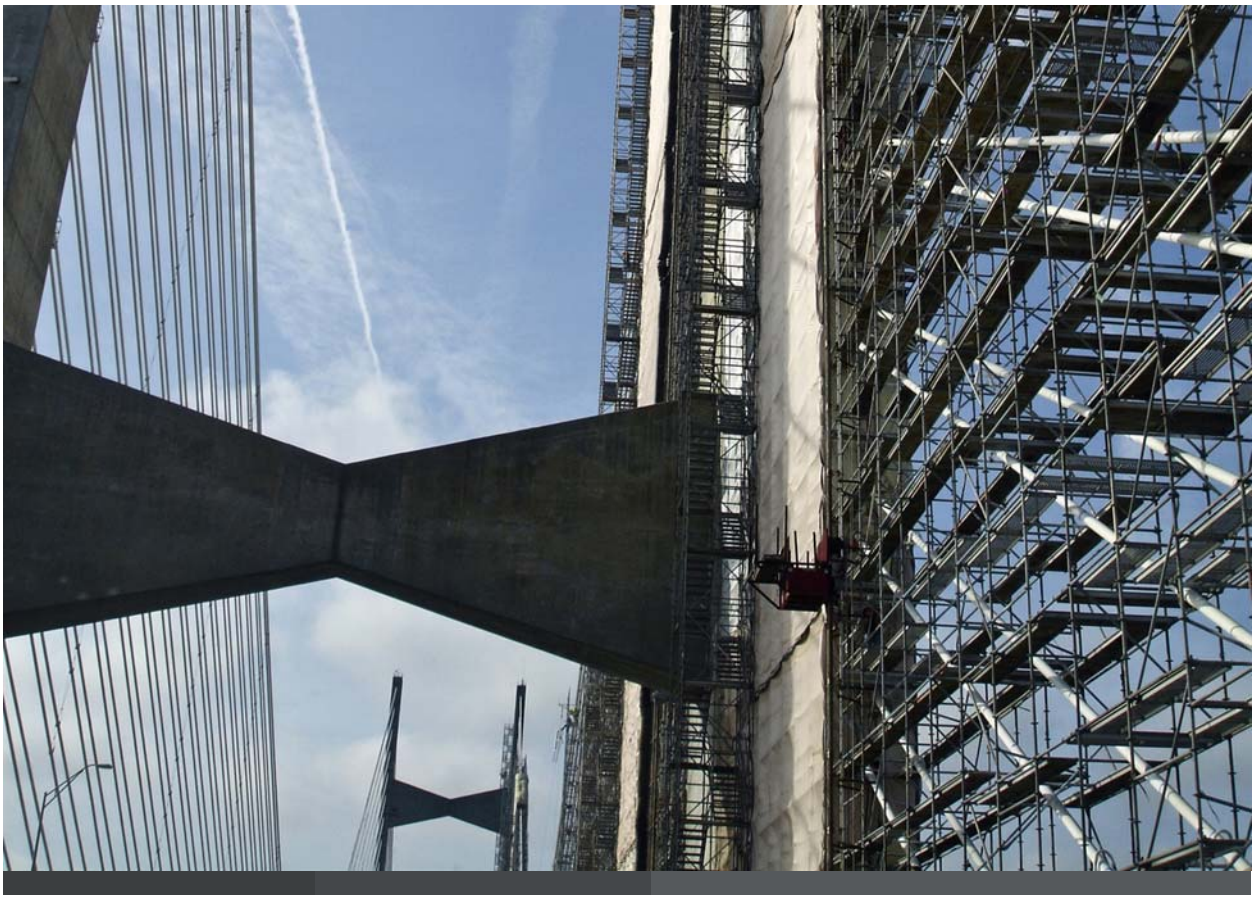

2025 Florida Transportation Plan

Performance Report

December 2009

This Performance Report provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.

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Introduction

The 2025 Florida Transportation Plan is a long-range transportation plan which identifies goals, objectives, and strategies to guide transportation decisions in Florida over the next 20 years. It addresses how Florida's transportation system can meet the mobility needs of our growing population, help make our economy more competitive, help build great communities, and help preserve our natural environment. It also addresses how to ensure our transportation system is safe and secure in a time of unprecedented public concern. Finally, it provides guidance on how transportation investments should be focused during a time of constrained funding, as well as how public and private transportation partners can most effectively work together to make these decisions.

The Florida Transportation Plan is a plan for all of Florida, not just the Florida Department of Transportation (department). It will take the collective efforts of many entities, each with well-defined roles and responsibilities, to implement the Florida Transportation Plan.

