

Stakeholder Group Meeting

May 12, 2022





### Introductions





My Name Is



## Questions



Has someone you know ever been seriously injured or killed in a traffic-related crash?

If you could, would you try to prevent that crash from happening?



## Today's Agenda







## Terminology



#### KSI Crash

A crash where an individual was Killed or Seriously Injured.

#### Fatal Crash

A crash that resulted in any injury that results in death within a 30-day period after the crash occurred.

#### Serious Injury Crash

A crash that resulted in any injury that results in one or more of the following:

- Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood
- Broken or distorted extremity (arm or leg)
- Crush injuries
- Suspected skull, chest, or abdominal injury other than bruises or minor lacerations
- Significant burns (2<sup>nd</sup> and 3<sup>rd</sup> degree burns over 10% or more of the body)
- Unconsciousness when taken from the crash scene
- Paralysis



## Terminology





## NOT ACCIDENT

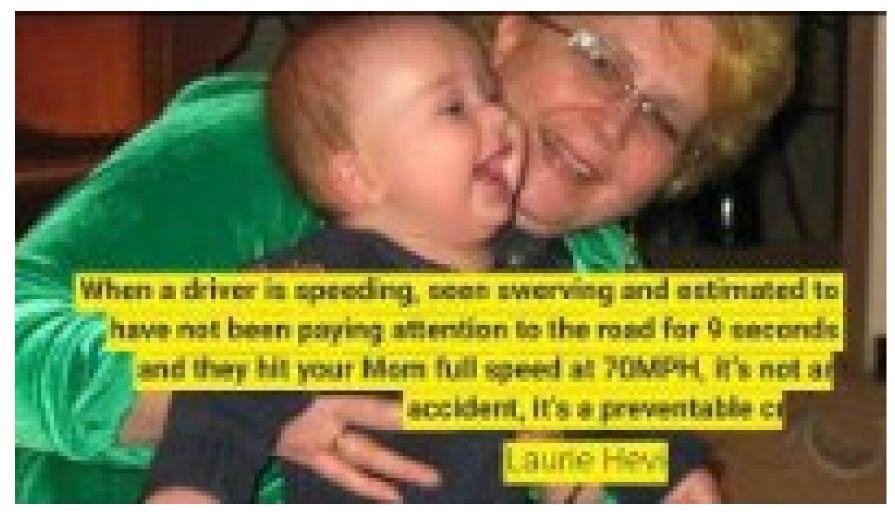
Traffic Crashes are not accidents, they are the result of preventable human error and systemic design decisions, they are fixable problems, and we should expect answers and solutions.



## Crash, Not Accident



#### https://www.youtube.com/watch?v=A4rUtnEYPZU





## Questions



How many people do you think died in traffic-related crashes in Marion County from 2011 – 2020?

**739** 

How many people do you think died in traffic-related crashes last year (2021)?

92

How many people do you think have died in traffic-related crashes so far this year (through May 10, 2022)?

33



## Questions



What would be an acceptable goal for the number of traffic related deaths this year? Next year? In 5 years?



## There's No One Someone Won't Miss



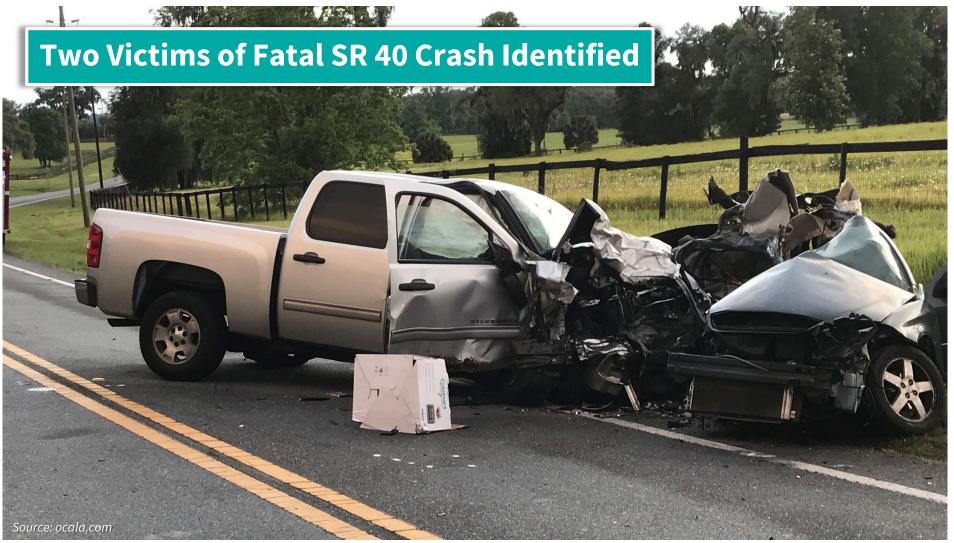
https://www.youtube.com/watch?v=Uzz0C96Eav0





