

# FLORIDA TRANSPORTATION COMMISSION

# HIGHWAY SAFETY REPORT CALENDAR YEAR 2009

**November 5, 2010** 

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#### INTRODUCTION

The Department of Transportation has always identified "Safety" as the single most important recurring, underlying theme throughout its programs. During her tenure, Secretary Stephanie Kopelousos has included Safety among her "Vital 4 Vision" of Safety, Mobility, Service, and Funding. Safety permeates throughout the design, construction, maintenance, and operations programs of the Department. In addition to the funds committed to safety as part of those programs, a separate "Safety" program provides funding for:

- Hazard Elimination
- Rail-Highway Grade Crossings
- Traffic Safety Grants

- Motor Carrier Safety Assistance
- Pedestrian/Bicycle Safety
- Community Traffic Safety Teams

However, given the state's dismal national ranking in fatalities and fatality rates, a greater emphasis on measuring the effectiveness of the Department's safety program is warranted.

The Performance Measures Working Group convened in 2005 with one objective being to develop and adopt a new safety performance measure. After several meetings, the Working Group concluded that a separate report was needed to convey a more comprehensive overview of the Department's highway safety program. The safety performance measure, as presented in the annual *Performance and Production Review of the Department*, was revised and a series of highway safety indicators were identified to aid in assessing the condition of highway safety in Florida. The Florida Transportation Commission advocates elevating the visibility of these statistics, which will serve as a catalyst for action by the Department and its highway safety partners in reducing, where possible, the incidence of highway fatalities and fatal crashes.

The purpose of this report is to provide an update on the new Secondary Performance Measure and several safety indicators to assist the Department in assessing the outcomes derived from investments in the safety programs it administers. The Florida Transportation Commission recognizes that there are many factors that are beyond the Department's control that contribute to highway fatalities. These include, but are not limited to:

- Driver skill levels and impairment;
- Use of safety equipment;
- Vehicle condition; and
- Road and weather conditions.

### **FDOT Safety Office Mission**

Continually improve the safety of users of Florida's highway system, the safety of Department employees, and the Department's preparation for, response to, and recovery from natural and man-made emergencies.

# **Safety Office Goals**

- 1. Decrease the frequency, rate, and severity of, and potential for, crashes involving motor vehicles, pedestrians, and bicycles on public roads in Florida through the implementation of comprehensive safety programs involving engineering, enforcement, education and/or emergency services.
- 2. Provide procedures, training, and awareness activities that foster safe work practices and workplaces for Department employees.
- 3. Provide plans and procedures to guide, direct, and improve the Department's preparedness for, response to, and recovery from workplace, local, and state emergency events.

# Florida Department of Transportation (Department) 2006 Strategic Highway Safety Plan (SHSP)

The purpose of the SHSP is to strategically focus funding and other resources on those problem areas where the opportunity for improvement is greatest, as measured by reductions in fatalities and serious injuries. Improving the safety of Florida's surface transportation system for residents and visitors is the unifying goal of Florida's safety community and the overarching goal of the SHSP. The SHSP identifies strategic safety priorities in both public and private agencies and organizations at national, state, regional and local levels.

The federal transportation act of 2005, "Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users" (SAFETEA-LU), places more emphasis on funding for highway safety than prior acts. Each state transportation department is required to develop and implement a SHSP after consultation with major safety stakeholders (metropolitan planning organizations, traffic enforcement officials, motor vehicle administration officials, motor carrier safety officials, and other state and local safety stakeholders). The resulting state SHSP must:

- Address all of the 4E's (Engineering, Enforcement, Education and Emergency Services) as key factors in evaluating highway projects;
- Identify and analyze safety problems and opportunities;
- Include a crash data system that can perform problem identification and countermeasure analysis;
- Establish strategic and performance-based goals that focus resources on areas of greatest need;
- Advance state traffic records data collection, analysis and integration with other safety data sources; and
- Establish an evaluation process to assess results.

A Memorandum of Understanding (MOU) was completed and transmitted as a part of the SHSP that was approved in September 2006. The MOU was executed by the following organizations:

Florida Department of Transportation
Federal Highway Administration
Florida Department of Highway Safety and Motor Vehicles
Florida Department of Education
Florida Sheriffs Association
Metropolitan Planning Organization Advisory Council
FDOT Motor Carrier Compliance
Florida Safety Administration
Florida Highway Patrol
Florida Department of Health
Florida Police Chiefs Association
Florida Operation Lifesaver

Florida's Strategic Highway Safety Plan (SHSP) focuses on seven areas that are targeted towards reducing the rate of fatalities and serious injuries. The goal of the SHSP is "to improve the safety of Florida's surface transportation system by achieving a five percent annual reduction in the rate of fatalities and serious injuries beginning in 2007." The Department achieved a 13.2% reduction in fatalities in 2009, greatly exceeding the goal.

The Department has been meeting with the SHSP leadership group (the signatories of the SHSP) on a quarterly basis to report on and assess the progress that is being made in reducing highway fatalities. In June 2010, this group met to consider whether the SHSP continued to focus on the appropriate traffic safety problems and whether to amend the SHSP. After much discussion, the participants were equally divided between continuing with the existing SHSP for the next five years and adding a few emphasis areas to the current Emphasis Areas. Suggestions for inclusion were distracted driving, older drivers, and younger drivers. These last two categories could be included in the Vulnerable Road Users Emphasis Area. There was also some discussion on adding work zone crashes. These changes would bring Florida's SHSP current with initiatives being emphasized at the national level and by Metropolitan Planning Organizations.

In August 2010 an SHSP Summit was held in conjunction with the 2060 Florida Transportation Plan Summit in Orlando. Presentations were made on the potential areas for amendment of the SHSP. After the presentations and discussion, attendees voted their preferences for adding emphasis areas and the majority favored adding each of the suggested emphasis areas. This information together with the results of an online survey will be presented to the Executive Committee in early 2011 for discussion and decision.

The seven areas in the initial SHSP are divided into "emphasis" and "continuing priority" areas. This report will update the progress in reducing fatalities in the emphasis areas of:

- Aggressive Driving
- Intersection Crashes
- Vulnerable Road Users
- Lane Departure Crashes

In addition, the report will provide and update on progress in the "continuing priority" areas of:

- Occupant Protection
- Impaired Driving
- Traffic Data and Decision Support

#### Highway Safety Performance Plan (HSPP) FY 2010

The Highway Safety Performance Plan (HSPP) supports and complements the SHSP by emphasizing the importance of the SHSP focus areas through its funding and outreach initiatives.

Each of the seven focus areas of the SHSP are major components of the HSPP. Sub-grants implement the goals and strategies of the SHSP by funding a wide variety of projects:

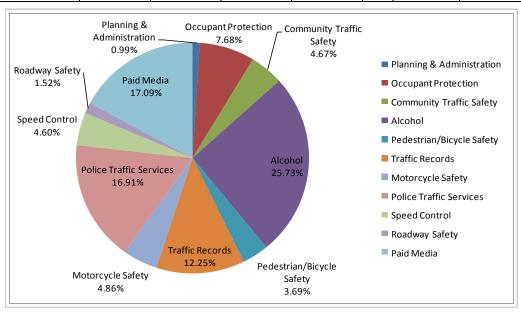
- Law enforcement overtime to eliminate speeding and other dangerous behaviors that constitute aggressive driving;
- Awareness and enforcement initiatives to eliminate distracted driving and decrease lane departure crashes;
- Awareness, educational, training, and enforcement efforts to increase awareness of motorists, bicyclists, pedestrians and motorcyclists;
- Awareness and enforcement initiatives to reduce red light running incidents and increase awareness when making right turns on red to reduce incidents at intersections;
- An aggressive child passenger seat program and training opportunities, including the only program of its kind in the nation that provides child passenger safety services to special needs children;
- Overtime to law enforcement to assist in DUI enforcement activities, teen driving programs, supporting the Impaired Driving Coalition, on DUI Enforcement and Prosecution, DUI and related training for law enforcement and prosecutors, and support for DUI Court Programs; and,
- Providing software and hardware for electronic crash reporting, expansion of Florida's EMSTAR program (for NEMSIS) compliance, and locating crashes on all roads.

