FTP Safety Subcommittee

Web Meeting

presented to
FTP Safety Subcommittee

presented by
Dana Reiding, FDOT
Lora Hollingsworth, FDOT
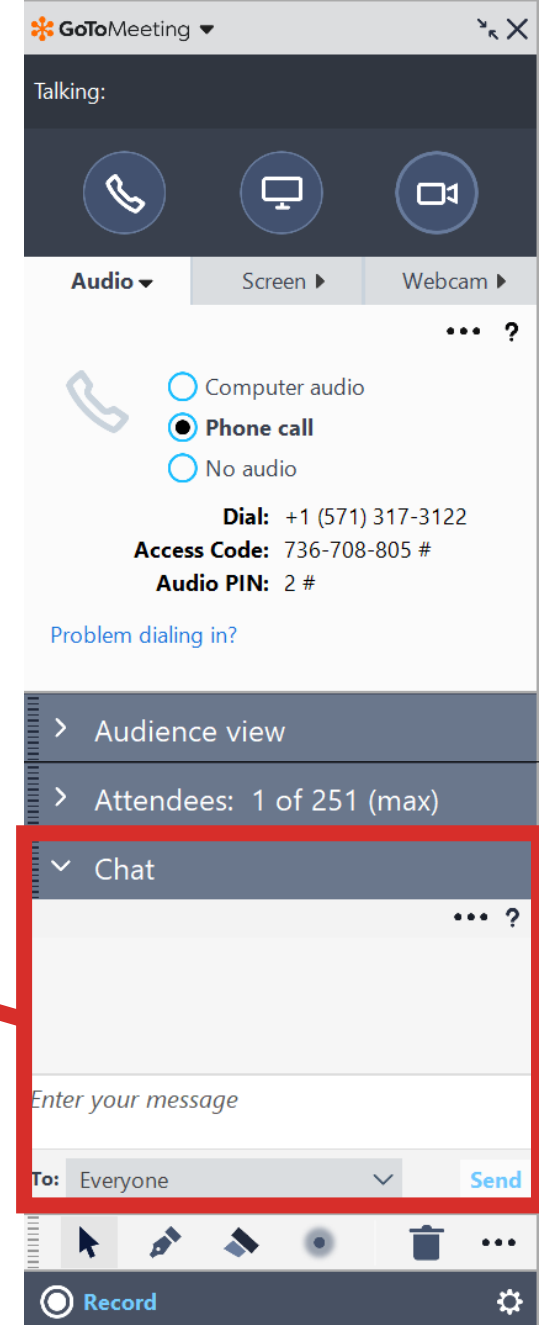
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April 22, 2020

GoTo Meeting Instructions

- Please mute your phone when you are not talking.
  - Don't put us on hold or take another call. We will hear your hold music.

- If you have questions during the presentation, please type them into the chat box

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Existing FTP Steering Committee Organizations	
Laura Cantwell	AARP
Jennifer Ray	Florida Department of Health
Courtney Drummond	Florida Department of Transportation
David Hawk	Federal Highway Administration
Major Jeff Dixon	Florida Highway Patrol
Jeff Branch	Florida League of Cities
Lisa Bacot	Florida Public Transportation Association
Peggy Smith	Florida's Rail Industry
Margaret Wuerstle	Florida Regional Councils Association
Ananth Prasad	Florida Transportation Builders Association
The Honorable Bryan Caletka	MPO Advisory Council
Chris Doolin	Small County Coalition
Brady Nepple	TEAM FL
Ken Stapleton	Urban Land Institute (ULI)
Organizations Not Represented on the FTP Steering Committee	
Ramon Gavarrete	Florida Association of County Engineers and Road Superintendents (FACERS)
Chief Art Bodenheimer	Florida Police Chiefs Association
Sheriff Bobby McCallum	Florida Sheriffs Association

Meeting Objectives

- Review FTP and SHSP Requirements
- Analysis of Florida's Crash Data
- Discuss Potential Emphasis Area Organization

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Review FTP and SHSP Requirements

The Florida Transportation Plan (FTP)

- A plan for ALL of Florida
- Florida's long-range transportation plan
- Provides policy guidance for all transportation partners
- Establishes policy framework for expenditure of state and federal transportation funds

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State and Federal Requirements

- Consider needs of entire state transportation system (all modes)
- Define state's long-range transportation goals/objectives (20+ years)
- Transportation performance management
  - State Safety Target: **ZERO** transportation fatalities and serious injuries
- Reflect prevailing principles of:
  - Preserving existing transportation infrastructure
  - Enhancing Florida's economic competitiveness
  - Improving travel choices to ensure mobility
 - Expanding state's role as a hub for trade and investment

FTP Goal: Safety and Security for Residents, Visitors, and Businesses

- Broad approach to safety and security, including
  - Transportation system safety (including non-highway modes)
  - Transportation security (i.e. customs, counter-terrorism)

- Establishes overall safety vision for Florida
  - **ZERO** transportation fatalities and serious injuries

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Strategic Highway Safety Plan (SHSP)

- Plan for ALL of Florida focused on highway safety

- Aligns with and provides direction to other state plans
  - Including FTP, Highway Safety Improvement Program (HSIP), Highway Safety Plan (HSP)

- Affirms the FTP Vision of **ZERO** transportation fatalities and serious injuries
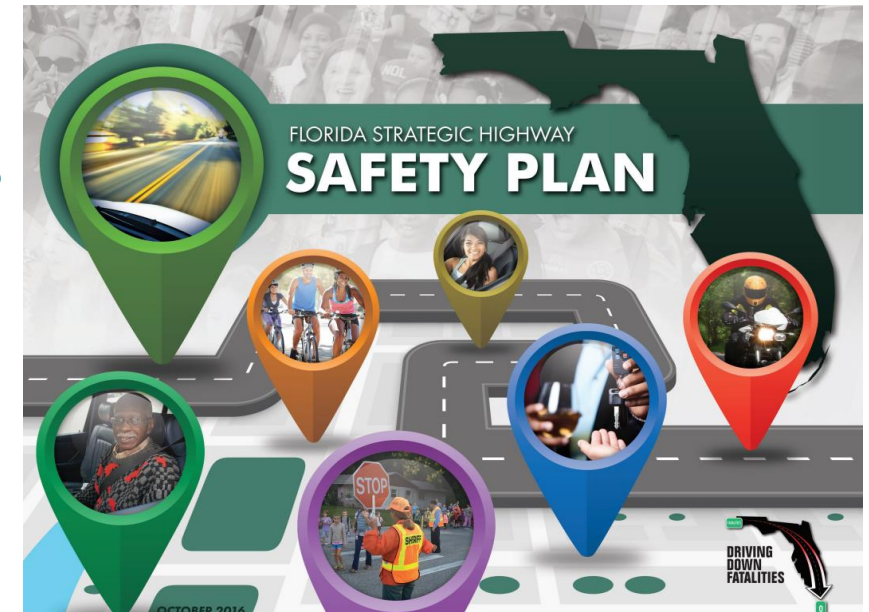
SHSP Requirements

- Updated at least every five years
  - Focused on short- and medium-term safety solutions (1-5 years)

- Data-Driven Problem Identification
  - States should use the best available safety data to identify critical highway safety problems and safety improvement opportunities on all public roads, including non-State-owned public roads and roads on Tribal land.