## **Crash Overview**



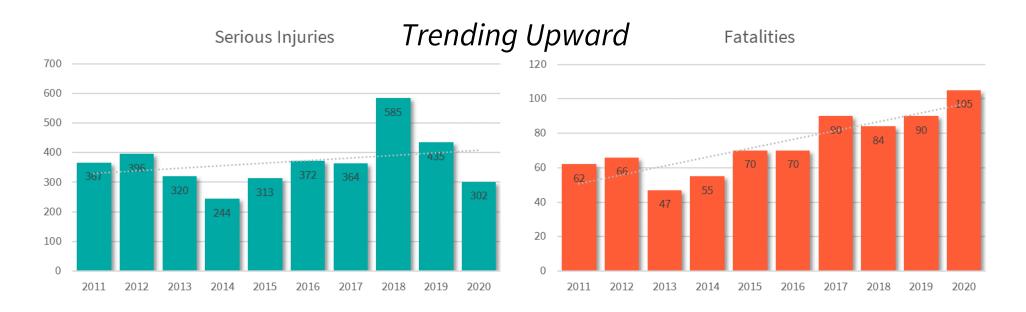




## Serious Injuries and Fatalities



In the last decade there were 3,698 serious injuries and 739 fatalities.



#### We haven't done much better since...

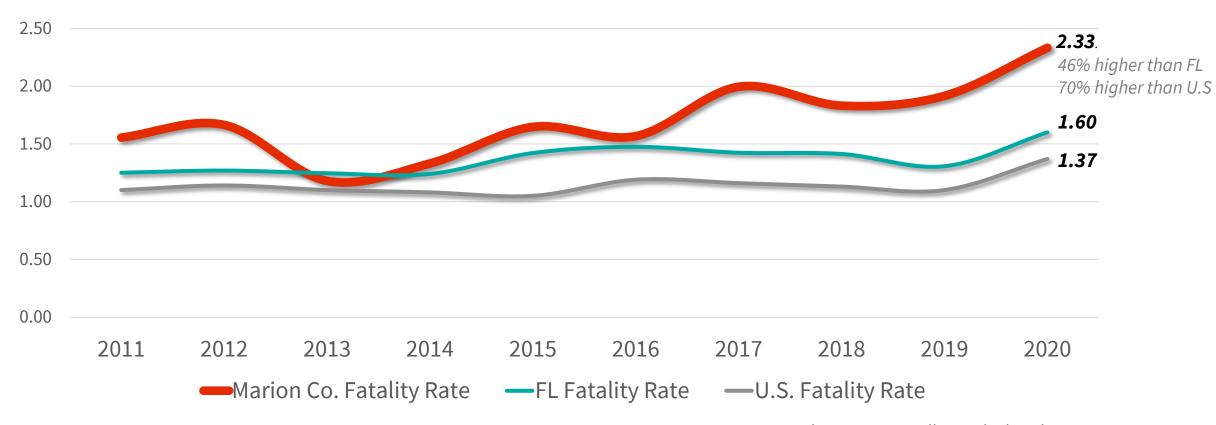
- 2021 262 Serious Injuries, 92 Fatalities
- 2022 136 Serious Injuries, 33 Fatalities (1/1/22 5/10/22)



#### Rate of Fatalities



## Deaths are becoming more common



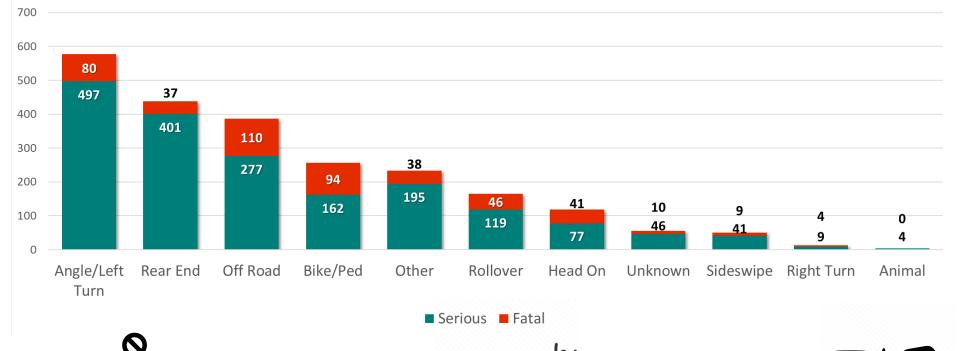


Fatalities per 100 Million Vehicle Miles



## Crash Types







- 23% of Fatal
- 17% of KSI Crashes



- 20% of Fatal
- 11% of KSI Crashes



#### **Angle/Left Turn**

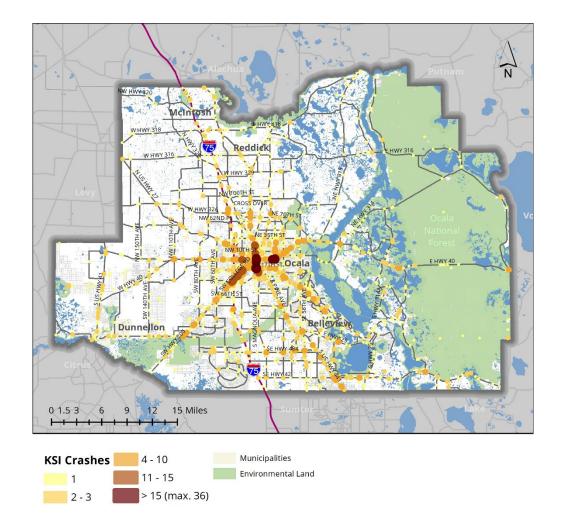
- 17% of Fatal
- 25% of KSI Crashes





## Crash Factors – Roadway





Road Type	Total KSI Crashes	Fatal Crashes	% of Streets	% of Traffic
Highway (I-75)	5.3%	9.6%	1.0%	22.5%
Arterial	<b>55.3</b> %	46.4%	7.8%	<b>37.1</b> %
Collector	25.7%	31.4%	14.7%	20.5%
Local	12.1%	12.4%	76.6%	19.9%
Other	1.8%	0.2%	NA	NA



74% of KSI and 81% of Fatal crashes occurred on streets with a posted speed limit of 45 MPH or higher.



