



# **Safety Summit I**

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## **How Do We Drive Toward Zero Deaths?**

***NJ 2020 Strategic Highway Safety Plan***

**Date: November 15, 2019**



# **Personal Story**

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## **Robert Nulman**

**Mothers Against Drunk Driving New Jersey Chapter  
Former Mayor of Clinton, New Jersey**



# Welcome Remarks

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# LOG IN NOW

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Later in this meeting, we will be using a live-polling tool to get your input. Please follow the directions below to log-in now.

1. Use your phone's browser to navigate to: **PolIEV.com/2020SHSP**

2. Answer the question:

**What do you think is the most significant road safety issue in New Jersey?**

## Sign into WiFi:

**Network:** Welcome-to-TCNJ

**Username:** guest2587

**Password:** jujemeby



# Strategic Highway Safety Plan

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## Overview



# What is a Strategic Highway Safety Plan?



*The SHSP is a five-year plan to drive down fatalities and serious injuries on all public roads.*

*Encompassing:*



Engineering /  
Infrastructure



Enforcement



Education

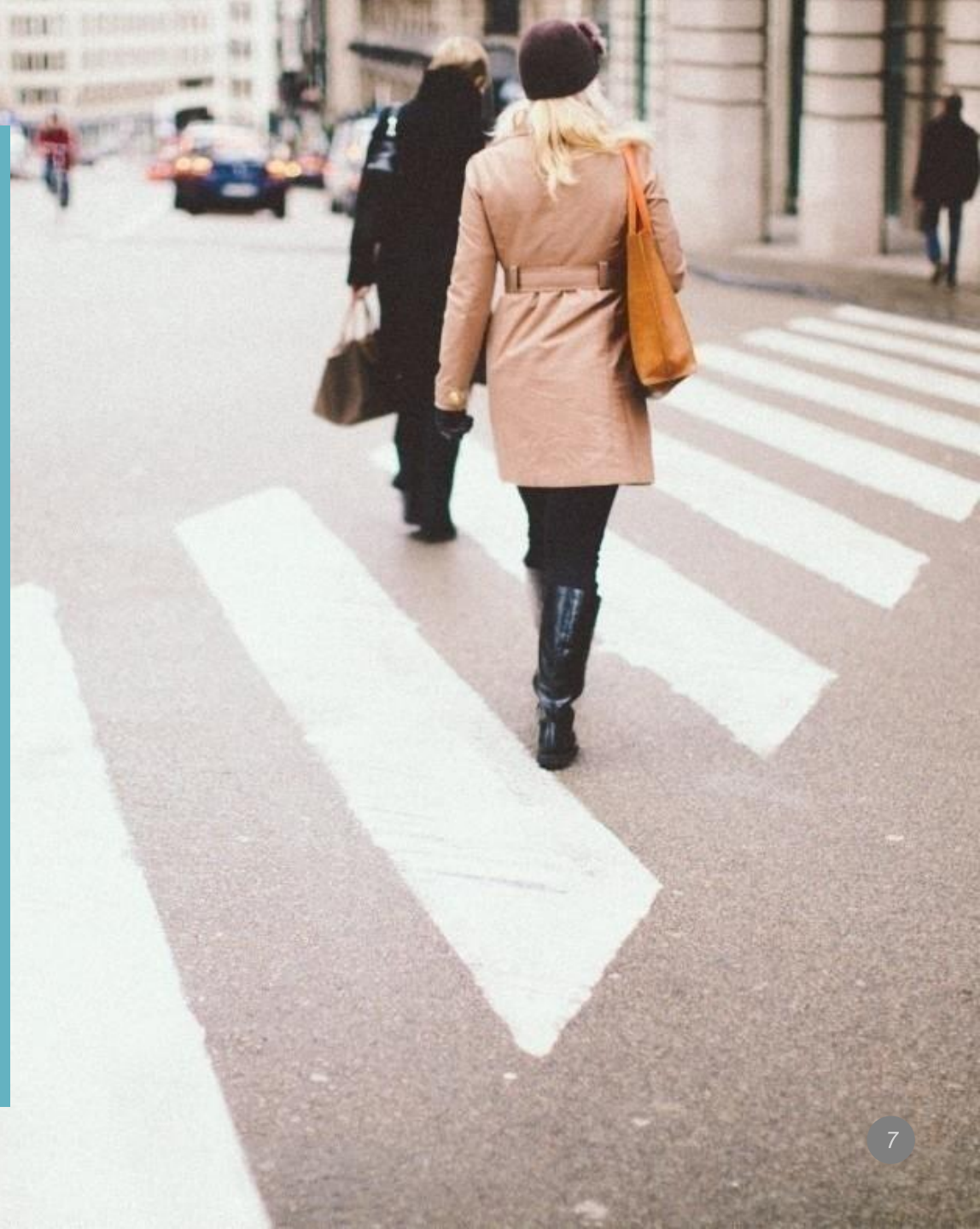


Emergency  
Response



# Why do a Strategic Highway Safety Plan?

- ✓ We need to work together to reach towards zero deaths
- ✓ Better coordination to integrate many separate safety initiatives
  - Zero Death Initiatives
  - State/regional/local initiatives
  - Health Initiatives
  - Education Initiatives
- ✓ Speak with a unified voice to the public
- ✓ Federal requirement





# Strategic Highway Safety Plan Approach

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- ✓ Collaborative with all safety stakeholders
- ✓ Comprehensive across all public roads
- ✓ Coordinated with other plans





# Strategic Highway Safety Plan Approach

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- ✓ Data-driven
- ✓ Performance-based
  - Comprehensive goals & objectives
  - Analyze data and trends
  - Prioritized emphasis areas and strategies
  - Monitoring and evaluation of implementation



## **What is an Emphasis Area?**

*An Emphasis Area is a safety-related focus area which will require:*



**Goals**



**Objectives**



**Strategies**

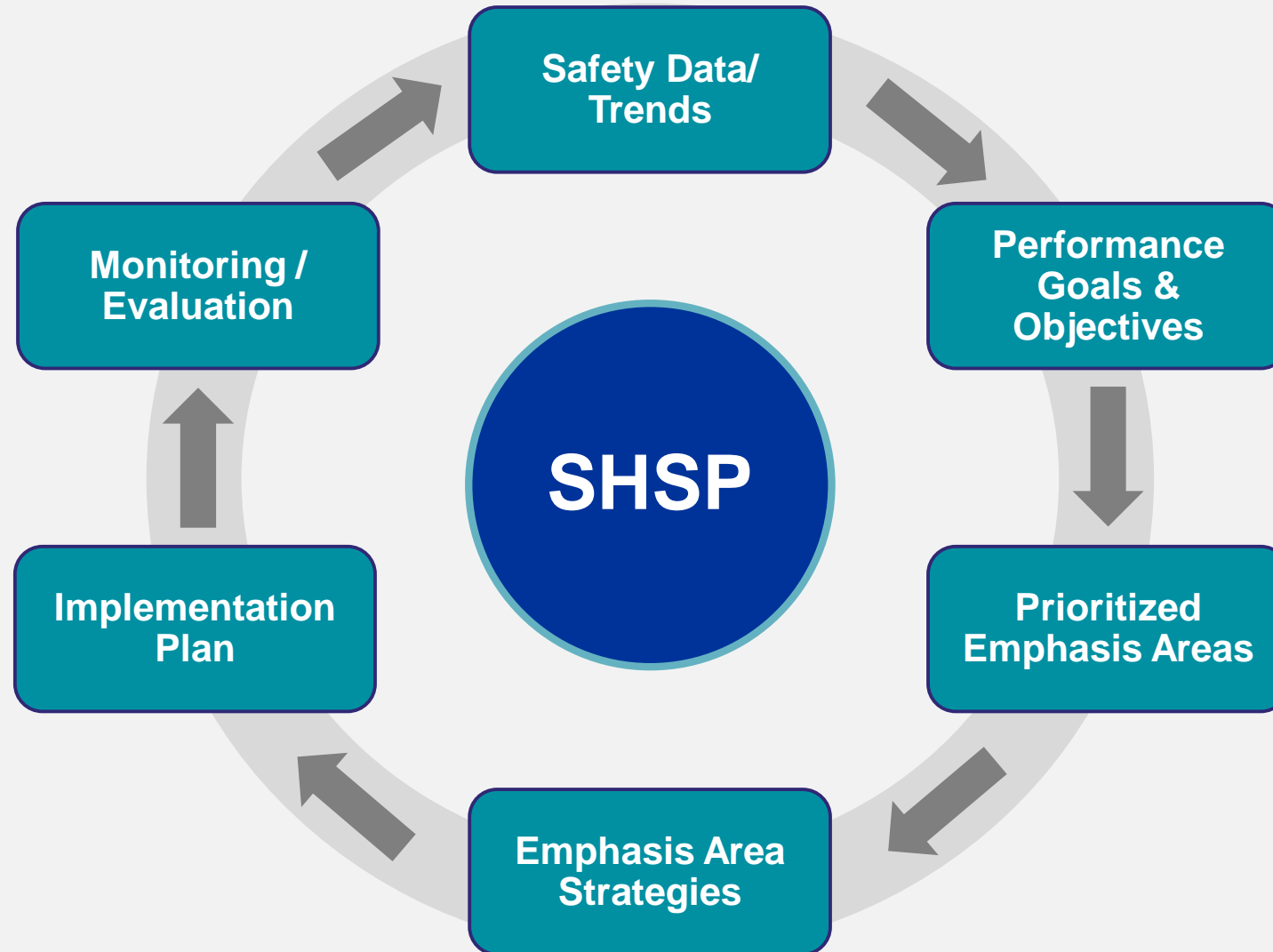


**Actions**

*to be achieved over the next five years.*



# Strategic Highway Safety Plan Approach

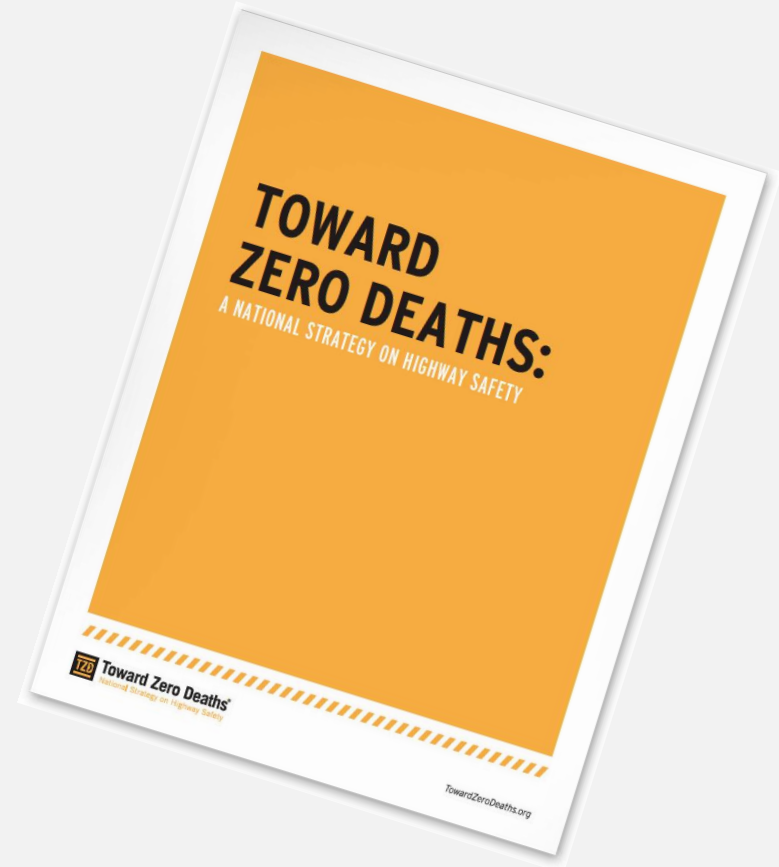


# Towards Zero Deaths – A National Strategy on Highway Safety

“The TZD plan outlines something everyone can do - on a personal level or professional level – that will contribute to saving lives on our roads.”

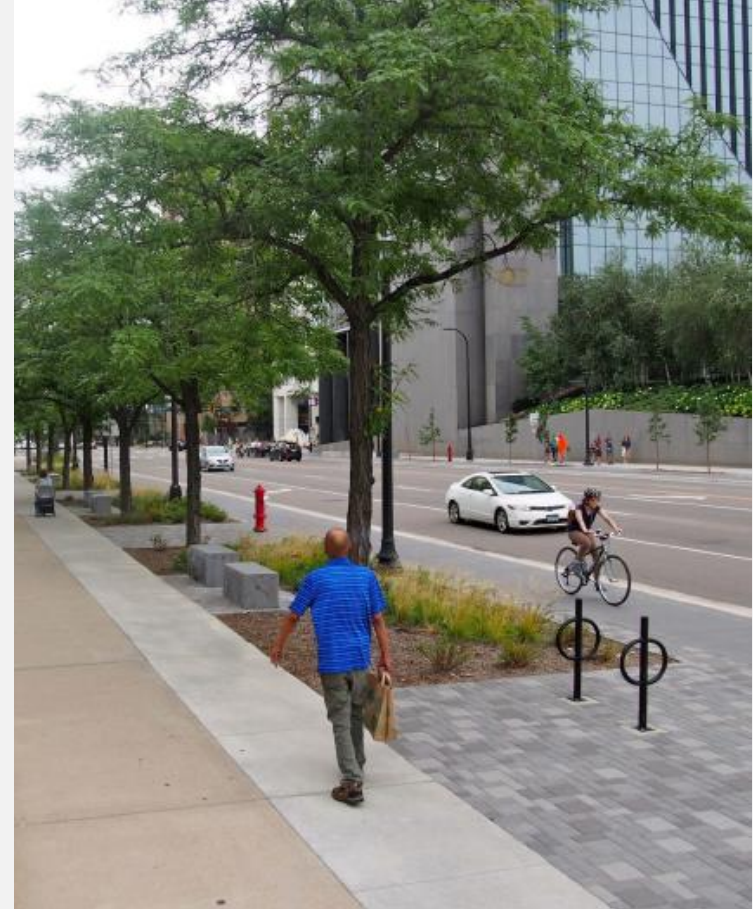
## Six Focus Areas

- Safer Drivers and Passengers
- Safer Vulnerable Road Users
- Safer Vehicles
- Safer Infrastructure
- Enhanced Emergency Medical Services
- Improved Safety Management



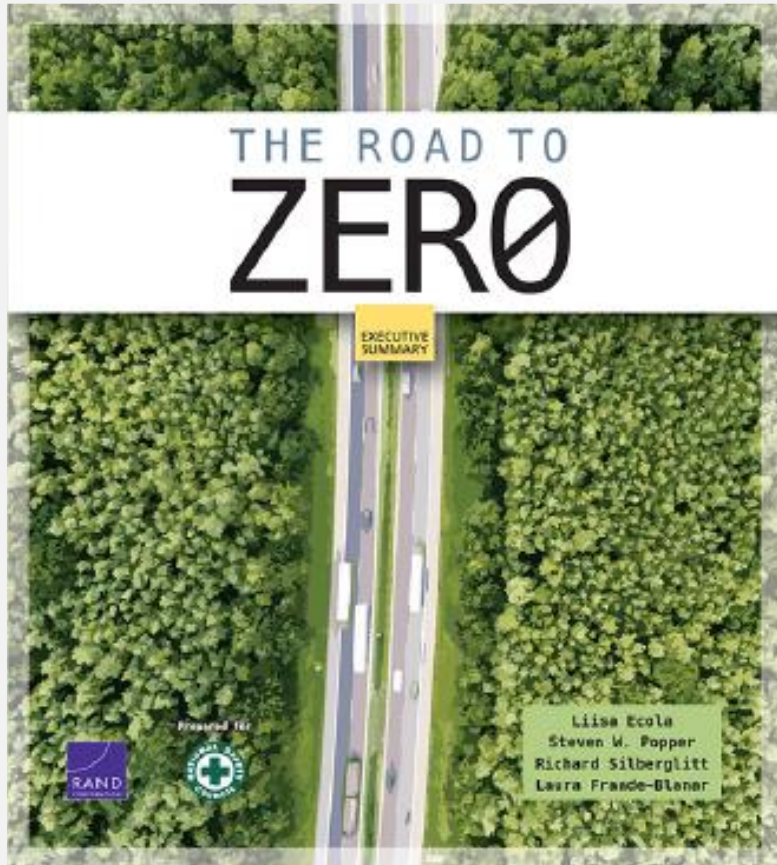
# What is Vision Zero?