- Performance Based Approach, including:
  - Number and rate of **Fatalities**
  - Number and rate of **Serious Injuries**
 - Number of **Non-Motorized Fatalities and Serious Injuries**

The SHSP Guides…

- **Partner efforts**
  - MPO Investments and priorities
  - Local investments and priorities
  - Safe Routes to School
  - Other safety advocacy groups

- **Florida's strategic safety coalitions**
  - Comprised of safety partners and advocates
  - Carrying out actions to reduce fatalities and serious injuries related to a specific SHSP Emphasis Area

- **Investments through the NHTSA Highway Safety Plan (HSP) and FHWA Highway Safety Improvement Program (HSIP)**

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Analysis of Florida's Crash Data
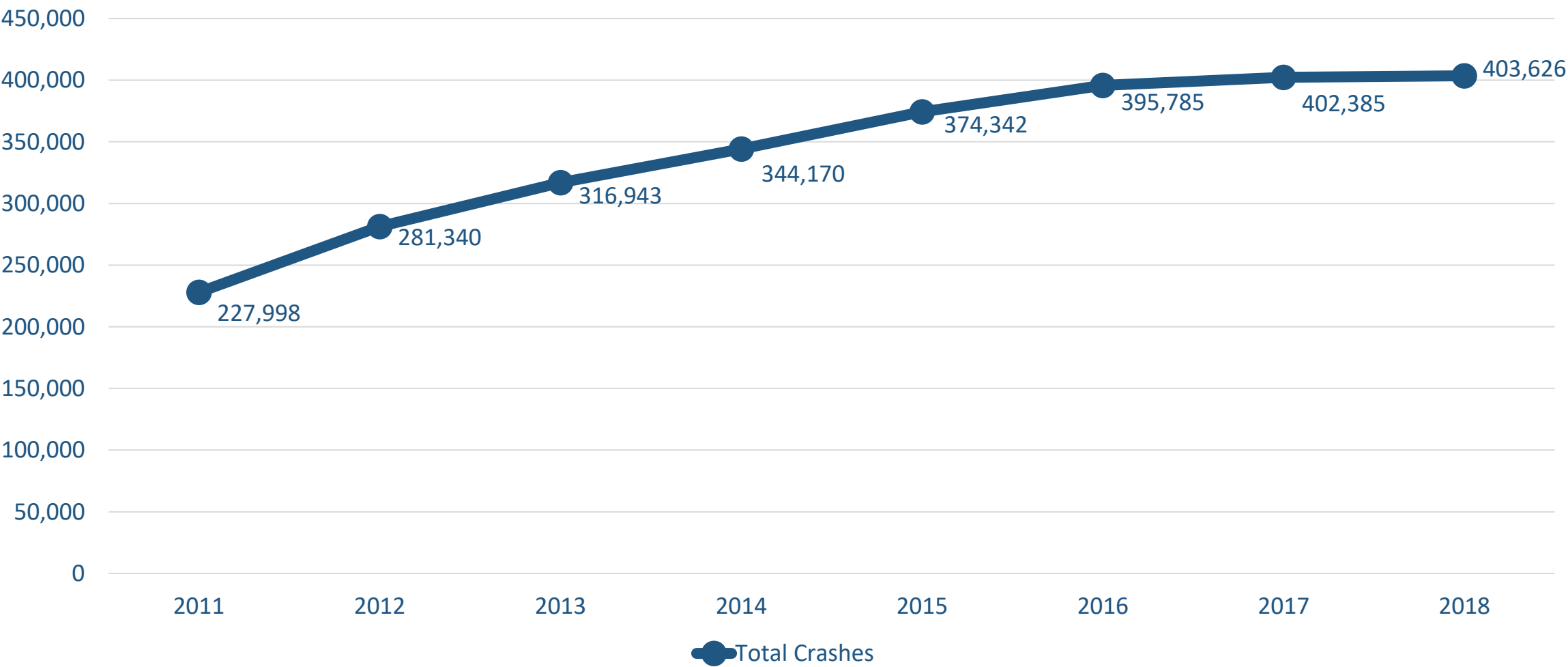
What's Changed

2011-2015
- Total Fatalities – **12,657**
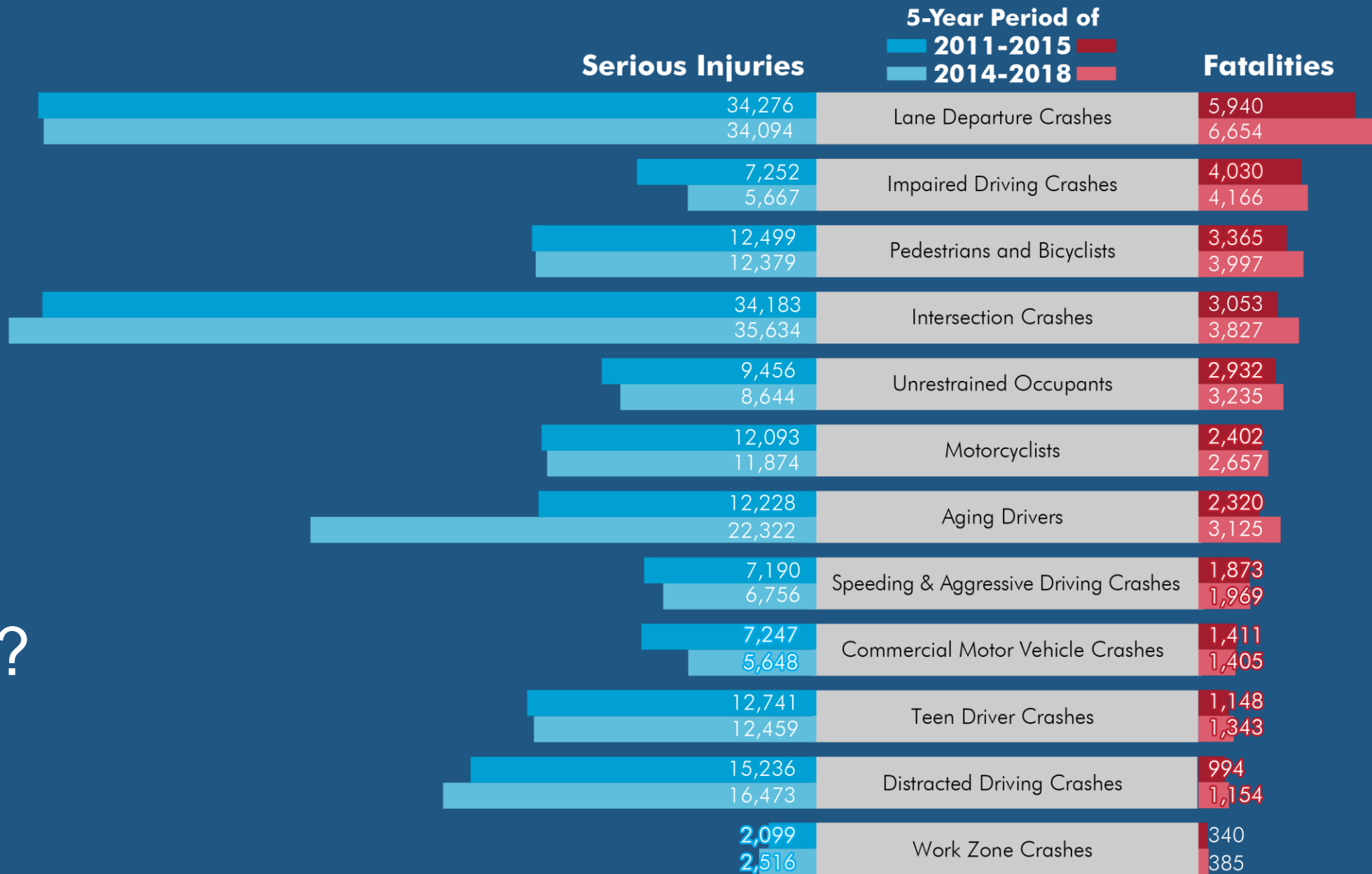- Serious Injuries – **102,524**

2014-2018
- Fatalities – **14,855**
- Serious Injuries – **103,630**

1.08%
Serious Injuries

17.37%
Fatalities

What's Changed?