## Crash Factors – Speed

# COMMITMENT TO ZERO An Action Plan >>>> for Safer Streets in Ocala Marion

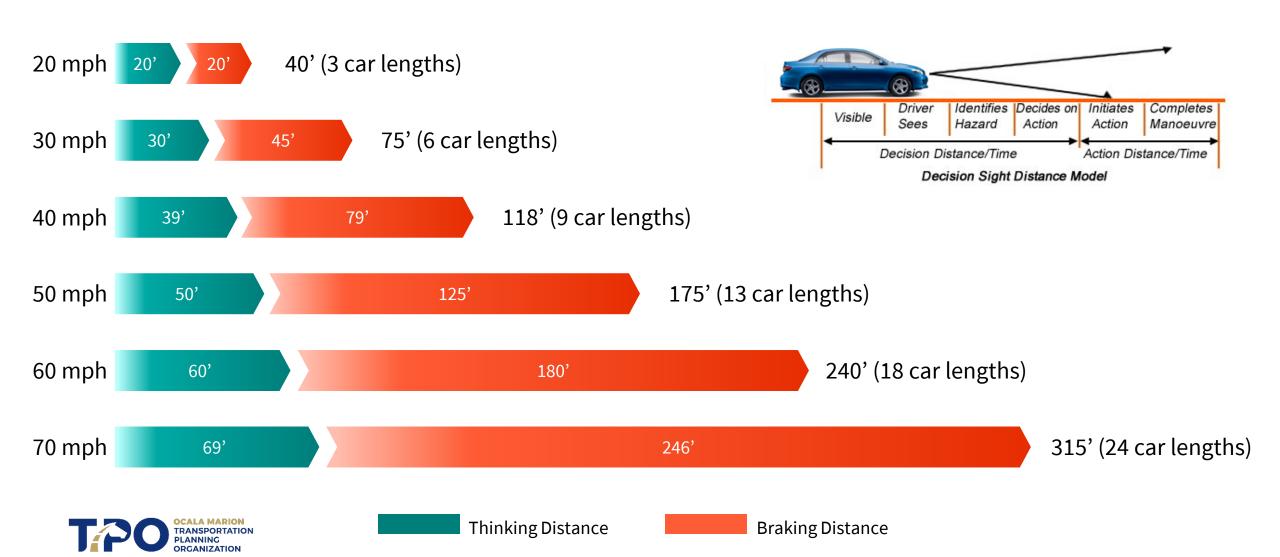
#### https://www.youtube.com/watch?v=Ol9KYAu8zJk





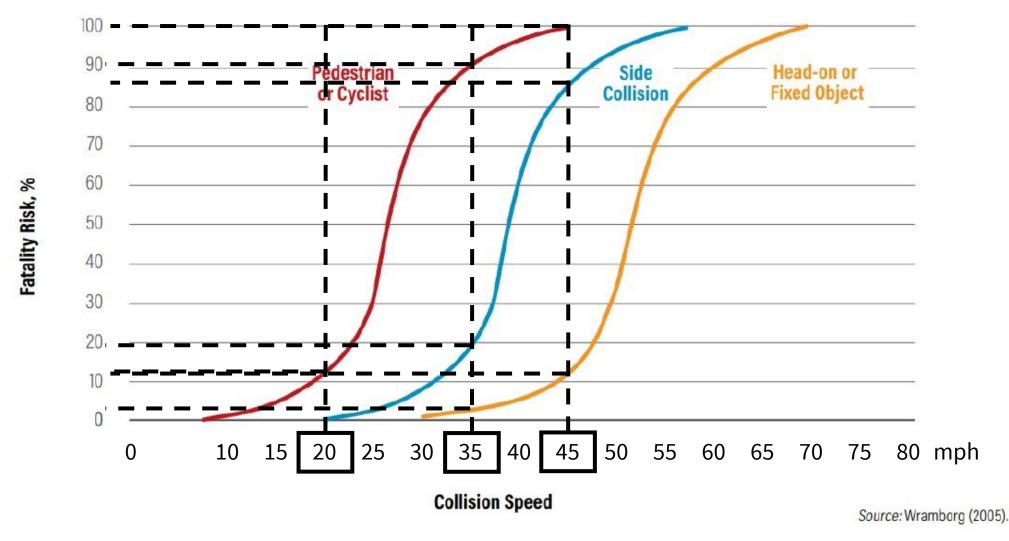
## Speed and Stopping Distance





## Speed and Fatality Risk



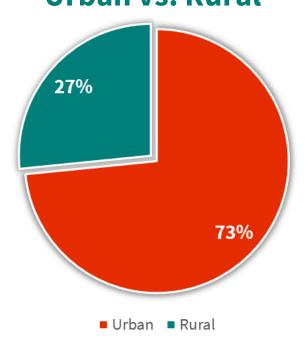




#### **Crash Location Data**



#### **Urban vs. Rural**



## **Geographic Location**

Geographic Location	% of Fatal	% of Serious Injury	% KSI
Unincorporated	81.4%	61.0%	65.2%
Ocala	16.7%	36.5%	32.4%
Belleview	1.5%	1.4%	1.4%
Dunnellon	0.4%	1.0%	0.9%
McIntosh	0.0%	0.1%	0.1%