- A strategy to eliminate all traffic fatalities and severe injuries
- Acknowledges that traffic deaths are largely preventable
- Data driven
- Typically engages public and elected officials
- In US, has been used mostly at City level



Source: Ryan Anderson, City of Minneapolis

# Road to Zero



**Double Down**  
on What Works

**Accelerate**  
Technology

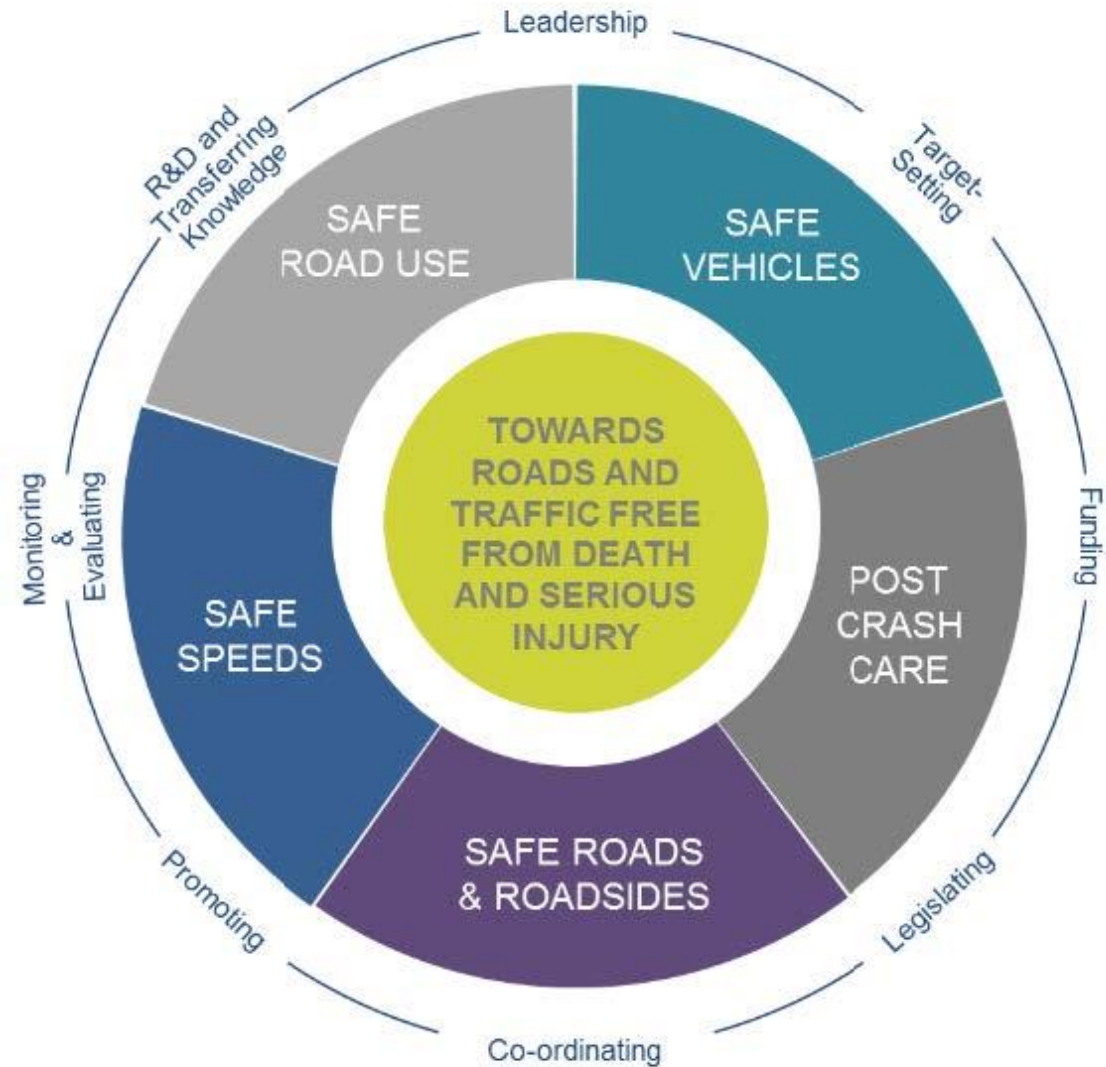
**Prioritize**  
Safety

# Safe System Principles

- Zero deaths and serious injury
- People make mistakes
- Shared responsibility
- Limited human tolerance to crash forces
- Solutions can be found across all pillars

## Other elements

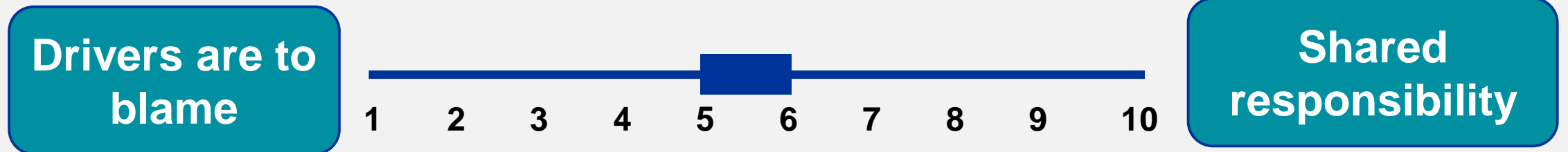
- Proactive approach
- Focus on fatal and serious injuries
- A vision – directs interim strategies



**Source:** Safe System Factsheet - Royal Society for the Prevention of Accidents  
<https://www.rospa.com/rospaweb/docs/advice-services/road-safety/roads/safe-system.pdf>

# Culture shift – where are you on the journey?

- Blame drivers → Shared responsibility
- All crashes → Focus on fatal and serious injury
- React to crashes → Proactive identification of risk
- Individual pillars → System





# New Jersey's 2020 SHSP Approach

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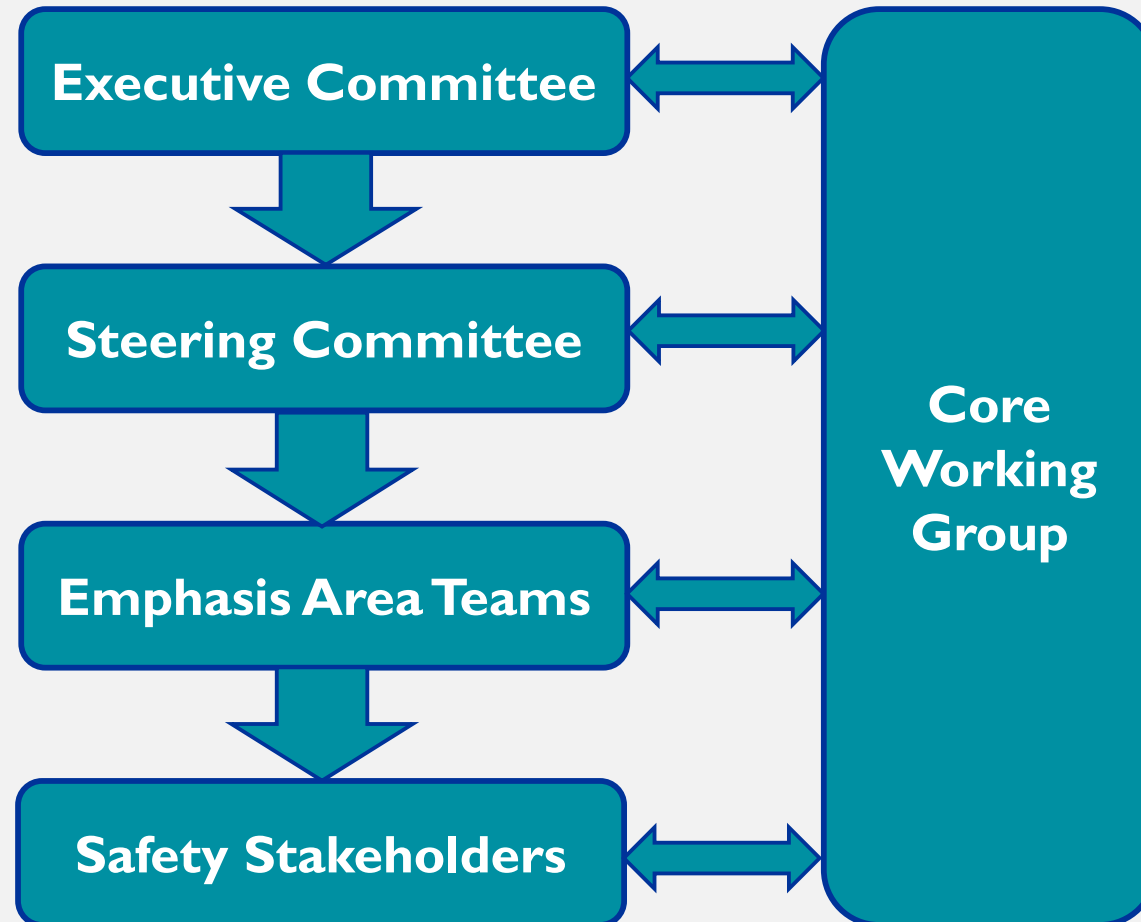


## What's different for the 2020 Strategic Highway Safety Plan Update?

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- ✓ Increase County and Municipal participation
- ✓ Better coordination/integration with all agencies
- ✓ Focus on Implementation

# SHSP Roles and Responsibilities






# SHSP Executive Committee



- NJDOT Commissioner, Chair
- DHTS Director, Vice Chair
- Governor's Office Representative
- MVC Chair and Chief Administrator
- State Police Superintendent
- Department of Health Commissioner
- Department of Education Commissioner
- Association of Counties President
- State League of Municipalities President
- State Association of Chiefs of Police President
- Federal Highway Administration New Jersey Administrator
- National Highway Traffic Administration Region 2 Administrator
- Federal Motor Carrier Safety Administration New Jersey Division Administrator

# Executive Committee's Role

## SHSP Development

-  Visible executive support
-  Ensure resources are available
-  Approve
  - Performance Goals
  - Emphasis Areas
  - Strategies and Action Plans
  - SHSP Implementation Plan
  - SHSP Report

## SHSP Implementation

-  Periodic review/evaluation of SHSP's effectiveness
-  Approve changes to the SHSP

# SHSP Steering Committee



Federal	State	County / Regional	Municipal	Non-Profit
<ul style="list-style-type: none"> <li>Federal Highway Administration</li> <li>National Highway Traffic Safety Administration</li> <li>Federal Motor Carrier Safety Administration</li> </ul>	<ul style="list-style-type: none"> <li>NJDOT</li> <li>NJ Division of Highway Traffic Safety</li> <li>NJ State Police</li> <li>NJ Transit</li> <li>NJ Turnpike Authority</li> <li>NJ MVC</li> <li>NJ Department of Banking and Insurance</li> <li>NJ Department of Health</li> <li>NJ Department of Education</li> </ul>	<ul style="list-style-type: none"> <li>Metropolitan Planning Organizations</li> <li>NJ County Engineering / Safety Professionals</li> </ul>	<ul style="list-style-type: none"> <li>Municipal Engineering / Safety Professionals</li> <li>Law Enforcement</li> </ul>	<ul style="list-style-type: none"> <li>AAA Mid-Atlantic</li> </ul>

# Steering Committee's Role

## SHSP Development

-  Assist in recruiting stakeholders
-  Provide input
-  Safety Summit agendas
-  Stakeholder engagement
-  Recommend
  - Performance Goals
  - Emphasis Areas (EA)
  - EA Area Team Leaders
  - EA Strategies and Action Plans
  - SHSP Implementation Plan

## SHSP Implementation

-  Monitor progress of implementation
-  Periodic review of SHSP performance and recommend changes

# Emphasis Area Teams

- Each team will include a mix of safety stakeholders.
- Each team will have a leader.
- Teams to be determined once Emphasis Areas are established.
- Teams will focus on one or more crash contributors.



**Engineering /  
Infrastructure**



**Enforcement**



**Education**






**Emergency  
Response**



# Emphasis Area Teams' Role

## SHSP Development

-  Develop Goals and Objectives
-  Prioritize Strategies
-  Develop Action Plans

## SHSP Implementation

-  Champion Action Plan Implementation



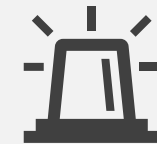
Engineering /  
Infrastructure



Enforcement



Education



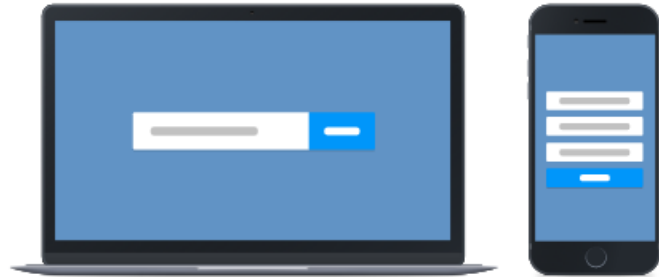
Emergency  
Response

# NJ 2020 SHSP Development Process



# Do you have any questions or comments?

## Join by Web



- 1 Go to **PollEv.com**
- 2 Enter **2020SHSP**
- 3 Respond to activity

## Join by Text



- 1 Text **2020SHSP** to **22333**
- 2 Text in your message



# Delaware's SHSP Perspective

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**Jennifer Cohan**

Secretary of Transportation, State of Delaware



# DELAWARE STRATEGIC HIGHWAY SAFETY PLAN: TOWARD ZERO DEATHS



Secretary Jennifer Cohan

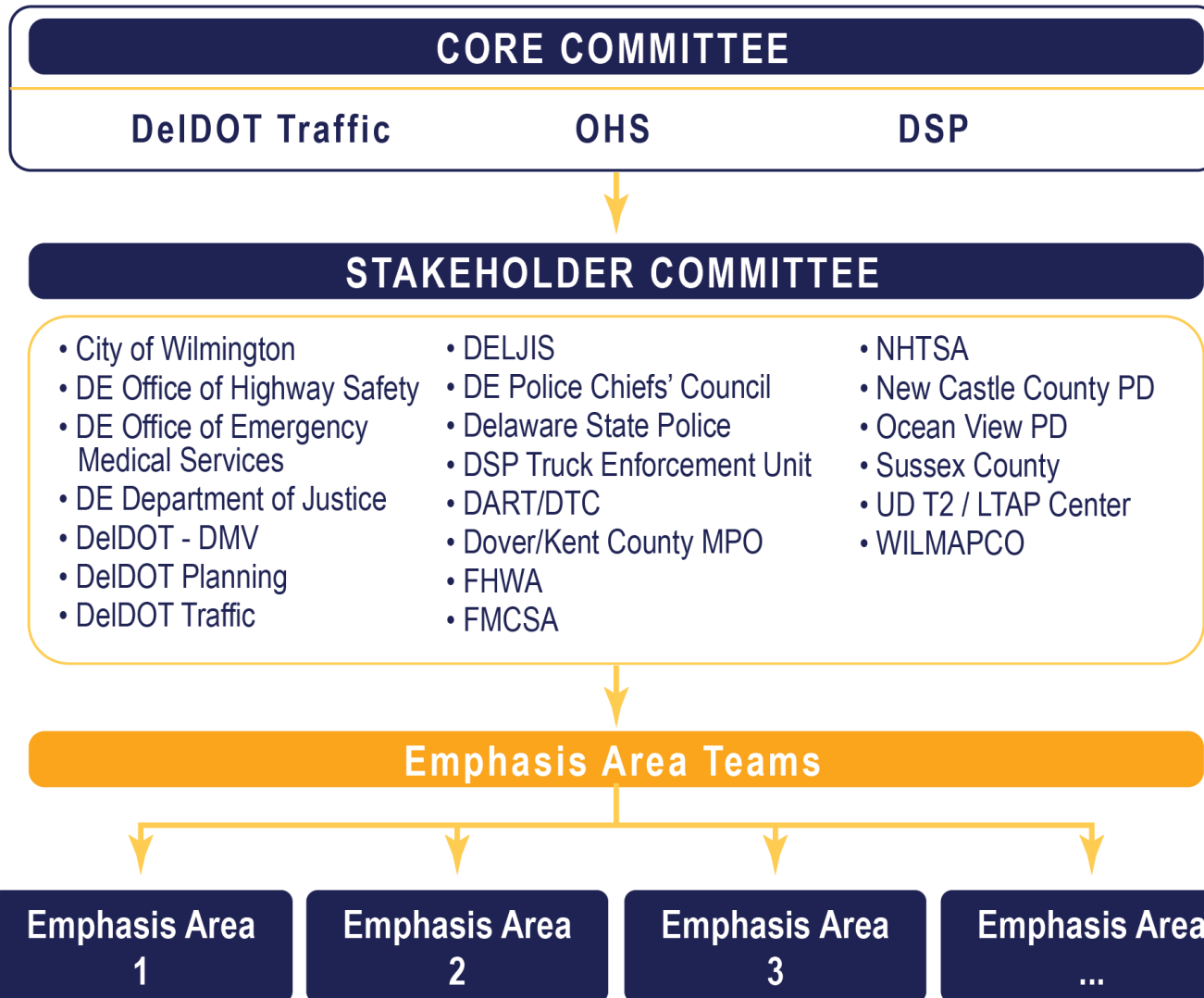
November 15, 2019

# What is an SHSP?

- ◆ Comprehensive transportation safety plan with a goal of reducing highway fatalities and serious injuries on all public roads
- ◆ Establishes consistent statewide goals, objectives, emphasis areas, priorities, and countermeasures with stakeholders and other transportation plans
- ◆ Makes effective use of State, regional, and local crash data and determines priorities based on crash data
- ◆ Addresses engineering, management, operation, education, enforcement, and EMS



# Stakeholder Involvement



# 2015 SHSP Mission & Overall Goal Statements

## MISSION

The *Delaware Strategic Highway Safety Plan: Toward Zero Deaths* aims to eliminate fatalities and serious injuries on Delaware's roadways through a multi-agency approach that utilizes education, enforcement, engineering and emergency medical service strategies.