This Performance Report documents the department's short-term objectives and strategies to implement the goals and long-term objectives of the Florida Transportation Plan. It specifies how those objectives are being measured and provides the policy framework for the department's budget and work program.

The report is organized by the five goals of the Florida Transportation Plan:

- A safer and more secure transportation system for residents, businesses, and visitors;
- Enriched quality of life and responsible environmental stewardship;
- Adequate and cost-effective maintenance and preservation of Florida's transportation assets;
- A stronger economy through enhanced mobility for people and freight; and
- Sustainable transportation investments for Florida's future;

The 2025 Florida Transportation Plan, this report and other transportation planning information are available on the Internet at: www.dot.state.fl.us/planning. A transportation glossary of terms and acronyms used in planning is also available at this Web site.

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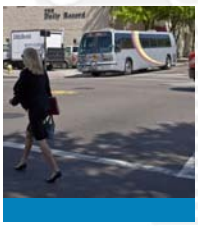
Performance Briefs

Safety and Security

December 2009

This Performance Brief provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.



Our Goal:
A Safer and More Secure Transportation System

Improving the safety of the transportation system is among the state's highest commitments to its residents and visitors. Safety improvements can save lives, enhance our quality of life, and support Florida's economic competitiveness. In today's global environment, it is also important to enhance the security of the transportation system for both people and freight while ensuring mobility.

In light of the importance of transportation safety, extensive efforts are invested in researching, monitoring, reporting, and improving safety. Transportation safety is perhaps the most complex aspect of transportation policy as it is affected by a multitude of factors such as: human traits and behaviors, technology, communications, enforcement, education, design, investment, and the natural environment including weather. The interactions of the individual, the vehicle, the infrastructure system, and the rest of the environment influence safety. Safety is an issue for every mode of transportation.

Our Long-Range Objectives:

The 2025 Florida Transportation Plan identifies four long-range safety and security objectives:

- Improve the safety of all modes of transportation comprising Florida's transportation system, for all users, including roadway intersections and locations where modes intersect.
- Reduce the rate of motor vehicle, bicycle, and pedestrian fatalities and serious injuries through design techniques and the application of the "4 Es" – engineering, education, enforcement, and emergency response strategies.
- Focus resources proactively where opportunities for safety improvements are greatest, as identified by best available data and trends.
- Improve the security of Florida's transportation system to deter and respond to attacks on transportation facilities or domestic targets, while ensuring mobility for all users.

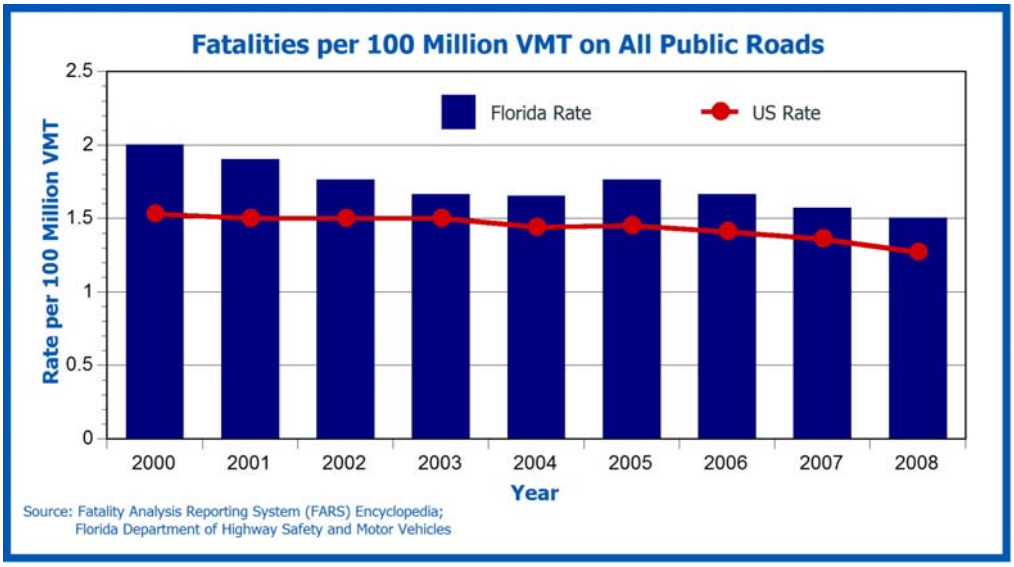
Our Short-Range Objective:
Through 2015, reduce by 5 percent annually, the highway fatality and serious injury rate per 100 million vehicle miles traveled.