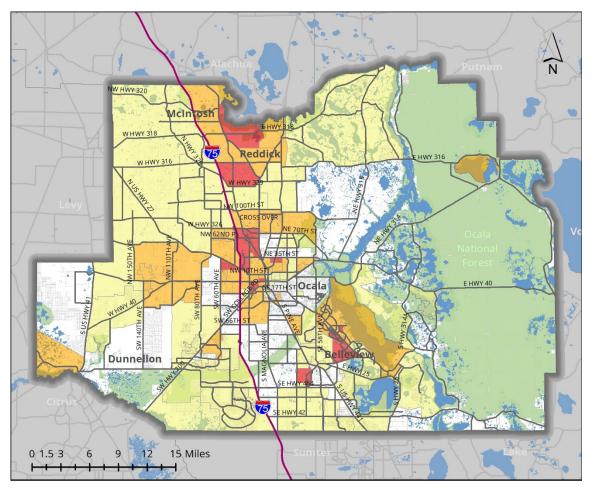
#### **Maintaining Agency**

Maintaining Jurisdiction	% of Fatal	% of Serious Injury	% KSI
State (FDOT)	49.6%	49.9%	49.8%
County	43.8%	34.9%	36.8%
Ocala	3.2%	10.1%	8.7%
Private	0.4%	2.7%	2.2%
Unknown/Other	1.7%	1.8%	1.8%
Belleview	0.6%	0.3%	0.3%
Forestry	0.6%	0.2%	0.3%



## Crash Location Data – Equity





Equity Area	% of Fatal	% of Serious Injury	% KSI	% Land Area
<ul><li>0 Disadvantaged</li><li>Populations</li></ul>	26.1%	20.1%	21.3%	50.5%
1 Disadvantaged Populations	41.2%	38.5%	39.1%	34.6%
2 Disadvantaged Populations	25.2%	32.3%	30.8%	12.6%
3 Disadvantaged Populations	7.5%	9.2%	8.8%	2.3%

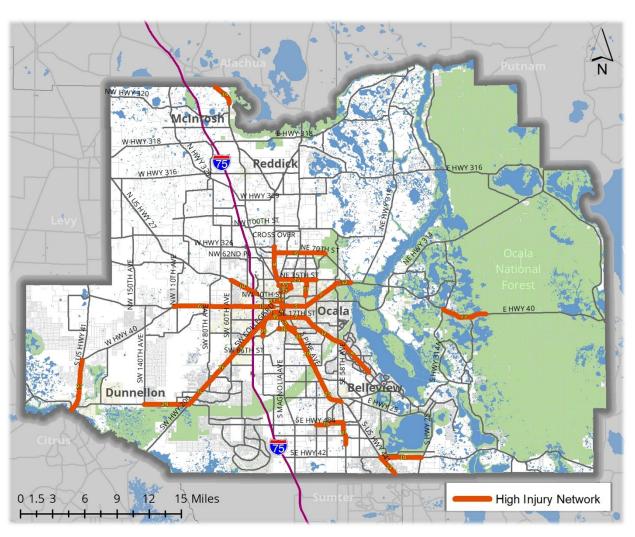
Equity Areas 1 Disadvantaged Populations 3 Disadvantaged Populations 2 Disadvantaged Populations





## High Injury Network





# 42% of KSI Crashes Occurred on 2.5% of the Roadway Network

- 87% of the HIN are Arterials
- 70% have 4+ travel lanes
- 81% have 45+ mph posted speed limit
- 68% are within the Urban area
- 73% are on State roads
- 65% don't have roadway lighting
- 51% are located near a school or park
- 32% have complete sidewalks

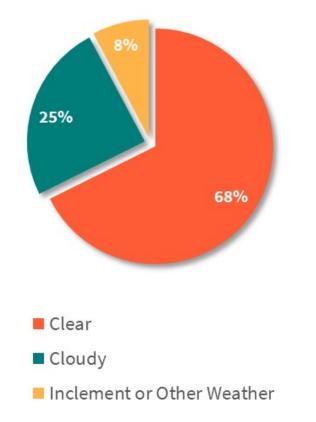




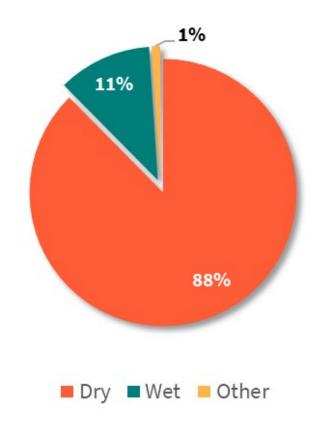
#### **Crash Factors - Conditions**



#### **Weather Conditions (KSI)**



#### **Road Surface Conditions (KSI)**

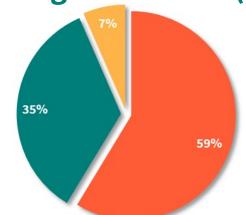




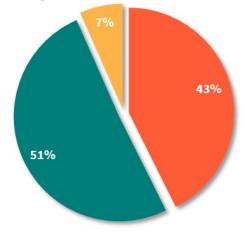
## Crash Factors – Lighting and Time of Day



