



FLORIDA STRATEGIC HIGHWAY
SAFETY PLAN



Florida's Strategic Highway Safety Plan

Presented to:
Florida Safety Partners

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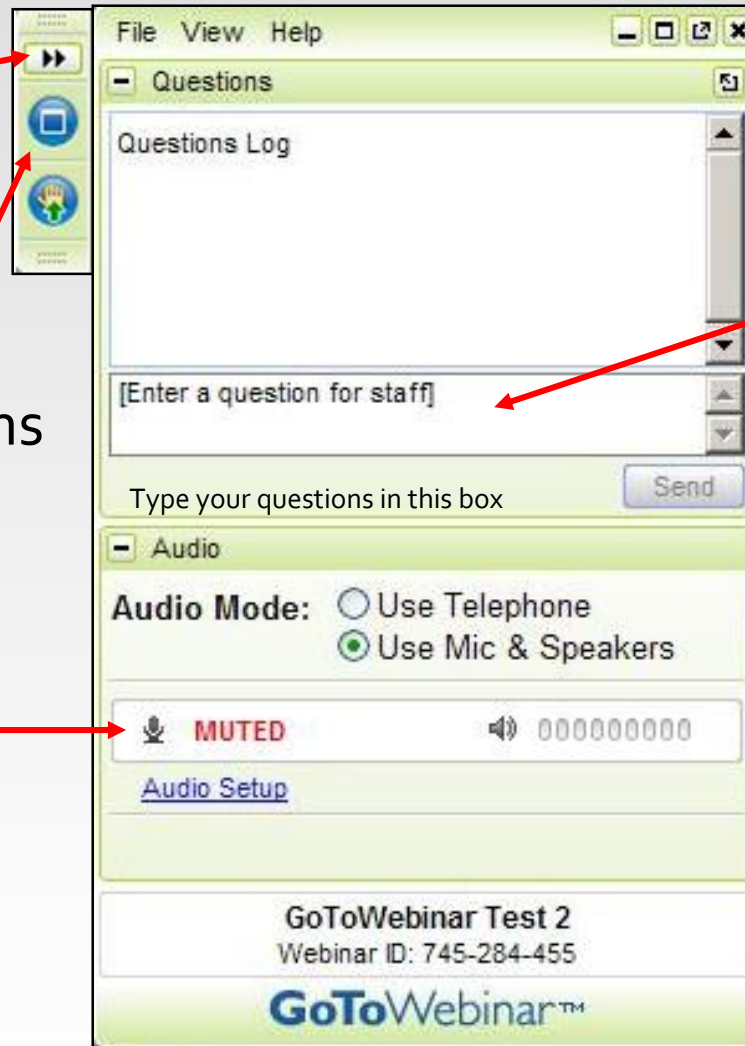


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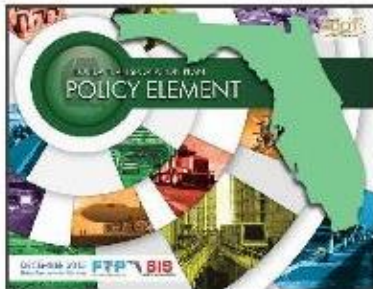
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Florida Transportation Plan Contents



Vision Element *(August 2015)*

Trends, uncertainties, and themes that will shape the future of transportation in Florida (50 years)



Policy Element *(December 2015)*

Goals and objectives to guide the Florida Department of Transportation and partners toward the vision (25 years)



Implementation Element *(2016)*

Emphasis areas with key actions (5-25 years)

FTP Goal Areas

Over the next 50 years, we want...

Safety and Security *for residents, visitors, businesses*

Transportation solutions that support Florida's global
Economic Competitiveness

Agile, Resilient, and Quality *transportation infrastructure*

Transportation solutions that support
Quality Places
to live, learn, work, and play

Efficient and Reliable Mobility
for people and freight

Transportation solutions that enhance Florida's
Environment and Conserve Energy

More Transportation Choices
for people and freight



FLORIDA STRATEGIC HIGHWAY SAFETY PLAN



JULY 2016



What Does the Update Process Include?

- Analysis of crash data and other trends affecting fatalities and serious injuries
- Selection of emphasis areas, strategies, and actions based on data and proven, effective approaches
- Review of public and partner input received from FTP update process
- Coordination with strategic safety coalitions
- Coordination with MPOs and other regional and local partners
- Review and approval by Signing Partners

SHSP Vision and Goal

FATALITIES

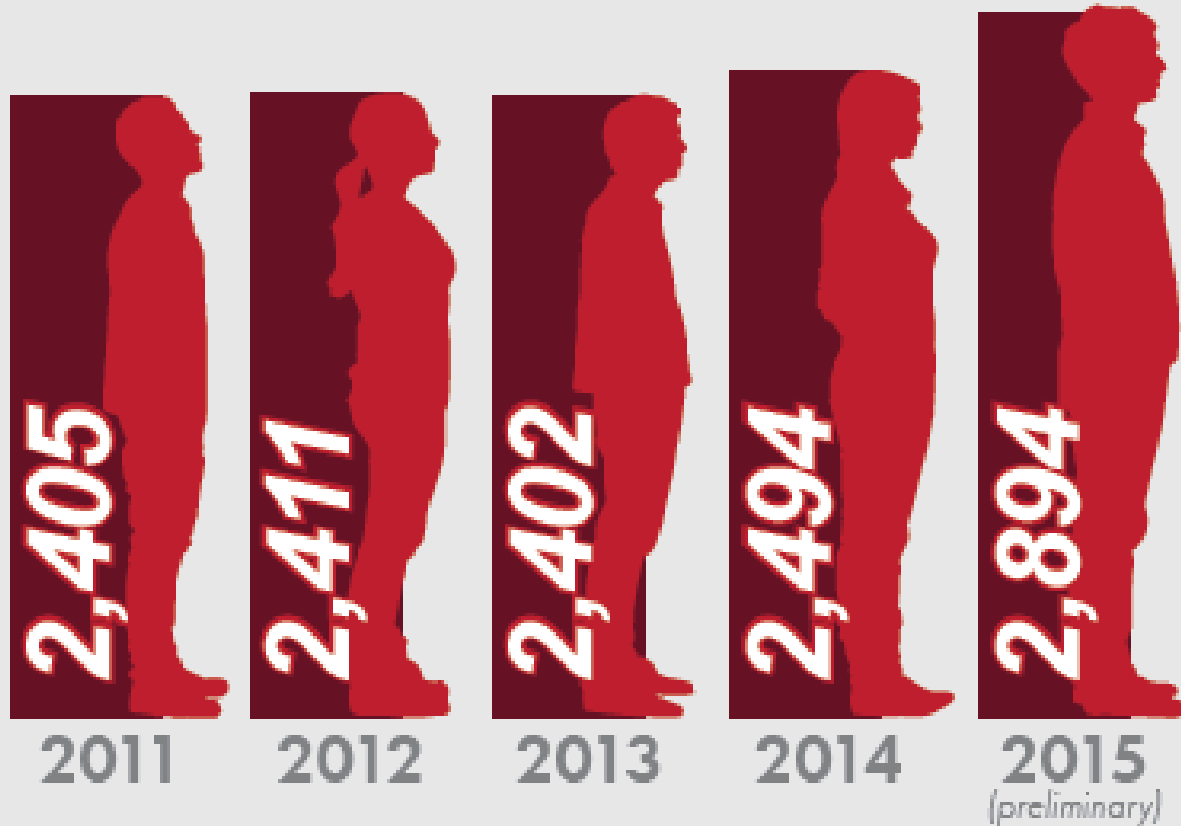
**DRIVING
DOWN
FATALITIES**

0

SHSP Vision:
**A Fatality-Free
Roadway System**



People Killed on Florida's Roadways



20.3%
Increase
between
2011 and 2015

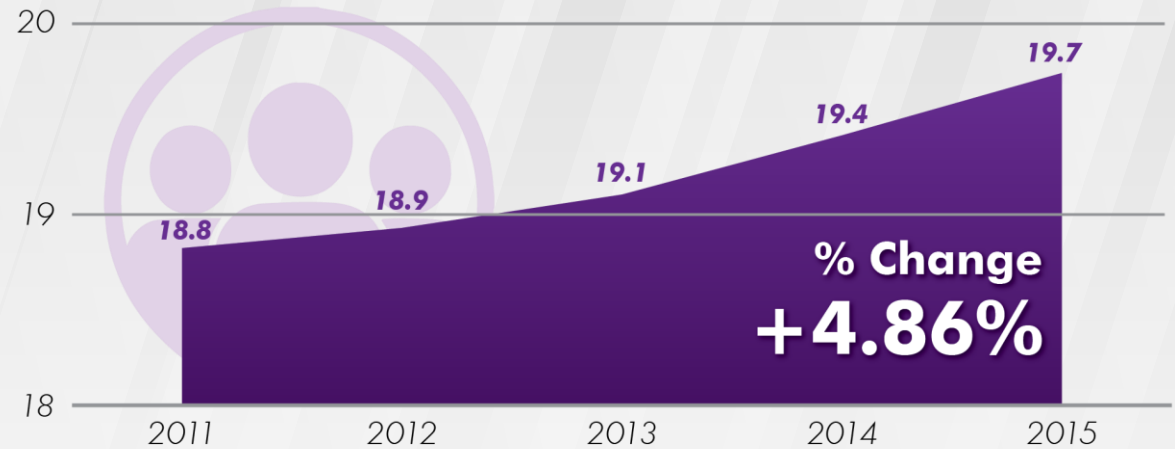
Vision: ZERO DEATHS

Source: Department of Highway Safety and Motor Vehicles (2016).