(EmStar is Emergency Medical Services Training and Software; NEMSIS is the National EMS Information Service)

The Traffic Safety Section of FDOT received more than 250 requests for grant funding under Sections 402, 405, 406, 410 and 2010. Each staff member ranked the funding requests based on the Highway Safety Matrix and whether it was a continuing program or a new request, if it satisfied a specific traffic safety need, and if it supported the goals for the program area and the SHSP. As a result, grant funds were provided for the following program areas (see the FY 2010 HSPP for the actual grant projects and recipients).

FY 2010 Highway Safety Performance Plan

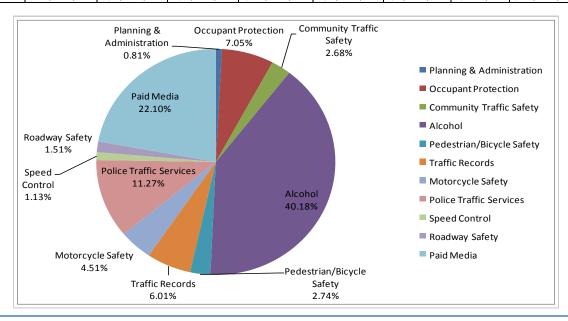
		11201	.u migiiway	Jaiety i ci	TOTTILATICE I	iaii			
Program Area	402	405	406	408	410	163	2010	Total	% of Total
Planning &									
Administration	\$277,644							\$277,644	0.99%
Occupant									
Protection	1,673,612	312,548	160,000					2,146,160	7.68%
Community									
Traffic Safety	1,303,809							1,303,809	4.67%
Alcohol	1,794,367				5,396,336			7,190,703	25.73%
Pedestrian/									
Bicycle Safety	1,031,348							1,031,348	3.69%
Traffic Records	1,039,426			2,385,157				3,424,583	12.25%
Motorcycle									
Safety	1,058,524						300,197	1,358,721	4.86%
Police Traffic									
Services	3,886,214		840,000					4,726,214	16.91%
Speed Control	1,286,101							1,286,101	4.60%
Roadway Safety	425,200							425,200	1.52%
Paid Media	1,370,000	1,005,402			2,400,000			4,775,402	17.09%
Total	\$15,146,245	\$1,317,950	\$1,000,000	\$2,385,157	\$7,796,336	\$0	\$300,197	\$27,945,885	100.00%



The Grant Program recently approved for funding for FY 2011 is emphasizing the Alcohol program area which saw a 93% increase in program funding. The breakdown by program area and grant is:

**FY 2011 Highway Safety Performance Plan** 

		F1 Z	OTT LIBIIM	ay Salety Pi	eriormanic	E FIAII			
									% of To-
Program Area	402	405 (K2)	410 (K8)	410 (J8)	408	163	2010	Total	tal
Planning & Administration	\$280,920							\$280,920	0.81%
Occupant Protection	2,441,351							2,441,351	7.05%
Community Traffic Safety	926,306							926,306	2.68%
Alcohol	2,440,037		3,037,723	8,433,422				13,911,182	40.18%
Pedestrian/ Bicycle Safety	947,825							947,825	2.74%
Traffic Records	564,726				1,515,562			2,080,288	6.01%
Motorcycle Safety	1,167,261						395,382	1,562,643	4.51%
Police Traffic Services	3,901,417							3,901,417	11.27%
Speed Control	391,787							391,787	1.13%
Roadway Safety	523,090							523,090	1.51%
Paid Media	845,000	1,590,351	1,410,862	2,551,200		1,253,958		7,651,371	22.10%
Total	\$14,429,720	\$1,590,351	\$4,448,585	\$10,984,622	\$1,515,562	\$1,253,958	\$395,382	\$34,618,180	100.00%









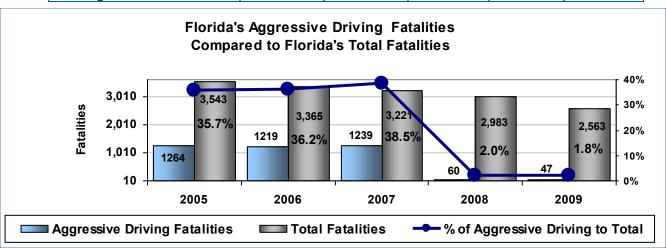
#### AGGRESSIVE DRIVING

Aggressive driving behaviors include *any two* events of: speeding, failure to yield the right-of-way, improper lane change, following too closely, improper passing or disregarding other traffic control devices per Section 316.193, Florida Statutes (F.S.). The Department funds Aggressive Driving programs utilizing National Highway Traffic Safety Administration (NHTSA) Highway Safety Program Funds. Strategies include: (1) enhance and promote effective law enforcement programs; (2) increase training and education; and, (3) identify and mitigate roadway features that may trigger aggressive driving. Aggressive Driving Citations have increased from less than 5,000 in 2003 to nearly 20,000 in 2009.

In prior years, the Department had reported aggressive driving as <u>any one</u> event of those noted above. The Department has since changed its reporting to be consistent with the statute and reporting by the Department of Highway Safety and Motor Vehicles and has classified aggressive driving as <u>any two</u> events of those noted above. Even though aggressive driving, as restated, accounts for only 2% of fatalities, the Department has indicated that, due to the prevalence of the individual behaviors constituting aggressive driving, it will still focus its funding efforts on changing the behaviors that cause aggressive driving events.

Aggressive Driving							
Performance Indicator:	rmance Indicator: Percent of aggressive driving fatalities to total fatalities						
	2005 2006 2007 2008 2009						
Aggressive Driving Fatalities	1,264	1,219	1,239	60	47		
Total Fatalities	3,543	3,365	3,221	2,983	2,563		
% of Aggressive Driving Fatalities to Total Fatalities	35.7%	36.2%	38.5%	2.0%	1.8%		

Performance Indicator:	Change in Florida's Aggressive Driving rate							
	compared to the	ompared to the previous year's rate						
	2005	2005 2006 2007 2008 2009						
Aggressive Driving Fatalities	1,264	1,219	1,239	60	47			
Rate Change From Prior Year	-3.0%	-3.0% 0.5% 2.2% -36.5% -0.2%						
% Change From Prior Year	-7.7%	1.5%	6.2%	-94.8%	-8.8%			



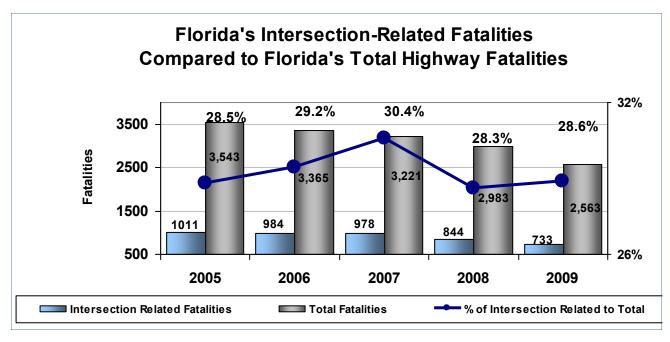
#### INTERSECTION-RELATED CRASHES

Reducing intersection crashes involves engineering solutions as well as educational and enforcement efforts. In 2007, the Department requested that FHWA conduct a "Reverse Scanning Tour" to identify opportunities to improve intersection safety. As a result, the FDOT implemented recommendations that have resulted in a 25.1% reduction in intersection related fatalities. Recommendations included: (1) improving traffic signal visibility; (2) verifying clearance timings are correct; (3) installing more countdown pedestrian heads; (4) performing road safety audits; and, (5) providing more driver-bicycle-pedestrian education.

