

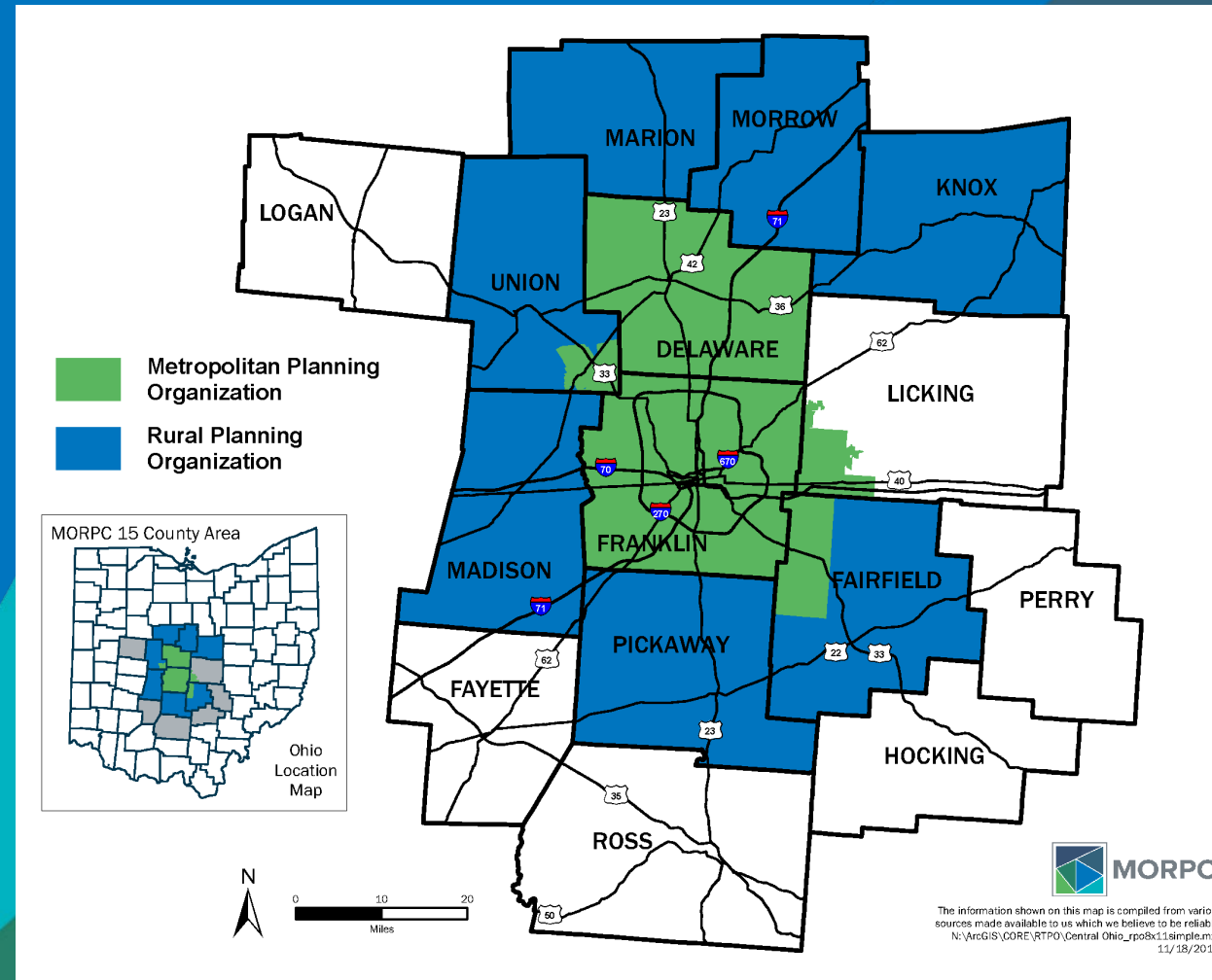


MID-OHIO REGIONAL
MORPC
PLANNING COMMISSION

Transportation Safety in Central Ohio

MORPC Safety Program

- Established in 2005
- Primary focus on MPO, but expanding services into CORPO communities
 - Crash Data Analysis
 - Technical Assistance
 - Special Projects and Studies
 - Participation in Safety Committees
 - Safety Education
- Trends, needs, strategies are changing



National Roadway Safety Strategy (NRSS)



MORPC

U.S. Department of Transportation's (USDOT) comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets.