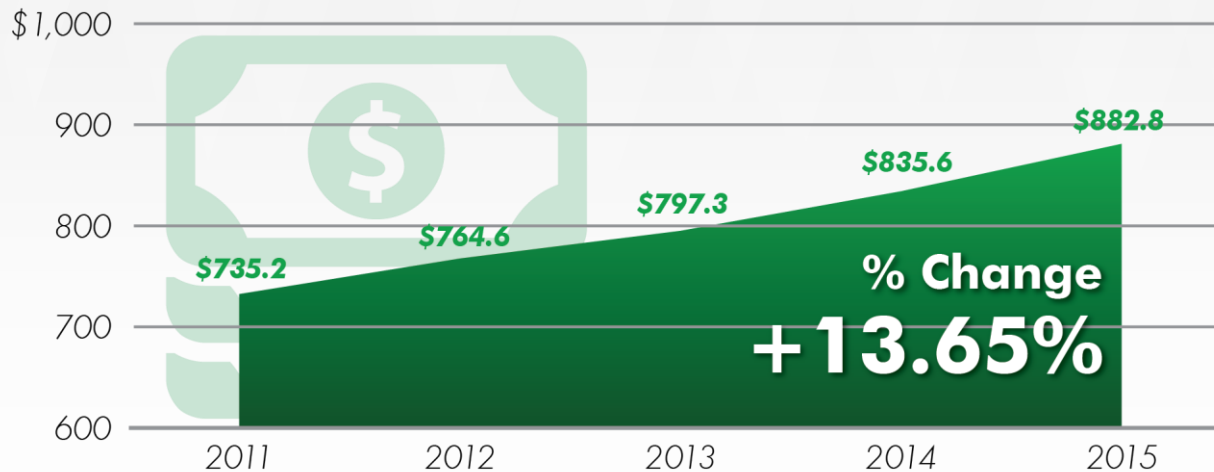


Factors Contributing to Increase in Fatalities

Florida Population (in millions)



Florida Gross Domestic Product (in billions)



Trends Shaping Safety of Florida's Roadways

Growth in Population

19M



2011

20M



2015

22M



2025

Growth in Visitors

159M

87M



2011

105M



2015



2025

Growth in Freight

774
million

2011

1,306
million

2040

by Weight (tons)

\$963
billion

2011

\$2,643
billion

2040

by Value (dollars)

Trends Shaping Safety of Florida's Roadways

24% of Florida's population will be **65+** by 2040



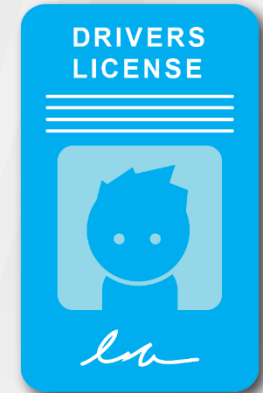
More aging road users are on Florida's roadways. These users tend to have a harder time seeing, reacting to, and recovering from events that cause crashes.

Licensed Drivers 65+



increased by
7.93%
(2011-2014)

Licensed Teen Drivers



decreased by
4.58%
(2011-2015)

Source: Florida Department of Highway Safety and Motor Vehicles, (2016).

Trends Shaping Florida's Roadway Safety

Floridians are choosing **non-automobile modes** more often.


Transit Boardings

 **6%** between 2011 and 2014
Source: FDOT (2015).


Walking to Work

 **2%** between 2011 and 2014
Source: Bureau of Economic and Business Research (2016).

Motorcycle Endorsements

 **13%** between 2011 and 2015
Source: Florida Department of Highway Safety and Motor Vehicles (2016).

Bicycling to Work

 **39%** between 2011 and 2014
Source: Bureau of Economic and Business Research (2016).

Trends Shaping Florida's Roadway Safety

28% of Americans **18-29** have used on-demand ride sharing services. Frequent users are **less likely** to **own a car and more likely** to take **transit, walk, or ride their bike**

Source: Pew Research Center (2015).



Google has autonomously driven more than **Self-Driving Car** **1.5 Million Miles Nationally**

Source: Google Self-Driving Car Project (2016).

90% of the U.S. Population owns a cellphone and **20%** use their phone for real time traffic or transit information

Source: Gartner, Inc., "Predicts 2015: The Internet of Things" (2014).

Trends Shaping Florida's Roadway Safety

Florida's Transportation System

State Highways

12,099 Centerline Miles

11% of All Intersections

Local Roads

107,674 Centerline Miles

89% of All Intersections

Rail-Highway Crossings

3,549 Public At-Grade Crossings

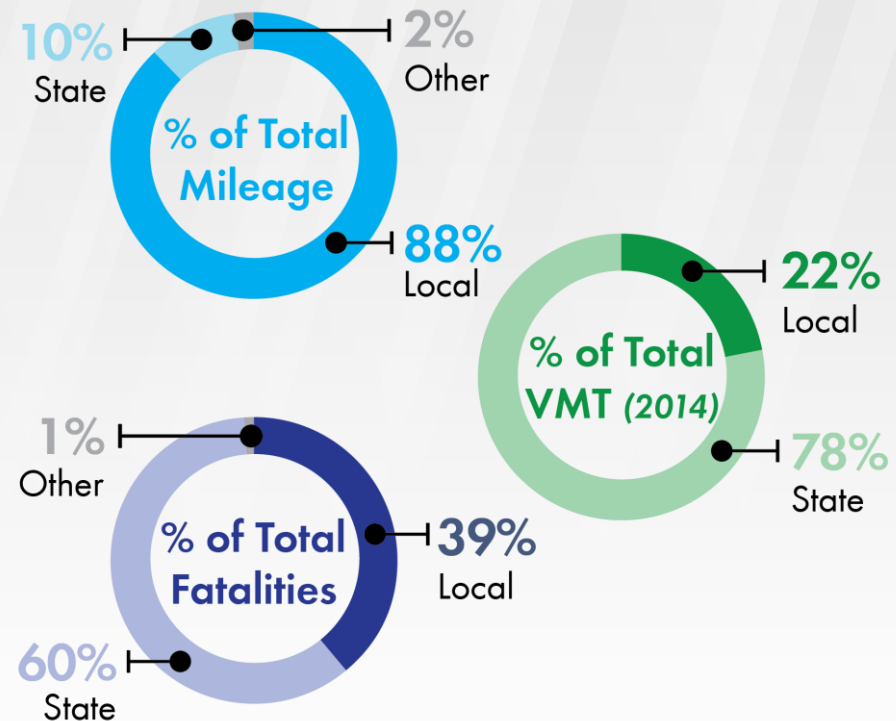
954 Private At-Grade Crossings

Bicycle/Pedestrian

7,282 Miles of Bicycle Facilities

3,276 Miles of Pedestrian Facilities

State v.s. Local Roadway (Centerline Miles)



Source: Florida Department of Transportation.