Intersection-related crashes have continued to decline, but as a percent of total crashes, have remained relatively constant.

Intersection Related					
Performance Indicator:	Percent of inte	ersection-rela	ted fatalities to	o all fatalities	
	2005	2006	2007	2008	2009
Intersection Related	1,011	984	978	844	733
All Florida Fatalities	3,543	3,365	3,221	2,983	2,563
% of Intersection Related Fatalities to All Florida Fatalities	28.5%	29.2%	30.4%	28.3%	28.6%

	Change in Florida's intersection-related crash rate							
	compared to	compared to the previous year's rate						
	2005 2006 2007 2008 2009							
Intersection-Related Fatalities	1,011	984	978	844	733			
Rate Change From Prior Year	-1.2% 0.6% 1.1% -2.1% 0.3%							
% Change From Prior Year	-3.9%	2.2%	3.8%	-6.8%	1.1%			



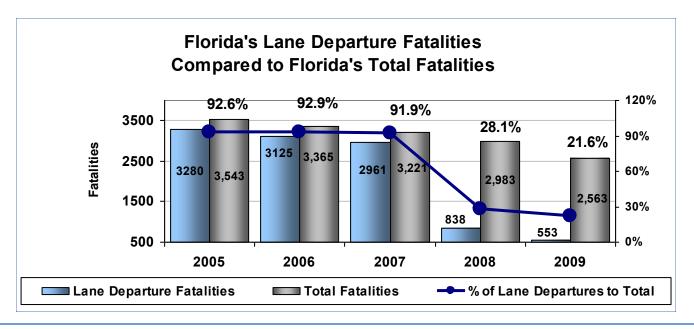
#### LANE DEPARTURES

Lane departure crashes include running off the road, crossing the center median into an oncoming lane of traffic, and sideswipe crashes. Running off the road may also involve a rollover or hitting a fixed object. To reduce the incidence of fatalities, efforts are being made to: (1) keep vehicles from leaving the road or crossing the median; (2) reduce the likelihood of vehicles overturning or crashing into roadside objects; and (3) minimize the severity of an overturn. Examples of these are: (1) installing over 600 miles of rumble strips; (2) installing median guard rail and canal protection barriers; (3) collision avoidance training for teens; and, (4) Move Over Law Enforcement (5).

In prior years, lane departures also included any of the above events at or influenced by intersections. Since intersection crashes are a separate measure, events associated with intersections are not included in the data beginning with 2008. Lane departures now account for approximately 22% of highway fatalities, and the Department will continue to invest in infrastructure improvements to lessen the occurrence of these fatalities.

Roadway Departure							
Performance Indicator:	Percent of roadway departure fatalities to total fatalities						
	2005 2006 2007 2008 2009						
Roadway Departure Fatalities	3,280	3,125	2,961	838	553		
Total Fatalities	3,533	3,365	3,221	2,983	2,563		
% of Roadway Departure Fatalities to Total Fatalities	92.8%	92.9%	91.9%	28.1%	21.6%		

Performance Indicator:	Change in Florida's Roadway Departure rate						
	compared to the previous year's rate						
	2005 2006 2007 2008 2009						
Roadway Departure Fatalities	3,280	3,125	2,961	838	553		
Rate Change From Prior Year	3.9% 0.0% -0.9% -63.8% -6.5%						
% Change From Prior Year	4.4%	0.0%	-1.0%	-69.4%	-23.2%		



# **Engineering**

# Education





# **Enforcement**

**Emergency Services** 





#### THE FOUR E'S

**Engineering:** This aspect of safety involves the design and maintenance of the roadway, intersections, and shoulders and clear recovery areas. Improving signalization, signage, guardrail, slope, geometry, audibility and visibility of lane delineation are some of the engineering tools employed. The Department also removes obstructions and installs canal protection devices to reduce the severity of injury if a lane departure occurs.

**Enforcement:** Enforcement of Florida's traffic laws on all public roads (state, county, and city) is the responsibility of the following law enforcement agencies:

- FDOT Office of Motor Carrier Compliance;
- Florida Highway Patrol (FHP);
- Florida Wildlife Conservation Commission;
- County Sheriffs, within their county boundaries; and,
- City police, within their city limits.
- Florida Wildlife Commission
- Department of Environmental Protection

**Education:** Traffic safety education of the public ranges from programs for young children to those tailored for elders, and it includes such topics as vehicle operator skills and vehicle safety, use of safety restraints, operator impairment (drugs or alcohol), emergency preparedness, pedestrian and bicycle safety, information on new laws or technologies, etc. Many agencies educate or train in highway safety-related areas.

**Emergency Services:** This category includes first responders and support agencies that prepare for, respond to, and assist in recovery efforts from natural disasters and other emergencies. Some agencies respond to individual crashes with medical and other services. Other agencies operate traffic and incident management systems using intelligent transportation systems (ITS) technology during traffic incidents, emergencies, and planned events to inform and re-route traffic, prevent secondary incidents and coordinate rapid emergency response.

# **Highway Safety Report for Calendar Year 2009**







#### SUMMARY OF FLORIDA'S HIGHWAY SAFETY PERFORMANCE FOR 2009

Motor vehicle travel is the primary means of transportation in the United States, providing an unprecedented degree of mobility. However, this exceptional degree of mobility comes at a significant cost in terms of fatalities and injuries. According to the National Highway Transportation Safety Administration (NHTSA) motor vehicle crashes are the leading cause of death for persons of every age from 3 through 33. Traffic fatalities account for more than 90 percent of transportation related fatalities.

Florida traffic crash statistics are gathered on a calendar year basis and are reported to NHTSA in the following calendar year. The data from NHTSA is generally available during the fall of the year, while the data from the State is generally available in June following the statistical year. (that is, 2009 data available in the fall and summer of 2010). For Calendar Year 2009:

#### Total Highway Fatalities:

- ⇒ State mileage death rate decreased to 1.30 deaths per 100 million vehicle miles traveled (VMT) in 2009 but is 15% higher than the national average (1.13)
- ⇒ Traffic fatalities in 2009 decreased 14.1% (420 fatalities) from 2008. Florida led the nation in absolute terms in the reduction in the number of fatalities.
- Car and Truck Occupants: The fatality rate fell to .80 per 100 million VMT and is 2.4% above the national average of .78.
- **Motorcyclists**: The fatality rate declined to 61.9 per 100,000 registered motorcycles and is 7.1% above the national average of 57.8. There were 130 fewer deaths in 2009.
- **Pedestrians**: The fatality rate declined by 3.0% to 2.59 per 100,000 population, however, the Florida rate increased to 94.2% above the national average of 1.33.
- **Bicyclists/Pedalcyclists**: The fatality rate declined to .54 per 100,000 population (from .63 in 2008) and declined to 161.7% (from 165.3%) above the national average of .21.
- Occupant Protection: The use of occupant safety restraints increased to 85.2% and the fatality rate of those unrestrained decreased (to .59 per 100 million VMT). Florida has surpassed the national use rate for the past two years.
- **Young Drivers**: The fatal crash rate for drivers under age 25 declined to 3.39 per 10,000 licensed drivers, and declined to 83.9% above the national average.
- **Alcohol-Related**: The fatal crash rate declined by 13.3% (152 fewer fatal crashes), however, Alcohol-related crashes still account for 38.8% of all Florida fatal crashes.