Serious Injuries | **5-Year Period of** 2011-2015 / 2014-2018 | **Fatalities**

Category	Serious Injuries 2011-2015	Serious Injuries 2014-2018	Fatalities 2011-2015	Fatalities 2014-2018
Lane Departure Crashes	34,276	34,094	5,940	6,654
Impaired Driving Crashes	7,252	5,667	4,030	4,166
Pedestrians and Bicyclists	12,499	12,379	3,365	3,997
Intersection Crashes	34,183	35,634	3,053	3,827
Unrestrained Occupants	9,456	8,644	2,932	3,235
Motorcyclists	12,093	11,874	2,402	2,657
Aging Drivers	12,228	22,322	2,320	3,125
Speeding & Aggressive Driving Crashes	7,190	6,756	1,873	1,969
Commercial Motor Vehicle Crashes	7,247	5,648	1,411	1,405
Teen Driver Crashes	12,741	12,459	1,148	1,343
Distracted Driving Crashes	15,236	16,473	994	1,154
Work Zone Crashes	2,099	2,516	340	385

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Sharing our Ideas

- Poll Everywhere – multiple ways to access the polls:
  - Visit www.pollev.com/FDOTplanning from your phone, tablet, or laptop to access the polling questions
  - Text "FDOTplanning" to 22333 to join the poll and respond to the polls via text message
  - Important note: A record of the poll responses will be kept for statutory records retention requirements

Why do you think Florida's fatalities have continued to rise while serious injuries have remained flat/declined?

"Crashes involving older road users. - result in more fatalities" "More Ped and bike crashes - resulting in more fatalities"

"higher speeds" "increased speeds" "We're you able to separate crashes, by County, and road ownership? Local Vs State"

"Enforcement restraint/limitations" "Carless driving" "Too big of a difference in design speed and posted speed" "Distraction"

"Vehicle safety" "Increased pedestrian fatalities" "traffic management technology" "Medical issues" "Construction"

"Population growth for the rise; vehicle safety for decline" "Traffic speeds are too high" "Distracted and inpatient drivera"

"Distracted driving, larger SUVs, driving under the influence." "Improved vehicle safety measures" "Increased speeds"

"Sense of false safety; better data" "Lack of enforcement" "urban vs rural" "Continue to prioritize vehicle throughput"
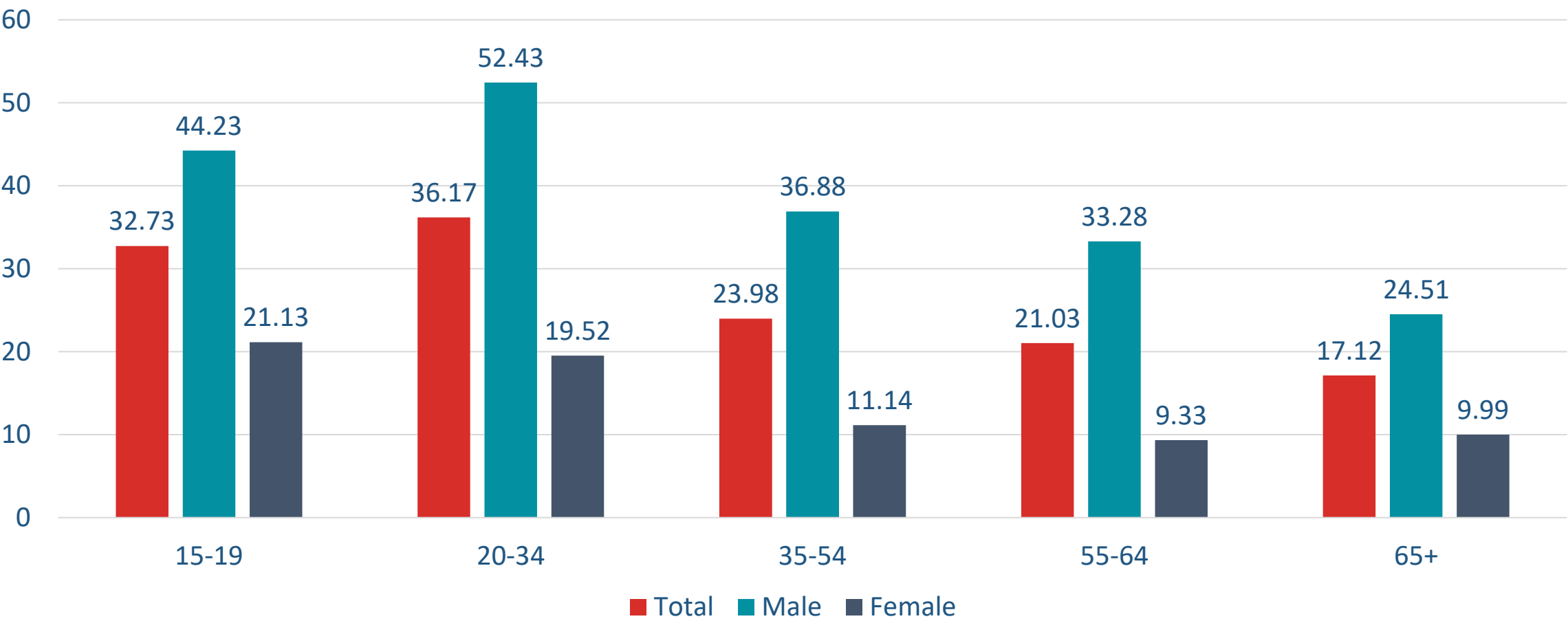
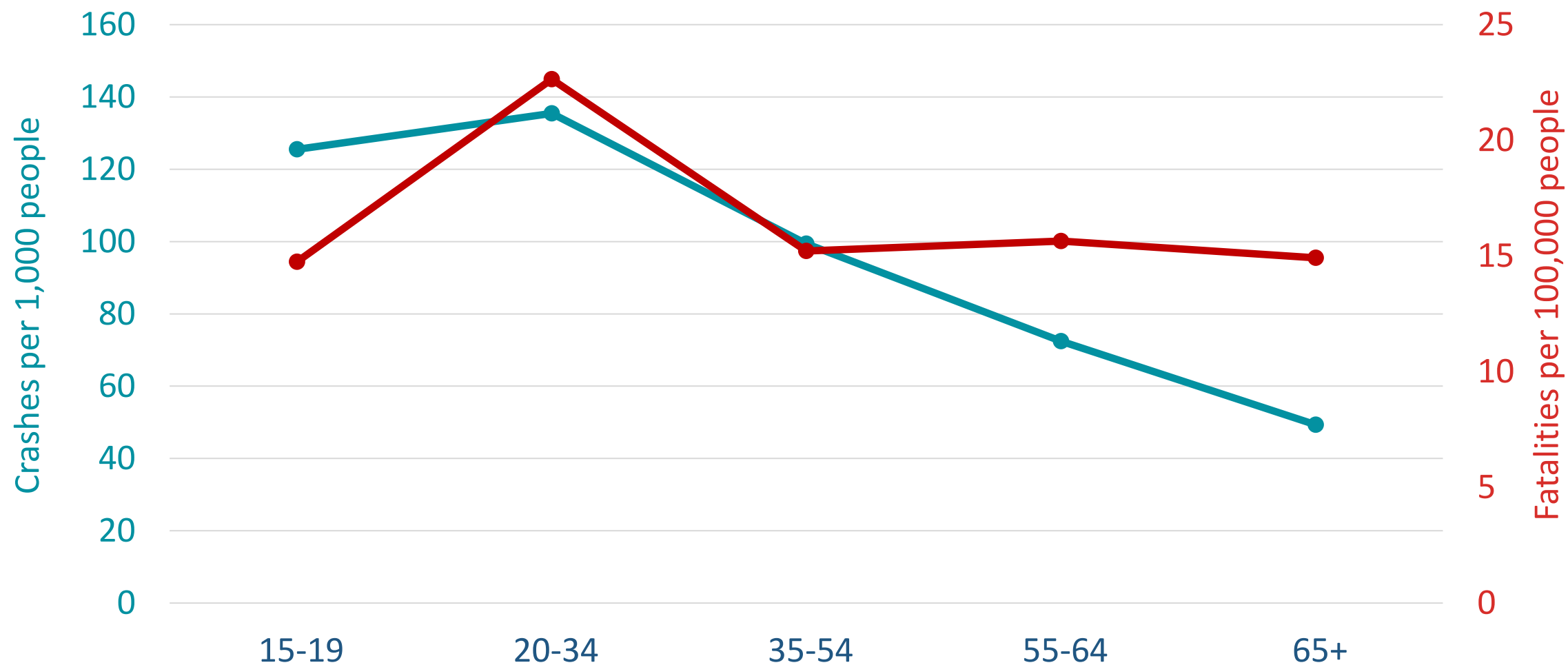"Extreme speed" "Distracted Driving" "Complacency among roadway users" "Technology interactions" "Speed"