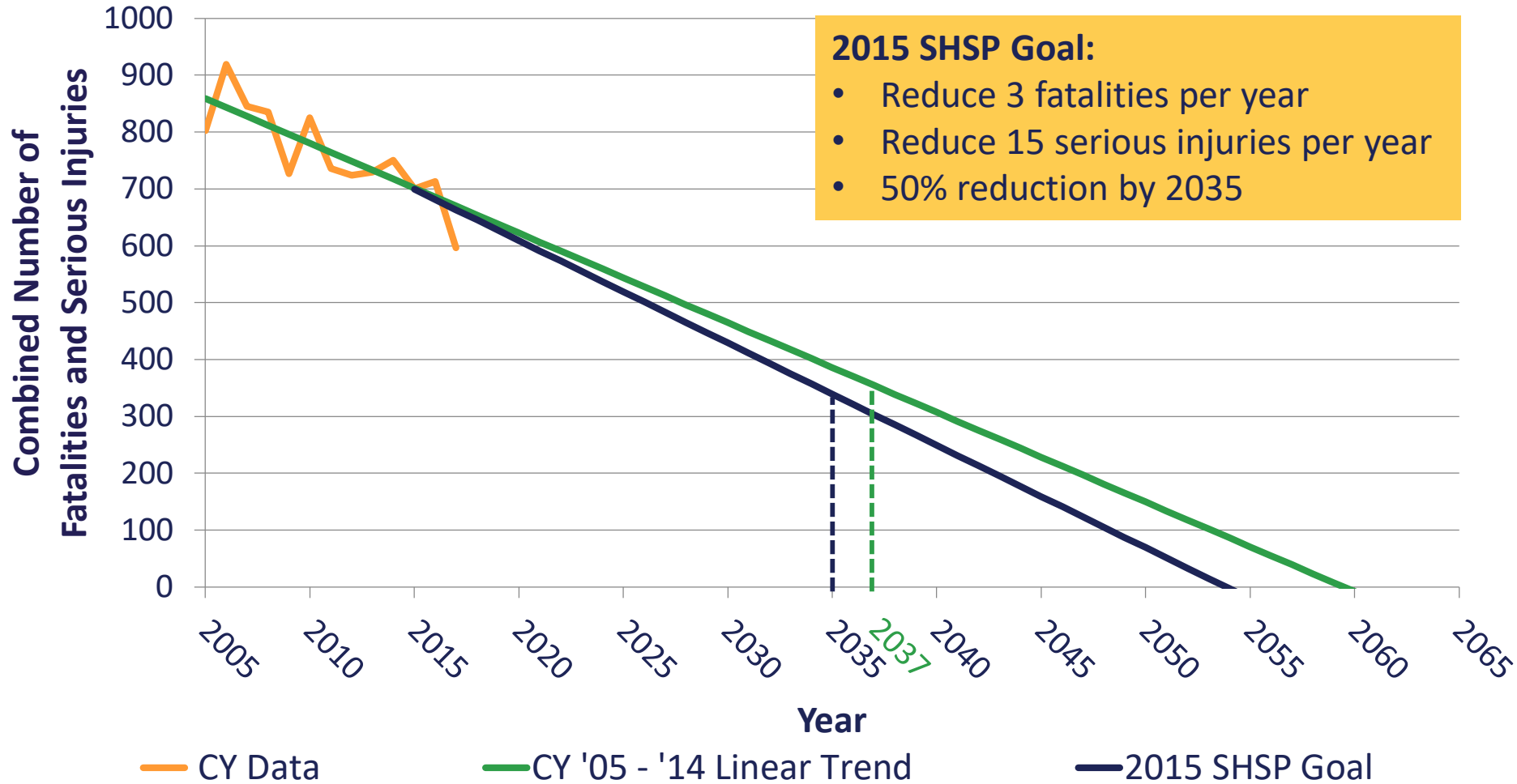
## OVERALL GOAL

The goal of the *Delaware Strategic Highway Safety Plan: Toward Zero Deaths* is to achieve a reduction of at least 3 fatalities and 15 serious injuries annually and continue to reduce the total number of fatalities and serious injuries to achieve at least a 50 percent reduction by 2035.



# 2015 SHSP Overall Goal

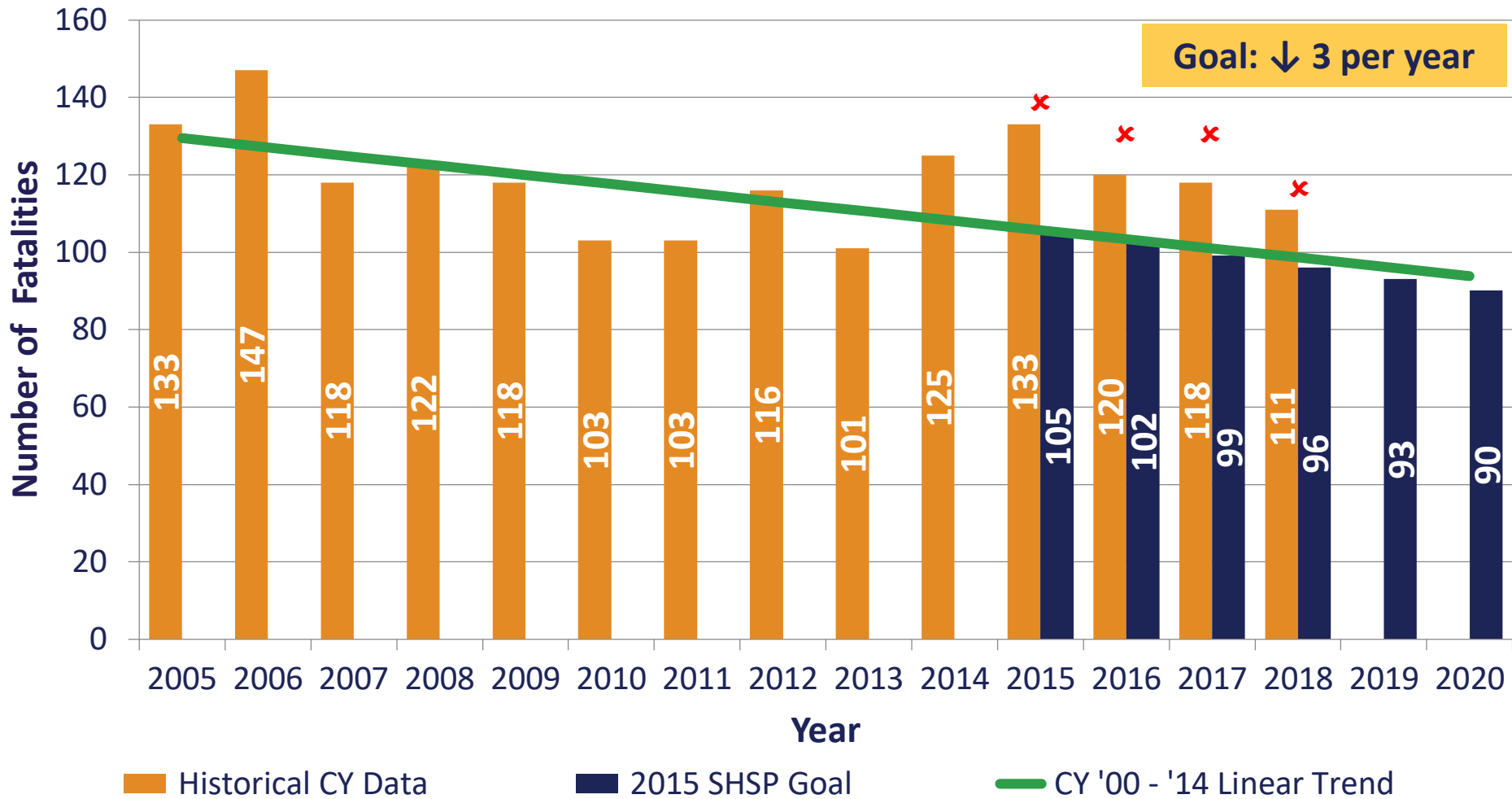
(Combined Fatalities & Serious Injuries)



Source: CARS



# Number of Fatalities



Source: CARS

✓ Goal Met    ✗ Goal Not Met



# 2018/2019 Fatalities

(as of 11/8/19)

	2019	2018	YOY % Change	2018 Total
<b>Total Fatalities</b>	<b>116</b>	<b>92</b>	<b>+26%</b>	<b>111</b>
<b>Person Type</b>				
Vehicle Occupants	65	55	+18%	64
Pedestrians	25	16	+56%	24
Bicyclists	7	5	+40%	6
Motorcyclists	19	16	+19%	17
<b>Crash Involvement</b>				
Curve Related	15	16	-6.3%	17
Roadway Departure	39	39	0%	43
Intersection Related	34	24	+42%	28
Median Crossover	2	3	-33%	3
Wrong Way	0	4	-100%	5
Work Zone	5	3	+66.7%	5

Source: OHS and DeIDOT based on analysis of CARS and fatal crash notices;  
 Current year count is unofficial and could rise as fatal investigations are completed



# Emphasis Areas

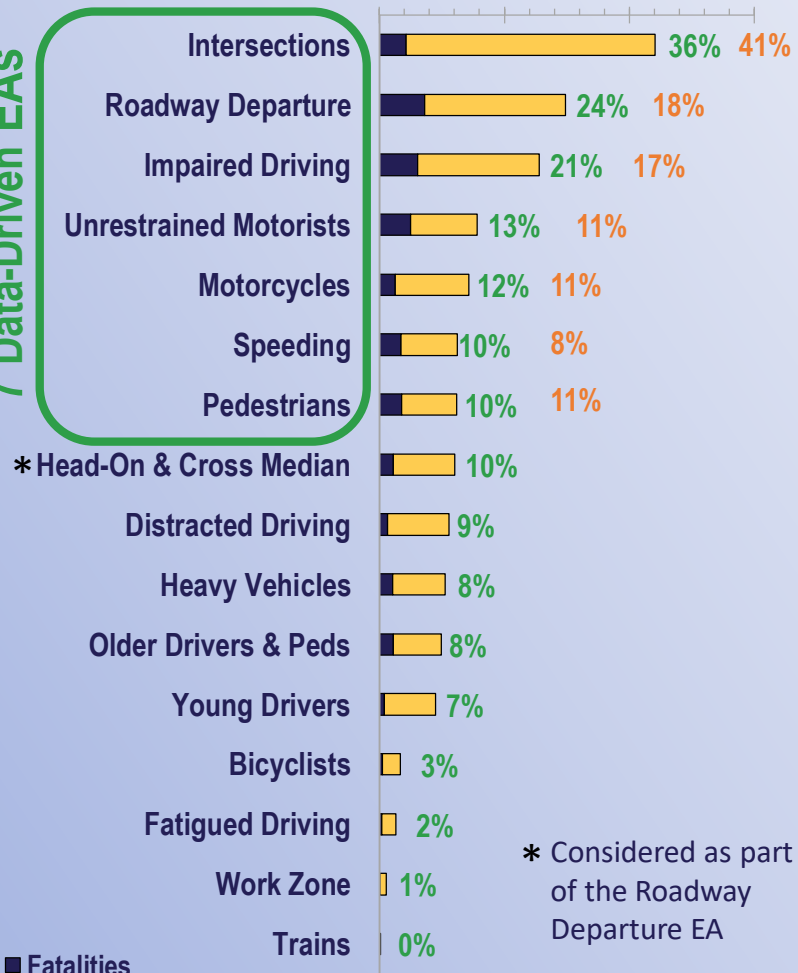


# Delaware's 2015 SHSP Emphasis Areas (EA)

7 Data-Driven EAs

Emphasis Areas Ranked by Fatalities and Serious Injuries (2007 - 2014)

0 1000 2000 3000



■ Fatalities  
■ Serious Injuries

% of Total Fatalities & Serious Injuries

\* Considered as part of the Roadway Departure EA

Account for  
**94% (91%)** of fatalities and  
**81% (75%)** of serious injuries  
 (2007 – 2014 data)  
 (2015 – 2017 data)



# Intersections



Improving the Design and Operation of Highway Intersections

Goal: Reduce the combined number of intersection-related fatalities and serious injuries by 35 every 5 years (7 per year) to achieve the overall goal of a 50 percent reduction by 2035.

# Roadway Departure



**Reducing the Frequency and Severity of Roadway Departure Crashes**

Goal: Reduce the combined number of fatalities and serious injuries in roadway departure crashes by 20 every 5 years (4 per year) to achieve the overall goal of a 50 percent reduction by 2035.

# Impaired Driving



Reducing Impaired Driving

Goal: Reduce the combined number of impaired driving fatalities and serious injuries by 20 every 5 years (4 per year) to achieve the overall goal of a 50 percent reduction by 2035.



# Unrestrained Motorists



**Increasing the Seat Belt Usage**

Goal: Reduce the combined number of unrestrained motorist fatalities and serious injuries by 10 every 5 years (2 per year) to achieve the overall goal of a 50 percent reduction by 2035.

# Motorcycles



**Increasing Motorcycle Safety and Awareness**

Goal: Reduce the combined number of motorcycle fatalities and serious injuries by 10 every 5 years (2 per year) to achieve the overall goal of a 50 percent reduction by 2035.

# Speeding



Speeding

Goal: Reduce the combined number of speeding fatalities and serious injuries by 10 every 5 years (2 per year) to achieve the overall goal of a 50 percent reduction by 2035.

# Pedestrians



**Making Walking and Street Crossing Safer**

Goal: Reduce the combined number of pedestrian fatalities and serious injuries by 10 every 5 years (2 per year) to achieve the overall goal of 50 percent reduction by 2035.

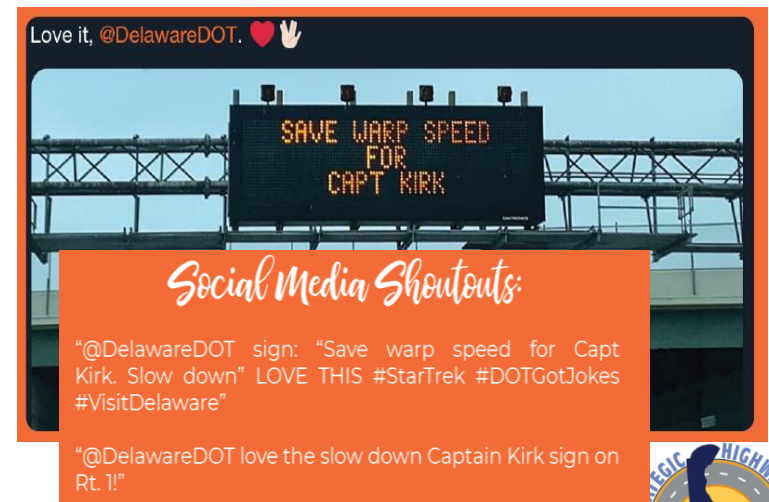
# Implementation Highlights

- Improved crash data systems (All)
- Improved study of countermeasures (All)
- Modified Hazard Elimination Program site selection process (Intersections)
- Compact roundabouts (Intersections)
- Electronic Red Light Safety Program (Intersections)
- Connected & Autonomous Vehicles (Intersections, etc.)
- High friction surface treatment (Intersections, Road Departure)
- Median guardrail (Road Departure)



# Implementation Highlights

- Mumble strips (Road Departure)
- Safety message program (Various)
- Speed limit policy (Speeding)
- Road/Pedestrian Safety Audits (Pedestrians)
- Rapid Flashing Beacons / Median Refuge Islands (Pedestrians)
- Barriers / Fencing (Pedestrians)
- Road Diets (Pedestrians, etc.)