- **Sets a vision and goal** for the safety of the Nation's roadways.
- **Adopts the Safe System Approach** principles to guide our safety actions.
- **Identifies new priority actions and notable changes to existing practices and approaches** that target our most significant and urgent problems and are, therefore, expected to have the most substantial impact.
- **Call to Action:** We partner with stakeholders to identify actions to get us closer to zero roadway fatalities.

www.transportation.gov/NRSS

USDOT Safe System Approach



A different way of thinking about the road safety problem ...



Accommodate human mistakes

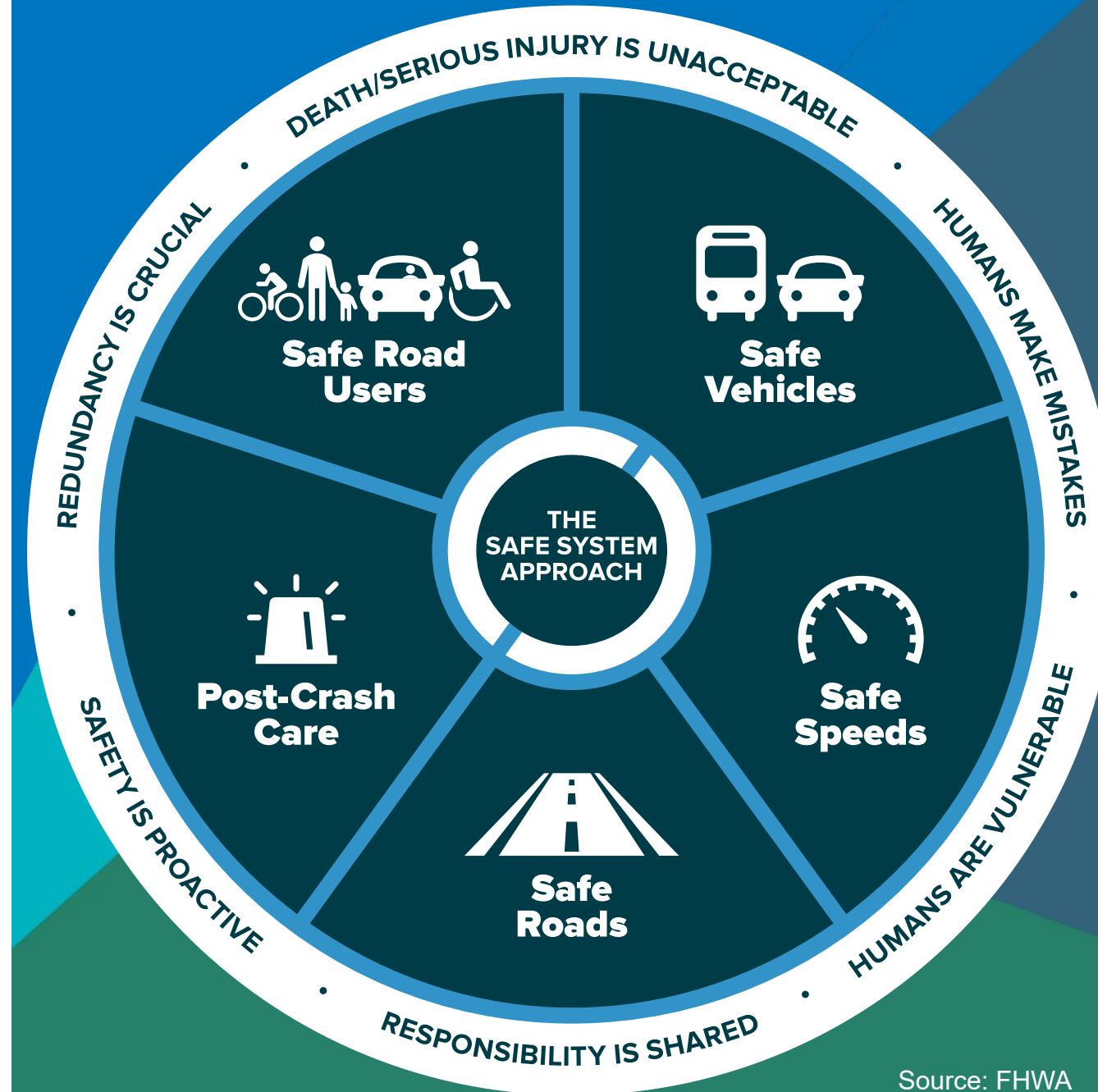


Keep impacts at tolerable levels

Safe System Approach

SAFE SYSTEM PRINCIPLES

1. Death and Serious Injury is Unacceptable
2. Humans Make Mistakes
3. Humans are Vulnerable
4. Responsibility is Shared
5. Safety is Proactive
6. Redundancy is Crucial



WELCOME

Brittany Shoots-Reinhard, PhD

*RESEARCH ASSISTANT PROFESSOR,
DEPARTMENT OF PSYCHOLOGY
THE OHIO STATE UNIVERSITY*



MORPC

WELCOME

Harvey Miller, PhD

*PROFESSOR OF GEOGRAPHY AND
DIRECTOR OF THE CENTER FOR URBAN AND
REGIONAL ANALYSIS (CURA)*

THE OHIO STATE UNIVERSITY



MORPC

WELCOME

John Bolte, PhD