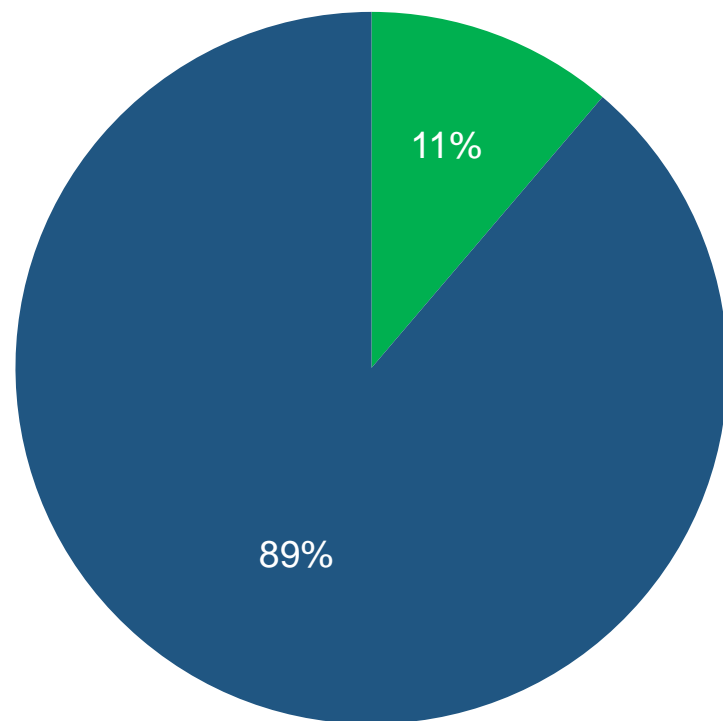# 2018 Fatality Rate by Age (Per 100,000 Licensed Drivers)

Age	Total	Male	Female
15-19	32.73	44.23	21.13
20-34	36.17	52.43	19.52
35-54	23.98	36.88	11.14
55-64	21.03	33.28	9.33
65+	17.12	24.51	9.99

Total **Male** **Female**

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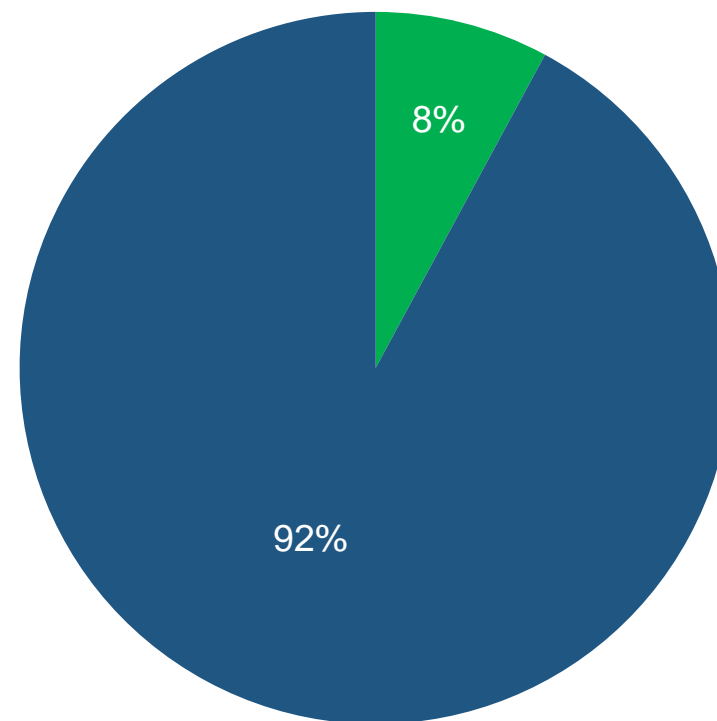
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Urban vs Rural (2011-2018)