#### FLORIDA'S FATALITY RATE COMPARED TO THE NATIONAL RATE

This secondary performance measure is statewide in scope and covers the key areas of safety performance on all public roads in Florida. Although not under the full control of the Department of Transportation, this measure brings attention to the necessity for comprehensive statewide solutions. This secondary performance measure is also reported in the Commission's *Performance and Production Review of the Florida Department of Transportation, FY 2010.* 

**Secondary Measure:** Florida's highway fatality rate per 100 million vehicle miles traveled (VMT) compared to the national highway fatality rate.

**Objective:** Bring Florida's fatality rate to within 5% of the national rate by FY 2011.

**Results:** The Department exceeded its stated goal of a 5% reduction in the fatality rate as stated in the SHSP. The number of fatalities fell by 14.2% (420). As a result, Florida's fatality rate declined to 15% above the national average.

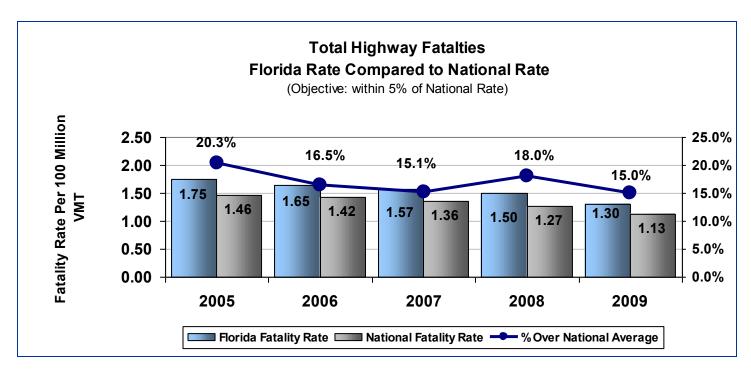
The Department has met the goal to be at or below 1.30 fatalities per 100 million VMT; however, the fatality rate still remains well above the national rate.

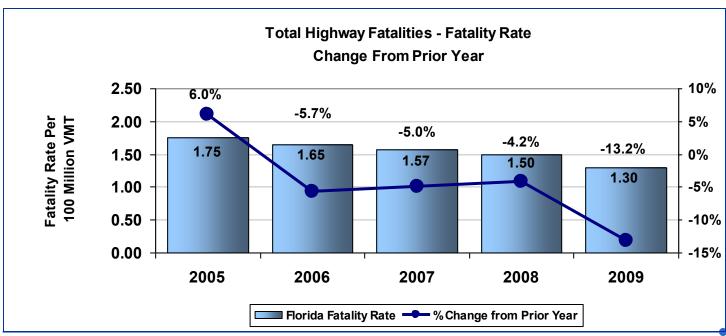
Secondary Measure:	Florida's highway fatality rate per 100 million vehicle miles traveled (VMT) compared to the national highway fatality rate							
	2005	2006	2007	2008	2009			
Florida Fatality Rate	1.75	1.65	1.57	1.50	1.30			
National Fatality Rate	1.46	1.42	1.36	1.27	1.13			
% Florida over National Rate	20.3% 16.5% 15.1% 18.0% 15.0%							
		Objective: By ublic roads to						

Secondary Measure:	Florida's highway fatality rate per 100 million vehicle miles traveled (VMT) compared to the previous year's rate						
	2005 2006 2007 2008 2009						
Florida Fatality Rate	1.75	1.65	1.57	1.50	1.30		
Rate Change from Prior Year	0.10	-0.10	-0.08	-0.07	-0.20		
% Change from Prior Year	6.0%	-5.7%	-5.0%	-4.2%	-13.2%		
	Short Range Objective: By 2011, reduce Florida's highway fatality rate on all public roads to or below 1.30 fatalities per 100 million VMT						

#### PERFORMANCE MEASURE

An important measure for gauging progress is the change in fatality rate from year to year. Although the Department does not have full control of all factors relating to this measure, the funding commitments the Department makes to safety programs should have an impact on reducing the fatality rate over the previous year.





#### HIGHWAY SAFETY PERFORMANCE INDICATORS

The following indicators were developed and approved by the Florida Transportation Commission's Performance Measures Working Group as a tool to assess the Department's ability, through its safety program funding and management, to affect the various demographic components that comprise the overall fatality rate.

Car and Truck occupant fatalities fell 252 or 13.8% in 2009. Although that is a significant drop in fatalities, the Florida rate stood at 2.4% above the national average. But it should be observed that the performance in this area has significantly improved each year since 2005.

A forward looking analysis shows that an 8% annual reduction in the fatality rate will be required to meet the Commissions goals by 2011.

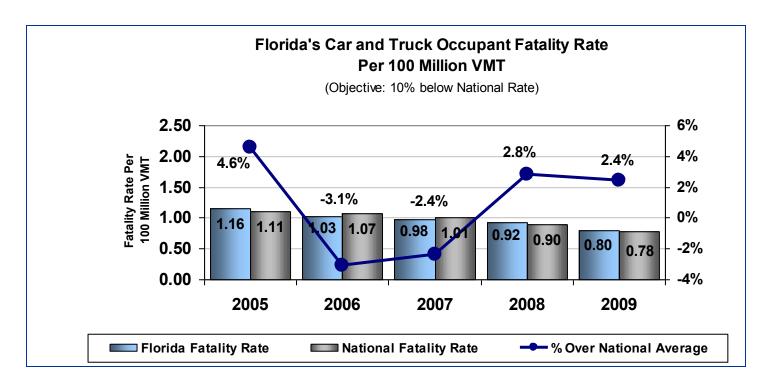
#### CAR AND TRUCK OCCUPANTS—FATALITY RATE— FLORIDA RATE COMPARED TO NATIONAL RATE

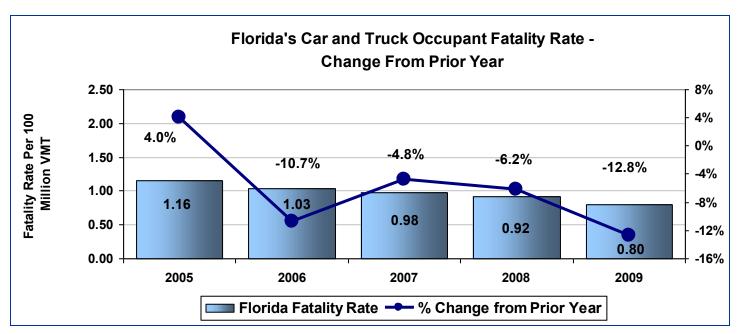
Performance Indicator:	Florida's car and truck occupant fatality rate per 100 Million vehicle miles traveled (VMT) compared to the national car and truck occupant fatality rate						
	2005 2006 2007 2008 2009						
Florida Fatality Rate	1.16	1.03	0.98	0.92	0.80		
National Fatality Rate	1.11	1.07	1.01	0.90	0.78		
% Florida over National Rate	4.6%	-3.1%	-2.4%	2.8%	2.4%		
	Short Range Objective: By 2011, reduce Florida's car and truck occupant highway fatality rate on all public roads to 10% below the the national car and truck fatality rate						

Performance Indicator:	Florida's car and truck occupant fatality rate per 100 million vehicle miles traveled (VMT) compared to the previous year's rate						
	2005	2006	2007	2008	2009		
Florida Fatality Rate	1.16	1.03	0.98	0.92	0.80		
Rate Change from Prior Year	0.04	-0.12	-0.05	-0.06	-0.12		
% Change from Prior Year	4.0%	-10.7%	-4.8%	-6.2%	-12.8%		
	Short Range Objective: By 2011, reduce Florida's car and truck occupant highway fatality rate on all public roads to or below 0.7 per						

#### FLORIDA'S CAR AND TRUCK FATALITY RATE

The Car and Truck Occupant Fatality Rate, and the change in rate over the previous year, have been fluctuating over the past several years. After a significant increase in 2005, the fatality rate has declined in each subsequent year.