*PROFESSOR IN THE SCHOOL OF HEALTH AND
REHABILITATION SCIENCES AND
DIRECTOR OF THE INJURY BIOMECHANICS
RESEARCH CENTER (IBRC)*

THE OHIO STATE UNIVERSITY



MORPC

Q & A

- **Brittany Shoots-Reinhard**
- **Harvey Miller**
- **John Bolte**



<https://pollev.com/laurenc265>

National Traffic Safety Crisis

US traffic deaths drop slightly in 2022 but still a 'crisis'

DETROIT (AP) — The number of people killed on U.S. roadways decreased slightly last year, but government officials said the 42,795 people who died is still a national crisis.

Estimates by the National Highway Traffic Safety Administration showed that the number of fatalities dropped 0.3% [from the 42,939 killed in 2021](#). Traffic deaths declined slightly in the fourth quarter, the third straight quarterly drop.

But they're still close to 2021 numbers, which were the highest in 16 years.



FOR IMMEDIATE RELEASE
June 22, 2023

CONTACT: [Adam Snider](#), 202-580-7930
202-365-8971 (after hours)

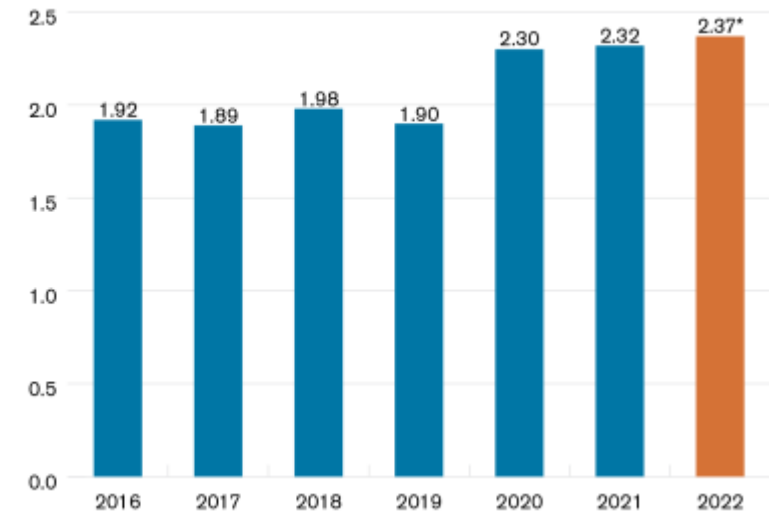
Drivers Hit and Killed More Than 7,500 Pedestrians Last Year, Most Since 1981, New Projection Shows

Dangerous driving, inadequate infrastructure, larger and heavier vehicles contribute to record death toll, with 20 people walking killed every day