# Next Steps

- **Strategic Highway Safety Plan**

- Continue to implement roadway departure countermeasures
- 2019: SHSP Core Agencies (DeIDOT, OHS, DSP) initiated 2020 SHSP development
- Spring 2020: Crash data review
- September 2020: Adopt 2020 SHSP

**Thank You**







# BREAK

# What do you think is the most significant road safety issue in New Jersey?



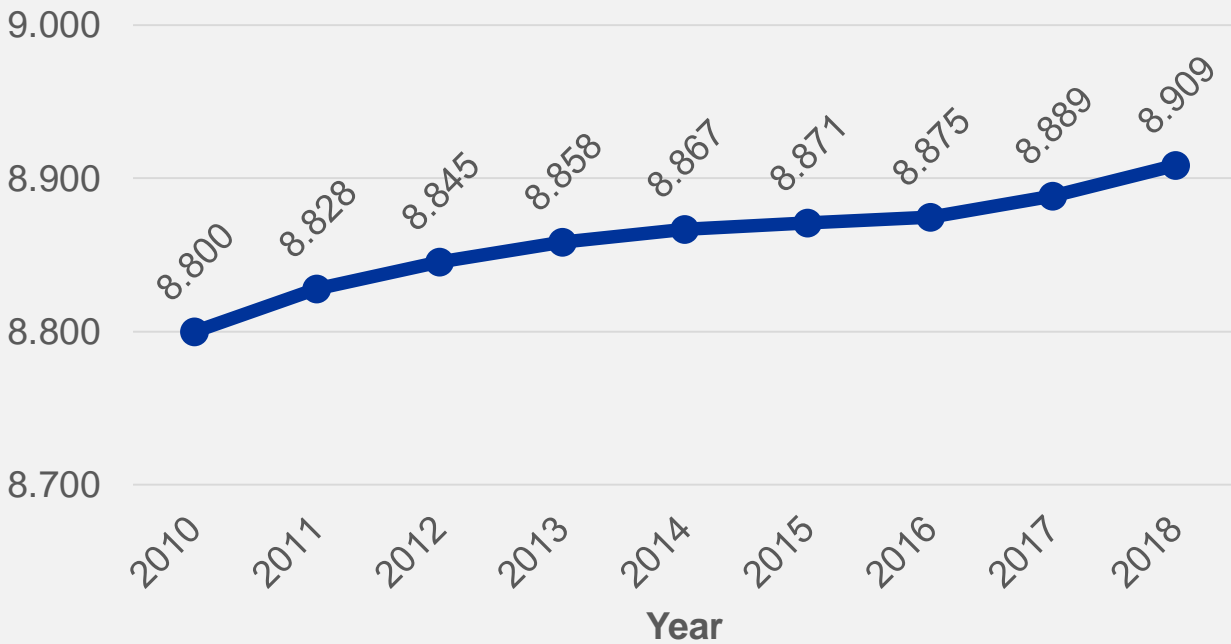


# **Safety Data Trends and 2015 SHSP Outcomes**

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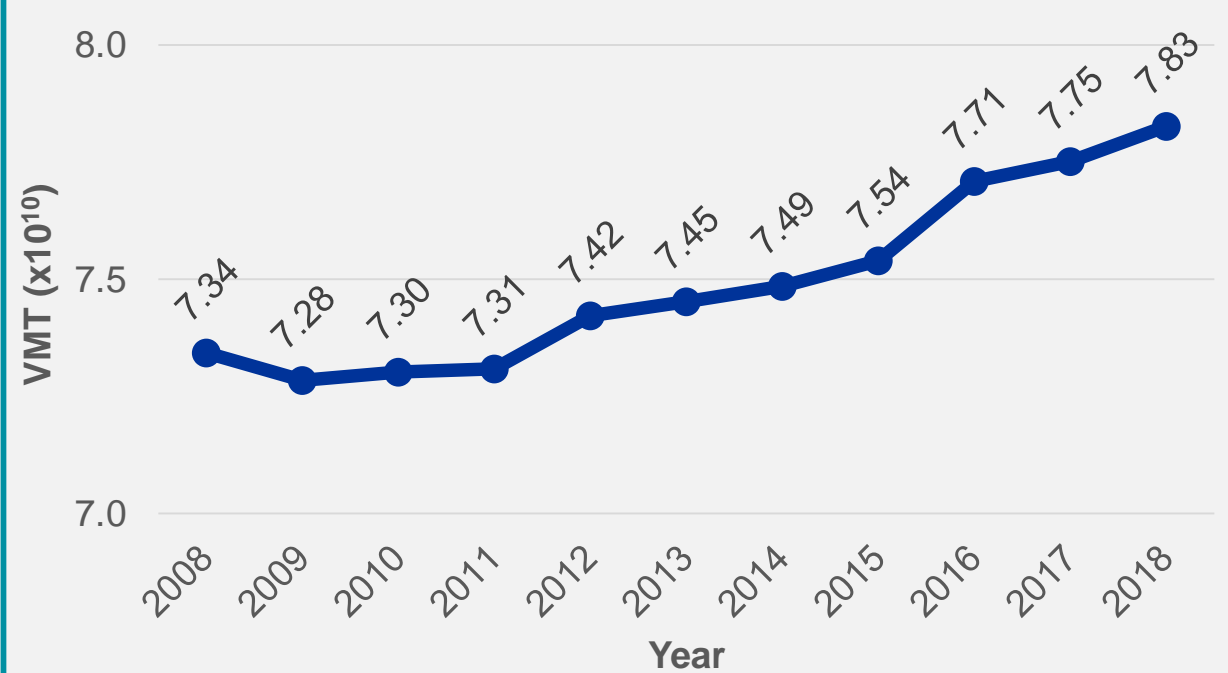
# Safety Influence Factors

## New Jersey Population (in millions)



(Source: United States Census Bureau)

## Annual New Jersey Vehicle Miles Traveled (x10<sup>10</sup>)

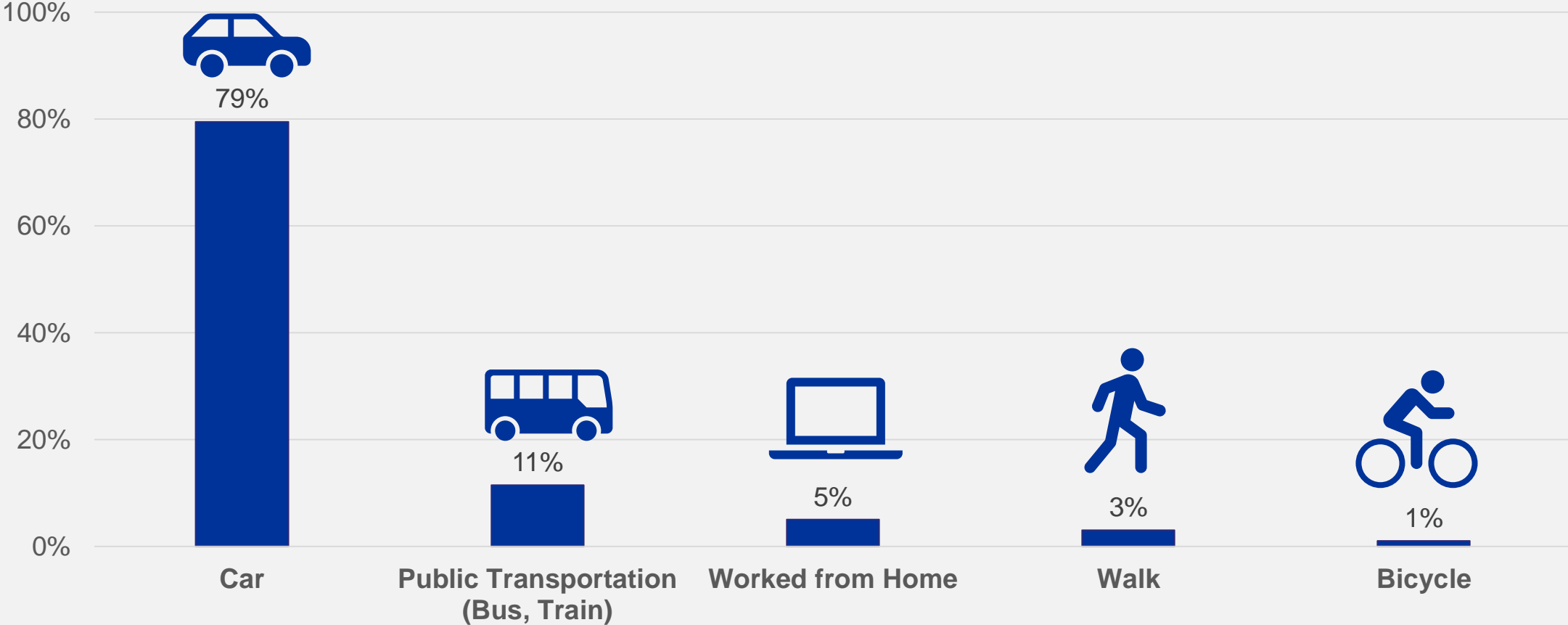


(Source: HSIP PM Targets 2020)

**2034 New Jersey Population Projection - 9.73 Million**

# Safety Influence Factors

## New Jersey Driving Habits

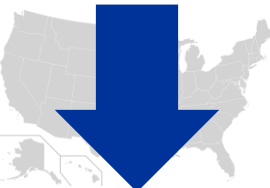


(Source: United States Census Bureau)


# How many traffic fatalities were there in New Jersey in 2018?



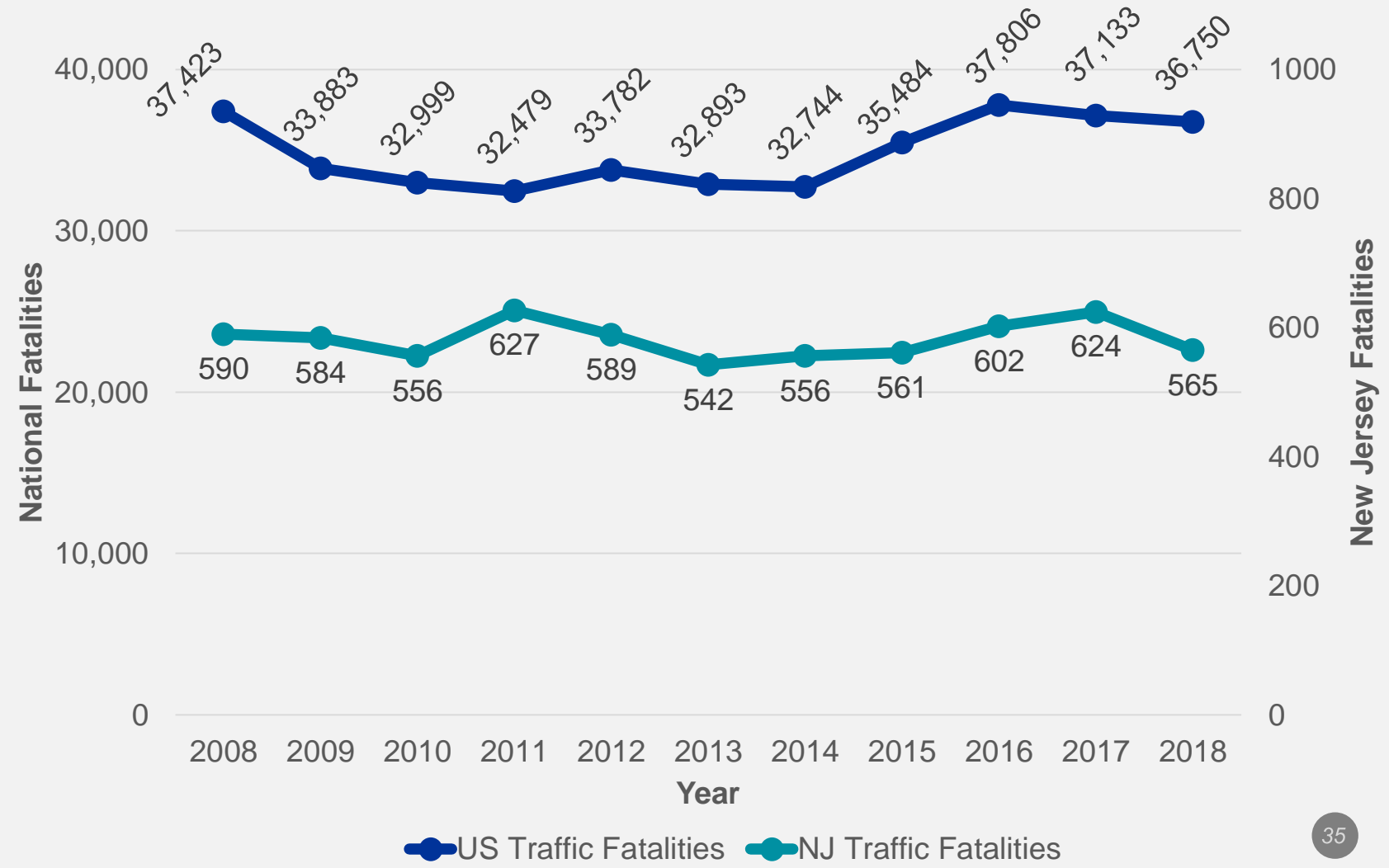
# Safety Data Trends – Traffic Fatalities



**~1%**  
Reduction in  
US Traffic Fatalities  
2017 to 2018

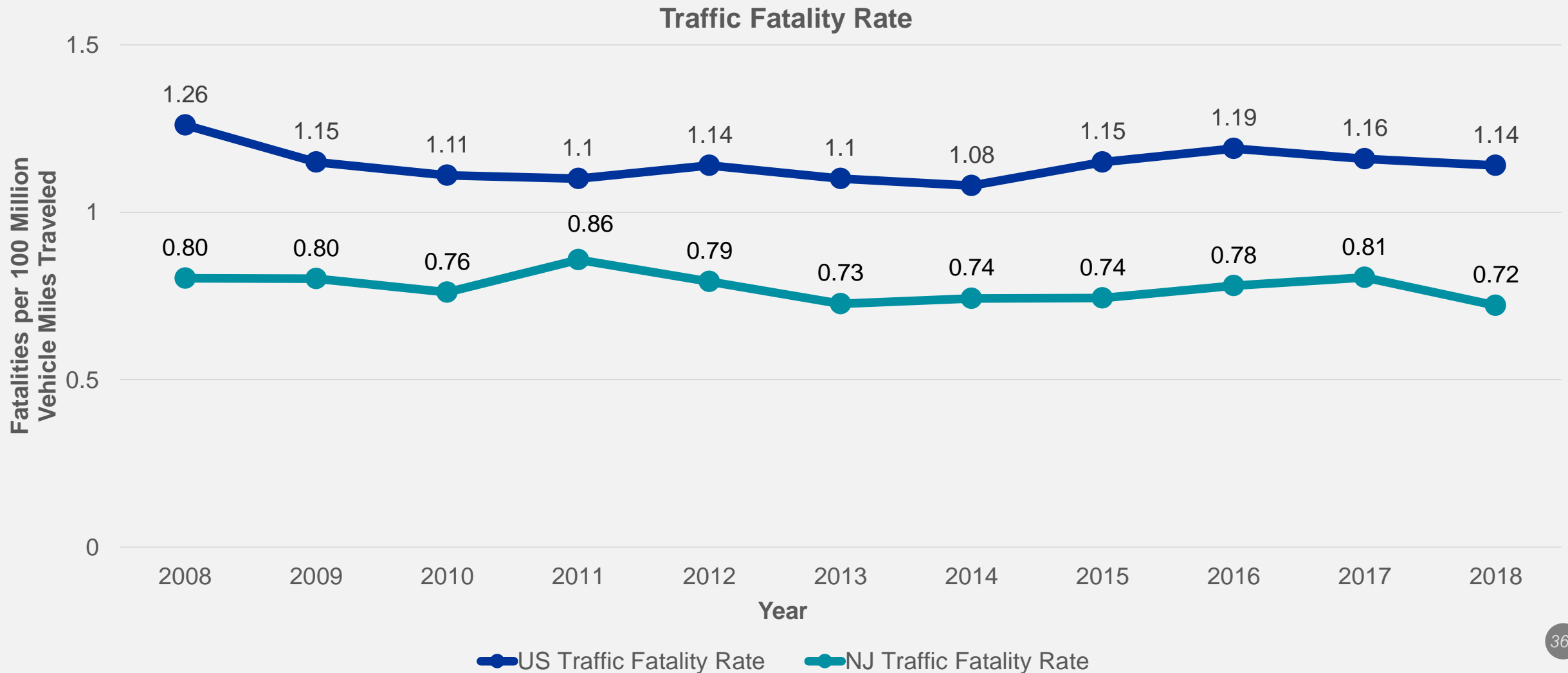


**~9%**  
Reduction in  
NJ Traffic Fatalities  
2017 to 2018



New Jersey and National Traffic Fatalities – 2008 to 2018 (Source: NHTSA)