Fatalities

11%

89%

■ Rural Counties ■ Urban Counties

Serious Injuries

8%

92%

■ Rural Counties ■ Urban Counties
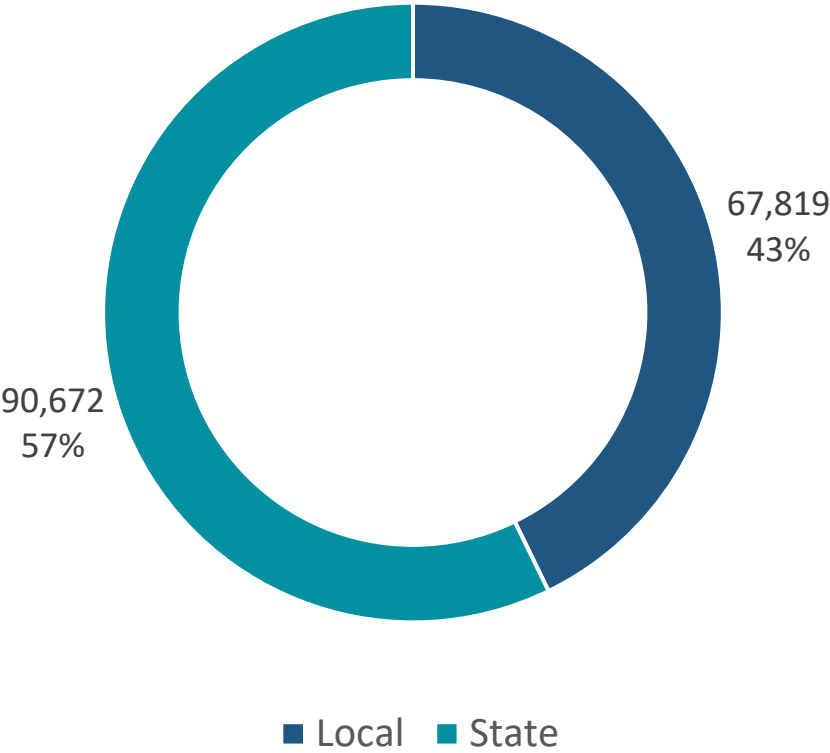
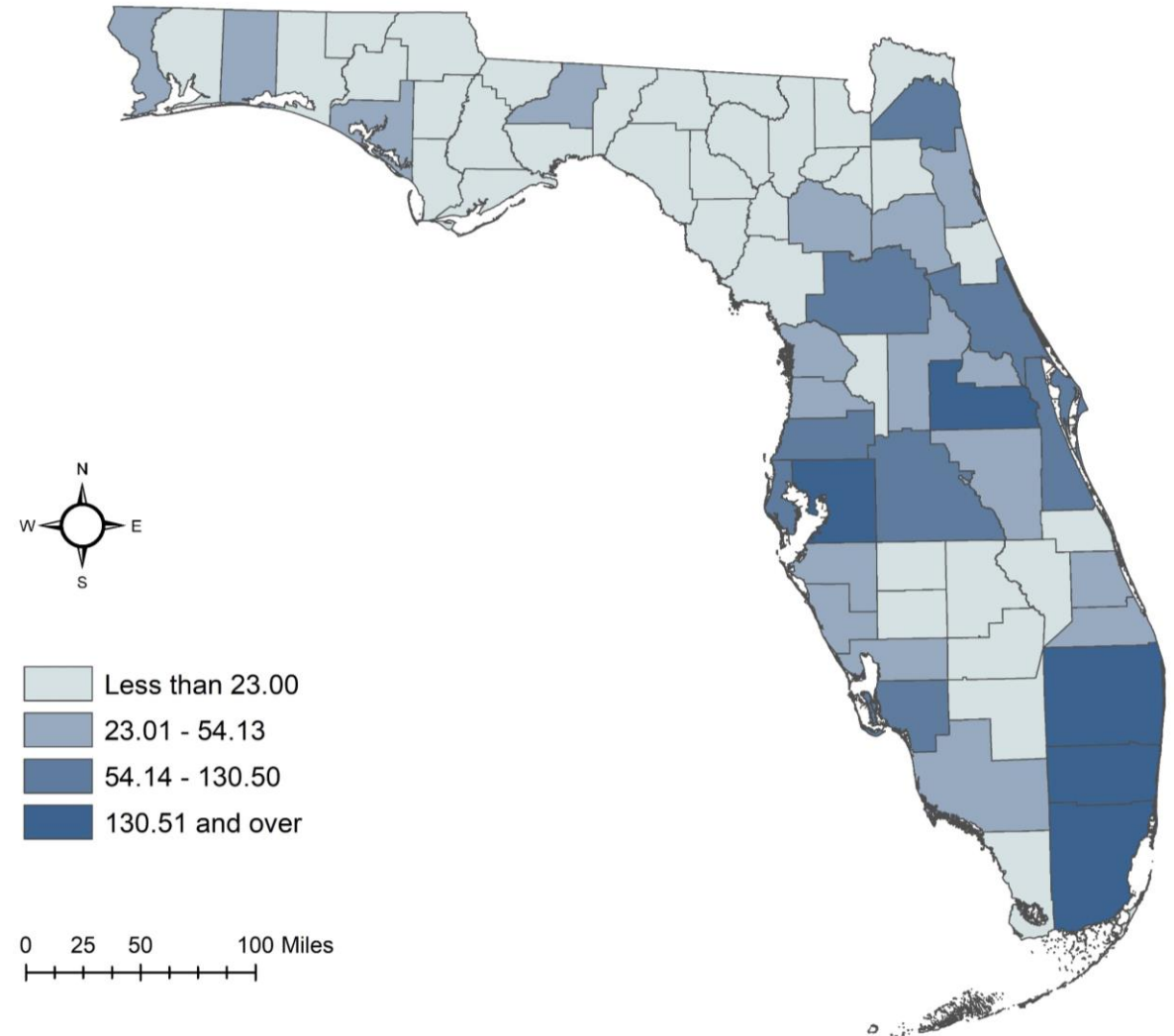FLORIDA
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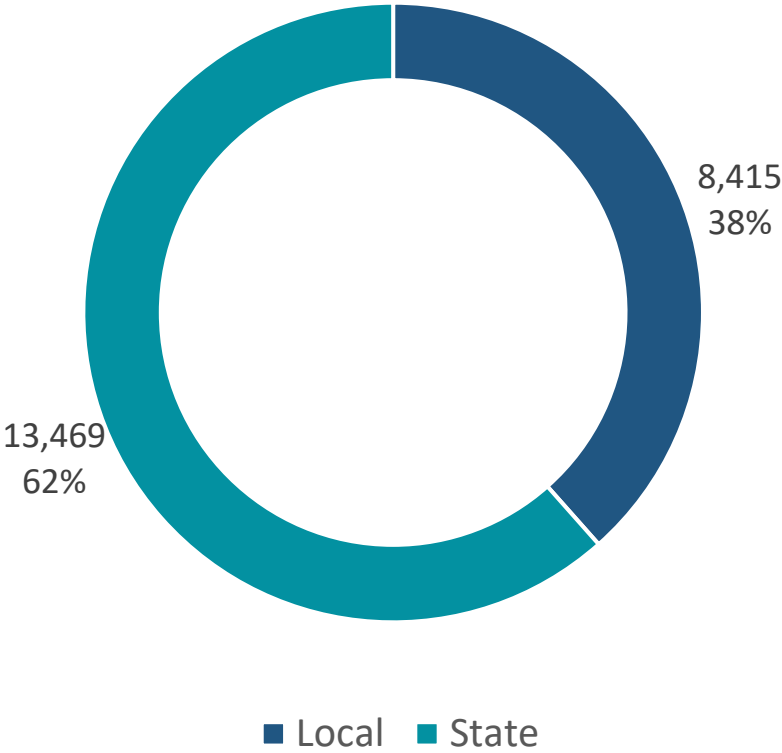
Total Fatalities by County 2011-2018

- Counties with the highest volume of fatalities (Average)
  - Miami-Dade County (274)
  - Broward (201)
  - Hillsborough (179)
  - Orange (153)
 - Palm Beach (152)

Average Number of Fatalities by County (2011-2018)