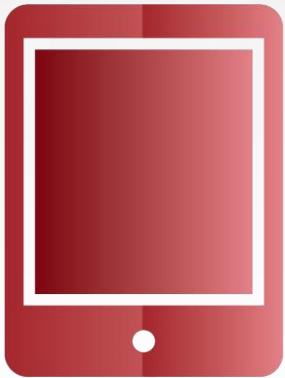
“4 Es” of Safety



Engineering



Enforcement

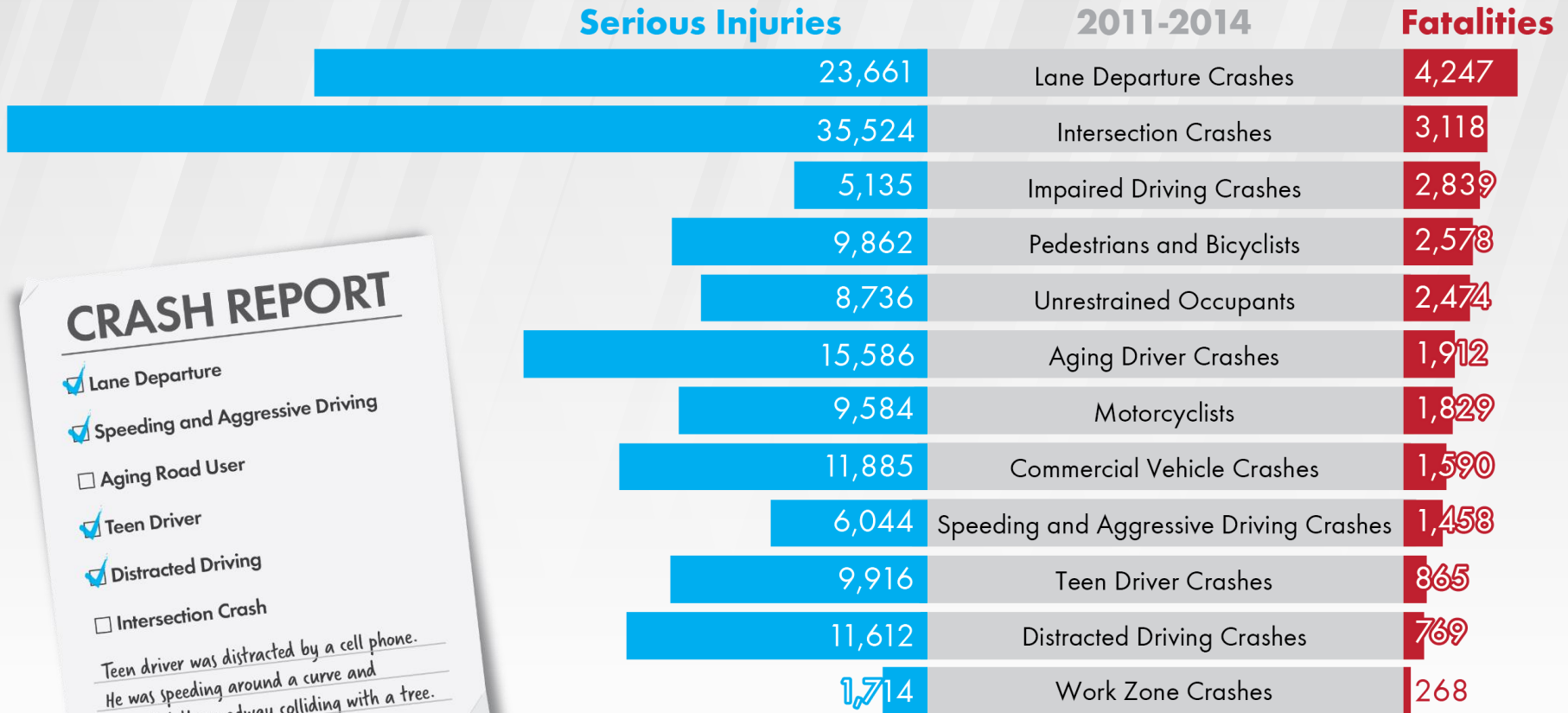


Education



**Emergency
Response**

Fatalities and Serious Injuries by Emphasis Area



Source: FDOT Safety Office (2016).





Lane Departure Crashes



Commercial Vehicle Crashes



Motorcycle Crashes



Intersection Crashes



Speeding and Aggressive Driving Crashes



Distracted Driving Crashes



Impaired Driving Crashes



Teen Driver Crashes



Work Zone Crashes



Pedestrian and Bicycle Crashes



Aging Road User Crashes



Traffic Records and Information Systems



Unrestrained Occupant Crashes



Engineering



Enforcement



Education



Emergency Response

SHSP Overarching Strategies

Engineering

Identify, develop, and deploy **engineering solutions** and best practices that encourage safe driving behavior and reduce roadway fatalities and serious injuries.

Incorporate policies and practices into **roadway design, traffic control, construction, operation, and maintenance** that make Florida's transportation system safer for all users.

Ensure infrastructure design allows for **efficient access of first responders**.

Education

Increase **training and educational opportunities** for first responders and other safety professionals focused on reducing roadway-related fatalities and serious injuries.

Educate all road users on **sharing the road**.

Develop and implement communication strategies for all road users and **improve public awareness** of highway safety needs.

Increase motorists' **understanding of engineering solutions and best practices**, and vehicle technologies that can reduce the number and injury severity of crashes.

Enforcement

Increase **targeted enforcement activities** in high-crash locations.

Increase enforcement of **high-risk driving behaviors**.

Coordinate with prosecutors and the courts to **improve prosecution and adjudication** of traffic safety-related cases.

Emergency Response

Improve **emergency response time**.

Provide training to first responders to **improve trauma management**.

Facilitate the **quick clearance of traffic crashes**.

Traffic Records Information Systems

Develop, maintain, and enhance **quality traffic records** data by ensuring it is timely, accurate, complete, uniform, integrated, and accessible traffic records data.

Develop a systematic approach for identifying locations and behaviors related to fatal and serious injury crashes.

Promote the **collection, analysis, and distribution** of quality crash data so state, regional, and local stakeholders can make appropriate and timely decisions on reducing and responding to crashes.



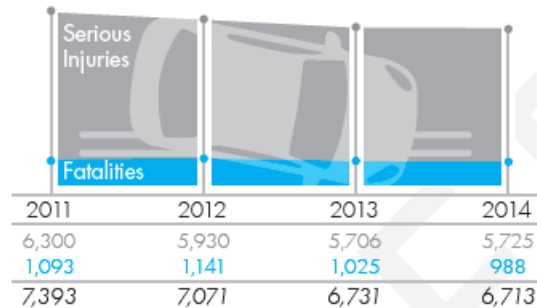
Lane Departures

When a vehicle leaves the travel lane by improperly passing, crossing the median into oncoming traffic, failing to keep in the lane, running off the road, over correcting, or swerving – the result is often deadly. More people are killed in lane departure crashes than any other type of crash both in Florida and nationally.

About one third of lane departure crashes result in a collision with another moving vehicle, possibly head-on, and two thirds involve hitting a tree or another fixed object. A little more than half of fatal lane departure crashes happen in rural areas where there are more two lane roadways, narrow shoulders, and long stretches of relatively empty roadway.

Lane Departures...
represent **35%**
of all crashes
yet result in **44%**
of all deaths

Fatalities and Serious Injuries



Both driver behavior and roadway design play a role in the number and severity of lane departure crashes. A driver who is speeding, distracted, drowsy, or impaired is likely to have difficulty staying in the lane. A roadway that is slick and wet, an object too close to the road, or a shoulder or curve that does not allow for any error can also contribute to a lane departure crash.

A Lane Departure and Intersection Coalition, made up of state and local transportation engineers and planners, is focusing on implementing best practices to make the roadway as safe as possible. More information on the Lane Departure and Intersection Coalition can be found on page 13. There is good news to report. Lane departure fatalities and serious injuries decreased 10 percent since 2011.

Wrong Way Crashes

A wrong way crash is an extreme example of a lane departure. In Florida 336 people died and 1,181 people were seriously injured in wrong way crashes on Florida roadways. A Highway Special Investigation Report from the National Transportation Safety Board suggested that a driver is 27 times more likely to be killed in a head-on collision on a limited-access highway than any other type of crash.

FDOT conducted a study on wrong way crashes and found this type of hazard was greater on freeways and in certain areas of the state, including the Tampa Bay region. To address the issue, FDOT used Do Not Enter and Wrong Way signage and installed vehicle-alerting technology to warn drivers. The study also found that the drivers' use of alcohol was a factor in a significant number of these crashes. The coalition created an educational campaign and worked closely with the Florida Highway Patrol, which did have an affect on wrong way crashes. Engineers are also working to reduce wrong way crashes through infrastructure design and retrofit.

Strategies

- Use the Highway Safety Manual and other tools to identify the most prevalent crash types and contributing factors, and match the most effective countermeasure to reduce crashes where lane departures are a current problem and where there is future crash potential.
- Investigate and implement new and innovative countermeasures including best practices used by other jurisdictions.
- Focus enforcement and education efforts on driver risk factors that can cause a lane departure crash such as speeding, distracted, or impaired driving.
- Support efforts by MPOs and local governments to address the safety of local and regional roads.