Pedestrian Fatality Rate Increased Yet Again in 2022

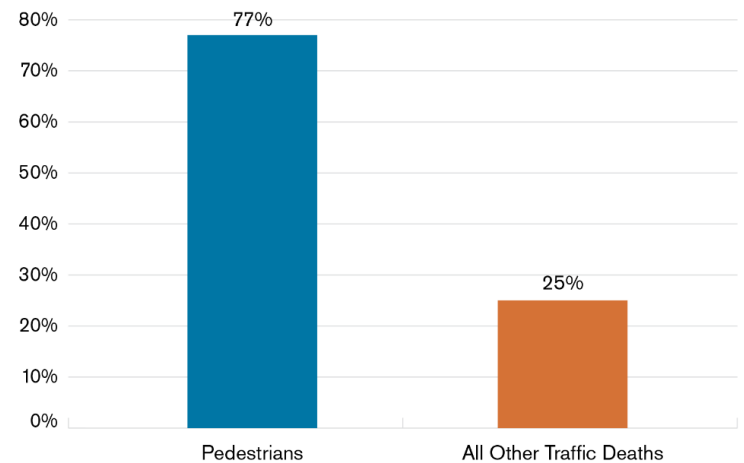
U.S. Pedestrian Fatality Rate per One Billion VMT

* Projected



Pedestrian Deaths Are Increasing Faster Than All Other Traffic Fatalities

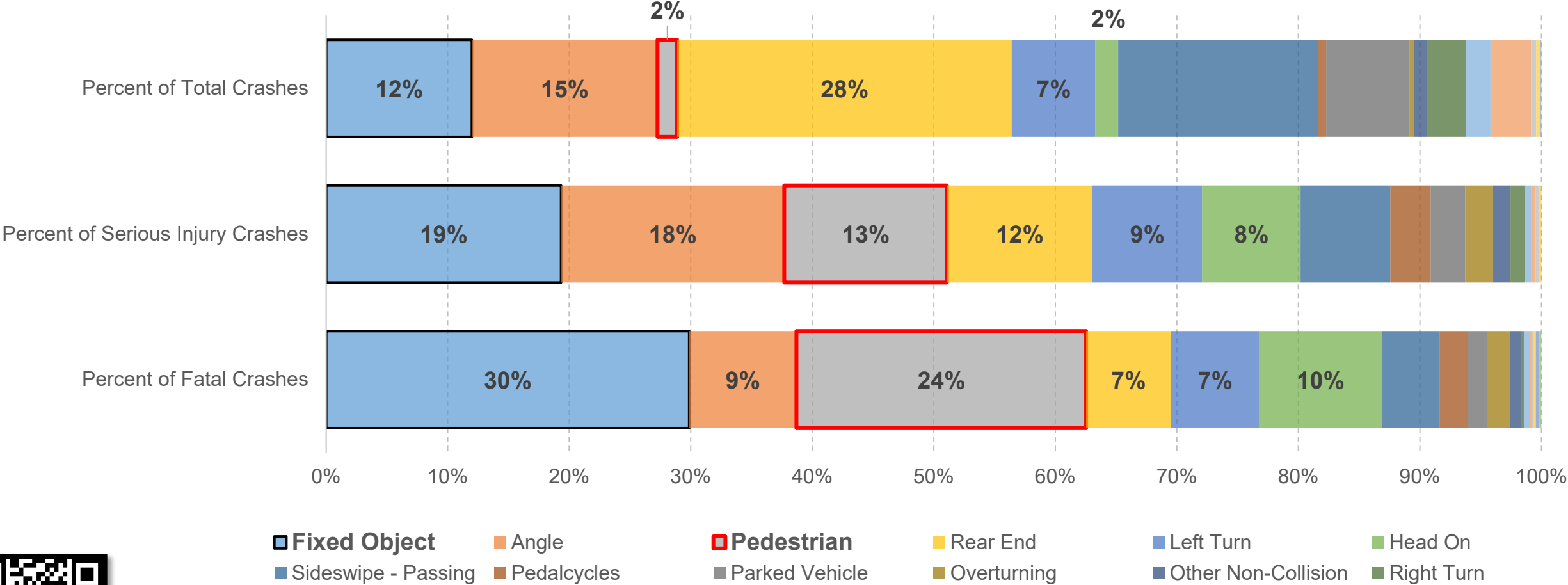
Percent Increase in Number of Traffic Deaths, 2010-2021