Less than 23.00
23.01 - 54.13
54.14 - 130.50
130.51 and over

0   25   50   100 Miles

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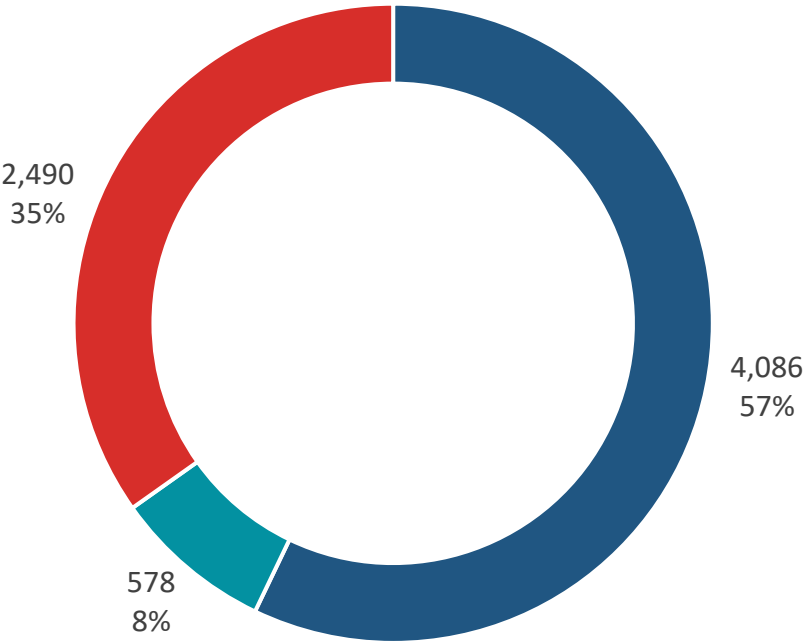# Fatality Rate by County 2011-2018

- Counties with the highest fatality rate (per 100M VMT)
  - Glades (3.80)
  - Levy (2.83)
  - DeSoto (2.72)
  - Putnam (2.38)

Average Fatality Rate per 100M VMT (2011-2018)

Legend:
- Less than 1.26
- 1.27 - 1.59
- 1.60 - 2.12
- 2.13 and over

0 25 50 100 Miles
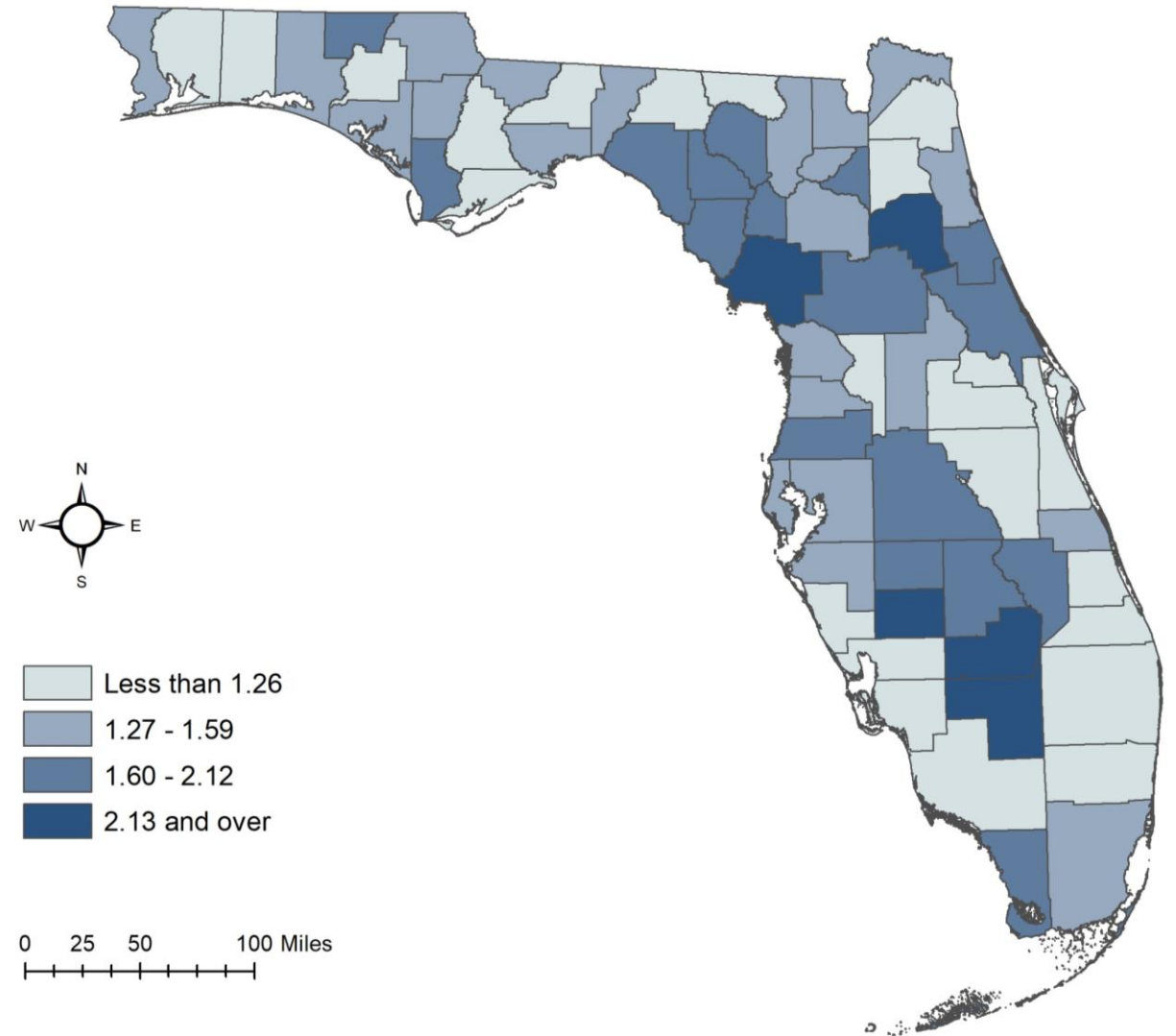
Types of Intersections 2011-2018

Fatalities

Serious Injuries

Fatalities:
- 4,086 — 57% (Four-Way Intersection)
- 578 — 8% (Other)
- 2,490 — 35% (T-Intersection)

Serious Injuries:
- 40,961 — 62% (Four-Way Intersection)
- 4,179 — 6% (Other)
- 21,042 — 32% (T-Intersection)
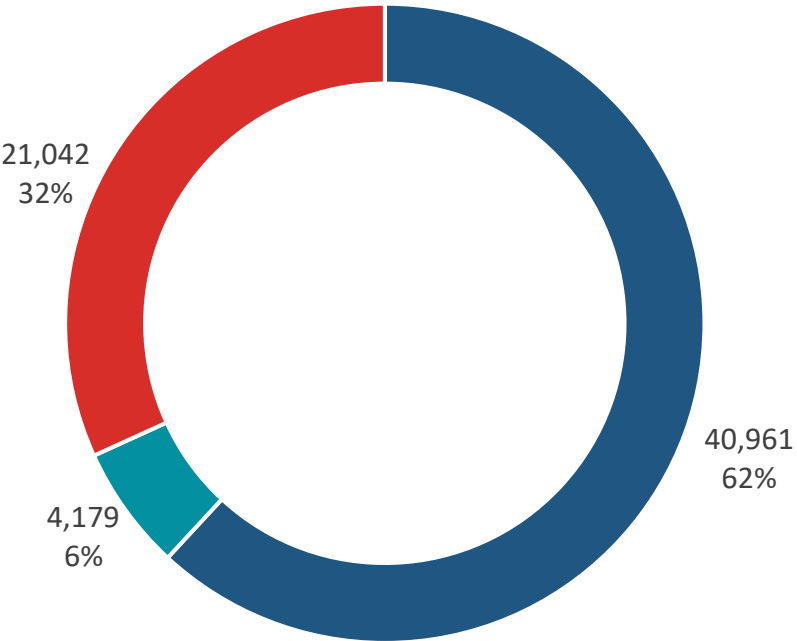
Legend: Four-Way Intersection | Other | T-Intersection