Intersection Crashes

No other location in the transportation system poses greater risks than an intersection. An intersection is the one place where all road users and vehicle types may come together.

An intersection is a potential point of conflict that relies on signage, traffic control devices, roadway design, lighting, the good behavior of users, and other factors to ensure everyone navigates through or safely turns from one roadway to another.

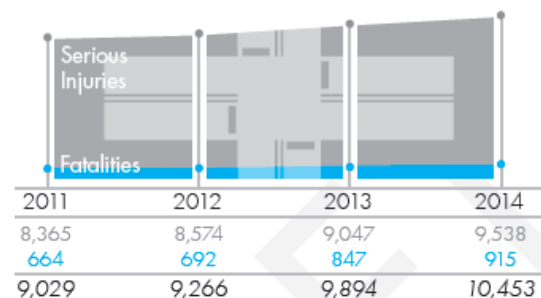
Pedestrians and bicyclists are involved in less than five percent of all intersection crashes, yet account for more than 20 percent of the fatalities. Intersections create risks for aging road users because as people age, there are declines in visual, thinking, and physical abilities. This creates difficulties for aging road users in some situations such as making left turns, changing lanes, and navigating through intersections.¹ Sixty percent of aging road user fatal crashes involved a failure to yield the right

¹ National Institute of Health, Senior Health.

LANE DEPARTURE AND INTERSECTION COALITION

The mission of the Lane Departure and Intersection Coalition is to analyze data, develop strategies, and implement improvements to eliminate fatal and serious injury crashes for both intersections and lane departures. With assistance from the Federal Highway Administration (FHWA), the Coalition has developed a Lane Departure Implementation Plan and is working on developing a similar plan for Intersections. In putting the plan together, the Coalition also relied on the progress made by other statewide coalitions such as Safe Mobility for Life Coalition and the Florida Impaired Driving Coalition.

Fatalities and Serious Injuries



of way. The traffic safety problem at intersections is evidenced by the 27 percent increase in fatalities and the 12 percent increase in serious injuries.

One intersection where there are special circumstances are railway-highway crossings. Florida has over 3700 public railroad crossings and the majority (80 percent) are equipped with active warning devices such as flashing lights and gates. This is higher than the nation percentage where only 50 percent have these devices. In the last five years, 23 people died and 86 were seriously injured in railway-highway crossing crashes in Florida. The

good news is Florida's rail crossing fatalities have decreased 44 percent over the past decade, which is noteworthy given increased highway traffic and changes in the railroad industry that have resulted in more trains on fewer rail lines.

Florida uses Complete Streets and context sensitive design strategies that consider the needs of all users and the context of local communities when planning roadway improvements. Improvements such as signal upgrades, turning restrictions at multi-lane intersections, traffic detection control systems, and roadway lighting at intersections are being implemented. Roundabouts have been proven to reduce the number of fatal and severe injury crashes by 82 percent over a stop-controlled intersection and 78 percent over a signalized intersection. Because such new design features can sometimes be confusing, education and information on how to safely navigate around them is necessary. These solutions can be integrated into almost any intersection to help reduce crashes that result in fatalities and serious injuries. While some improvements, such as roundabouts are high cost, there is an equally high benefit.

Strategies

- Reduce the frequency and severity of crashes at intersections by limiting conflicts through geometric, traffic control, and lighting improvements.
- Institute and promote Highway Safety Manual analyses and road safety audits/assessments using multi-disciplinary teams to review the operations and safety for all intersection users.
- Use traditional and alternative designs and technologies to reduce conflict risks such as innovative interchange designs, access management, and roundabouts.
- Improve the awareness and visibility of traffic control devices so all users can safely navigate an intersection.

Impaired Driving Crashes

Impaired driving is involved in about one quarter of all motor vehicle deaths in Florida. Defined as driving under the influence of alcohol and/or legal (prescription and over-the-counter) and/or illegal drugs, impaired driving is a complex social issue that involves all areas of the criminal justice, health care, and education systems.

Alcohol impairment is measured by the amount of alcohol in the blood or blood alcohol concentration (BAC). As the BAC increases, the effects include a decline in visual functions and multitasking, reduced concentration, impaired perception, and an inability to respond quickly to emergencies.

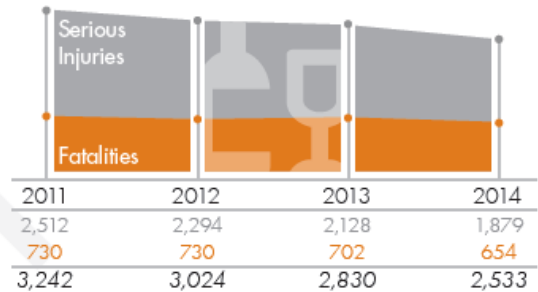
The problem is complicated by the growing number of impaired driving incidents that involve legal (prescription and over-the-counter) and illegal drugs. For Florida, 39 percent of impaired driving crashes involved drivers under the influence of alcohol only, 12 percent involved drivers under the influence of drugs only, and 18 percent involved drivers that were under the influence of both alcohol and drugs. It is easier for officers to test and arrest for alcohol impairment because drugs require a blood or urine test. The frequency of impaired driving crashes is highest between the hours of midnight and 2 a.m., and on weekends. The use of safety belts is also lower among impaired drivers (66.0 percent use as compared to 89.4 percent for all drivers).

Impaired driving crashes disproportionately lead to fatalities, ranking third in total number of fatalities, behind lane departure and intersection. The good news is that the numbers are decreasing. Fatalities are down 10 percent and serious injuries by 25 percent.

Reducing the number of drug or alcohol test refusals is a top priority of the Florida Impaired Driving Coalition (FIDC). Florida's test refusal rate is approximately 25 percent, which means that a quarter of the people stopped for suspected impaired driving are not being tested. This means the State is not capturing the true rate of impairment. To address the problem of impaired driving, Florida is promoting training for law enforcement officers to help them better detect, investigate, and process impaired drivers along with a push for more officers who are trained in drug recognition.



Fatalities and Serious Injuries



FLORIDA IMPAIRED DRIVING COALITION (FIDC)

The FIDC was formed in 2009 to identify and prioritize the state's most pressing impaired driving issues and develop a plan to maximize the state's ability to reduce these crashes.

FIDC members include representatives from more than 30 agencies and organizations which work with some part of Florida's impaired driving system.

The Florida Impaired Driving Strategic Plan (IDSP) identifies several key areas where efforts will be focused in the future including prevention; criminal justice system; communication; screening, assessment, treatment and rehabilitation; and program evaluation and data.

Impaired Driving Fatalities

0.15+ BAC: **19%**

0.08-0.14 BAC: **27%**

Below 0.08 BAC: **XX%**

Positive for Drugs: **XX%**

Refusals: **35%**

Strategies

- Combine high-visibility enforcement with increased public awareness of the dangers, costs, and consequences of impaired driving, with emphasis on high-risk populations and locations.
- Reduce repeat impaired driving behavior through targeted enforcement, effective and efficient prosecution, enhanced penalties for subsequent offenses, and improved evaluation, intervention, and treatment of substance abuse.
- Identify opportunities to prevent or counteract impaired driving through training of law enforcement, court, and substance abuse treatment personnel, recognition of emerging trends and new best practices, and use of tools such as ignition interlock devices, and revision of laws and rules.

Pedestrians and Bicyclists

Walking and biking are popular in Florida given the year-round moderate climate. Given the vulnerability of a pedestrian or bicyclist, however, these activities can result in death and serious injury when they come into conflict with a motor vehicle. Since 2011, pedestrian and bicycle fatalities increased 16 percent and serious injuries increased 14 percent. Florida began a pedestrian assessment in January 2012 and began specifically addressing key bicycle concerns in 2014.

There are several factors involved in these crashes. Approximately two thirds of pedestrian and bicyclist-related fatal crashes occur outside of a marked crosswalk or bicycle lane. A major factor in these crashes is failure to yield to the right-of-way on the part of motorists, pedestrians, and bicyclists. More than 40 percent of bicyclist fatalities are related to traumatic brain injury involving a cyclist who was not wearing a helmet, or who wore a helmet improperly.

Florida represents

6% of the U.S. population

but accounts for

17% & 11%
of bicycle fatalities & of pedestrian fatalities

Source: National Highway Traffic Safety Administration (NHTSA).