Regional Safety Priorities



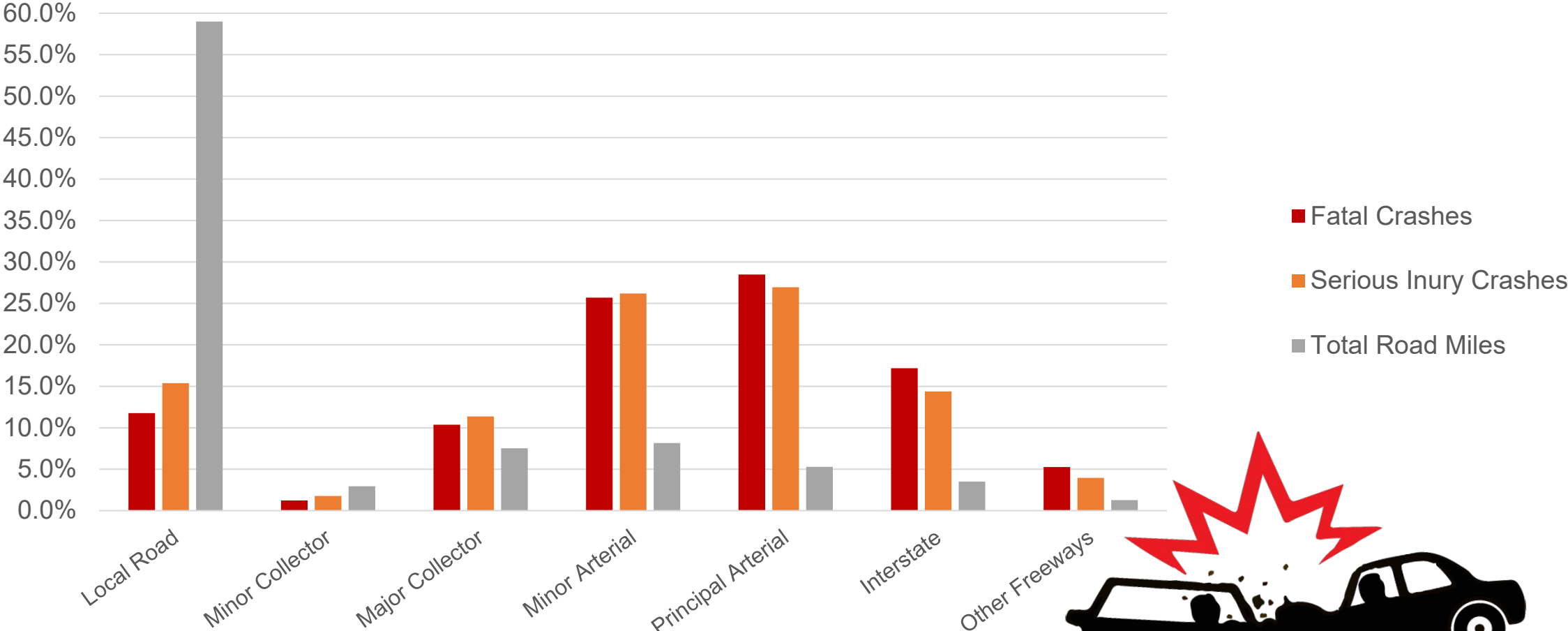
Percentage of Crashes by Crash Type (2018 – 2022)



Impacts of Roadway Design



Percentage of Fatal and Serious Injury Crashes by Functional Class (2018 – 2022)