#### **Lighting Conditions (KSI)**

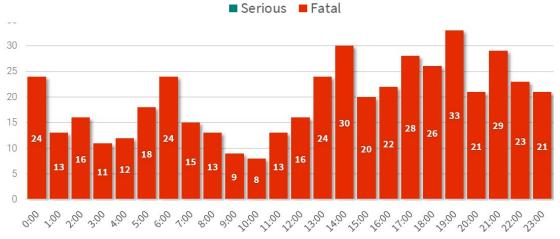


#### **Lighting Conditions (Fatal)**



#### **Time of Day**





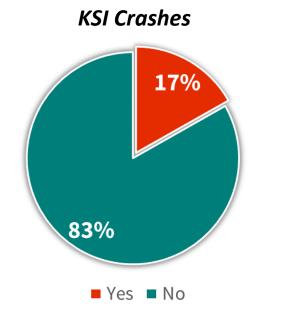
## Crash Factors - Impairment

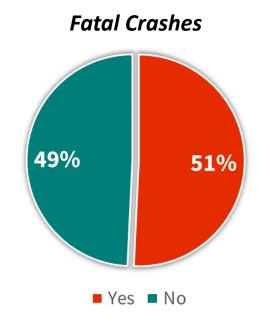






51% of the Fatal crashes and 17% of the Serious Injury crashes were impairment (Alcohol/Drug) related.







#### Crash Factors – Seatbelts



#### **Passenger Restraint**



39.4% of the Fatal crashes and 13.5% of the Serious Injury crashes involved people not wearing a seatbelt (properly restrained).



## Seatbelt Use





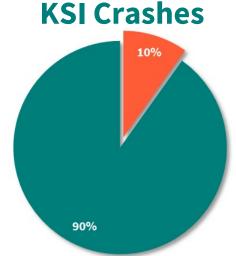


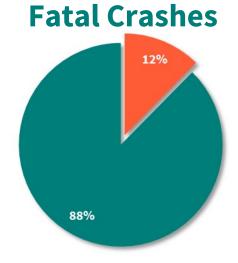
## **Distracted Driving**



# Any activity that takes the driver's attention away from the task of driving.

- Eating and drinking
- An outside person, object or event; animal, crash scene, road construction
- Adjusting radio or air temperature
- Another occupant; talking or assisting a child
- A moving object in vehicle; a pet, an insect, object falling from a seat
- Smoking related, reaching for, lighting, smoking, or dropping a cigarette
- Cell phone related
- Object in vehicle; reaching for a water bottle, sunglasses, bag/purse
- Adjusting mirrors or lights in vehicle
- Other distractions; medial issues, looking at road signs, sleepy, fatigued, inattentive, or lost in thought/daydreaming







## **Distracted Driving**



#### What behavior has the biggest impact on driver reaction time?

- Impairment (Alcohol/Drugs)
- Texting
- Talking on the Phone Hands Free
- Talking on a Handheld Phone
- Using In-Car Touchscreen



#### **Effects on Reaction Times**



**57%** Using In-Car Touchscreen

**46%** Speaking on Handheld Phone

**35%** Texting

**27%** Hands Free Phone

**21%** Using Cannabis

12% Alcohol

At legal limit



Percent increase in distracted drivers' response times.

## **Distracted Driving**









# https://www.youtube.com/watch?v=1\_ULqQKjLqgPlan>>> for Safer Streets in Ocala Marion





#### Remember...



Each number is a person, the next number could be a family member, friend, neighbor, co-worker, classmate, etc.











































An Action Plan >>> for Safer Streets in Ocala Marion

#### **Foundational Elements**



Commitment to Zero is structured around four key areas/cornerstones:

Education and Awareness

Public and Partner Engagement

Safety Analysis

**Action Planning** 



#### What is Commitment to Zero?



#### **Actionable**

 The TPO's effort to improve the safety of our transportation system by working to eliminate fatal and serious injury traffic crashes.

#### **Collaborative**

 Collective data driven process involving citizens, elected officials, stakeholders, and public and private sector partners.

#### Lasting

• An ongoing effort that will need to be monitored and updated; it will be a marathon, not a sprint.



#### Partner Efforts – State Commitment



#### Florida Strategic Highway Safety Plan (SHSP)

- Establishes "Target Zero," a safety vision of zero transportation-related deaths or serious injuries
  - Safe System Approach
  - Recognizes complexity of crashes
  - Includes multidisciplinary approach to crash safety
  - Expands the 4Es: Information Intelligence, Innovation, Insight into Communities, and Investments/Policies
- TPO's must consider SHSP in updating Long Range Transportation Plans and Capital Improvement Programs



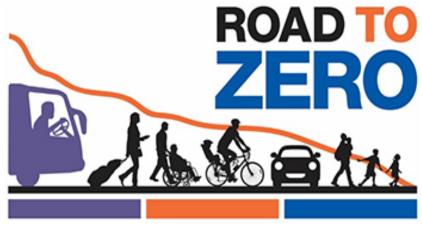


#### Partner Efforts – Federal Commitment



#### **Road to Zero**

 The primary safety goal of FHWA is to reduce transportation-related fatalities and serious injuries across the transportation system, and for this reason it fully supports the vision of zero deaths.