Fatalities and Serious Injuries



Florida seeks to be a quality place for people to live, learn, work, and play, and is working to ensure everyone has convenient and safe choices for transportation, including walking, biking, and transit. The state is implementing engineering, education, enforcement, and emergency response strategies that reduce crash risk and increase the safety, accessibility, and mobility of these vulnerable road users. Florida's focused initiative to improve pedestrian and bicyclist safety has resulted in a statewide Complete Streets Policy and Implementation Plan, an intersection lighting plan, updated design guidance, a comprehensive communication plan, high visibility enforcement efforts, a strong emphasis on pedestrian and bicyclist safety in driver education, revisions

of Florida's Driver Handbook and driver license exam, and improved emergency response to victims of traffic crashes.



Engineering solutions such as the addition of pedestrian hybrid beacon traffic signals at marked midblock crosswalks and protected bike lanes have been added to support pedestrian and bicyclist safety. Florida has also made improvements in the traffic data that allows more accurate assessment of pedestrian and bicycle related issues including the development of a geographic information systems (GIS) tool that allows Florida to map crashes, identify areas with an over representation of crashes, and conduct a comprehensive analysis of the context of each priority area to ensure the appropriate countermeasures are selected to resolve specific challenges.

FLORIDA PEDESTRIAN AND BICYCLE SAFETY COALITION

Florida's Pedestrian and Bicycle Safety Coalition, a diverse group of national, state, and local partners and safety advocates, prioritizes and implements the strategies identified in the statewide Pedestrian and Bicycle Strategic Safety Plan (PBSSP) to reduce pedestrian and bicycle related fatalities and serious injuries as a result of traffic crash involvement on Florida's roadways.

The PBSSP was finalized in 2013 in response to a pedestrian fatality rate that was nearly double the national average and a bicyclist rate that was nearly triple. The Coalition meets regularly to discuss and update the progress of the PBSSP implementation.

Strategies

- Increase awareness and understanding of safety issues and compliance with traffic laws and regulations related to pedestrians and bicyclists.
- Develop and use a systematic approach to identify locations and behaviors prone to pedestrian and bicycle crashes and implement multidisciplinary countermeasures.
- Create urban and rural built environments to support and encourage safe bicycling and walking.
- Support national, state, and local initiatives and policies that promote bicycle and pedestrian safety.

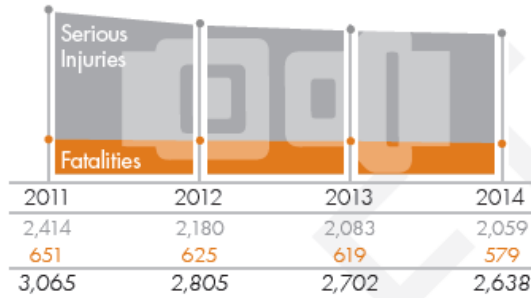
Unrestrained Occupants

NHTSA estimates that safety belts saved nearly 13,000 lives in the United States in 2014. Safety belts and age-appropriate child safety seats, when used properly, keep motorists in their seats during a crash and spread the crash forces across the stronger parts of the upper body, which helps to prevent deaths and serious injuries.

In Florida, unrestrained occupants represent nearly 26 percent of all fatalities and 11 percent of serious injuries. Nearly 72 percent of lane departure and almost 40 percent of intersection fatalities and serious injuries involved a person who was unrestrained. Often, the individuals who were killed or seriously injured in unrestrained crashes exhibited other risk taking behaviors such as driving impaired (22 percent), speeding (17 percent), and being distracted (13 percent).

Successful occupant protection involves enforcement, communication, and education necessary to achieve significant, lasting increases in safety belt and child safety seat usage. In Florida, efforts focus on regulation, policy, and education, including safety belt and child safety seat awareness

Fatalities and Serious Injuries



and enforcement. These efforts include programs that target specific demographic groups with low compliance rates, such as teen and minority populations, and other activities aimed at child passenger safety, such as expansion of inspection stations, awareness training, school bus safety, and special needs training.



Each spring around Memorial Day, Florida, along with all 50 states and the District of Columbia

participate in NHTSA's nationwide Click It or Ticket high visibility enforcement campaign. These efforts have helped Florida reduce unrestrained occupant fatalities by 11 percent and serious injuries by 15 percent.

Safety belts **reduce the risk of fatal injury** to front seat occupants by

45% and the **risk of moderate-to-critical injury** by **50%**

Source: Centers for Disease Control.

Florida's safety belt use rate is

89.4%

National average is

87.0%

Source: National Highway Traffic Safety Administration (NHTSA).

Strategies

- Enforce occupant protection use laws, regulations, and policies to provide clear guidance to the public concerning motor vehicle occupant protection systems including those aimed at children.
- Determine which population groups are at highest risk for not wearing safety belts, and develop culturally relevant public education and outreach to increase awareness of the benefits of safety belt use among these groups.
- Develop and implement programs that use the media, including social media, to improve public awareness of the importance of safety belts.



Aging Road Users

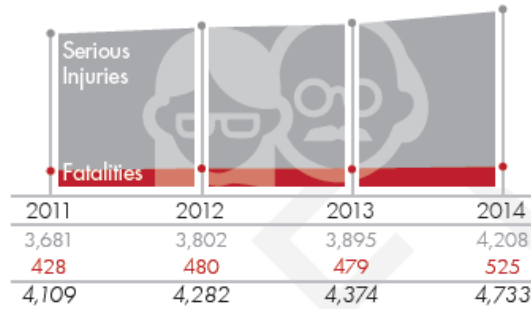
Florida has the largest number of aging road users in the nation. Since today's older adults are expected to live longer and continue to drive longer than any previous generation, their impact on traffic safety can be substantial.

As drivers age, their traffic risks increase. An 80-year old woman driver is seven times more likely to be killed as a 45-year old woman in trips that are the same distance.⁵ Aging impacts vision, memory, physical strength, reaction time, and flexibility - all necessary for safe driving. Fortunately, the majority of aging drivers voluntarily limit their driving when their skills begin to deteriorate. They make choices to not drive at night, stay on familiar roadways, and drive more during the mid-day hours when traffic is not as heavy (10 a.m. to 2 p.m.).

Whether it is an increase in the overall number of individuals age 65 or older, an increase the number of vehicle miles they are traveling, or other causes, fatalities involving aging drivers have increased by 18 percent and serious injuries by 13 percent. To address the needs of aging road users, Florida's Safe Mobility for Life program provides a one-stop web site for information on aging issues; the *Florida Guide for Aging Drivers*; the nation's largest CarFit

⁵ The Pepper Institute on Aging and Public Policy, Florida State University.

Fatalities and Serious Injuries



program that helps drivers be safe and comfortable by improving the "fit" between drivers and their vehicles; a Find-a-Ride database that provides direct access to over 800 local transportation options; and roadway improvements such as larger lettering on signs and advance warning signs.

Additional activities include helping people transition more easily from driving to other modes of transportation; developing and distributing resources and tools to support safe driving skills; educating and promoting driving evaluation strategies to prevent crashes; and supporting implementation of community design features that meet the mobility needs of an aging population. Pedestrian and bicycle safety for aging road users also will be addressed as more seniors decide to walk or ride rather than drive.

SAFE MOBILITY FOR LIFE COALITION

The mission of the Safe Mobility for Life Coalition (SMFLC) is to improve the safety, access, and mobility of Florida's aging road users by developing a comprehensive strategic plan to reduce fatalities, serious injuries, and crashes among this vulnerable population. The Coalition consists of almost 30 agencies and organizations who share responsibilities and interests in aging road user safety and mobility.

The Coalition's Aging Road User Strategic Safety Plan includes ten emphasis areas. The Coalition takes a positive and innovative approach to strike a balance between safety and mobility and help Floridians maintain independence and remain active in their community even after they transition from driving.

Strategies

- Promote and educate on comprehensive driving evaluations and safety strategies to prevent crashes.
- Expand transportation choices and promote community design features to meet the mobility needs of an aging population.
- Develop and distribute resources and tools to support safe driving skills and encourage early planning to safely transition from driving.

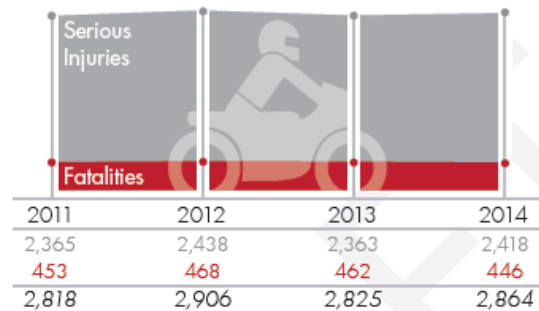
Motorcyclists

More Floridians ride motorcycles than ever before, with riders coming from every age and demographic group. Florida's sunny weather, beautiful beaches, and scenic highways make it a popular place for motorcycle enthusiasts, and the downturn in the economy and higher gas prices earlier in this decade made motorcycles and scooters a more attractive transportation choice.