Q & A

- **Brittany Shoots-Reinhard**
- **Harvey Miller**
- **John Bolte**



<https://pollev.com/laurenc265>



When poll is active respond at PollEv.com/laurenc265



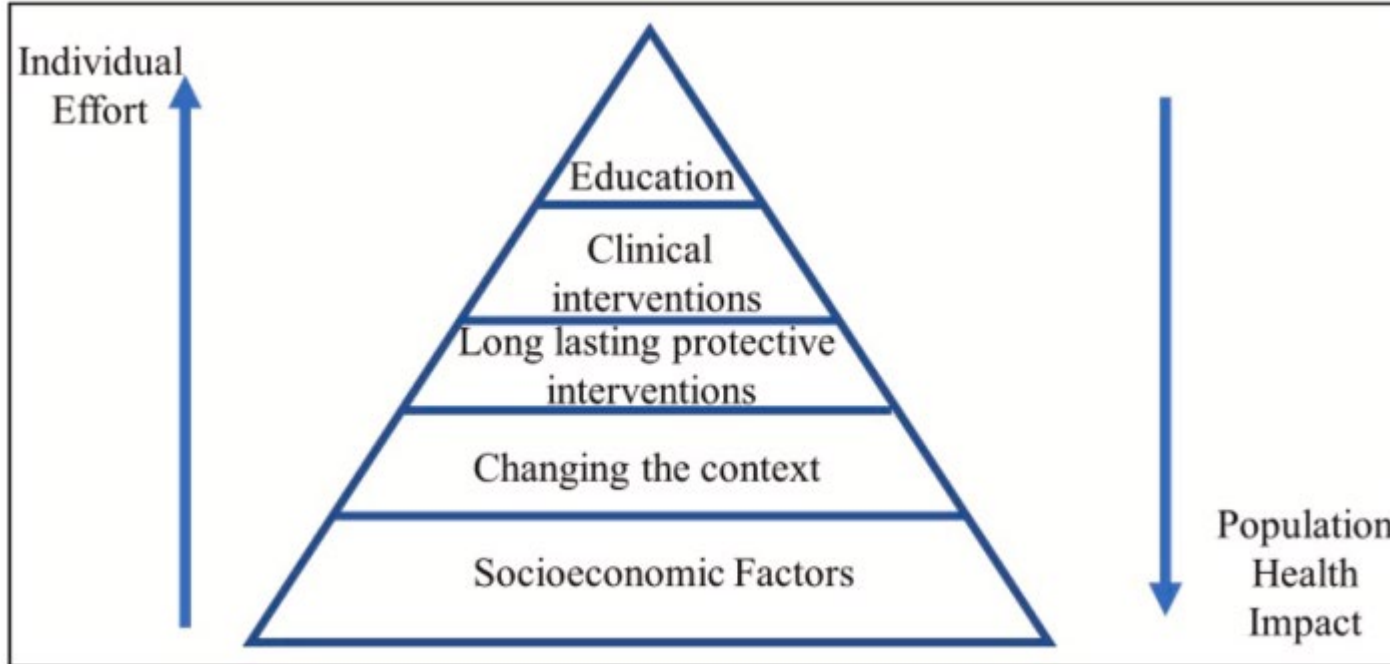
Submit your questions for the panel, or promote other submitted questions.

Nobody has responded yet.

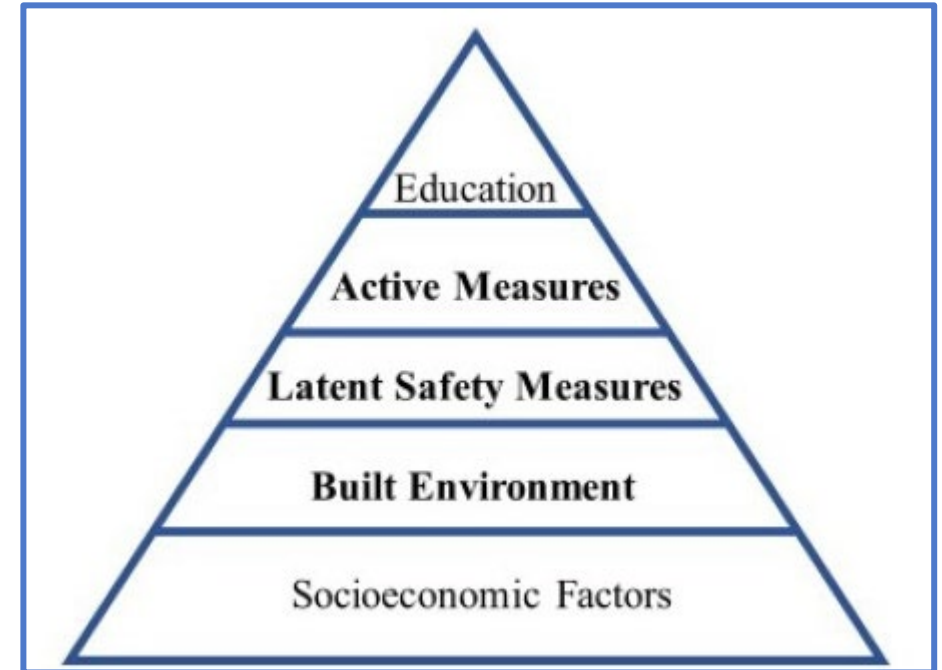
Hang tight! Responses are coming in.