FHWA, NHTSA, FMCSA, and NSC Initiative

#### **Bipartisan Infrastructure Law (BIL)**

 New and first of its kind \$6 billion Safe Streets and Roads for All program will fund local efforts to reduce roadway crashes and fatalities through grants for planning and projects.

Secretary Pete Buttigieg 🔮 @SecretaryPete · Feb 4

Precisely because they're all too common, we have come to accept the idea that monstrous numbers of traffic deaths are an inevitable fact of modern life. But they aren't.

@USDOT is working to change that mindset and keep you safe on our roads.



• •

#### Safe Streets and Roads for All



- The new Safe Streets and Roads for All (SS4A) discretionary grant program will provide \$5-6 billion in grants over the next 5 years. Funding supports regional and local initiatives through grants to prevent roadway deaths and serious injuries.
- Eligible SS4A Activities:
  - Develop or update a Comprehensive Safety Action Plan
  - Conduct planning, design, and development activities in support of an Action Plan
  - Carry out projects and strategies identified in an Action Plan





#### Why Commitment to Zero?



As national and state initiatives move towards ZERO, the TPO and local agencies must respond.

No traffic-related death or serious injury is acceptable, and we believe that we can do something to reduce the number of traffic-related deaths and serious injuries on our streets.









## Commitment to Zero Approach





#### APPROACH

Zero is our goal. A Safe System is how we get there.

#### **Safe System Approach**

 The Safe System approach is a recognized international road safety best practice that is rapidly gaining awareness and application in the United States. Other countries have been able to achieve significant reductions in traffic-related deaths and serious injuries by adopting the Safe System approach. Working to create a Safe System requires strengthening all elements of the system and leveraging collaborative partnerships.



## Safe System Principles





#### No Death of Serious Injury is Acceptable

Traffic deaths and serious injuries are acknowledged to be preventable. While no crashes are desirable, the Safe System approach prioritizes eliminating crashes that result in death and serious injuries on the transportation system.



#### **Responsibility is Shared**

Life saving changes happen when we elevate the collective, or societal, responsibility for safe mobility. Safe system acknowledges the responsibility that rests with system designers – transportation planners and engineers – as well as policymakers in designing and maintaining a safe system for people to function within. Individuals share the responsibility to abide by the system's laws and policies set. If safety problems persist, then the responsibility comes back to the system designers and policymakers to take further measures to ensure that crashes don't lead to death or serious injury.



#### **Humans Make Mistakes**

Recognizes that humans are human and that they will inevitably make mistakes that can lead to crashes. The transportation system should be designed and operated to accommodate these mistakes and avoid death and serious injury.



#### **Proactive vs. Reactive**

Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.



#### **Humans Are Vulnerable to Injury**

People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.



#### **Redundancy is Crucial**

Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.



## Safe System Approach – Redundancy







## Safe System Differences



#### **Traditional Road Safety Practices vs. Safe System Approach**

 Whereas traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach refocuses transportation system design and operation on anticipated human mistakes and lessening impact forces to reduce crash severity and save lives.

Traditional Approach	Safe System
Prevent Crashes	Prevent Deaths and Serious Injuries
Improve Human Behavior	Design for Human Mistakes/Limitations
Control Speeding	Reduce System Kinetic Energy
Individuals are Responsible —————	▶ Share Responsibility
React Based on Crash History ————	▶ Proactively Identify and Address Risks



#### Stakeholder Group Role



Responsibility is Shared, We Cannot Do This

Alone!

Provide Insight, Feedback, and Local Knowledge Provide Input and Guidance on the Development and Prioritization of Actionable Strategies

Assistance with Education and Engagement Campaigns

Help Implement the Plan



## Safety Action Plan







## Safety Action Plan



#### What won't the Commitment to Zero Safety Action Plan do?

- It will not have all the answers
- It will not be a prescriptive manual it will be a guide for addressing a complex issue
- It won't fix the problem overnight this is a long-term commitment, it is a marathon, not a sprint
- It will not be a one-and-done effort, the plan will evolve over time and will need to be updated periodically





## Safety Action Plan



#### What will the Commitment to Zero Safety Action Plan do?

- Align the TPO's safety vision with Federal and State initiatives, vision, and goals.
- Utilize a data-driven approach.
- Establish a framework for coordination, education, and engagement.
- Focus efforts on proven mitigation strategies and performance measures to monitor progress.
- Kick-Start Commitment to Zero





#### Safety Action Plan Timeline



#### FALL 2021

- Begin Project (Nov. '21)
- Data Collection and Analysis (Nov. Dec. '21)
- Communications Plan (Dec. '21)
- Project Coordination (Throughout)

#### **SPRING 2022**

- Finalize High Injury Network (Mar. '22)
- Begin Developing Actionable Strategies (Mar. '22)
- Continue Online Engagement (Throughout)
- Committee & Board Presentations (Mar. '22)
- Working Group Meeting #2 (Apr. '22)
- Public Workshop (Apr. '22)
- Stakeholder Group Meeting (May '22)

#### **WINTER 2022**

- Project Kick-Off Meeting (Jan. 12, 2022)
- Crash Assessment Findings (Feb. '22)
- Identify High Injury Network (Feb. '22)
- Best Practice Review Findings (Feb. '22)
- Launch Online Survey and Map (Jan. '22)
- Working Group Meeting #1 (Feb. '22)

#### **SUMMER 2022**

- Close Online Survey & Map (Jul. '22)
- Working Group Meeting #3 (Jul. '22)
- Draft Action Plan (Aug. '22)
- Committee & Board Presentations (Sep. '22)
- Final Action Plan (Sep. '22)



## **Actionable Strategies**







#### **Strategies Focus Areas**













## Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

#### Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.