Motorcyclists, including motor scooter riders, represent seven percent of licensed drivers, three percent of registered motor vehicles, and less than one percent of traffic on Florida's roadways, yet represent 19 percent of Florida's traffic fatalities and 12 percent of serious injuries. During the past five years, motorcycle-related fatalities increased by 17 percent, perhaps reflecting the 17 percent increase in motorcycle endorsements and 10 percent increase in motorcycle registrations over the same period. Whatever the reason, an increase that large indicates there is a serious problem involving motorcycles in Florida.

Florida's efforts to improve motorcyclist safety involve educating riders about riding skills and

Fatalities and Serious Injuries



how to be seen by other vehicles, protective equipment, impaired riding, and proper licensure. Florida also educates other motor vehicle drivers about sharing the roadway and educates engineers and highway maintenance personnel about roadway hazards specific to motorcyclists.

In 2008, Florida adopted a law requiring motorcyclists who want to obtain a motorcycle endorsement or motorcycle-only license to complete a mandatory 15-hour basic training course provided by the Florida Rider Training Program.

Florida law also requires that all riders younger than 21 years wear a helmet. Motorcyclists 21 years and older may ride without helmets only if they show proof of coverage by a medical insurance policy. The state is focused on educating all riders about the value of wearing protective gear including helmets, eye protection, jackets, gloves, long-legged pants, and sturdy footwear.

FLORIDA MOTORCYCLE SAFETY COALITION

The Florida Motorcycle Safety Coalition was formed in 2008, and includes representatives from more than 25 public and private agencies and organizations who developed and now implement the Motorcycle Strategic Safety Plan (MSSP).

It is focused on promoting "Ride S.M.A.R.T.," which stands for: Say no to drinking and riding, Make yourself visible to motorists, Always wear a helmet, Ride in control, and Train regularly. The coalition, a winner of a 2011 National Roadway Safety Award, collects and analyzes data, conducts surveys, and implements and evaluates the state's motorcycle safety program.

Strategies

- Improve the skill levels of motorcyclists through increased participation in rider education programs and proper license endorsements.
- Promote the safe operation of motorcycles, including sharing the road, responsible riding, and the use of personal safety gear.
- Consider the unique vulnerabilities and characteristics of motorcyclists when designing and improving transportation infrastructure.



Commercial Motor Vehicle Crashes

"If you bought it, a truck brought it," is as true today as it was several years ago when it was first introduced as an advertising campaign. Projections suggest that truck tonnage will increase by 74 percent by 2040 due to continued globalization in trade and significant changes in the nation's shopping patterns, increasing the demand for trucks on Florida's roadways.² As one of the top tourist destinations in the world, Florida also has a high number of motor coaches on the road, a trend that is expected to continue.

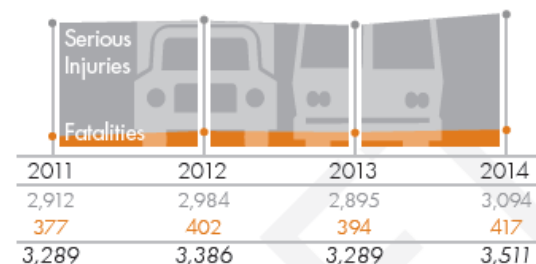
Nearly 600,000 Floridians hold a commercial driver license - about one in every 10 nationwide. Out of the 350,000 commercial motor vehicles registered in Florida, almost 72,000 are truck tractors (semi-trucks). Growth in commercial vehicle traffic has resulted in a 10 percent increase in commercial vehicle-related fatalities and a six percent increase in serious injuries.³

The Florida Highway Patrol's Office of Commercial Vehicle Enforcement (CVE) conducts safety inspections of commercial trucks and buses and enforces

² Federal Highway Administration, Freight Analysis Framework 3.4.

³ National Highway Traffic Safety Administration.

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safety requirements. CVE has a comprehensive commercial motor vehicle safety enforcement program that includes traffic enforcement focused on moving infractions, distracted driving, fatigued driving, and impaired driving. CVE concentrates enforcement efforts on these violations in specific high crash location such as speeding and following too closely on Interstate highways.

Florida's shortage of available truck parking often results in trucks parking along the shoulders of interstates, which creates a safety hazard for motorists. Roadside pull-off areas along interstates in highly urbanized areas increase safety during traffic stops. Expanded parking areas at rest stops helps reduce driver fatigue. Public awareness

programs such as are conducted throughout the state. Outreach efforts include public speaking, media interviews, public service ads, billboards, dynamic message boards, and electronic social networking to educate the public about the value of the trucking industry and motorist safety in relation to commercial motor vehicle operations. Other efforts under consideration include truck-only lanes, more truck lane restrictions, and separate entrances particularly at busy port locations.

Nationally in 2014,
73% of the **fatalities** in commercial vehicle crashes were **occupants of other vehicles**

10% were **pedestrians, bicyclists, or motorcyclists**

Source: National Highway Traffic Safety Administration (NHTSA).

Strategies

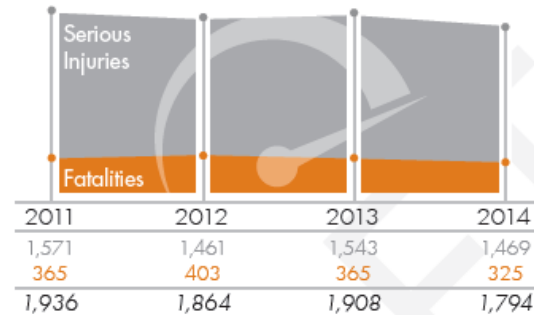
- Conduct targeted enforcement for violations in high crash locations associated with commercial vehicles.
- Use public awareness program, outreach efforts, and social media to increase motorist awareness of safe driving around commercial vehicles.
- Collaborate with the trucking and bus industry on programs and initiatives to improve safety and reduce crashes.

Speeding and Aggressive Driving Crashes

Chances of dying in a crash doubles for every 10 miles per hour (mph) a car travels above 50 mph. Speeding reduces the time a driver has to react to a dangerous situation, and increases the impact energy and risk of death in the event of a crash. According to the National Safety Council, if a car is traveling at 30 mph and accelerates to 60 mph, the amount of energy upon impact is four times greater. That impact ripples across the three types of collisions that are part of a crash: the vehicle collision when the car hits another car or object; the human collision when the people in the car hit the interior of the vehicle or another occupant; and the internal collision when organs in the body collide with the body's skeleton or other organs.

A crash is considered to be speed-related when a driver is driving too fast for conditions or exceeding the posted speed limit. Speeding is part of the overall problem of aggressive driving, which can also involve following too closely, refusing to yield the right-of-way, running red lights, weaving in and out of traffic, and passing improperly. In addition to the effects on reaction time and impact, speeding reduces a driver's ability to steer safely around other vehicles, curves, or objects in the

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roadway; extends the distance necessary to stop a vehicle; and increases the distance a vehicle travels before a hazard is noticed. While quieter, better designed cars and smoother and wider roadways can contribute to the speed problem, driver attitude and cultural norms are ultimately the major factor in decisions to speed.

Speeding or aggressive driving is involved in nearly 65 percent of all fatalities and serious injuries involving lane departure and nearly 42 percent involving intersections. Individuals involved in speeding and aggressive driving

crashes often exhibit other risk-taking behavior such as not wearing a safety belt (32 percent) or driving impaired (25 percent). The good news is that, since 2011, speeding and aggressive driving fatalities have decreased by 11 percent and serious injuries have declined six percent.

Speeding and aggressive driving are complex issues that can be addressed through engineering, enforcement, and education solutions. Engineering solutions include managing speed by setting appropriate speed limits; using variable speed limits that change based on road, traffic, and weather conditions; or implementing traffic calming measures that slow drivers down. Local law enforcement agencies can also target problems with high visibility speeding and aggressive driving initiatives that educate the public about the problem and cite individuals who violate the law.



Strategies

- Enforce speeding and aggressive driving laws by focusing on high-risk locations.
- Incorporate technology and other innovations including speed cameras at high risk locations.
- Evaluate crash hotspots and implement appropriate engineering countermeasures to control speed and reduce aggressive driving behavior.
- Conduct community-based public awareness and education regarding speeding and aggressive driving.