A “Public Health Approach” to Road Safety

A “Health Impact Pyramid”



The “Safe Systems Pyramid”



David J. Ederer, Rachael Thompson Panik, Nisha Botchwey, Kari Watkins,
The Safe Systems Pyramid: A new framework for traffic safety,
Transportation Research Interdisciplinary Perspectives
www.sciencedirect.com/science/article/pii/S2590198223001525#f0005

The “Safe Systems Pyramid”



<i>Tier</i>	Approach to prevention	Programs and interventions	Relevant policy
5	Education	Driver education programs; Slow Down Campaigns	Driver’s education requirements for licensing
4	Active Safety Measures	Signals and signs indicating that one should stop or yield; forward, rear, and side collision warning; seat belts; helmets	Standards and guidance on where to place signs and signals; vehicle standards requiring safety features
3	Latent Safety Measures	Signal timing that encourages slower traffic progression; leading pedestrian intervals; air bags; automated emergency braking systems; speed governors; alcohol ignition interlocks	Standards and guidance on signal placement and cycle length; vehicle standards requiring the installation of latent safety features
2	Built Environment	Roundabouts; speed humps; chicanes; raised crosswalks; sidewalks; bicycle infrastructure	Design guidance that emphasizes safety over capacity; sidewalk ordinances
1	Socioeconomic factors	Affordable housing near transit; Zoning reform that reduces vehicle miles traveled; Safety features on commercial fleets	Zoning policies; housing policy; occupational safety policy

THANK YOU!



Regional Crash Trends

Between 2016-2022 in Central Ohio*:

	2016	2017	2018	2019	2020	2021	2022	(5-YR) TOTAL
Total Crashes	41,726	41,772	39,621	40,077	26,506	28,134	28,046	162,384
Total Fatalities	127	112	110	130	149	152	150	691
Total Serious Injuries	874	848	797	832	825	961	814	4,223
Total Non-Motorized Fatal and Serious Injuries	156	153	149	153	151	173	152	778