#### **Safe Speeds**

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

#### **Safe Roads**

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space (e.g., left turn signals), and alerting users to hazards and other road users.

# Post-Crash Care & Data

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.



#### Considerations



# Things to consider when developing actionable strategies within the Safe System approach:

- Fatal and Serious Injury reduction strategy, not a total crash reduction strategy.
  - Safe Streets, Not Safer Streets
- Focus on "System-Wide" changes; site specific is part of the plan, but the goal is a safe "system."
- Value human life above all other measures.
- Every failure is an opportunity to learn and improve.



#### Safe Road Users



The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.





## Safe Road Users – Strategies



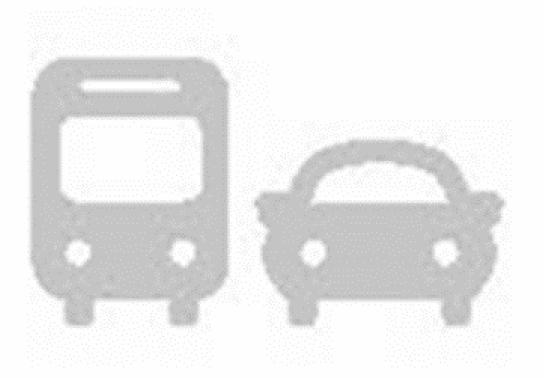
- Amplify Commitment to Zero to build a culture of safety and educate people about safe behaviors
- Empower Citizens to be Commitment to Zero Champions
- Develop Stronger Relationships with Community Groups and Neighborhoods
- Target younger audiences to impact generational change (e.g., Truth Campaign aimed at eliminating teen smoking)
- Expand access to quality traffic safety education and incorporate input from the public
- Strategically and equitably focus enforcement on the most dangerous behaviors



#### Safe Vehicles



Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.





## Safe Vehicles – Strategies



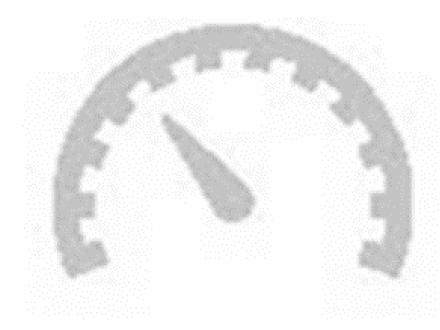
- Support transportation options that reduce driving
  - Enhance walking and bicycling facilities and connectivity
  - Support transit and the expansion of transit coverage, accessibility, and frequency
- Pursue the latest safety features in government fleets and Incorporate fleet vehicles into a Commitment to Zero media campaign, using vehicles as moving billboards
- Work with national partners to ensure that new innovative safety features become standard in new vehicles, i.e., seatbelts, air bags, ABS, collision warning systems, etc.



## Safe Speeds



Humans are unlikely to survive highspeed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.





## Safe Speeds – Strategies



- Update codes, manuals, and guidance to support speed reductions
  - Establishing target speeds
  - Support movement away from setting speed based on the 85<sup>th</sup> percentile
- Implement road designs to achieve desired vehicular target speeds
- Work with law enforcement to inform, implement, and enforce speed reduction efforts
  - Support automated speed enforcement efforts; consider as a pilot or cameras within school zones
    - Implement education campaign in advance of any program



#### Safe Roads



Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space (e.g., left turn signals), and alerting users to hazards and other road users.



#### Safe Roads – Strategies



- Invest in projects that prioritize safety and contribute to Commitment to Zero
  - Update the High Injury Network with new crash data on a regular schedule and use it to prioritize safety interventions
  - Make cost-effective safety improvements systematically and rapidly on the HIN
- Prioritize vulnerable road users (people walking and riding bicycles)
- Updated planning, design, and operations manuals, codes, policies, and laws to support Commitment to Zero
  - Create safe streets for all road users, e.g., implementing complete streets
- Strategically and equitably focus enforcement on the most dangerous behaviors



#### Post Crash Care and Data



When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.





#### Post Crash Care and Data – Strategies



- Collaborate with first responders, law enforcement, and healthcare providers
  - Expand the role of the CTST to discuss recent KSI crash trends and collectively identify quick treatments and/or next steps
  - Evaluate hospital data for trauma patients to understand long-term health outcomes and economic impacts of crashes
  - Monitor crash response times and collectively work to identify opportunities to reduce them
- Collect, evaluate, manage, and share data
  - Create or utilize a public-facing crash dashboard (e.g., Signal Four)
  - Work with partners to improve the quality and timeliness of relevant traffic safety data
  - Conduct benchmarking and target setting exercises



## **Priority Actions**





#### **Priority Actions**



# Are there any issues, topics, or strategies that we should identify as priorities for implementing Commitment to Zero and to set the stage for other actions?