#### MOTORCYCLISTS FATALITY RATE

#### **OVERVIEW:**

Motorcycle fatalities in 2009 dropped by 130 from 2008. The fatality rate fell measurably due to the 24.6% decrease in fatalities. Educational and enforcement efforts are being credited with the reduction in fatalities

Preliminary data indicates that due to the large reduction in fatalities in 2009, the Department has met the goals established for 2011.

#### **BEST PRACTICES:**

Although the State of Florida does not have a universal helmet law, riders under the age of 21 must wear a helmet. Those riders 21 or older and who are covered by an insurance policy providing at least \$10,000 in medical benefits are exempt from wearing a helmet.

As of July 1, 2008, completion of the Basic Rider Course through the Florida Rider Training Program must be completed before the motorcycle endorsement can be added to a riders license (section 322.12 (5) F. S.).

In 2008, the FDOT, DHSMV, Department of Health (DOH), ABATE (American Bikers Aimed Towards Education), Insurers, Law Enforcement and others created the Motorcycle Safety Coalition and created a Strategic Plan and a Business Plan to address motorcycle safety.

Educational programs are designed for both motorcyclists and motorists. These programs include *Share the Road* and *Look Twice*, *Save a Life* campaigns.

Other programs for motorcyclists include *None for the Road* and *Ride Straight - State to State*, which targets driving under the influence and included partnering with other Southern States.

According to the NCHRP (National Cooperative Highway Research Program) report, *Counter Measures That Work*, roadway design, traffic control, construction and maintenance policies and practices are experimental strategies. Educational and outreach programs are experimental or are unproven. Strategies to promote helmet use, discourage the use of alcohol, rider licensing or training, and conspicuity programs are low in effectiveness. The only proven and effective measure to reduce fatalities is state motorcycle helmet laws.

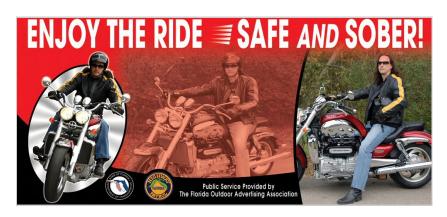
#### MOTORCYCLISTS FATALITY RATE

Florida's motorcycle fatality rate remains well above the national average. Factors contributing to this high rate of fatalities are the repeal of the motorcycle helmet law and a sharp increase in motorcycle sales to the "baby boomer" generation. At this point, Florida has met both 2011 goals.

#### FLORIDA RATE COMPARED TO NATIONAL RATE

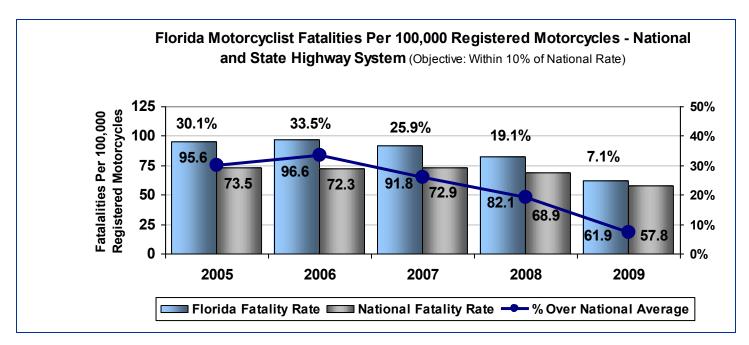
Performance Indicator:		Florida's motorcyclist fatality rate per 100,000 registered motorcy- compared to the national motorcyclist fatality rate							
	2005								
Florida Fatality Rate	95.60	96.55	91.81	82.10	61.92				
National Fatality Rate	73.48	72.34	72.94	68.93	57.79				
% Florida over National Rate	30.1%	33.5%	25.9%	19.1%	7.1%				
	Short Range Objective: By 2011, reduce Florida's motorcyclist								
	Fatality rate	to within 10%	of the national	l motorcyclist	fatality rate				

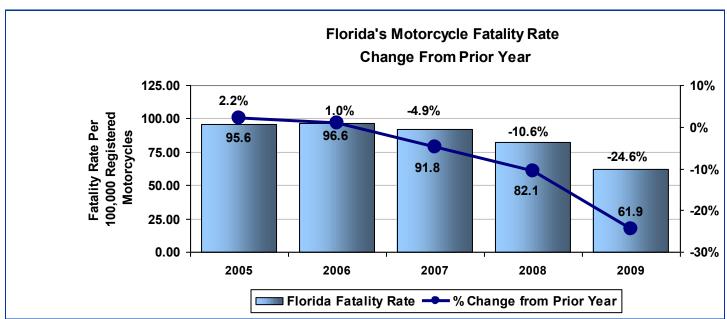
Performance Indicator:	Florida's motorcyclist fatality rate per 100,000 registered motorcycles compared to the previous year's rate						
	2005 2006 2007 2008 2009						
Florida Fatality Rate	95.60	96.55	91.81	82.10	61.92		
Rate Change from Prior Year	2.1	1.0	-4.7	-9.7	20.2		
% Change from Prior Year	2.2%	1.0%	-4.9%	-10.6%	-24.6%		
	Short Range (	Objective: By	2011, reduce	Florida's moto	rcyclist		
	fatality rate on all public roads to or below 70.0 fatalities per 100,000 registered motorcycles						



#### MOTORCYCLISTS FATALITY RATE

There were 130 fewer motorcycle fatalities in 2009. Florida began a major motorcycle initiative in 2008 that promotes safety, raising other motorists awareness of motorcycles and cracking down on risky and reckless motorcycle behaviors. Continued education and enhanced enforcement efforts appear to be making a difference.





#### PEDESTRIANS FATALITY RATE

#### **OVERVIEW:**

Pedestrian fatalities decreased in 2009 by 4.0% from those reported in 2008 (482 compared to 502, a decrease of 20). Most pedestrian fatalities occur in urban areas, at non-intersection locations, in normal weather conditions, and at night. Alcohol involvement, either for the driver or the pedestrian, was reported in 46% of traffic crashes that involved pedestrians. Of the 482 pedestrians killed in traffic crashes in 2009, 195 (40.5%) had been drinking (an increase of 7%).

#### **BEST PRACTICES:**

According to the NCHRP report, examples of proven engineering practices include:

- Providing sidewalks/walkways and curb ramps, installing or upgrading traffic and pedestrian signals, constructing pedestrian refuge islands and raised medians, providing vehicle restriction/diversion measures, and installing overpasses/underpasses. The use of "Count Down" pedestrian signals are an effective intersection enhancement. Florida uses these signals as well as installing "median refuges" or "islands" at larger intersections. Providing crosswalk enhancements, implementing lighting/crosswalk illumination measures and installing traffic calming for both roads and intersections.
- Educational, outreach and training programs are also proven strategies for improving pedestrian and motorist awareness.
- For school-aged children, elementary school pedestrian training, safe routes to school (SFRTS), child school bus training and model "ice cream vendor" ordinances have proven effective in reducing fatalities. These ordinances spell out traffic rules governing how one passes a stopped ice cream truck and other rules to keep children safe around ice cream trucks. Florida has had a form of "ice cream vendor" ordinance in place since 2001.
- The Department has established a statewide initiative to improve pedestrian and bicycle safety and has created the Bicycle and Pedestrian Partnership Council. The Council includes representatives from state agencies, local governments and external stakeholders such as walkers, bicyclists and trail users.
- NHTSA recently awarded a major grant to the Department's District 7 as a demonstration project to create comprehensive pedestrian safety programs, including an enforcement component during the next 3 years. The strategies include infrastructure improvements that make it safer to walk, along with better education and enhanced enforcement.

#### PEDESTRIANS FATALITY RATE

There were 20 fewer pedestrian fatalities in Florida in 2009 and the fatality rate declined to 2.59 per 100,000 population. Though the Florida rate declined in 2009, it rose to 94.2% above the national average.