**Data shown represent the actual data for the MPO area only*

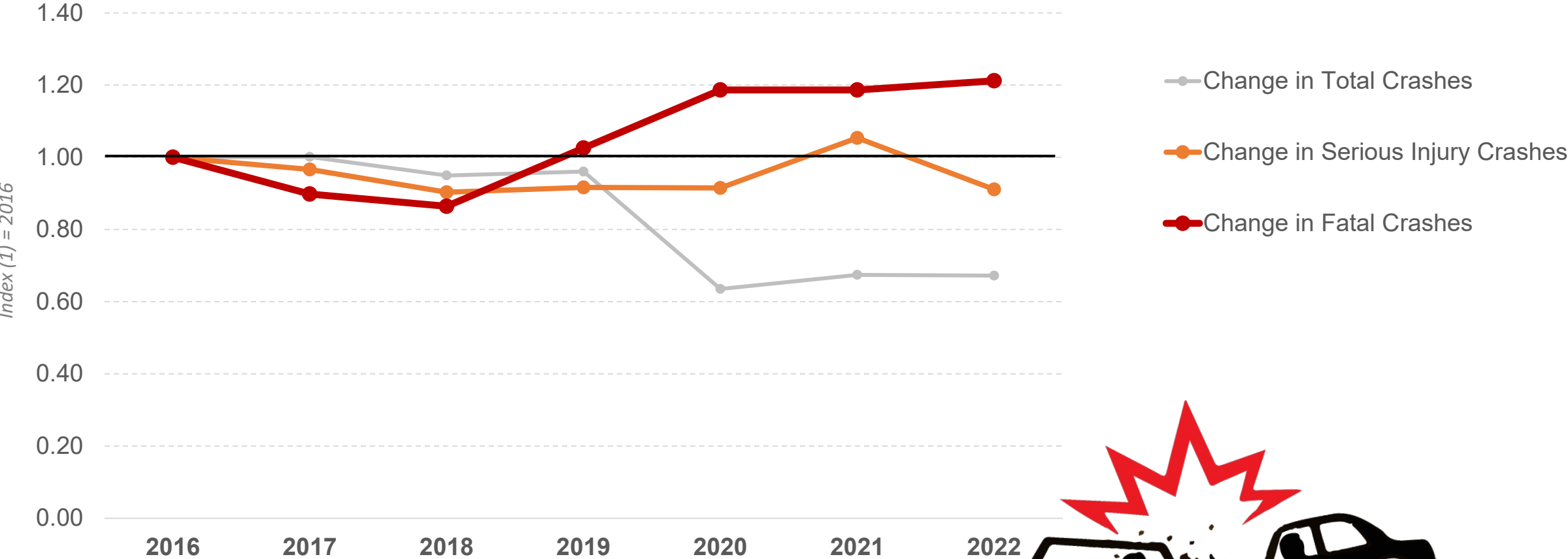


Regional Crash Trends



MORPC

Change in Fatal & Serious Injury Crash Numbers per Year (2016 – 2022)

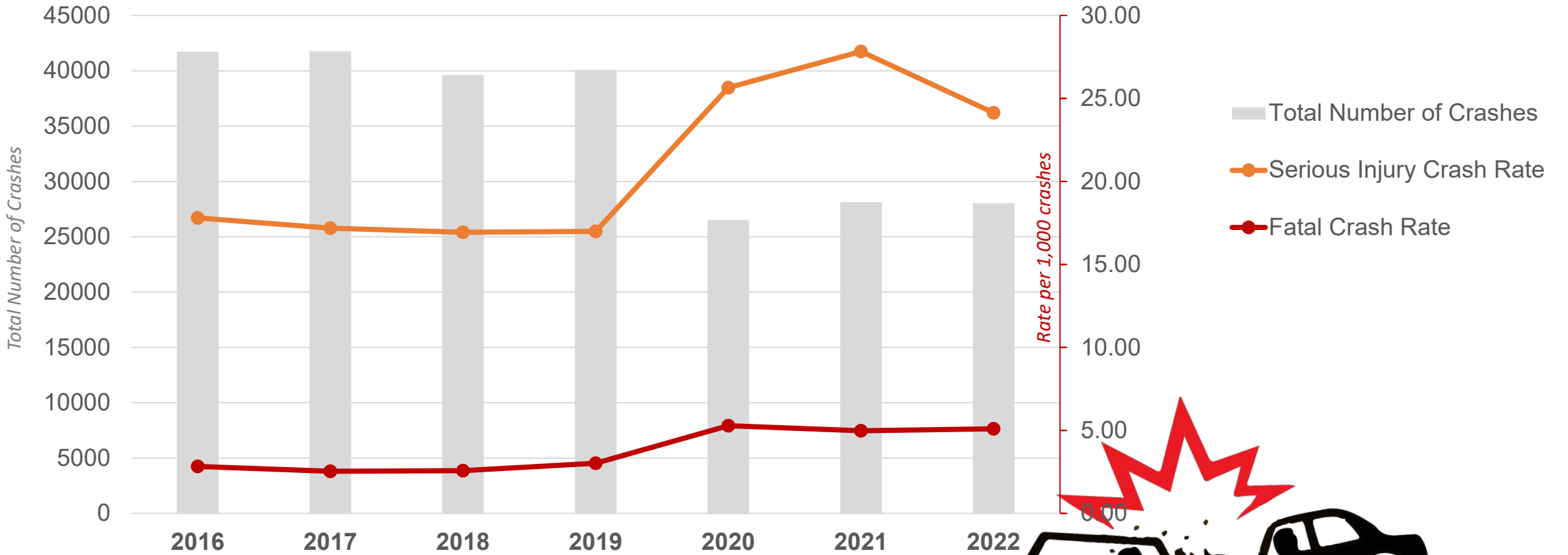


Note: Data shown represent data for the MPO area only



Impacts of COVID-19

Fatal & Serious Injury Crash Rates per Year (2016 – 2022)



Note: Data shown represent data for the MPO area only