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Lighting Condition 2011-2018

Fatalities

- Dark-Lighted: 6,437 — 29%
- Dark-Not Lighted: 5,608 — 25%
- Dawn: 433 — 2%
- Daylight: 8,780 — 40%
- Dusk: 682 — 3%
- Other/Unknown: 144 — 1%

Serious Injuries

- Dark-Lighted: 33,645 — 21%
- Dark-Not Lighted: 20,167 — 12%
- Dawn: 2,931 — 2%
- Daylight: 101,420 — 62%
- Dusk: 5,368 — 3%
- Other/Unknown: 477 — 0%

Legend: Dark-Lighted | Dark-Not Lighted | Dawn | Daylight | Dusk | Other/Unknown

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Weather Condition 2011-2018

Fatalities

- 259 1%
- 80 1%
- 1,317 6%
- 4,020 18%
- 16,405 74%

Clear ■ Cloudy ■ Rain ■ Fog Smog Smoke ■ Other

Serious Injuries

- 1,037 1%
- 250 0%
- 11,955 7%
- 28,645 18%
- 122,103 74%

Clear ■ Cloudy ■ Rain ■ Fog Smog Smoke ■ Other

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Major Takeaways

- Highest rate of fatalities and serious injuries - **20-34 age group**
  - Drivers 65+ are more likely to be killed or seriously injured
  - Teen drivers are more likely to be involved in a crash but less likely to be killed or seriously injured
- Highest number of fatalities - **urban areas** Highest fatality rates - **rural areas**
- Most fatalities and serious injuries happen on **state-maintained roadways**
- Most intersection fatalities and serious injuries are at a **four-way or T-intersection**
- More fatalities occur at night with about **half on lighted facilities** More serious injuries occur during the day
- Most crashes involving a fatality or serious injury occur when the **weather is clear**.

Discussion

Proposed Emphasis Areas and Organization

Existing Approach

Emphasis Area	Fatalities	Serious Injuries	Category
Lane Departures	6,654	34,094	Roadways
Impaired Driving	4,166	5,667	Behavior
Pedestrians and Bicyclists	3,997	12,379	Users
Intersections	3,827	35,634	Roadways
Unrestrained Occupants	3,235	8,644	Behavior
Aging Road Users	3,125	22,322	Users
Motorcyclists	2,657	11,874	Users
Speeding and Aggressive Driving	1,969	6,756	Behavior
Commercial Motor Vehicles	1,405	5,648	Users
Teen Drivers	1,343	12,459	Users
Distracted Driving	1,154	16,473	Behavior
Work Zones	385	2,516	Roadways
Rail Grade Crossings	40	75	Roadways
Traffic Records and Information Systems		Foundational	

Fatalities and Serious Injuries from 2014-2018

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Priority, Continuing, and Special Emphasis Areas

Priority Emphasis Areas	Fatalities	Serious Injuries
Lane Departures	6,654	34,094
Impaired Driving	4,166	5,667
Pedestrians and Bicyclists	3,997	12,379
Intersections	3,827	35,634
Unrestrained Occupants	3,235	8,644
Aging Road Users	3,125	22,322
Continuing Emphasis Areas	**Fatalities**	**Serious Injuries**
Motorcyclists	2,657	11,874
Speeding and Aggressive Driving	1,969	6,756
Commercial Motor Vehicles	1,405	5,648
Teen Drivers	1,343	12,459
Distracted Driving	1,154	16,473
Special Emphasis Areas	**Fatalities**	**Serious Injuries**
Work Zones	385	2,516
Rail Grade Crossings	40	75
Traffic Records and Data	Foundational	
Micromobility, Transit, Automated and Connected Vehicles	Emerging	

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Potential Hybrid Approach

Priority Emphasis Areas	Fatalities	Serious Injuries
BEHAVIOR		
Impaired Driving	4,166	5,667
Occupant Protection	3,235	8,644
Speeding and Aggressive Driving	1,969	6,756
ROADWAYS		
Lane Departures	6,654	34,094
Intersections	3,827	35,634
ROADWAY USERS		
Pedestrians and Bicyclists	3,997	12,379
Aging Road Users	3,125	22,322
Motorcyclists	2,657	11,874
FOUNDATIONAL		
Traffic Records and Information Systems	Foundational	
Continuing and Emerging Emphasis Areas		
Commercial Motor Vehicles, Teen Drivers, Distracted Driving, Work Zones, Rail, ACES, Micromobility, and Transit		

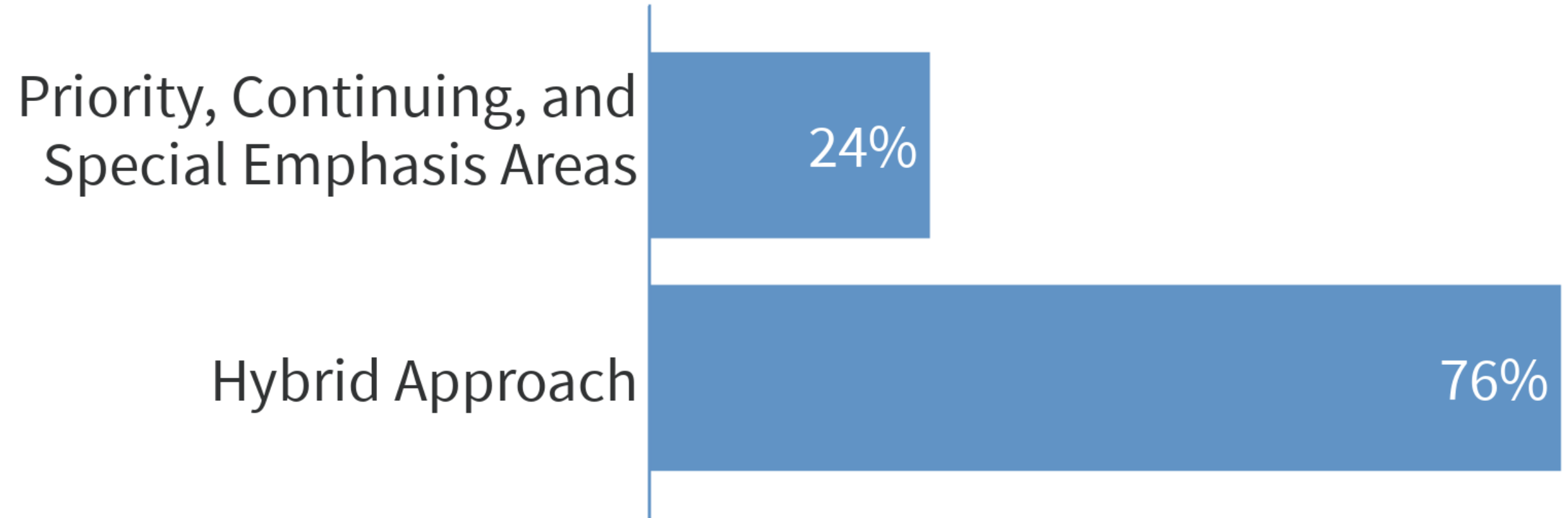FLORIDA Transportation Plan

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Discussion

Do you have a preferred Emphasis Area organization/structure?