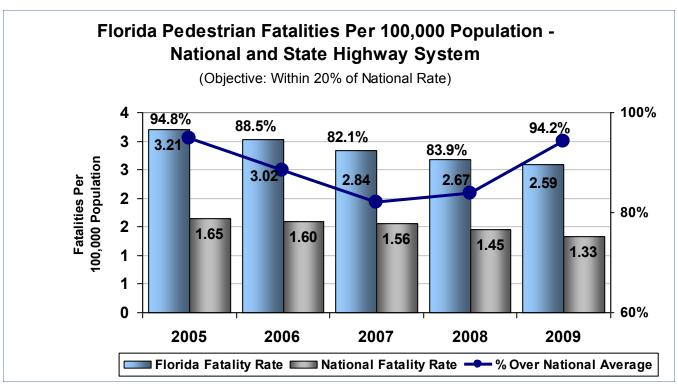
In January, 2009, the Commission challenged the Department to achieve a 10% annual reduction in pedestrian fatalities. The challenge was to achieve a goal of no more than 1.6 pedestrian fatalities per 100,000 population. A forward looking analysis indicates that an annual reduction in the pedestrian fatality rate will have to exceed 18% in order to meet the challenge and attain the goal.

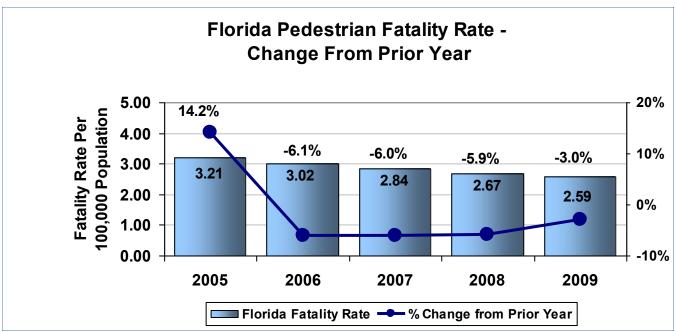
#### FLORIDA RATE COMPARED TO NATIONAL RATE

Performance Indicator:	Florida's pedestrian fatality rate per 100,000 population compared to the national pedestrian fatality rate						
	2005	2006	2007	2008	2009		
Florida Fatality Rate	3.21	3.02	2.84	2.67	2.59		
National Fatality Rate	1.65	1.60	1.56	1.45	1.33		
% Florida over National Rate	94.8%	88.5%	82.1%	83.9%	94.2%		
	Short Range Objective: By 2011, reduce Florida's pedestrian fatality rate on all public roads to within 20% of the national pedestrian fatality rate						

	Florida's pedestrian fatality rate per 100,000 population compared to the previous year's rate						
	2005 2006 2007 2008 2009						
Florida Fatality Rate	3.21 3.02 2.84 2.67						
Rate Change from Prior Year	0.4 -0.2 -0.2 -0.2						
% Change from Prior Year	14.2%	-6.1%	-6.0%	-5.9%	-3.0%		
	Short Range Objective: By 2011, reduce Florida's pedestrian fatality rate on all public roads to or below 1.6 fatalities per 100,000 population						

#### PEDESTRIANS FATALITY RATE





#### BICYCLISTS/PEDALCYCLISTS FATALITY RATE

#### **OVERVIEW:**

Bicyclist fatalities declined by 15.3% in 2009 from those reported in 2008 (from 118 to 100). Fatal bicycle crashes exhibit the same patterns as pedestrian fatal crashes in that most (60%) occur in conditions other than daylight. Road users have failed to appreciate the magnitude of the problem and cyclists have failed to appreciate the benefits of reflective gear or lights. Recent work suggests that educational interventions can increase road users' awareness of the need to be conspicuous and can demonstrate behaviors that increase nighttime safety.

#### **BEST PRACTICES:**

In addition to helmet laws for children and adults, education and enforcement appear to be the next most effective means for reducing bicyclist fatalities. Engineering improvements would include adding bicycle lanes when constructing or reconstructing highways.

As previously indicated, the FDOT has established a statewide initiative to improve pedestrian and bicycle safety and has created the Bicycle and Pedestrian Partnership Council. The Council includes representatives from state agencies, local governments and external stakeholders such as walkers, bicyclists and trail users. The Council will make recommendations on design, planning, safety and other programs involving bicycle and pedestrian issues.

With varying degrees of success, according to the NCHRP, examples of education and enforcement activities include:

- Share the Road awareness campaigns.
- Educational programs focusing on *riding with traffic*, not against traffic.
- Educational programs emphasizing the benefits of wearing a helmet and reflective clothing and using reflectors and lights at night.
- Enforcement programs that provide warnings or tickets to bicyclists who violate traffic regulations related to riding in the wrong direction, and those running red lights, making illegal turns, or riding at night without functioning lights.

All of the identified educational programs are currently being used in Florida.

#### BICYCLISTS/PEDALCYCLISTS FATALITY RATE

The Department's impact on this indicator is limited to the planning and designing of bikeways in new construction and the widening of highway projects. Education for drivers and bicyclists along with enforcement of traffic laws will also have an impact on reducing this fatality rate. Although the fatality rate declined in 2009, it has continued to remain well above the national average.

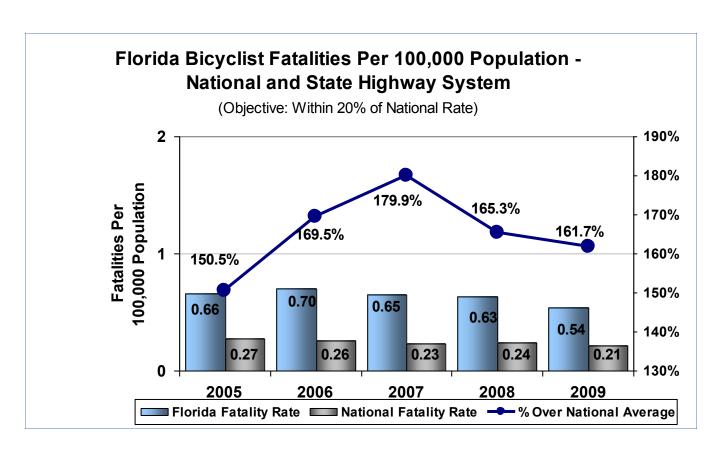
In January, 2009, the Commission challenged the Department to achieve a 10% annual reduction in bicyclist fatalities. The challenge was to achieve a goal of no more than .4 bicyclist fatalities per 100,000 population. A forward looking analysis indicates that an annual reduction of greater than 10% will be required to meet the challenge and attain the goal.