# Safety Data Trends – Fatality Rate



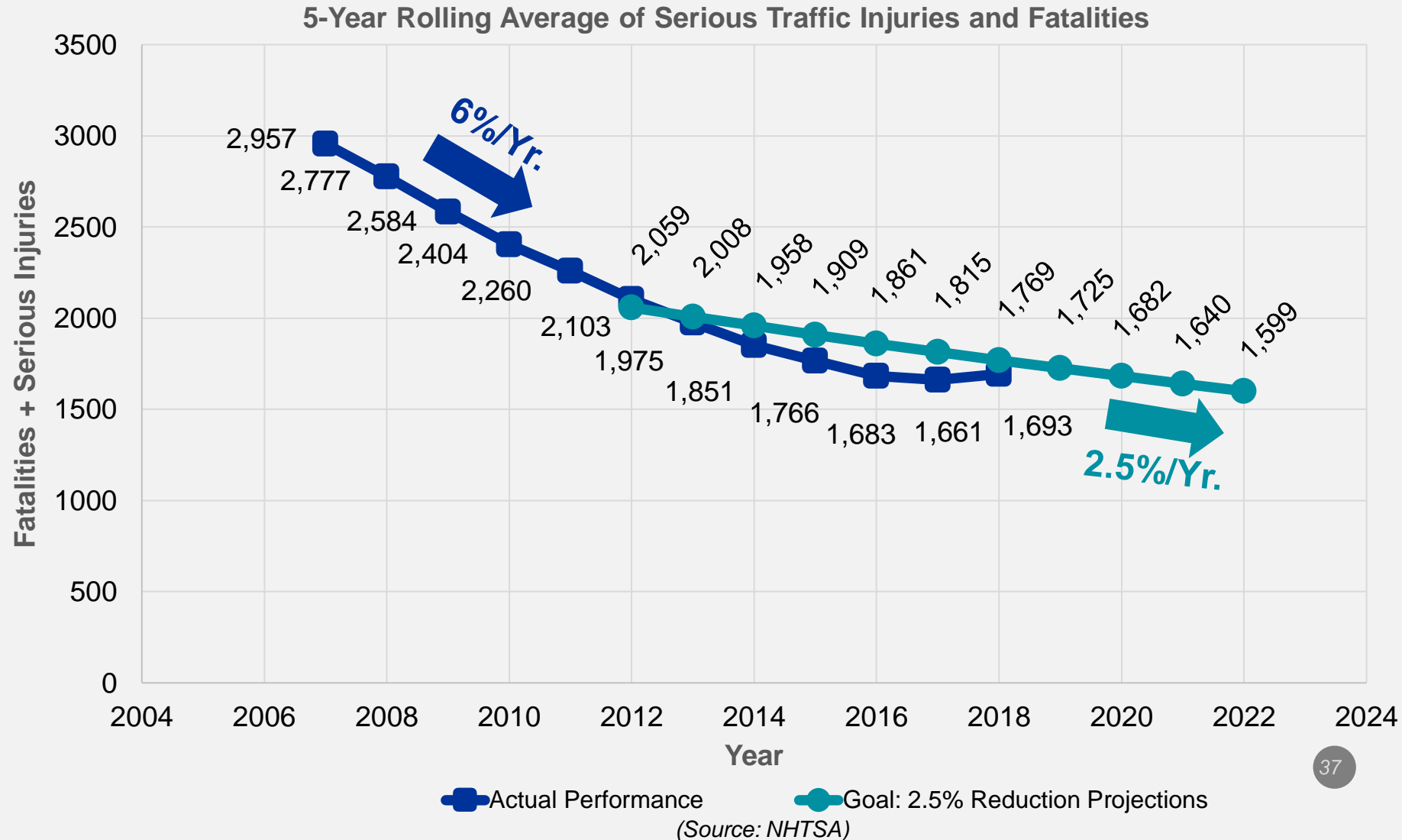
(Source: NHTSA, HSIP PM Targets 2020)



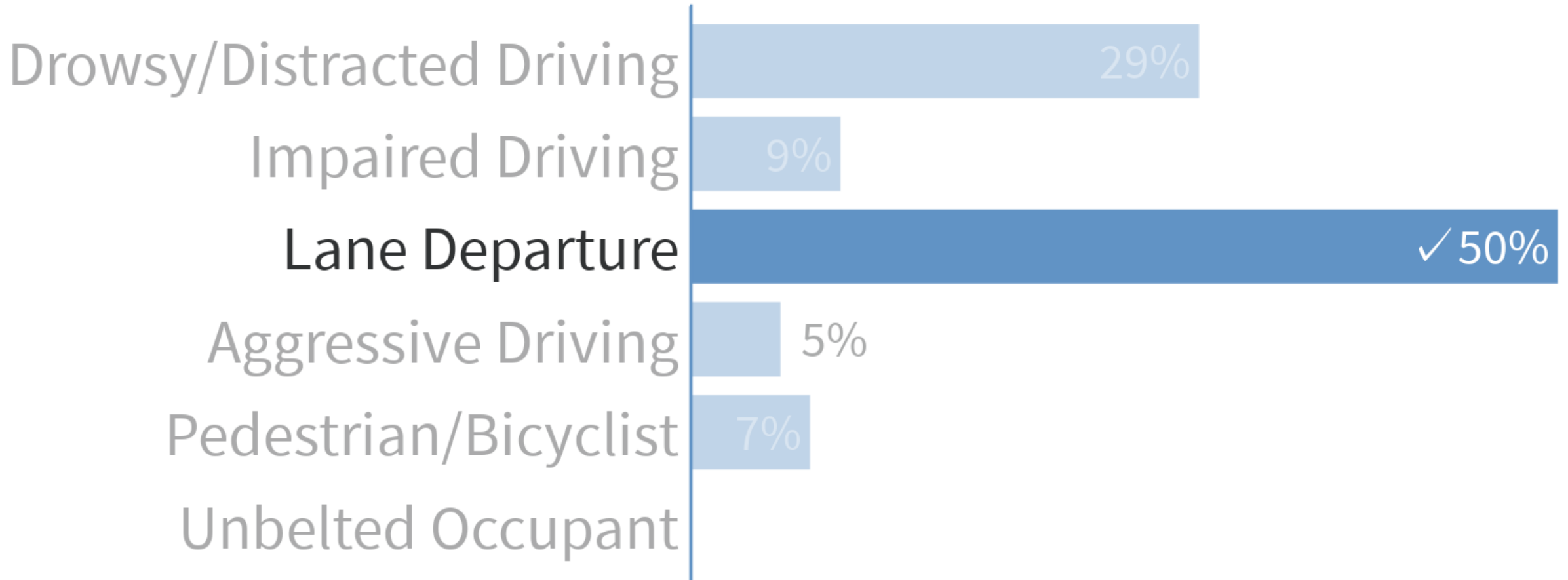
# Safety Data Trends – Performance Goals

**TZD** **Toward Zero Deaths**  
National Strategy on Highway Safety

**2015 SHSP goal**  
**2.5% per year**  
Reduction of fatal  
and serious injuries  
(5-yr rolling average)



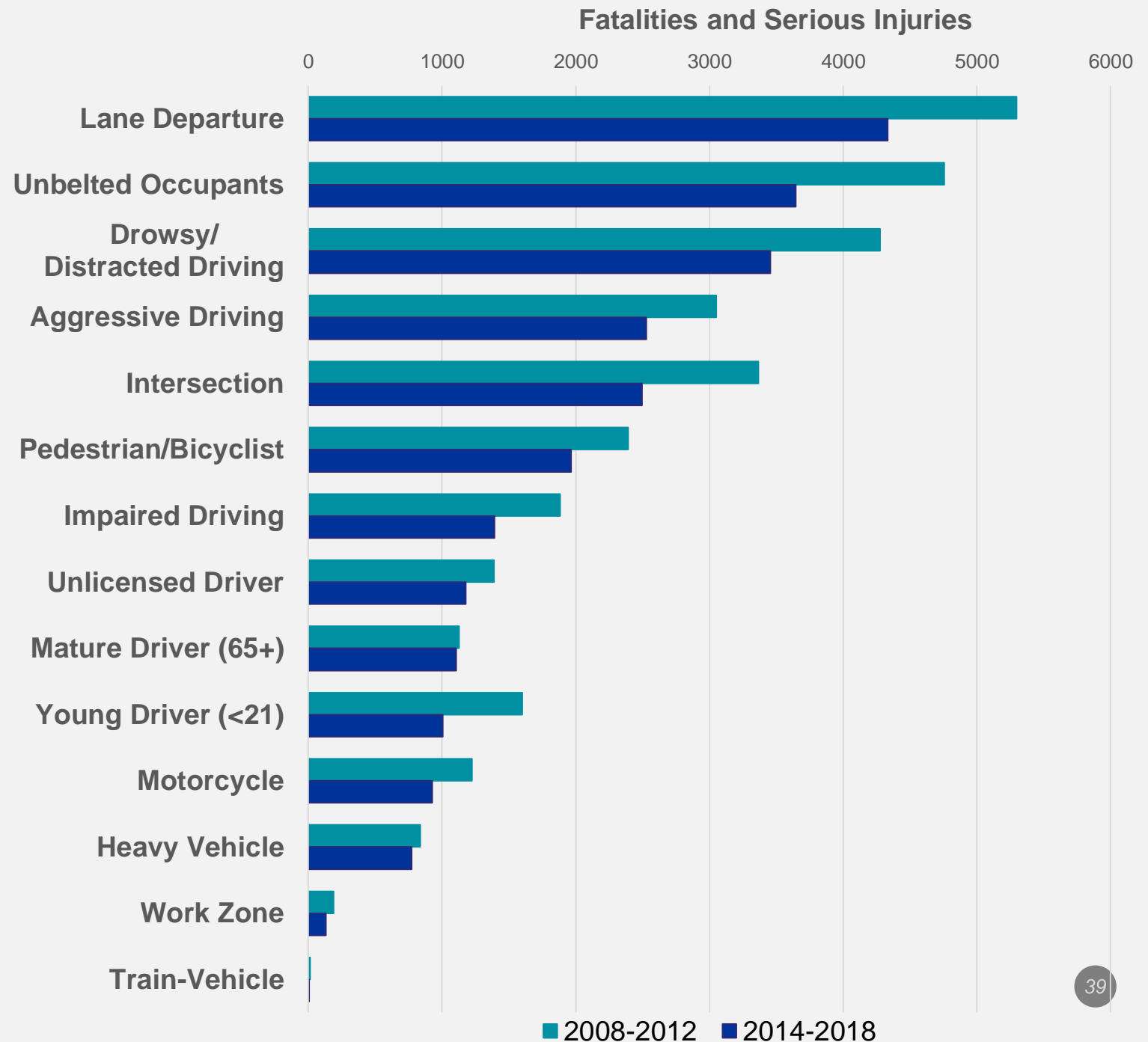
## For the years 2014 - 2018, what Emphasis Area accounted for the most crashes?



# 2015 SHSP Emphasis Areas

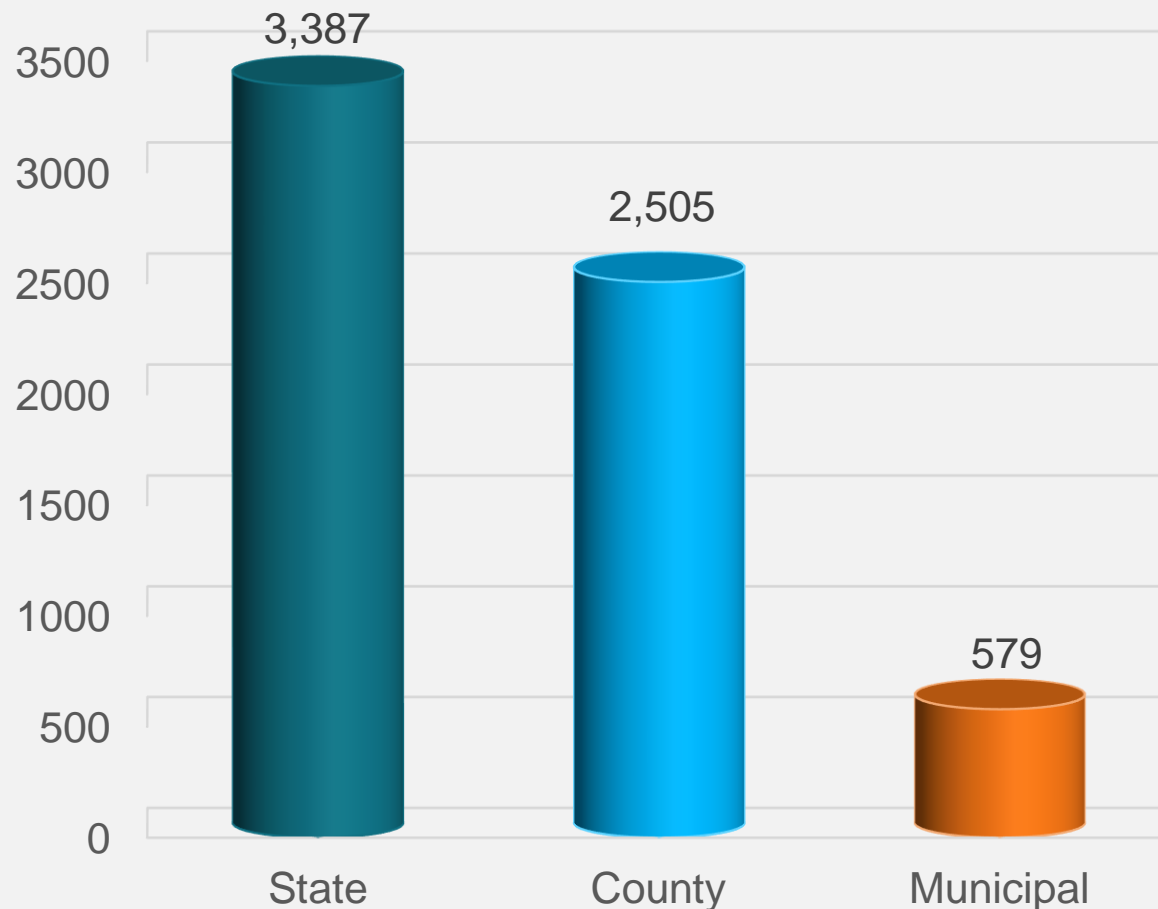
## Highest Areas:

- Lane Departure
- Unbelted Occupants
- Drowsy/Distracted Driving
- Aggressive Driving
- Intersection
- Pedestrian/Bicyclists

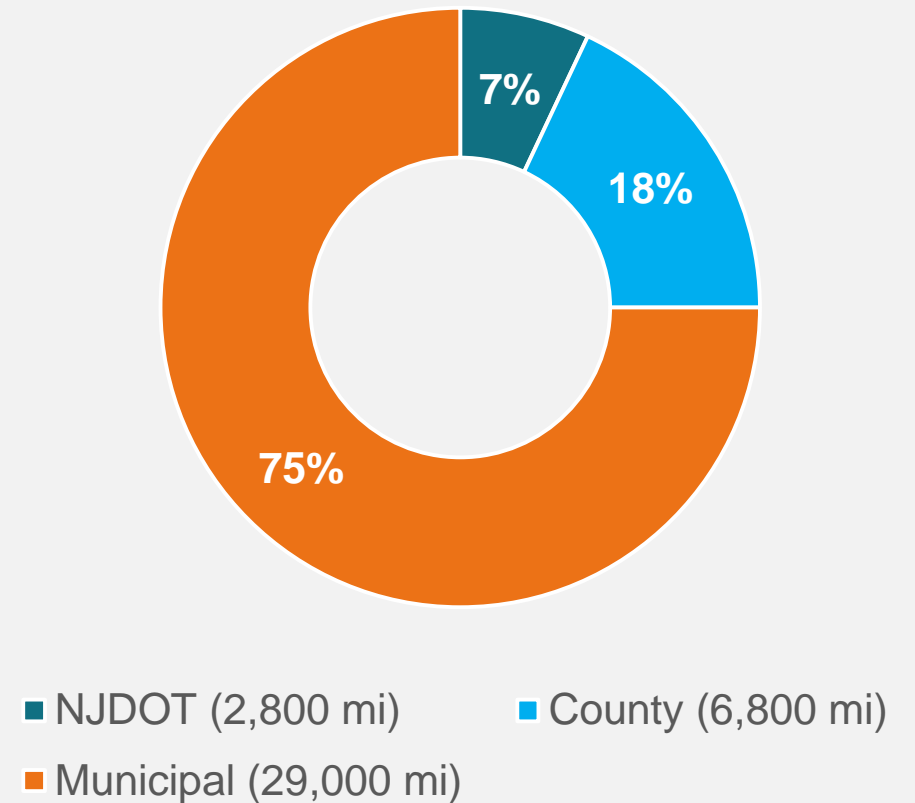


# Fatal & Serious Injuries by Roadway System (2014-2018)

Fatalities and Serious Injuries (2014–2018)