Priority, Continuing, and Special Emphasis Areas

Priority Emphasis Areas	Fatalities	Serious Injuries
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Impaired Driving	4,166	5,667
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What are some things you like about the proposed Priority, Continuing, and Special Emphasis Area approach?

"Has more focus"   "Still appears to be a strain on resources"   "More focus on Addressing the low hanging fruits"   "B"

"Each group is specifically identified."   "Easy to communicate the areas being worked on"

"Focus on biggest gains given resource constraints"   "Partners are familiar with the messaging and approach"

"Previously attempted…however funding, support concerns"   "Several states have successfully adopted this approach"

"all groups identified clearly"   "Allows for each area to have a better idea of what the other is doing successfully."

What are some things you DON'T like about the proposed Priority, Continuing, and Special Emphasis Area approach?

"The multiple focus areas makes it hard to understand the overall impact of efforts toward the reduction of crashes"

"May become difficult to manage"   "Combining groups just muddies the water"

"This runs the risk of an area being overshadowed by another based on any situation that may arise statewide or nationally."

"Takes away prioritizing on known needs in an area"   "Some emphasis areas may not receive the attention they deserve"

"Doesn't convey complexity of crashes"   "Crashes are so complex that addressing a specific area with less attention on others"

"May require individuals to be involved in many groups"   "too many emphasis areas"   "overwhelming"   "Stretches resources"

"Difficult to emphasize the most important multi-factor combinations"

Potential Hybrid Approach

Priority Emphasis Areas	Fatalities	Serious Injuries
BEHAVIOR		
Impaired Driving	4,166	5,667
Occupant Protection	3,235	8,644
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Traffic Records and Information Systems	Foundational	
Continuing and Emerging Emphasis Areas		
Commercial Motor Vehicles, Teen Drivers, Distracted Driving, Work Zones, Rail, ACES, Micromobility, and Transit		

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What are some things you like about the proposed Hybrid Emphasis Area approach?

"Appears to align potential strategies or responses"

"Allows a focus on those things that can be improved"

"Focused on key issues"

"Targeted responses easy to develop"

"Streamlining resources (time and money)"

"Breaks up focus areas by funding source"

"Groups contributing factors while placing priority on bigger impact areas"

"data is king...follow the data"

"Synergy"

"New approach to reduce crashes"

"Puts behavior first - this is most important."

"More decisive"

"Clear focus on high risk driving behaviors and roadway factors"

What are some things you DON'T like about the proposed Hybrid Emphasis Area approach?

" disorganization/lost focus "   " Doesn't include broader areas such as EMS response "   " Challenges- gaining by in from stakeholders "

" More difficult to measure results "   " Missing the mark - it is not one area but a consideration of all elements (4 E's) "

" Distracted is a perceived issue. Move to BEHAVIOR "   " creating a silo analysis environment "

" Areas get lost in the grouping. How about keeping them separate as they are all important "   " Driver behaviors too limited "

" add distracted driving under behavioral "   " Teen drivers should be included under Roadway Users "   " lack of synergy "

" Tiered approach (priorities) is better "   " Continuing/emerging is catch all - lose focus. Probably will be reactive. "

Major Takeaways

- Highest rate of fatalities and serious injuries - **20-34 age group**
  - Drivers 65+ are more likely to be killed or seriously injured
  - Teen drivers are more likely to be involved in a crash but less likely to be killed or seriously injured
- Highest number of fatalities - **urban areas**
  Highest fatality rates - **rural areas**
- Most fatalities and serious injuries happen on **state-maintained roadways**
- Most intersection fatalities and serious injuries are at a **four-way or T-intersection**
- More fatalities occur at night with about **half on lighted facilities**
  More serious injuries occur during the day
- Most crashes involving a fatality or serious injury occur when the **weather is clear**.

What strategies support Florida's vision of ZERO transportation fatalities and serious injuries?

"Documenting and addressing secondary crashes"   "Work with private sector development to meet goals"

"more use of roundabouts as opposed to 4way intersections"   "High emphasis/high visibility ped facilities"

"Require a written test and riving test every 5 years for drivers"   "continue to deploy technology to enable AV and CV to remove the human element"

"More and better sidewalks and bike lanes."   "More transit/fewer single occupancy trips"   "context design"   "Analysis of equity issues."

"Utilize social media heavily, both for information and for education"

"Increased use of social media safety messages and educational outreach opportunities"

"Improve drone access to deliver goods so people won't be driving. then figure out how to supplement that gas tax"

"Re-testing to acquire driving licenses (not FDOT's area it's within DHSMV)"

"Legislature and Policy changes - required education exams for every driver's license renewal and replacement"

"Congestion management"   "More transportation choices"   "Continue to focus on distracted driving"

"Identify and communicate what is working and what isn't working in all emphasis areas on an annual basis."   "Complete streets"   "4Es"

"Truly be strategic. Match funding to where we will make greatest gains."   "incentivize good behavior for insurance rates -"   "Use of data"

"Focused education and outreach"   "Due to lack of distracted driving data consider ways to gather data such as visual surveys as with seatbelt use counts"

"Use cameras to capture driver behaviors in order to determine suitable solutions"   "Benchmarking those states which have achieved ZERO fatalities."

"Increased communications on SHSP implementation."   "Continued Section 130 funding in support of railroad crossing closures"

"Additionally funding for law enforcement"

"Create better big-data or AI analytics that can provide good insights about multi-factor situations/conditions leading to fatalities and serious injuries."

"Incentivize new car technologies."   "Better multimodal facilities"

"Proactive approach - apply systematic countermeasures that are mandatory for inclusion and implementation from Planning to Maintenance"

"Do not focus on factors that do not directly cause crashes such as daytime or clear weather. Focus on causation factors"

"Try different roadway treatments as pilot areas to see if driver behavior adjusts/changes"   "Targeted improvement to data collection and quality."

"Policy change: electronic enforcement"   "Pandemics!"   "Make safety more important than time (culturally)"

"alternative modes of transportation reducing dependency on roads"   "better data reporting in real time"

"Continue to focus on changing dangerous driver behaviors and roadway engineering"

"Taking a long term approach to driver education, with an emphasis on driver license education in schools and overall."

"Increased teleworking, remote working, flexible working hours."   "Technology development. Connected vehicle technology and roadway systems"

Next Steps

- Safety Subcommittee Meeting #4
  - Date TBD
    - Targeting the week of June 8, 2020
  - Topics to include
    - Finalize Emphasis Areas and Structure
    - Participate in group activities to identify and prioritize safety strategies
- Safety Subcommittee Web Page
  - http://floridatransportationplan.com/safety_committee.htm

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Thank You