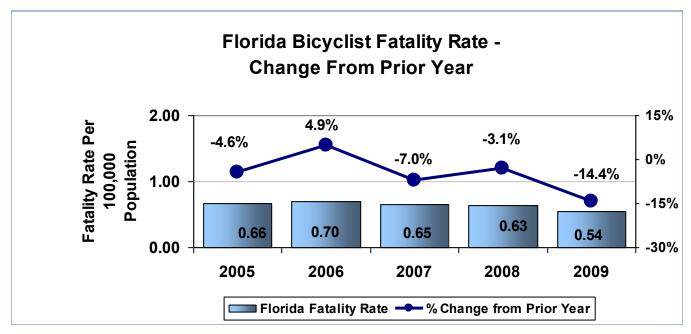
#### Bicyclists—Fatality Rate—Florida Rate Compared to National Rate

Performance Indicator:	Florida's bicyclist fatality rate per 100,000 population compared to the national bicyclist fatality rate						
	2005	2006	2007	2008	2009		
Florida Fatality Rate	0.66	0.70	0.65	0.63	0.54		
National Fatality Rate	0.27	0.26	0.23	0.24	0.21		
% Florida over National Rate	150.5%	169.5%	179.9%	165.3%	161.7%		
	Short Range Objective: By 2011, reduce Florida's bicycle fatality rate on all public roads to within 50% of the national bicycle fatality rate						

Performance Indicator:	Florida's bicyclist fatality rate per 100,000 population compared to the previous year's rate						
	2005 2006 2007 2008 2009						
Florida Fatality Rate	0.66	0.70	0.65	0.63	0.54		
Rate Change from Prior Year	-0.03	0.03	-0.05	-0.02	-0.09		
% Change from Prior Year	-4.6%	4.9%	-7.0%	-3.1%	-14.4%		
Short Range Objective: By 2011, reduce Florida's bicyclist fatality rate on all public roads to or below 0.4 fatalities per 100,000 population							

#### BICYCLISTS/PEDACYCLISTS FATALITY RATE





#### OCCUPANT PROTECTION USAGE AND FATALITY RATE

#### **OVERVIEW:**

Fatalities for unrestrained car and truck occupants decreased by 15.5% in 2009 as compared to 2008 (from 1,085 to 917, a decrease of 168). Safety belt usage increased to 85.2% (from 81.7% in 2008). (NOTE: Safety belt usage is 87.4% in 2010, above the national average of 84%).

Usage of safety belts varies widely from state to state, reflecting factors such as differences in public attitudes, enforcement practices, legal provisions, and public information and education programs.

Pickup truck drivers and their passengers continue to be among the lowest safety belt wearers.

#### **BEST PRACTICES:**

An overall program that includes a public awareness campaign, increased enforcement and a primary safety belt law has proven to be the best strategy to both increase safety belt usage and decrease the number of injuries and fatalities attributed to not wearing safety belts.

- The Florida Legislature passed, and the Governor signed, a Primary Safety Belt law June 30, 2009.
- "Click It or Ticket" awareness waves that are sustained and that do not occur only during media campaign blitzes are effective.
- In Florida, State and local law enforcement agencies along with AAA and AARP, also conduct random vehicle safety checks or "CarFit" events throughout the year. The whole car gets a thorough check and it costs the driver nothing.

#### OCCUPANT PROTECTION USAGE AND FATALITY RATE

In 2009, 59% of fatalities occurred where the driver or occupant was not using safety belts. In addition to the Primary Safety Belt Law, focused education and enforcement are activities that positively affect safety belt usage. Child passenger seat giveaways, with multi-lingual education on usage and special needs seat programs have been of benefit in reducing fatalities. Florida is one of only two states that does not have a booster seat law and was cited by the National Transportation Safety Board (NTSB) as having the most lenient child passenger safety law in the nation.

#### FLORIDA USAGE AND FATALITY RATES

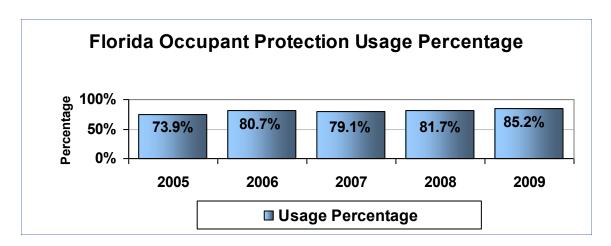
Performance Indicator:	Florida Occupar	nt Protection Usa	age Percentag	je	
	2005	2006	2007	2008	2009
% of Usage	73.9%	80.7%	79.1%	81.7%	85.2%

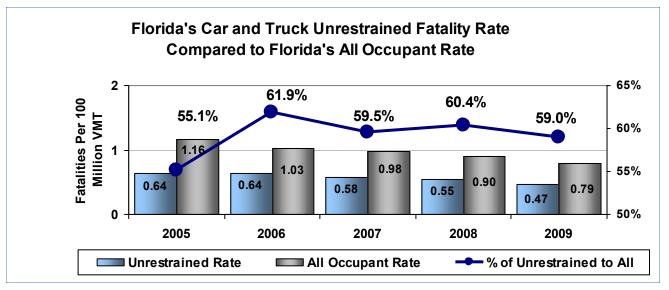
Performance Indicator:	Florida's car and truck unrestrained occupant fatality rate per 100 Million vehicle miles traveled (VMT) compared to Florida's car and truck all occupant fatality rate					
	2005	2006	2007	2008	2009	
Florida Unrestrained Car & Truck Occupant Fatality Rate	0.64	0.64	0.58	0.55	0.47	
Florida Car & Truck Occupant Fatality Rate	1.16	1.03	0.98	0.90	0.79	
% Unrestrained to All	55.1%	61.9%	59.5%	60.4%	59.0%	

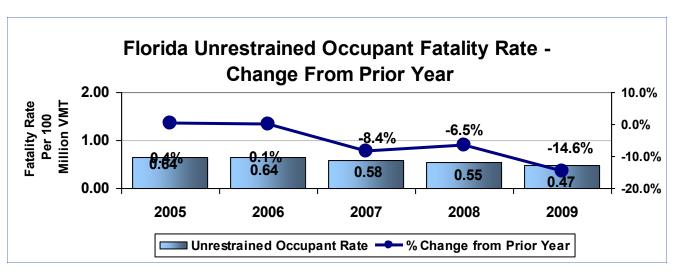
Performance Indicator:	Florida's car and truck occupant fatality rate compared to the						
	previous year's	previous year's rate					
	2005	2006	2007	2008	2009		
Florida Unrestrained Car & Truck Occupant Fatality Rate	0.64	0.64	0.58	0.55	0.47		
Rate Change From Prior Year	0.00	0.00	-0.05	-0.04	-0.08		
% Change From Prior Year	0.4%	0.1%	-8.4%	-6.5%	-14.6%		



#### OCCUPANT PROTECTION USAGE AND FATALITY RATE







#### YOUNG DRIVERS FATAL CRASH RATE

#### **OVERVIEW:**

Fatal crashes involving young drivers (under the age of 25) decreased by 20.6% in 2009 compared to 2008 (from 878 to 697, a decrease of 181). Young drivers are more likely to engage in risky driving behaviors, such as speeding and tailgating, and lacking experience, they are the least able to cope with hazardous situations. Focus group studies indicate that teens do not see anything wrong with underage drinking, only buckle up with safety belts from fear of enforcement, are distracted by too many occupants (particularly other teens), and "feel the need to speed".

#### **BEST PRACTICES:**

- Limit the number of passengers under the age of 18 riding with teen drivers. The risk of a crash involving a teen driver increases with each additional teen passenger in the vehicle.
- Improve the process of testing young drivers to obtain a driver's license.
- Enhance the Graduated Driver's License (GDL) program and enforce compliance. Enhancements could include requiring more driving hours with a restricted license before being eligible for a license; requiring more adult supervisory hours; limiting eligible nighttime hours of driving; and limiting the number of teens allowed as passengers for a longer period.
- Enhance driver education opportunities.
- Enhance enforcement of driver license restrictions and safety belt usage, and increase DUI checkpoint opportunities.

In Florida, drivers <u>under</u> 17 years of age, when operating a motor vehicle after 11 p.m. and before 6 a.m., must be accompanied by a driver who holds a valid driver's license and is at least 21 years of age, unless that person is driving directly to or from work. Also, drivers who are 17 years of age have the same requirement during the hours after 1 a.m. and before 5 a.m., unless driving directly to or from work. Safety belt usage for all drivers and occupants under the age of 18 is mandatory.

#### YOUNG DRIVERS FATAL CRASH RATE

Drivers under the age of 25 are nearly twice as likely to be involved in a fatal crash than a driver 25 years of age or older. The Department has limited ability to affect this indicator.

Young driver fatal crashes decreased 19.3% in 2009 while fatal crashes of older drivers decreased by 17.1%.