Roadway Jurisdiction



# Emphasis Areas Crash Trends – NJ Fatalities & Serious Injuries



**~51%**

Lane  
Departure



**~33%**

Aggressive  
Driving



**~47%**

Unbelted  
Occupants



**~25%**

Pedestrian/  
Bicyclist



**~45%**

Drowsy/  
Distracted  
Driving



**~32%**

Intersections

# Emphasis Areas Crash Trends – NJ Fatalities & Serious Injuries



~18%

Impaired Driving



~12%

Motorcycle



~14%

Mature Driver (65+)



~2%

Work Zone



~13%

Young Driver (<21)



~10%

Heavy Vehicle



~15%

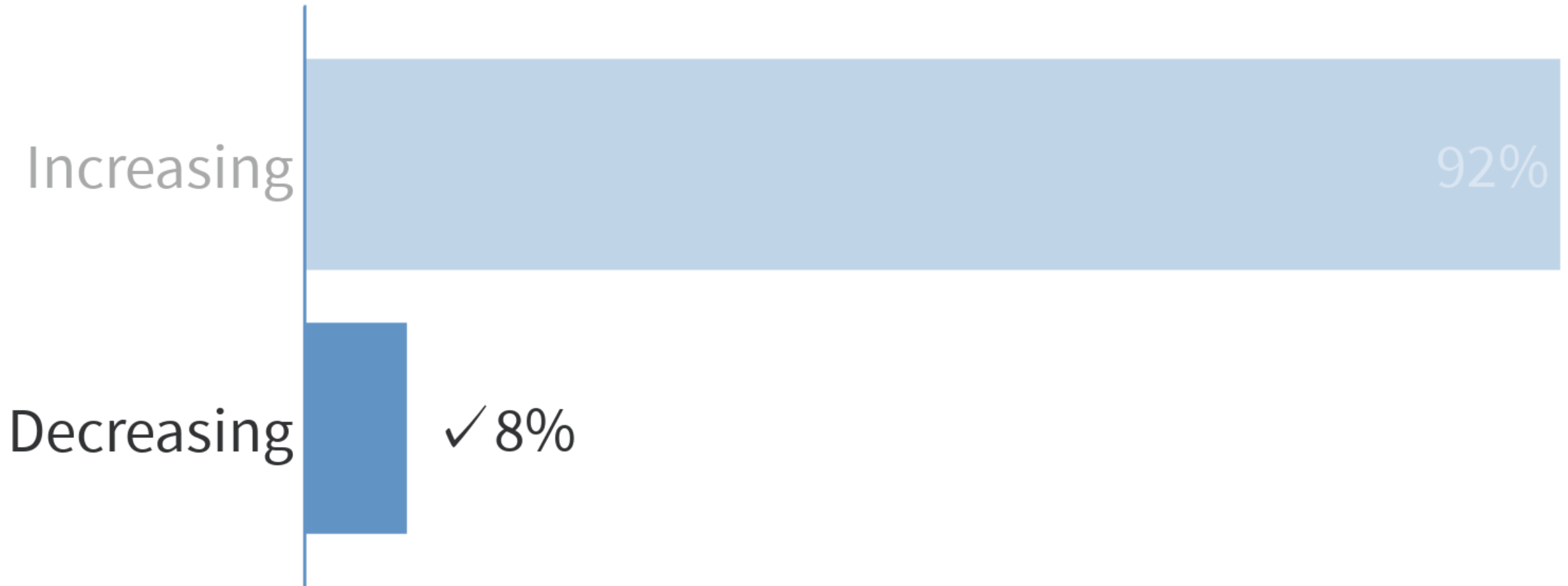
Unlicensed Driver



~0.1%

Train-Vehicle

# Are cell phone usage related crashes increasing or decreasing?

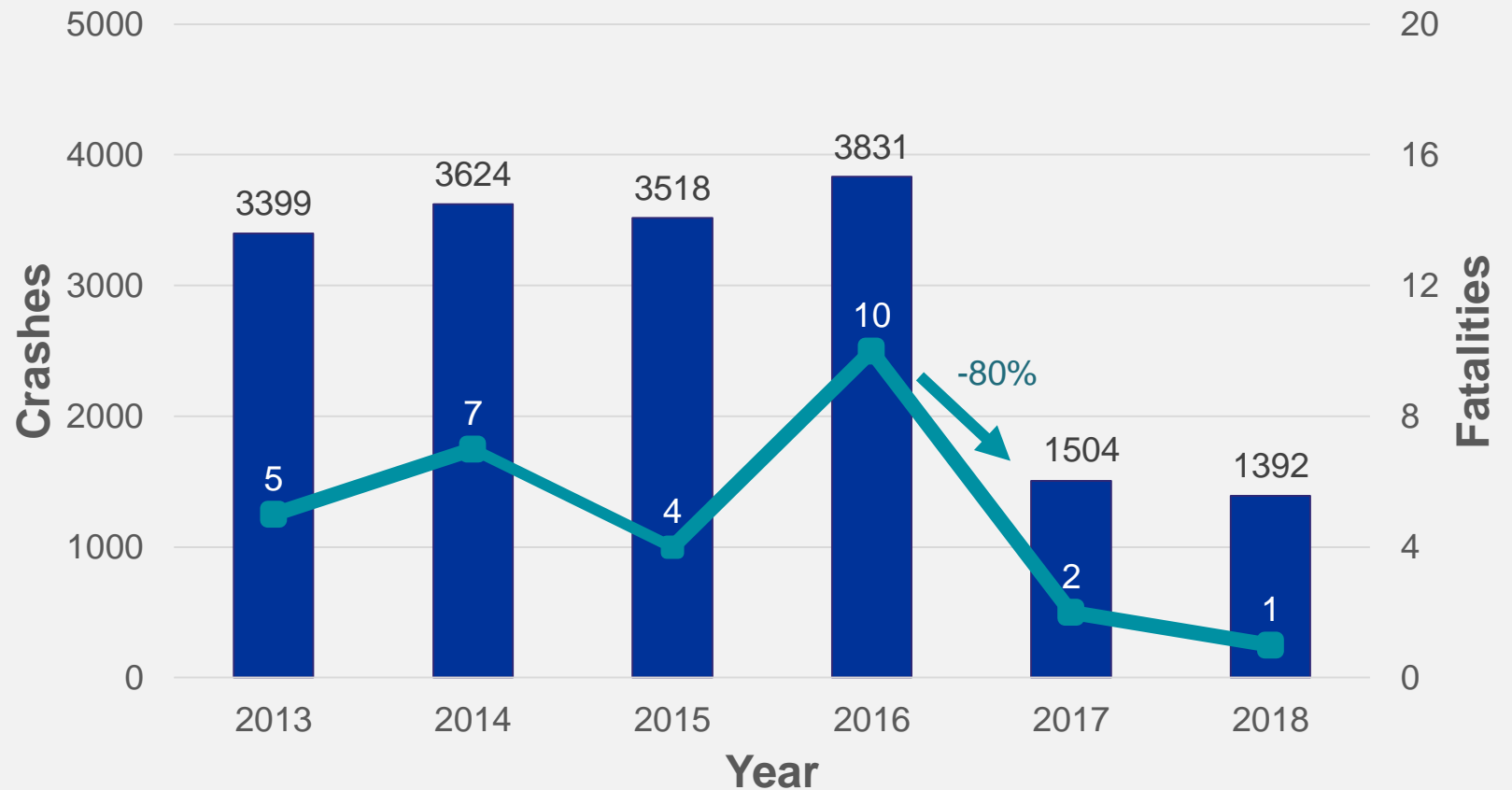


# Safety Data Trends – Cell Phone Usage Crash Trends



~1%

Fatalities in New Jersey are  
Cell Phone Use related

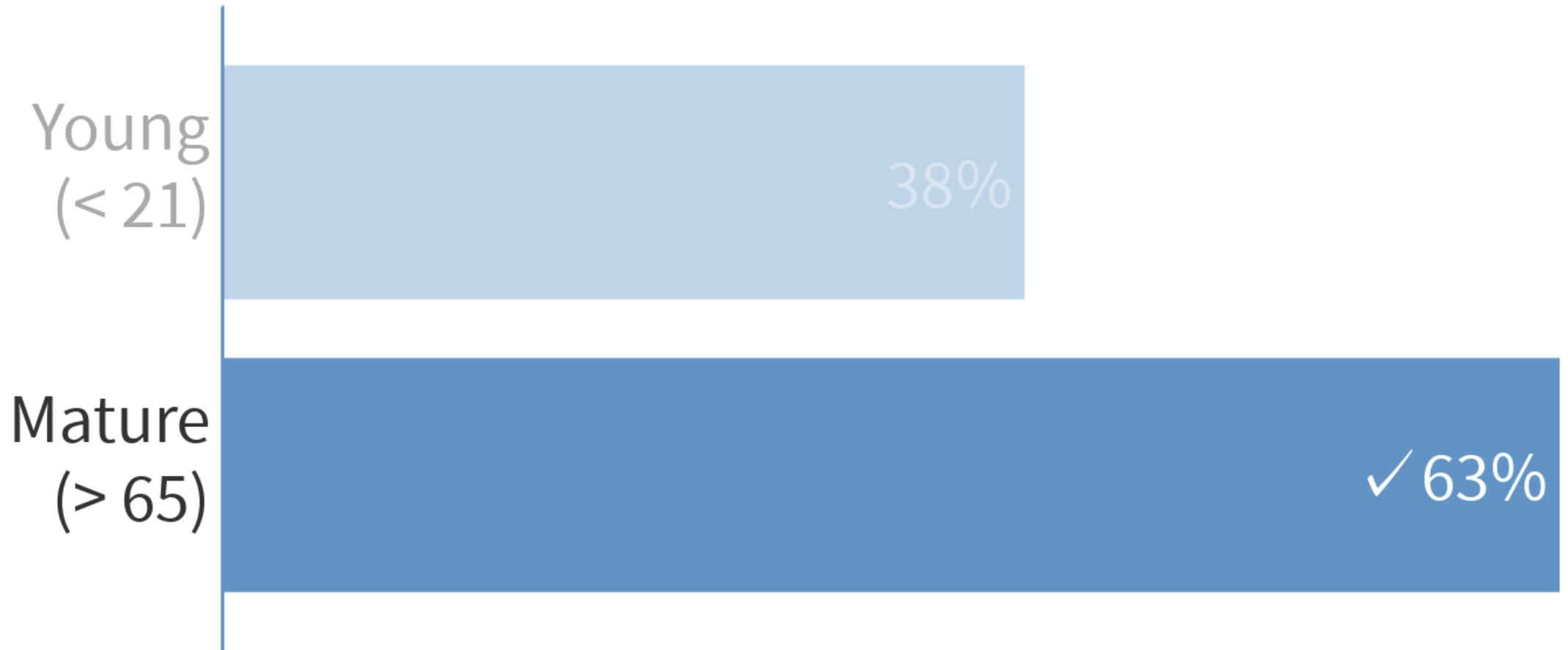


Cell Phone Use Related Crashes and Fatalities

(Source: NJDOT)



## In New Jersey, is the number of crash fatalities higher for young drivers (< 21) or mature drivers (> 65)?

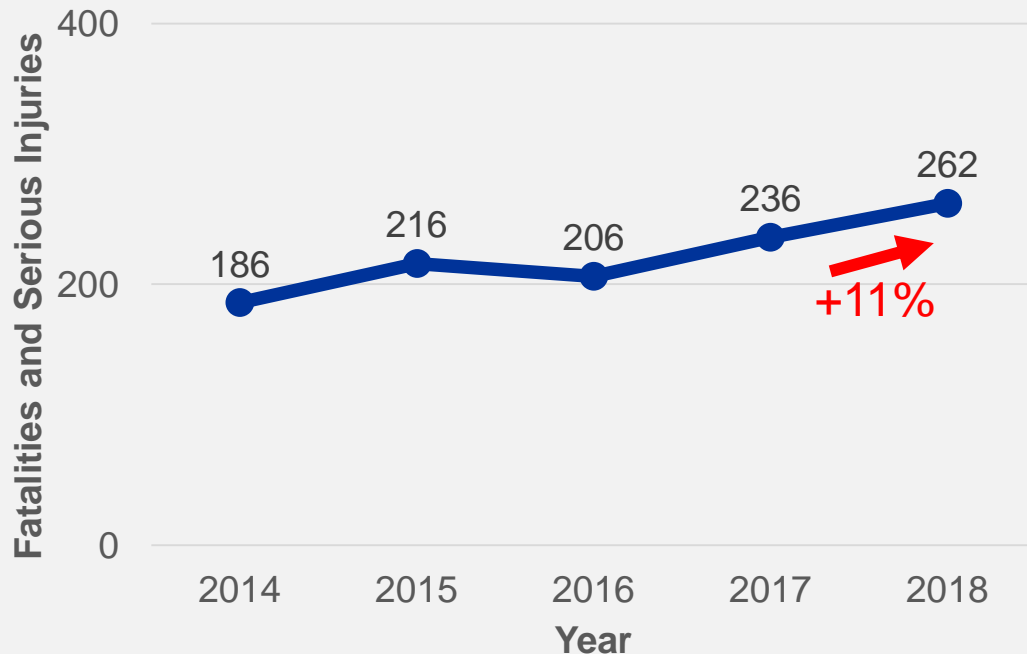


# Safety Data Trends – Mature and Young Driver Crash Trends

**Mature Drivers (65+)**  
~23% of Fatalities  
1.2 Million Licensed Drivers



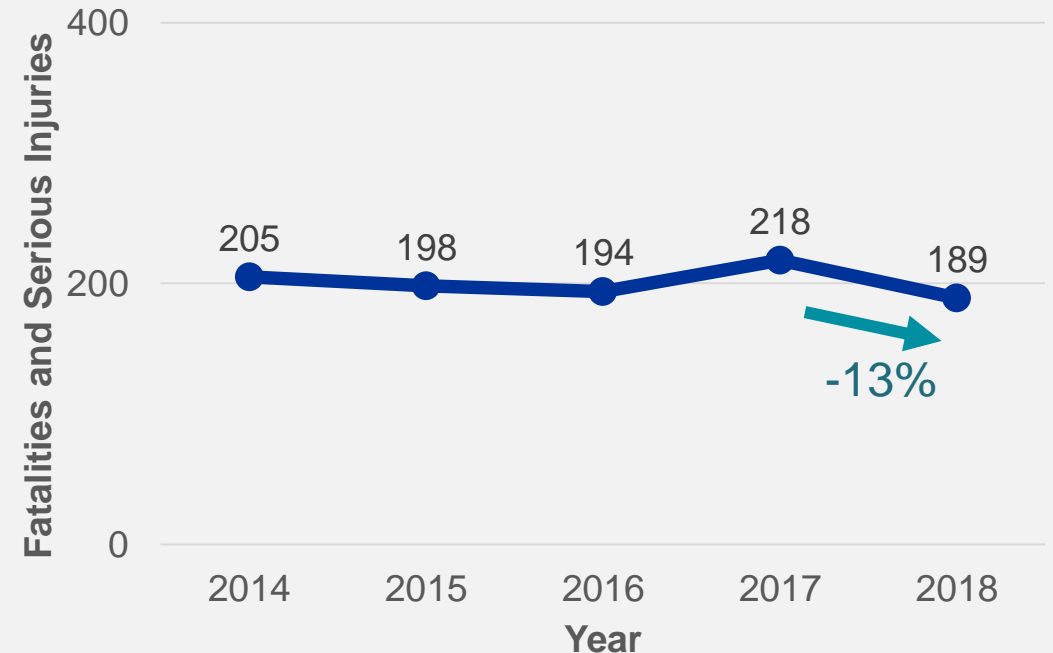
Mature Driver Crash Trends



**Young Drivers (<21)**  
~11% of Fatalities  
237K Licensed Drivers



Young Driver Crash Trends



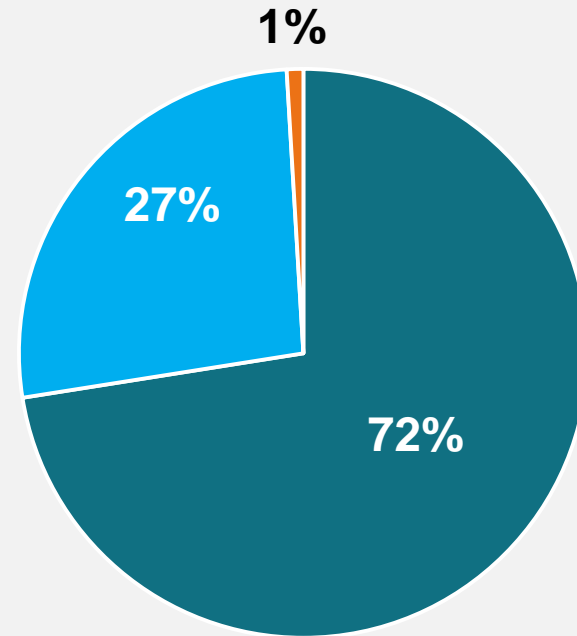
(Source: Safety Voyager)