Teen Driver Crashes

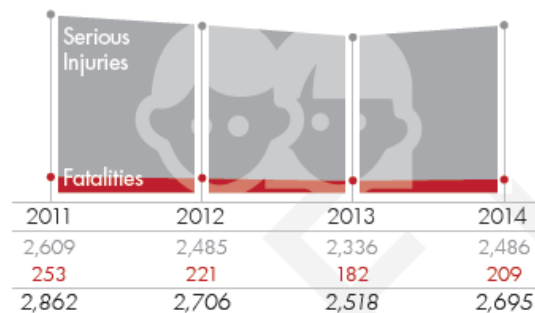
As any parent knows, handing the car keys to a new driver is a proud yet terrifying experience. Florida has over 400,000 registered teen drivers, age 15 to 19. Teen drivers are involved in approximately 40,000 crashes resulting in 200 fatalities and 2,500 serious injuries each year. Nationally, drivers aged 16 and 17 have the highest crash rates of any age group.

Teen drivers do not have years of experience to recognize and avoid dangerous situations. According to the Centers for Disease Control and Prevention (CDC) finds that teens often engage in risky behaviors. In one third of the deaths and serious injuries involving teen drivers, safety belts were not worn. Teens are more likely to

Motor vehicle crashes are the
LEADING CAUSE OF DEATH
for U.S. teens

Source: Centers for Disease Control.

Fatalities and Serious Injuries



underestimate dangerous situations, speed, and allow shorter distances between vehicles.⁴

For most adults, driving is almost automatic; in reality, it is a complex task requiring the driver to pay attention to a multitude of factors simultaneously, including other cars, pedestrians, obstructions, signs, and signals. Almost half of all Florida teen fatalities and serious injuries happen at intersections where the mix of traffic, pedestrians, signs, and signals can be overwhelming, especially for someone who is inexperienced.

⁴ Centers for Disease Control

The teen years are a time to gain new knowledge and skills, one of which is driving. That is why Graduated Driver



Licensing (GDL) laws allow new drivers to gain necessary experience and skills before being allowed full driving privileges. GDL has been very effective in reducing fatalities and serious injuries among this age group, according to the National Highway Traffic Safety Administration (NHTSA). In Florida, teen driver fatalities declined 17 percent since 2011, and serious injuries decreased by five percent.

TEEN SAFE DRIVING COALITION

Leading the charge in Florida to improve traffic safety among teens is the Teen Safe Driving Coalition, which is focusing on reducing the alarming number of teen drivers being killed or seriously injured in traffic crashes.

The Coalition is working to expand the network of individuals and partners who are involved in the teen safe driving effort and is conducting extensive outreach and education.

Each year, the Coalition works with Students Against Destructive Decisions (SADD) on a Leadership Academy, which helps Florida teens plan and conduct peer-to-peer safety campaigns in their schools and communities.

Strategies

- Educate stakeholders about the potential safety benefits of improving Florida's Graduated Driver Licensing Law to include passenger and cell phone restrictions.
- Educate parents, caregivers, and role models on the dangers of impaired driving for teen drivers including the prohibition on providing alcohol or drugs to anyone under the age of 21.
- Work with law enforcement agencies to increase enforcement of GDL and other traffic safety laws including safety belt use and impaired driving.

Distracted Driving

At 55 miles per hour, a driver can travel the distance of a football field (with his or her eyes off the road) in the amount of time it takes to send a text.⁶ Distracted driving includes anything that takes the driver's attention away from the vital task of driving.

There are three types of distraction: manual, which is taking hands off the wheel; visual, or taking eyes off the road; and cognitive, which involves taking one's mind off driving. Discussions about distracted driving often center on cell phone use and texting but other activities such as eating, talking to passengers, reading, adjusting the radio or climate controls, dealing with children, and being fatigued or drowsy can be equally as distracting.

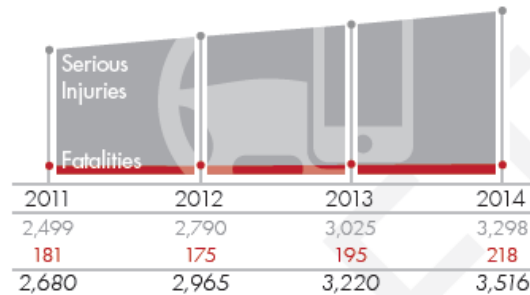
Fatalities involving distracted driving increased 17 percent while serious injuries increased 24 percent. The relatively low numbers of fatalities and serious injuries, given what people suspect is the extent of the problem, may be due to the difficulty

⁶ Centers for Disease Control (CDC)

Strategies

- Implement effective roadway design and operation practices such as rumble strips and stripes and flashing beacons with warning signs to mitigate lane departures, speeding, and other symptoms of distracted driving and to reduce congestion and improve mobility.
- Change societal attitudes about distracted driving through intensive public education activities.
- Collaborate with other public and private organizations to offer innovative solutions, such as public and private sector policies that prohibit distracted driving when using company or organization vehicles.

Fatalities and Serious Injuries



in obtaining distracted driving data. Law enforcement officers often have trouble determining if a person was distracted and cannot confiscate a cell phone to verify if a driver was texting without a warrant.

Activities to address distracted driving include a "Just Put It Down" campaign with a sample proclamation and a pledge for people to sign and a partnership with GEICO Insurance to offer "Safe Phone Zones" at 64 Florida rest areas, welcome centers, and turnpike service plazas.



At any given daylight moment across America,

660,000 DRIVERS are USING CELL PHONES

or manipulating electronic devices while driving.

Source: NHTSA, One Text or Call Could Wreck It All, Traffic Safety Marketing.

Work Zones

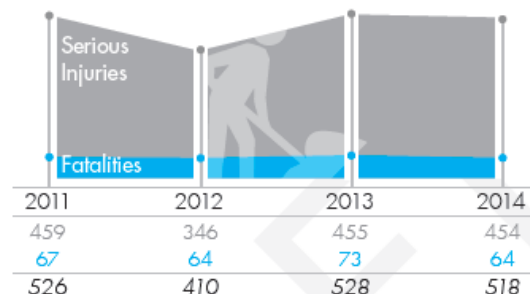
While work zones may be frustrating to many drivers, they are essential to ensure Florida's roadways, bridges, medians, and shoulders are properly constructed and maintained. A work zone is an area set up by state and local departments of transportation or utility companies to allow highway construction, maintenance, or utility-work activities. Work zones are usually marked by signs, channeling devices, barriers, pavement markings, and/or work vehicles, and may be monitored by state or local law enforcement.

The length of time a work zone is in operation depends on the type of construction or maintenance project as well as the type of roadway, weather conditions, and traffic volume. A work zone involves workers, vehicles, trucks, and

In 2014, Florida had the **3rd** highest number of **Fatal Traffic Crashes** in **Work Zones** in the Nation with a total of **60 Crashes**

Source: National Work Zone Information Clearinghouse.

Fatalities and Serious Injuries



equipment that can necessitate lane closures, detours, and moving equipment, and can last from a few days to years. While work zone fatalities make up only three percent of overall fatalities and two percent of serious injuries, the safe and efficient flow of traffic through work zones is an ongoing priority for Florida's transportation and safety partners. A focus on work zone safety is critical because plans for investment in maintaining existing roads and bridges and building or expanding roadways to meet the growing capacity needs of the state's transportation system will result in more work zones across the state.

Workers were present in the work zone in 33 percent of the fatal crashes and 40 percent of the crashes involving serious injuries. The majority of the fatalities and serious injuries happened in work zones located on shoulders or in the median area of the roadway, and for most, law enforcement officers were not present. A major cause of these crashes is distraction, with 21 percent of work zone related fatalities and serious injuries involving distracted driving.

Efforts to improve safety in and around work zones include traffic training for workers and contractors, rumble strips to alert drivers that the work zone is near, and law enforcement presence to ensure traffic slows down.

FLORIDA WORK ZONE SAFETY COALITION

The Florida Work Zone Safety Coalition is an industry initiated coalition that was established in 2016. This coalition is new and does not currently have a strategic safety plan. FDOT participates as a member of this coalition and will encourage the coalition to adopt the strategies identified in the SHSP.

Strategies

- Apply advanced technology to improve work zone safety such as automated work zone information systems, simplified dynamic lane merge systems, portable changeable message signs, and queue warning systems.
- Educate road users about work zone safety and provide timely and accurate information regarding active work zones.
- Determine the feasibility and effectiveness of other improvements including installing reflectors on barrier walls, spacing on curves, changes in the penalties and fines to contractors for getting out of the roadway late, using of crash cushions, and correcting pavement marking errors.
- Work with law enforcement, contractors, and DOT personnel to reduce speeds in and around work zones with reduced speed limits through a comprehensive approach of increased fines and increased law enforcement contacts.



Traffic Records and Information Systems

Data are the foundation of any effort to improve traffic safety and critical for the development and implementation of the SHSP. Using data to identify safety problems creates an evidence-based safety planning process, and results in better decision-making.