- Examples:
  - Speed Management
  - Vulnerable Users (Pedestrians and Bicyclists)
  - Improved Data Collection and Analysis
  - Improved Collaboration
  - Equity for All Transportation Users
  - Enforcement
  - Response Times
  - Culture of Safety



## Discussion and Your Input





#### You're Almost There

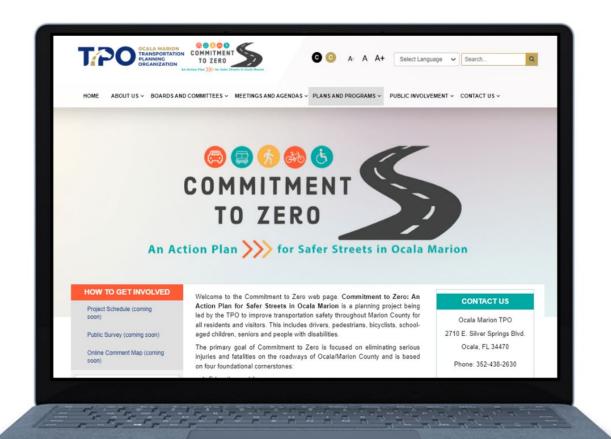






## **Engagement Opportunities**





Take and Share the Online Survey:

Ocala Marion TPO
Commitment to Zero Safety Action Plan Survey

The Ocala Marion TPO is working on the development of the Commitment to Zero Safety Action Plan that will book at how the community can work together to eliminate traffic-related deaths and serious injuries. Your injury will be instrumental in providing perspective and direction on how the TPO can work with local and state partners to improve transportation safety in Marion County. Thank you!

If you have questions or comments relating to the survey, please contact. Rob Balmes, AICP CTP, at Note Balmes, Plant from a coverso about a surfay issue that require intended to develop please contact. Rob Balmes, AICP CTP, at Note that the provider of the survey is remarked to surfax develops please contact, Rob Balmes, AICP CTP, at power of the survey is remarked to surfax develops please contact, Rob Balmes, AICP CTP, at power of the survey is remarked to surfax develops please contact. Rob Balmes, AICP CTP, at power of the survey is remarked to surfax develops please in filtering County.

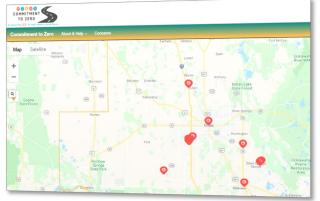
1. Have you ever been involved in a traffic crash?

Yes

No

Visit the Interactive

Map:



https://ocalamariontpo.org/safety-plan/



#### **Next Steps**



- Continued push for public input
- Actionable strategies development
  - Includes identification of performance measures
- Transportation Disadvantage Board Workshop (6/16)
- Working Group Meeting #3 (July)
- Draft Action Plan (August/September)
- Continue to think about how you and your organization can get involved in the implementation of the Action Plan



#### Working Together



# Achieving **ZERO** takes everyone working together. None of us can do this along. We can all do something.

#### If you are...

**An individual** – choose daily to practice safe driving, riding, and walking behaviors, avoid unnecessary risks, and share the road safely with other road users.

**A family member or caregiver** – teach children from the youngest age about the importance of safety and monitor the driving skills of family members for signs of changes in vision, physical abilities, and cognition.

**A business or military base** – adopt policies requiring employees to practice safe driving behavior while on the clock, support additional transportation options, and encourage safe behavior 24/7.

**A school** – teach and promote traffic safety through interactions with children, parents, and caregivers.

**A local government** – adopt rules and policies that promote safety and make transportation and land use decisions to support safe communities for all residents.

**A law enforcement officer** – enforce traffic laws, demonstrate and encourage positive behavior, and work with local governments to identify and reduce risks.

A prosecutor or part of the court system – ensure penalties are applied for safety-related offenses.

A transportation planner or engineer – prioritize and advance proven practices for making our streets, roads, and intersections safer.

**FDOT, FLHSMV, and other state agency staff** – continue a strong commitment to improving roadway safety through resource allocation, policy support, and organizational leadership.

**An elected official** – make safety a high priority for our state through proactive and visible leadership.

**An insurance company** – provide strong financial incentives for safe driving practices.

An emergency response or health professional – continually enhance the timeliness of response to crashes and the quality of care for crash victims.

A vehicle manufacturer or technology provider – develop and refine vehicle and roadside systems to reduce driver or rider error and prevent crashes.

**A hospitality professional** – provide information to your visitors for traveling safely while visiting.

A realtor or residential property manager – provide information to new Florida residents to educate them on traffic safety in and around their new community.



#### Call to Action



# The road ahead is not easy, but in the hands of those who care, we believe that we will see this commitment through. The TPO has made a Commitment to Zero, will you do the same?

#### Commitment to Zero Pledge...

I recognize that crashes are preventable, and my choices matter to my life and the lives of others.

I pledge to make safety a priority, to focus on driving, to slow down, be aware of my surroundings, walk, ride, or roll in a safe and predictable manner, and to set an example for those around me.



## Thank You!

TPO Contact: Rob Balmes, AICP, CTP, Rob.Balmes@marionfl.org

Consultant Contact: Chris Keller, AICP, cKeller@benesch.com