# Safety Data Trends – Pedestrian and Bicyclist Crashes

## Years 2013 – Present

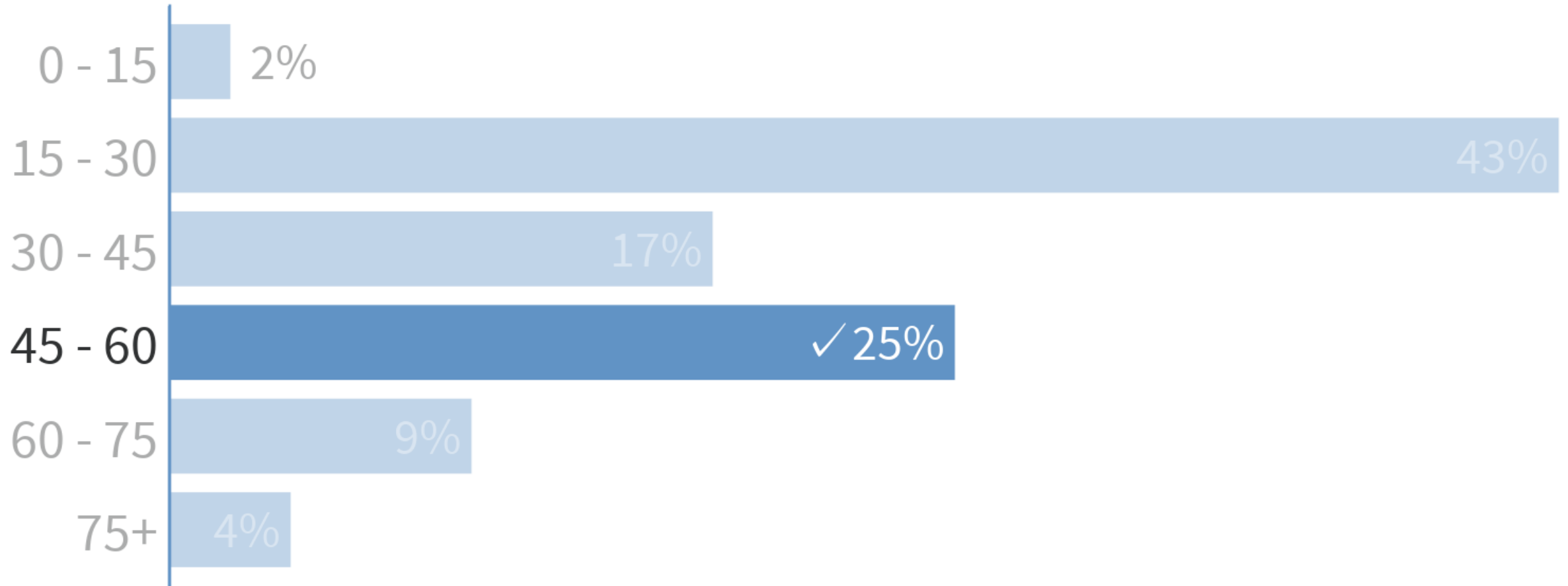
- 30,318 Ped Crashes
- 11,106 Bike Crashes
- 393 Ped and Bike Crashes

Crashes Involving Pedestrians vs. Bicyclists

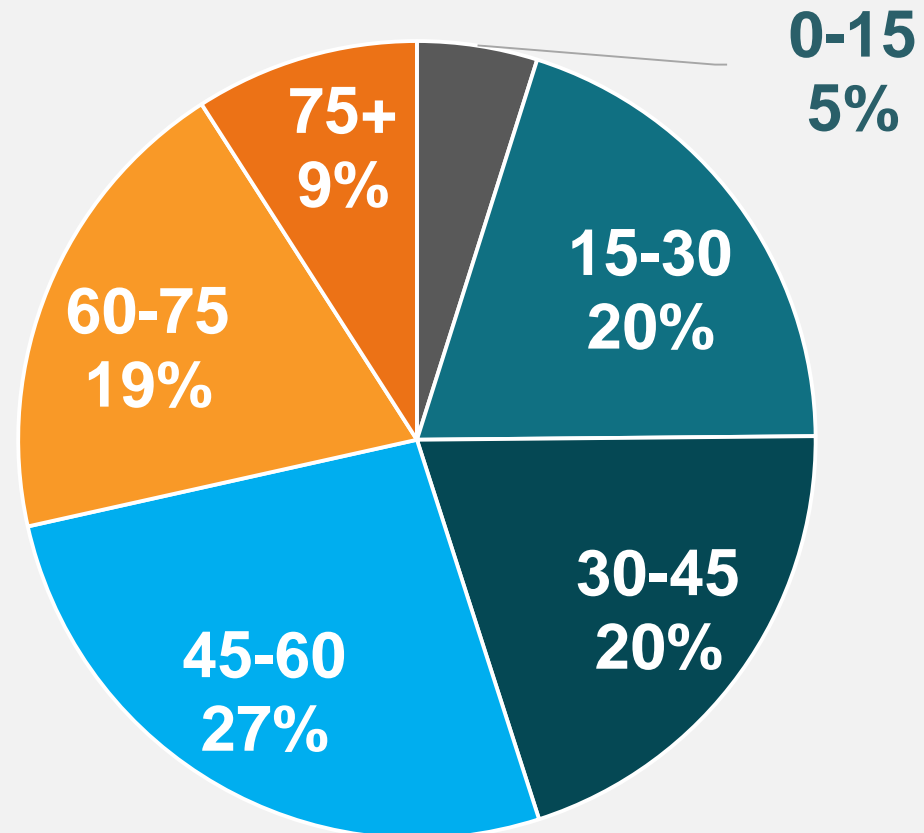


■ Pedestrians ■ Bicyclists ■ Peds and Bicyclists

# Pedestrian/Bicycle fatalities and serious injuries are highest for which age group?



# Safety Data Trends – Pedestrian and Bicyclist Fatalities and Serious Injuries

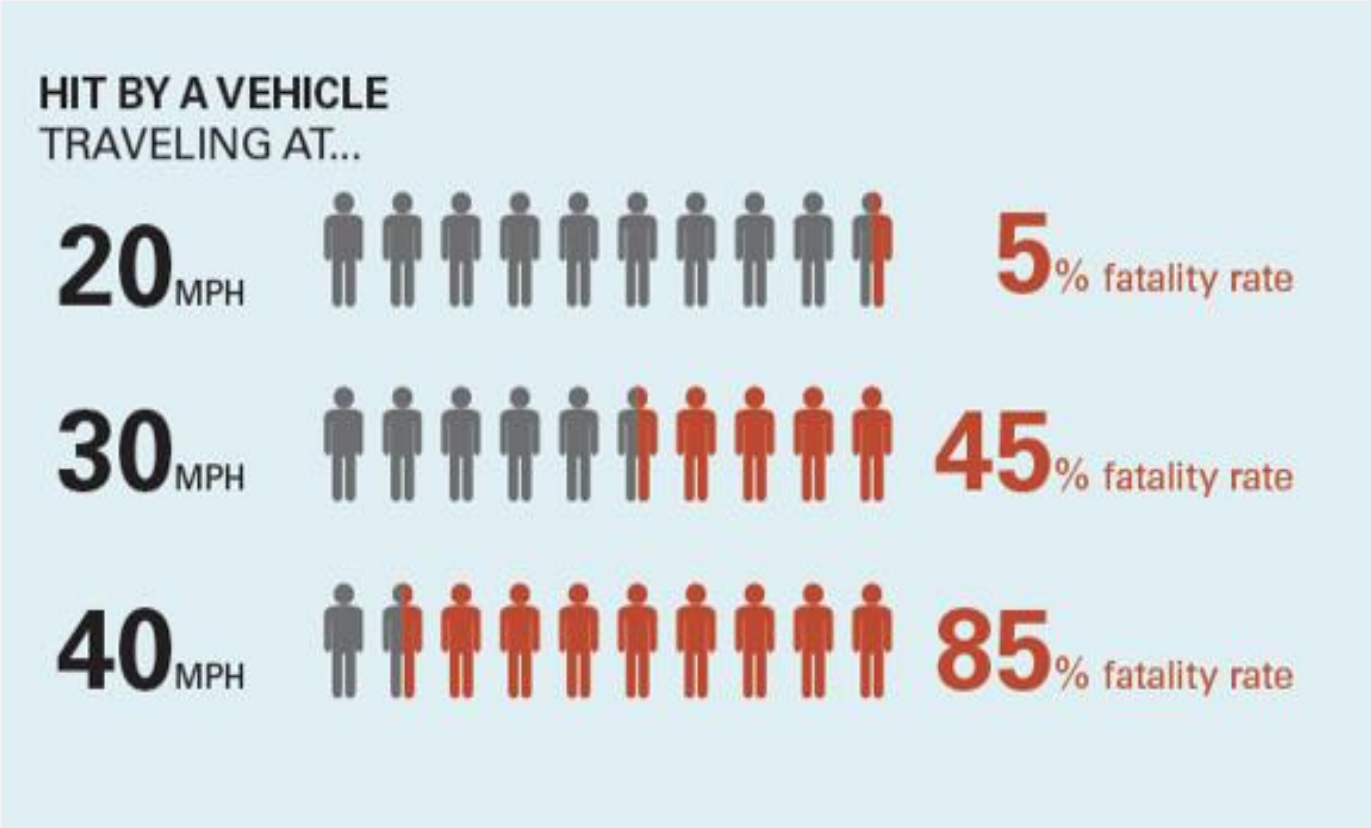


Involvement by Age

**27% Fatalities and Serious Injuries – Ages 45-60**

(Source: Safety Voyager)

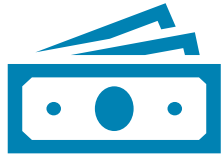
# Safety Data Trends – Pedestrian and Bicyclist Crashes



(Source: New Jersey Complete Streets Design Guide)

# Economic Cost of Crashes

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**~\$3.8 Billion**

2018 NJ Crash Cost  
(Fatalities and Serious Injuries)

**~\$11.3 Million per Fatal Crash**

Federal Highway Administration  
National Comprehensive Crash Cost



# **Traffic Fatalities and Serious Injuries: A Public Health Issue**

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**Maria Baron**

Research Scientist, NJ Department of Health

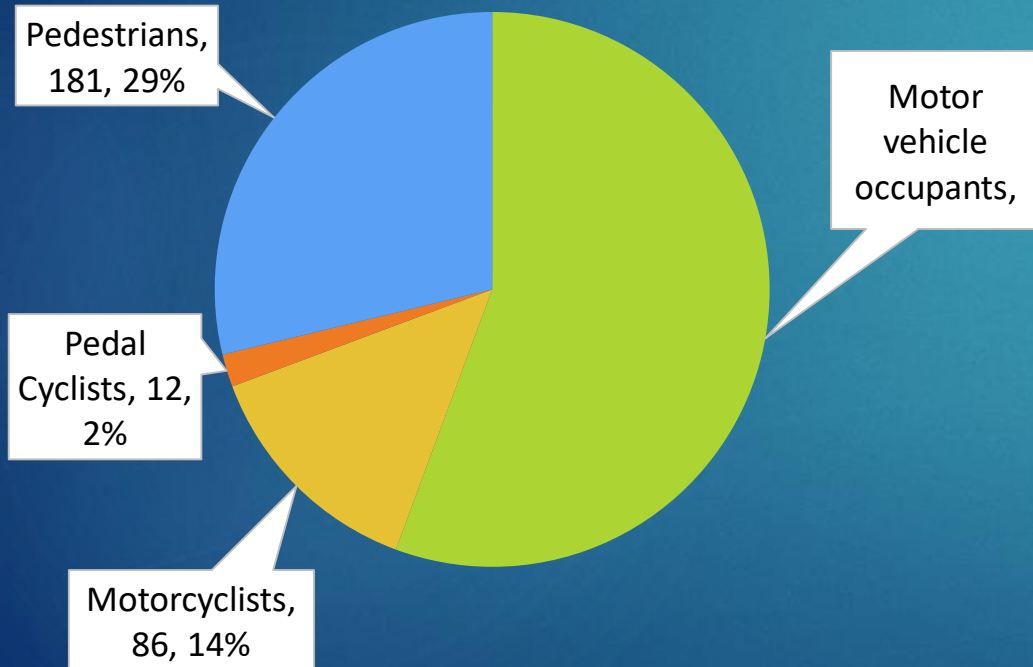


# Traffic-related fatalities & hospitalized injuries, NJ, 2017

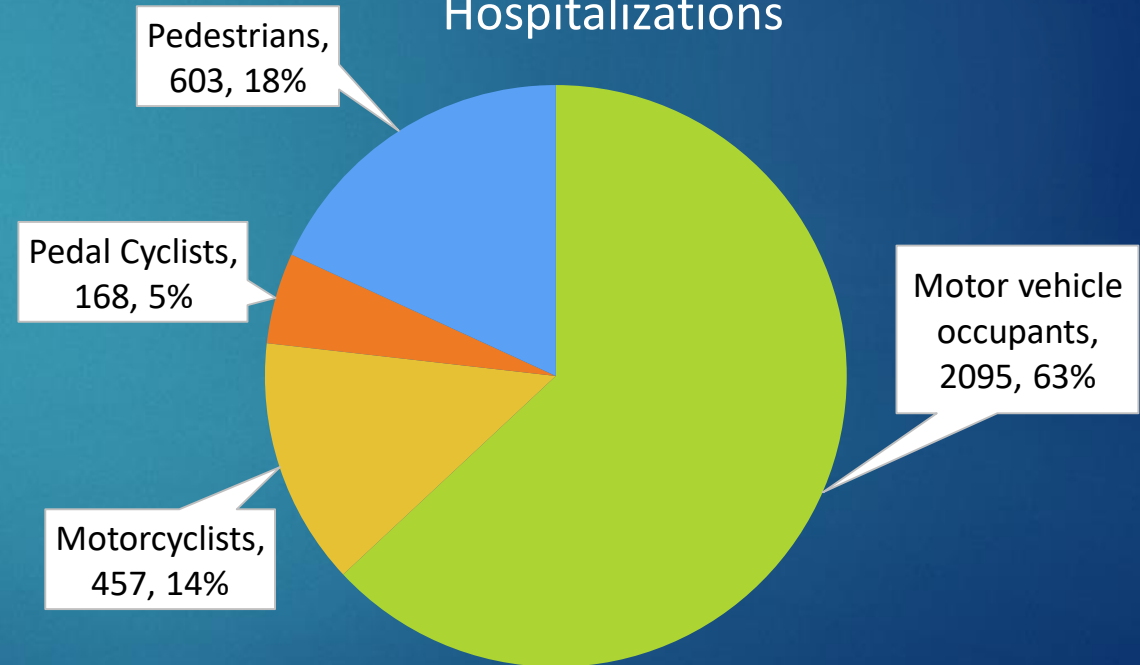
**629 Deaths (6.6 per 100,000)**

**3,323 Hospitalizations (35.9 per 100,000)**

Deaths



Hospitalizations



*Crashes are considered "Traffic" when they occur on public roadways; assumed unless otherwise specified.*

# The cost of traffic-related injury, NJ, 2017

Highest	Sex/Age Group	Count	Rate per 100,000
Death count	Males 25-34	<b>93</b>	16.0
Death rate	Males 75+	46	<b>19.2</b>
Hospitalization count	Males 25-34	<b>359</b>	61.8
Hospitalization rate	Females 75+	256	<b>68.7</b>