In January 2009, the Commission adopted a resolution challenging the Department to "reduce the rate of fatal crashes by young drivers (under 25 years of age) to no more than 50% above the rate of drivers 25 years and older" by 2011. A 14% reduction in fatal crashes will have to occur over the next two years in order to meet this challenge.

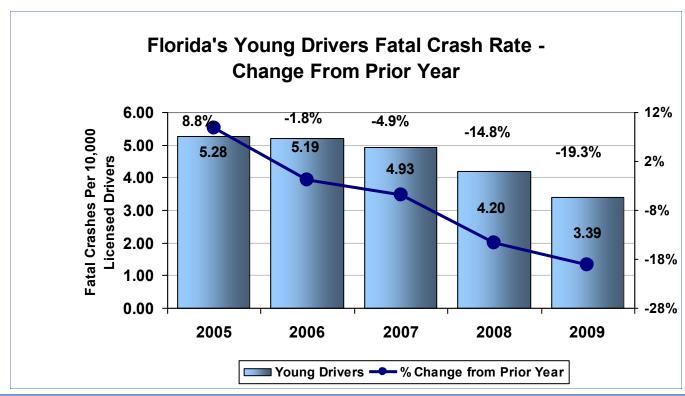
#### FLORIDA FATAL CRASH RATES

Performance Indicator:	Rate per 10,000 licensed drivers of young drivers (under age 25) involved in fatal crashes compared to drivers 25 or older				
	2005	2006	2007	2008	2009
Rate of Young Drivers Involved in Fatal Crashes	5.28	5.19	4.93	4.20	3.39
Rate of Drivers 25 and Older Involved in Fatal Crashes	2.56	2.42	2.28	2.22	1.84
% of Young Drivers Over Drivers Aged 25 and Older	106.1%	114.2%	116.0%	89.7%	83.9

Performance Indicator:	Rate per 10,000 licensed drivers of young drivers (under age 25) involved in fatal crashes compared to the previous year's rate					
	2005	2006	2007	2008	2009	
Rate of Young Drivers Involved in Fatal Crashes	5.28	5.19	4.93	4.20	3.39	
Rate Change From Prior Year	0.43	-0.10	-0.25	-0.73	-0.82	
% Change From Prior Year	8.8%	-1.8%	-4.9%	-14.8%	-19.3%	

#### YOUNG DRIVERS FATAL CRASH RATE





#### ALCOHOL-RELATED FATAL CRASH RATE

#### **OVERVIEW:**

The percent of alcohol-related fatal crashes in 2009 remained constant at the 2008 level of 38.8% of total fatal crashes. Although alcohol-related fatal crashes declined (from 1,073 to 921) by 14.2%, total fatal crashes also declined by 14.2%. Alcohol-related fatal crashes are not just restricted to passenger vehicles; fatal crashes also involve impaired motorcyclists, bicyclists, and pedestrians. Although the number of alcohol-related fatal crashes has declined steadily since 2005, the percent of alcohol-related fatal crashes compared to total fatal crashes has remained fairly constant.

Efforts over the past 20 years have had significant impacts on the reduction in alcohol-related fatal crashes. Legislation lowering the allowable blood alcohol limit, DUI checkpoints and saturation waves along with public service announcements and public education have contributed to the reduction in alcohol-related fatal crashes.

#### **BEST PRACTICES:**

- Starting January 1, 2009, all high Blood Alcohol Content (BAC) and repeat offenders will be required, by law, to have Ignition Interlock Devices (IID's) installed in Florida.
- Checkpoints: frequent, highly publicized DUI checkpoints are one of the best ways to reduce impaired driving crashes and fatalities. While saturation patrols produce more DUI arrests, checkpoints have proven to produce more of a deterrent effect (at least 400 checkpoints are conducted in Florida each year).
- Florida has created an Impaired Driving Coalition which includes law enforcement, the Judiciary, the State Attorney's Office, Florida Department of Law Enforcement, Mothers Against Drunk Driving, and the Governor's Office of Drug Policy among others to tackle the variety of complex issues surrounding impaired driving. There are 29 dedicated members who have met four times since April 2010 and are developing a strategic plan.
- Education and public service announcements are somewhat effective.
- Enforcement of strict DUI laws and driver license suspensions can be very effective.

#### ALCOHOL-RELATED FATAL CRASH RATE

In January 2009, the Commission also challenged the Department to reduce alcohol-related fatal crashes to less than 30% of total crashes. In order to achieve this objective, alcohol-related crashes will need to decline by more than 15% annually.

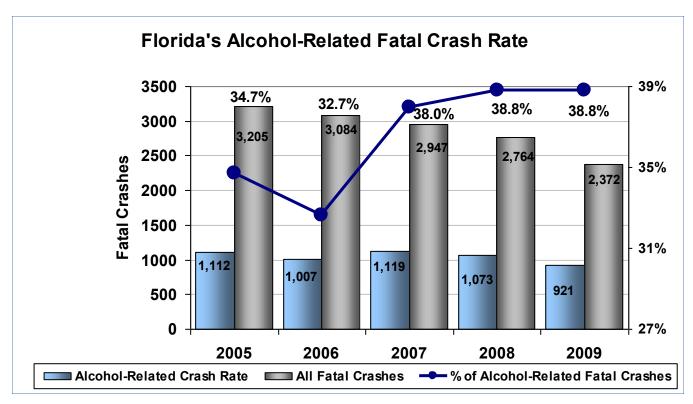
Of drinking drivers in crashes, 21 year old drivers had the highest involvement rate in all crashes and in fatal crashes.

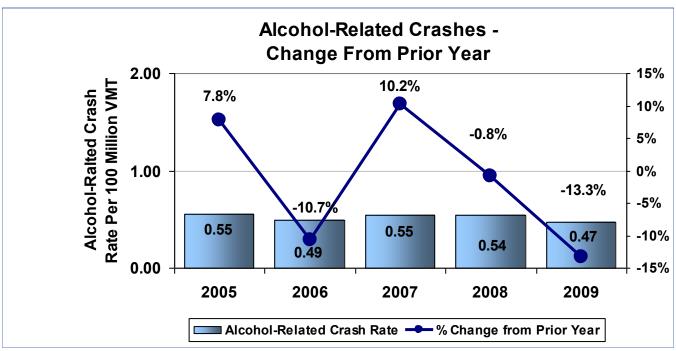
#### **CRASH RATE**

Safety Indicator:	Percent of alcohol-related fatal crashes to all fatal crashes.						
	2005	2006	2007	2008	2009		
Florida Alcohol-Related Fatal Crashes	1,112	1,007	1,119	1,073	921		
All Florida Fatal Crashes	3,205	3,084	2,947	2,764	2,372		
% Alcohol-Related Fatal Crashes	34.7%	32.7%	38.0%	38.8%	38.8%		

Safety Indicator:	Florida's alcohol-related crash rate per 100 million vehicle miles traveled (VMT) compared to the previous year's rate.						
	2005	2006	2007	2008	2009		
Florida Alcohol-Related Fatal Crash Rate	0.55	0.49	0.55	0.54	0.47		
Rate Change From Prior Year	0.04	-0.06	0.06	-0.01	-0.07		
% Change From Prior Year	7.8%	-10.7%	10.2%	-0.8%	-13.3%		

#### ALCOHOL-RELATED FATAL CRASH RATE





### References

# For National Statistics:

NHTSA's National Center for Statistics and Analysis, 2009 NHTSA's Annual Assessment of Motor Vehicle Crashes, 2009 National Cooperative Highway Research Program (NCHRP), Counter Measures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, 5th Edition 2010

# For Florida Statistics:

Florida Department of Highway Safety and Motor Vehicles Annual Performance Report Florida Department of Transportation Safety Office



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