A traffic records system consists of data about a state's roadway network and the people and vehicles that use it. The six traffic records systems are: crash, vehicle, driver, roadway, citation/adjudication, and emergency medical services/injury surveillance. The data from these systems are used to understand driver demographics, licensure, behavior, and sanctions; vehicle types, configurations, and usage; engineering, education, and enforcement measures; crash-related medical issues and actions; and how all of these factors affect highway safety. Decision makers and safety stakeholders at the state, regional, and local level analyze the various data to understand their highway safety problems, set priorities, and develop and evaluate projects and programs that save lives.

Connecting quality data from all of the traffic records systems can provide a detailed and clear picture of traffic safety issues. The analysis of a single crash or aggregated crashes statewide, in a region, or a specific corridor, can help inform the type of engineering, education, or enforcement strategy to implement by targeting specific safety problems, road user populations, or training needs. Additionally, quality data allow for performance monitoring so that resources and investments are used most effectively and efficiently.

FLORIDA TRAFFIC RECORDS COORDINATING COMMITTEE

Florida's Traffic Records Coordinating Committee (TRCC) was created to bring together agencies interested in reducing traffic fatalities and serious injuries by improving the timeliness, accuracy, completeness, uniformity, integration, and accessibility of traffic records data. The TRCC facilitates planning, coordinating, and implementing projects to accomplish common goals and improve the quality of the state's traffic records information systems.

Currently the TRCC is working on integrating with the national emergency medical services information system; expanding a crash geo-location system; and providing grants to local law enforcement agencies and courts to improve their traffic records systems.



Strategies

- Develop and maintain complete, accurate, uniform, and timely traffic records data.
- Promote the use of traffic records data for decision-making purposes and ensure its accessibility.
- Facilitate collaboration of multiagency initiatives and projects that improve traffic records information systems.
- Create the same key data fields and definitions among Florida's six data systems to allow end users to link traffic records data.

Strategic Safety Coalitions



Florida Work Zone Safety Coalition



Florida Engineering and Operations Coalition





Transition to Implementation

The Strategic Highway Safety Plan focuses on persistent problems and new or trending areas that most significantly affect Florida's highway fatalities and serious injuries. The state's network of highway safety professionals and advocates are working to drive down fatalities and serious injuries with an ultimate vision of zero. The SHSP identifies proven strategies, programs, and initiatives, as well as new approaches that will be used to accomplish this vision.

The SHSP is an overarching plan that provides direction to state, regional, and local transportation, law enforcement, education, emergency management, and other entities. The SHSP will be implemented through multiple activities. The SHSP will:

- Provide a framework for the updates of Florida's Highway Safety Improvement Plan (HSIP) and Highway Safety Plan (HSP), which identify specific projects as priorities for use of dedicated safety improvement funding available through the Federal Highway Administration and the National Highway Transportation Safety Administration, respectively, along with the Commercial Vehicle Safety Plan through funding from the Federal Motor Carrier Safety Administration.
- Inform the updates of strategic or action plans developed and maintained by established or new coalitions of safety professionals focused on specific emphasis areas.
- Guide FDOT in incorporating safety improvement strategies as appropriate into the full range of maintenance, operations, and capacity projects in its work program and future plans, recognizing that every transportation investment also represents an opportunity to improve the safety of travelers. A key focus will be on improving the safety of travel on Florida's Strategic Intermodal System, the state's high priority network of facilities important for statewide and interregional travel.
- Guide Florida's 27 metropolitan planning organizations (MPO), 67 counties, and 411 cities in updating safety action plans and safety elements of their long-range transportation plans, as well as implementing specific projects.

Emphasis area coalitions are charged with implementing the strategies of the SHSP. These coalitions represent a variety of federal, state, regional, local, and advocacy organizations whose expertise and interests include multiple modes of transportation, as well as engineering, education, enforcement, and emergency response. The coalitions meet regularly, and develop and track progress on detailed data-driven strategic plans that focus on proven strategies and activities to drive down fatalities and serious injuries.

Florida's Highway Safety Coalitions

Lane Departure and Intersection Coalition

Florida Impaired Driving Coalition

Florida Pedestrian and Bicycle Safety Coalition

Safe Mobility for Life Coalition

Florida Motorcycle Safety Coalition

Teen Safe Driving Coalition

Florida Traffic Records Coordinating Committee

Work Zone Safety Coalition

(review plans at <http://www.dot.state.fl.us/safety>)



The Florida Transportation Plan identifies implementation guiding principles related to collaboration, innovation, customer service, and data and performance. The transition of the SHSP from planning to implementation will require a focus on these same areas.

How do we collaborate across jurisdictions, modes, and disciplines?

- Continue to support Florida's existing safety coalitions to coordinate with stakeholders to drive down fatalities in specific emphasis areas.
- Establish ad hoc committees or additional coalitions for the commercial motor vehicle, distracted driving, occupant protection, and speeding/aggressive driving emphasis areas that do not presently have established coalitions.
- Coordinate with Florida's MPOs and local governments on SHSP emphasis area implementation and future updates of their safety plans and programs.
- Continue to encourage multi-disciplinary approaches to safety improvements that consider engineering, education, enforcement, and emergency response solutions.
- Coordinate with land use, public health, and other partners to ensure safety considerations are a top priority in planning decisions related to transportation.

How do we embrace innovation in all aspects of highway safety?

- Invest in research and evaluation of new technologies and practices that can reduce highway fatalities and serious injuries.
- Plan to use technology to improve communication across modes and design "smart streets" that provide information to all travelers to reduce conflicts.
- Monitor and evaluate innovations that may change travel behavior and demand for potential impact to safety.
- Update state and local safety plans and regulations to consider technologies and innovation that may reduce fatalities and serious injuries.

How do we better serve our customers?

- Communicate clear and consistent safety messages using a variety of mediums and venues that engage roadway users in their role in Driving Down Fatalities.
- Create transportation environments that are accommodating and safe for all roadway users.
- Educate roadway users on how to use new infrastructure and technologies, such as roundabouts and signalized crosswalks.
- Understand how changes in travel demand, preferences, and options impact highway safety.

How do we improve data and performance?

- Commit to ongoing improvements in the quality, integration, and analysis of various traffic records data, including innovative uses of new and emerging data sources.
- Create a long-term strategy for managing traffic records data as a critical resource for highway safety agencies' and partners' decision-making and research, including data storage, sharing, privacy, and quality issues.
- Commit to ongoing highway safety research to identify proven strategies, programs, and initiatives that can be replicated across the state to realize further reductions in highway fatalities and serious injuries.
- Implement innovative techniques to measure progress and guide investment decisions to continuously improve traffic safety.
- Work with MPOs to coordinate target setting and performance measures between the state and local plans, consistent with federal requirements.



Call to Action

Improving safety on our roadways involves all of us working together to reduce fatalities and serious injuries. Implementing the SHSP strategies, through the efforts of engineering, education, enforcement, and emergency response, while increasing roadway users' awareness and understanding of their role improving safety on our roadways, is our best opportunity to Drive Down Fatalities.

To successfully implement the SHSP, all stakeholders should commit to:

- Update their safety plans, including other state, coalition, MPO, and local government plans, to reflect alignment with the FTP and SHSP zero fatality vision.
- Demonstrate support and promote the SHSP vision of zero fatalities by incorporating SHSP strategies and links to the SHSP document on state, regional, and local transportation safety agency and organization websites.
- Promote initiatives that increase roadway users' understanding of the state's most significant traffic safety problems and their role in reducing fatalities and serious injuries.
- Document and report progress in each emphasis area toward achieving Florida's vision of zero roadway fatalities.
- Support national, state, and local initiatives and policies that promote highway safety.

Safety for Florida's residents and visitors is a top priority for the state that cannot be achieved without the help of safety partners. Florida's traffic safety community must continue to work together to identify and implement innovative solutions that help to reduce fatalities and serious injuries on Florida's roadway system. As we continue to work together, engage new partners, and follow through with the strategies outlined in the SHSP, we are confident that we can drive down roadway fatalities and serious injuries.

For more information please visit:

www.dot.state.fl.us/safety/

What's Next?

- **Comment Period for Draft SHSP Document – July 25 – August 4**
- **Transmit for Executive Review – August 10**
- **Adoption and Signing Ceremony – August 22**

Signing Partners



Florida Sheriffs
Association



Florida Rail
Enterprise



Questions?



For more information about the SHSP, please visit:

www.dot.state.fl.us/safety/

or email:

Lora.Hollingsworth@dot.state.fl.us