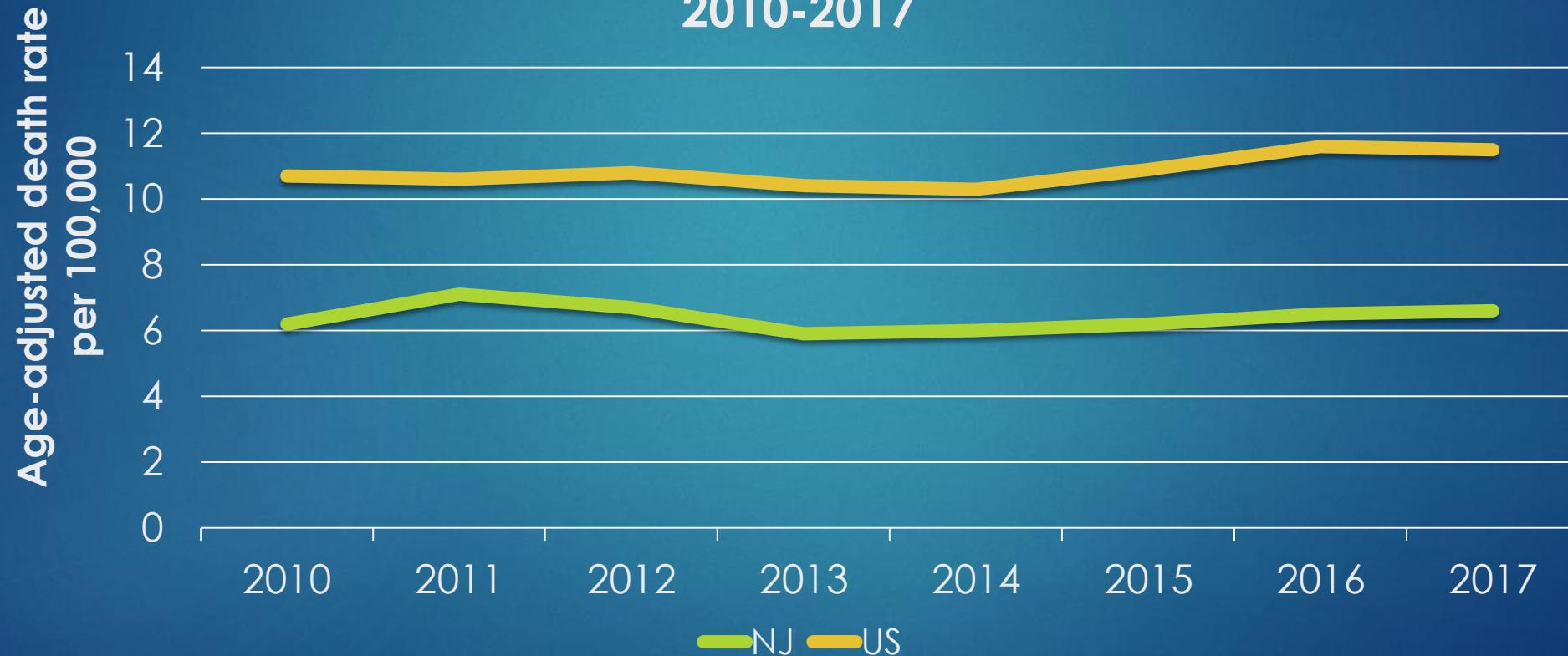
## Cost per hospitalization

Discharge Status	Count	Average charge per person	Total charges
Non-fatal discharges	3,323	\$140,534	\$466,995,457
In-hospital deaths	97	\$302,603	\$29,352,524

# The Good News

NJ's traffic-related fatality rate (6.6 in 2017): among lowest in U.S. and stable over time

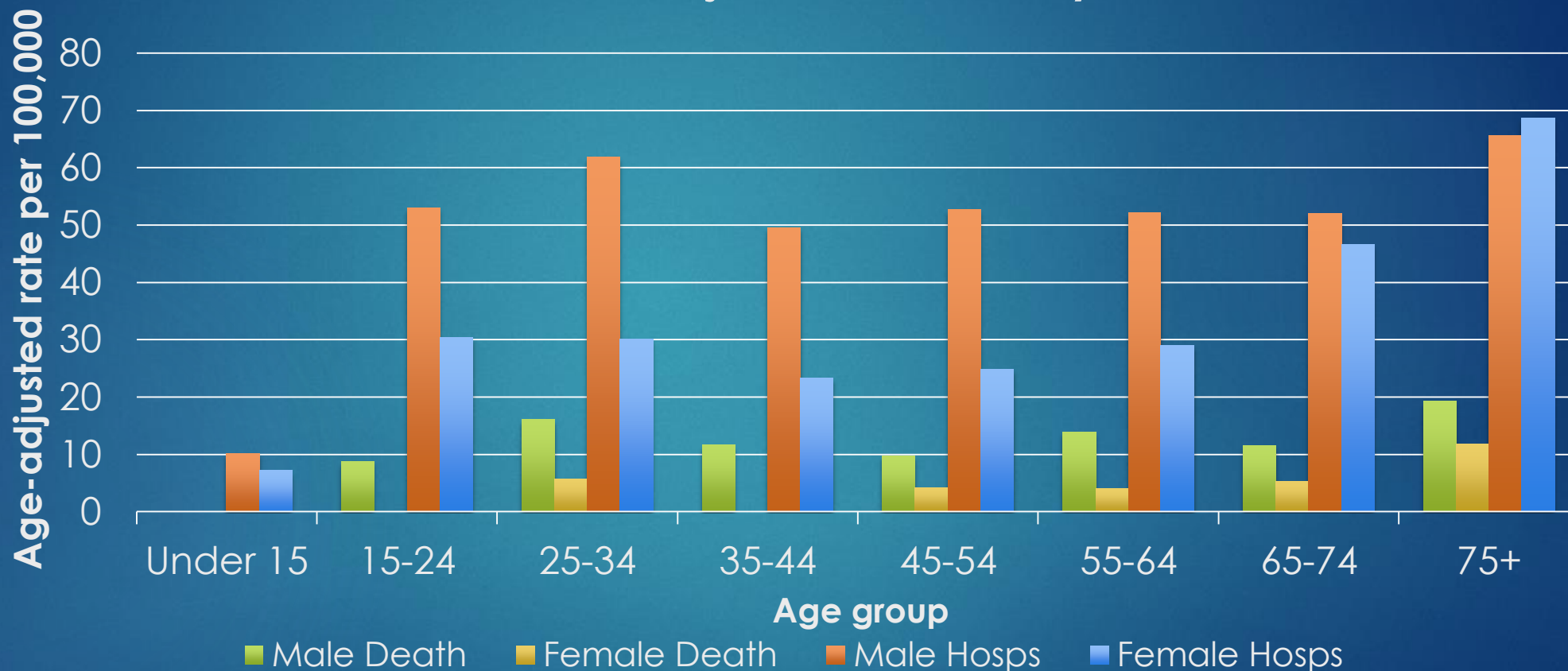
Traffic-related fatalities, New Jersey and the U.S.  
2010-2017



97% of those injured seriously enough in crashes to require inpatient care are discharged *alive* from NJ hospitals

# Traffic-related injuries by age and gender

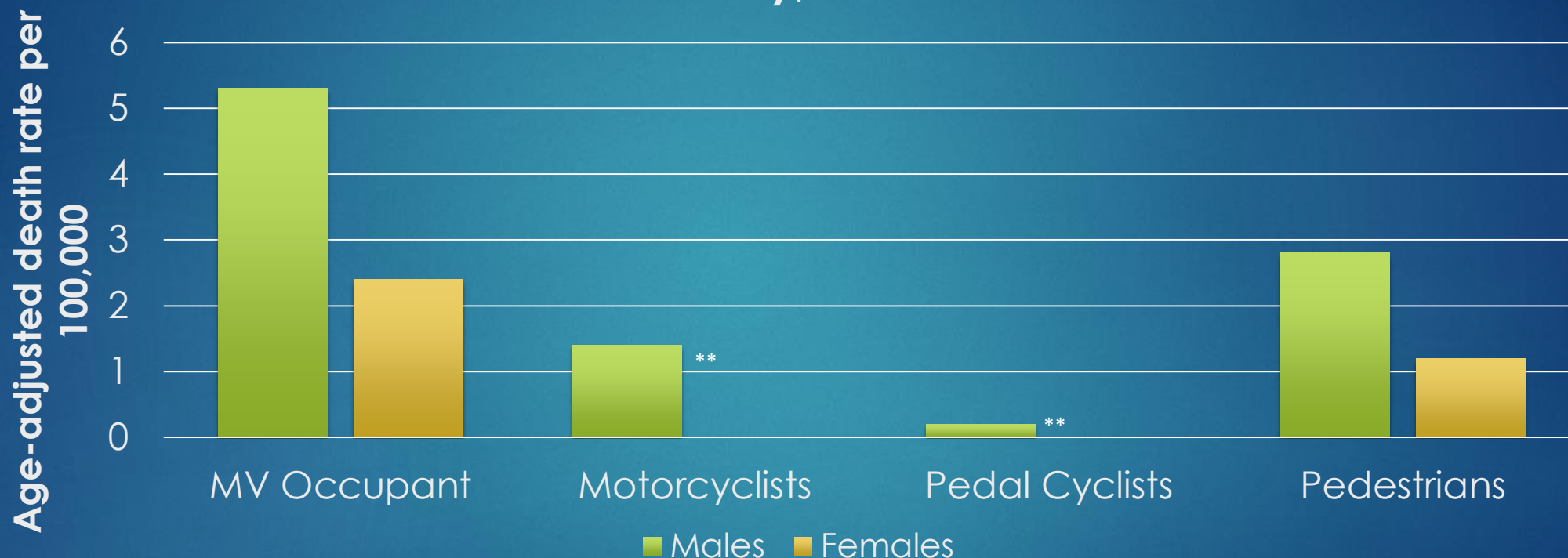
## Traffic-related injuries, New Jersey, 2017



Rates of fatal and non-fatal traffic-related injuries increase dramatically at age 15 to 24 and again at age 65, particularly non-fatally injured females involved in crashes. Males generally have higher injury and death rates due to motor vehicle crashes than females at any age.

# Gender differences by position

Fatality rates by gender and position  
New Jersey, 2015-2017



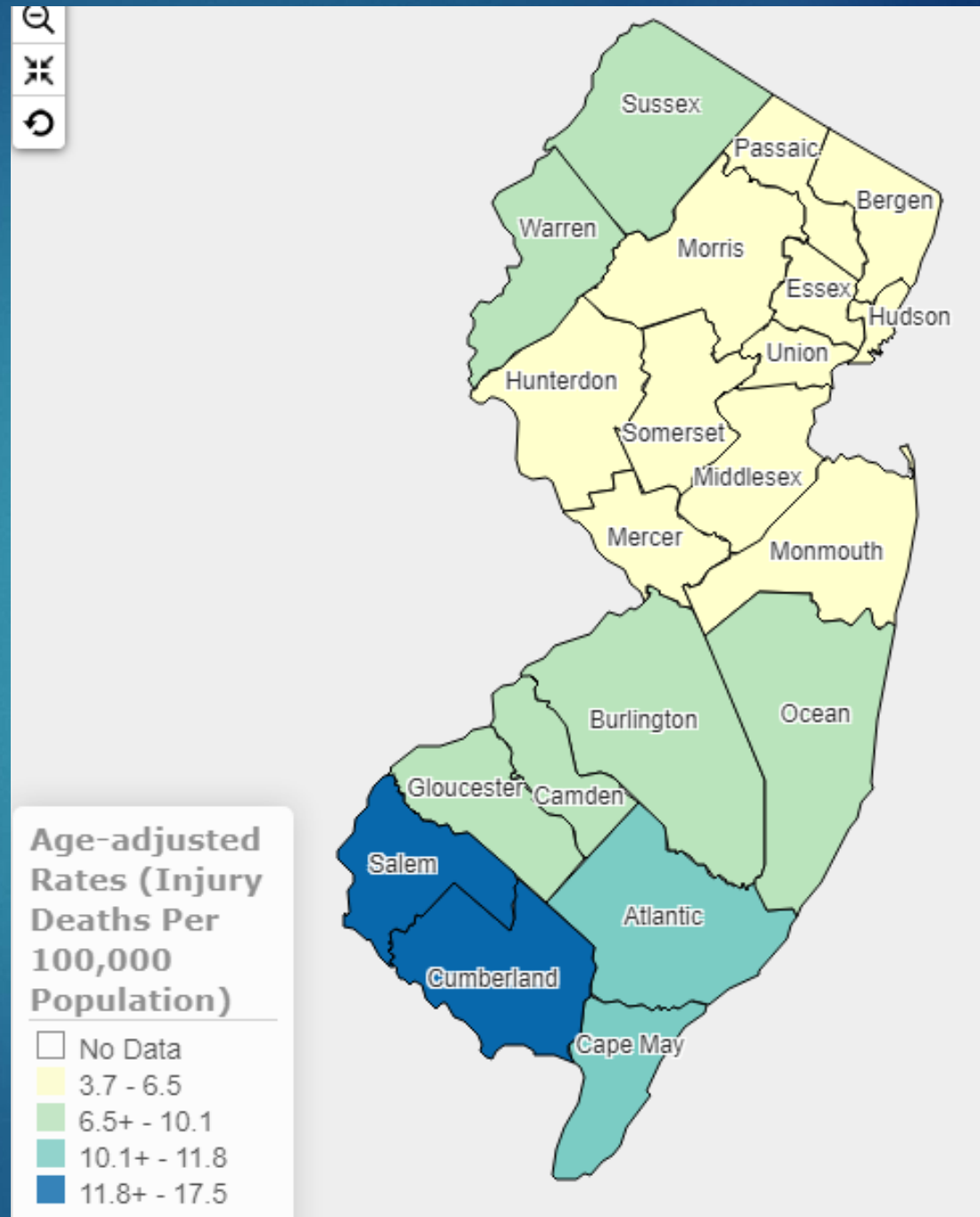
Males are more likely to die from injuries in general, particularly in younger age groups.

Data not collected on death certificate for risk factors such as drinking/drugged driving, seat belt use, helmet use.

\*\*Rates not calculated for fewer than 20 deaths

# Motor vehicle-related traffic death rates by county

## New Jersey 2015-2017



# Strengths and limitations of data

- ✓ Fatalities are captured for all New Jersey residents no matter where the injury occurred
- ▶ Incomplete reporting on motor vehicle occupant details in death and hospital data (drivers, passengers)
- ▶ Need better injury location reporting on the death certificate; no injury location reported in UB data
- ✓ Inpatient hospitalizations are reported for all New Jersey acute care facilities
- ▶ Excludes specialty hospitals, rehabs, VA medical centers
- ▶ Incomplete reporting in any given year due to technical issues may bias results

# Thank you!

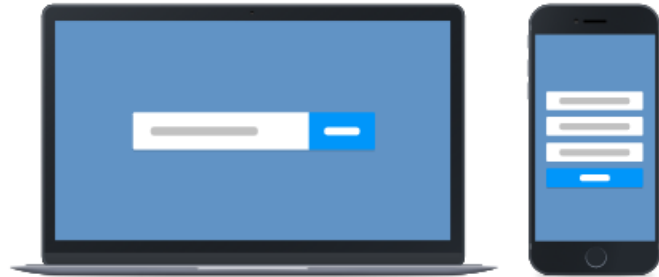


- ▶ For more data, visit [nj.gov/health/shad](https://nj.gov/health/shad)
- ▶ For questions, email [chs@doh.nj.gov](mailto:chs@doh.nj.gov)



# Do you have any questions or comments?

## Join by Web



- 1 Go to **PollEv.com**
- 2 Enter **2020SHSP**
- 3 Respond to activity

## Join by Text



- 1 Text **2020SHSP** to **22333**
- 2 Text in your message

🔗 When poll is active, respond at [PollEv.com/2020shsp](https://PollEv.com/2020shsp)

📱 Text **2020SHSP** to **22333** once to join

# Having seen and heard all of this information, what do you think is the most significant road safety issue in New Jersey?





# **Next Steps**

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# **How You Can Get Involved**

# NJ 2020 SHSP Stakeholder Involvement

Executive Committee

Steering Committee

Emphasis Area Teams

Safety Stakeholders



# Safety Stakeholders' – How to Communicate

Executive Committee

Steering Committee

Emphasis Area Teams

Safety Stakeholders

- Live Polling
- Comment Cards
- Talk to Steering Committee Members
- Website



# 2020 SHSP Stakeholder and Public Outreach

## Website

- Central hub for public
- Chart progress
- Highlight collaboration and implementation
- Information on how to get involved



The screenshot shows the homepage of the website. At the top left is the logo "Driving Toward ZERO Deaths" with a silhouette of New Jersey. To the right is a navigation menu with links for "Home", "About", "Partners", "Schedule", "News and Media", "Resources", and a red "Get Involved" button. Below the navigation is a large blue banner featuring a group of cyclists. The text on the banner reads "Toward Zero Deaths NJ" in large white letters, with a red underline, and "Reducing fatal and serious injury crashes on New Jersey's roads" below it. At the bottom of the banner, there are two text boxes. The left one asks "What is the New Jersey 2020 Strategic Highway Safety Plan?" and describes it as a five-year plan to reduce fatalities and injuries. The right one features a quote from Commissioner Diane Gutierrez-Scaccetti: "The NJ 2020 SHSP is an opportunity for all New Jersey to further develop a culture of safety and move towards zero deaths on our roadways. With your help, we can get there!"

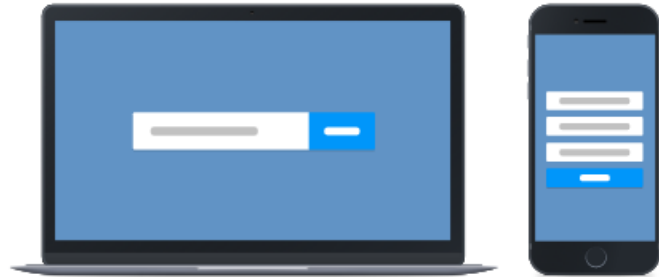
[SafeRoadsForAllNJ.com](https://www.SafeRoadsForAllNJ.com)

# NJ 2020 SHSP Schedule



# Do you have any questions or comments?

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# Closing Remarks

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