To achieve our long-range objectives, the Florida Department of Transportation (department) has established the measurable short-range objective of achieving a

five percent annual reduction in the rate of traffic related fatalities and serious injuries beginning in 2007 and has identified many strategies for implementation. This objective is consistent with the goal established in Florida's Strategic Highway Safety Plan which was adopted in September 2006.

Highway safety experts use the number of highway fatalities per 100 million vehicle miles of travel (VMT) to calculate a "fatality rate." It includes motor vehicle and motorcyclist fatalities as well as bicyclist and pedestrian fatalities involving motor vehicles.

Florida has made progress over the past three decades in reducing its highway fatality rate. However, the state remains behind most states and the national average. After an unexpected spike in 2005, Florida's highway fatality rate per 100 million VMT has declined in the past three years to 1.65 in 2006, 1.57 in 2007 and 1.50 in 2008, which reflects a five percent reduction. In 2008, 2,983 people died on all roads in Florida, the third consecutive year to see a decrease. There was a 15.6% decrease in fatalities from 2005 to 2008. Various factors could have an impact on this decline – the economic conditions, increased safety of vehicles, safety programs and initiatives and fewer vehicles on the road.



Nevertheless, in 2008, Florida averaged 665 crashes per day. Nearly one out of three highway deaths occurred at roadway intersections, and nearly one out of five were pedestrians or bicyclists. In 2008, over six of 10 highway fatalities in Florida were car or truck occupants. The rest were bicyclists, motorcyclists and their passengers, and pedestrians.

Even with safer highway design, safer motor vehicles, increased safety belt use, increased and improved public education, vigorous enforcement of laws, and improved emergency response and trauma treatment, there is more work to do in reducing the fatality rate on all public roads.

Reducing traffic related injuries and fatalities requires the combined effort of federal, state, and local agencies, as well as the driving public. The department has little direct control over factors such as driver skills or impairment, the presence and use of safety equipment, vehicle condition, and weather. However, the department strives to make sure the design, construction, maintenance, and operation of the State Highway System meets safety standards. Pavements may need to be more skid-resistant or otherwise improved in areas where crash reports indicate problems with pavement conditions. Highway construction and repair sites must be clearly marked and traffic regulated through detours. Hazards within rights of way are identified and removed when possible.

The severity of crashes can be reduced by installing guardrails, dividing highways, adding paved shoulders, using break-away sign posts, and placing crash cushions at the end of roadside obstacles. The department ensures guardrails and other safety devices are in good condition. Night inspections of signs make sure they are just as visible then as during the day.

The department cannot, however, eliminate the need for good driver judgment – the most dominant factor in highway safety – in dealing with traffic signals, interchanges, and other potential points of conflict between system users. At best, the department can work to make the highway environment “as safe as possible.”

Strategic Highway Safety Plan (SHSP)

Traveling safely is the public’s highest expectation from the transportation system. This makes it an important aspect of Floridians’ quality of life. Ongoing coordination and effective working relationships with adequate support among all agencies is necessary to cover the many factors related to improving safety, such as driver skill level, driver impairment, the use of safety equipment, vehicle condition, and road and weather conditions.

In 2006, the department collaborated with the Federal Highway Administration and Florida’s state and regional safety partners and stakeholders, to develop a Strategic Highway Safety Plan. This plan defines a system, organization, and process for managing the attributes of the road, the driver, and the vehicle to achieve the highest level of highway safety by integrating the work of the disciplines and agencies involved.

Just as the Florida Transportation Plan is a plan for all of Florida's transportation partners, the Strategic Highway Safety Plan is a plan for all of Florida's safety partners. It will take the committed and sustained efforts of safety partners in every level of government, in the private sector, and in the "4 Es" of engineering, enforcement, education, and emergency response – all working together – to achieve successful implementation.

The purpose of Florida's Strategic Highway Safety Plan is to focus funding and other resources strategically on those problem areas where opportunity for improvement is greatest, measured by reductions in fatalities and serious injuries. "Improving the safety of Florida's surface transportation system [for residents and visitors] by achieving a five percent annual reduction in the rate of fatalities and serious injuries beginning in 2007" is the unifying goal of Florida's safety community and the overarching goal of the Strategic Highway Safety Plan.

As part of the process in developing Florida's Strategic Highway Safety Plan, a memorandum of understanding was signed by each of the Florida's 12 major safety agencies and organizations. These partners have agreed to support the plan's mission, vision, and goal. A 20-member Steering Committee representing a broader range of safety partners, led multi-disciplinary teams which developed Strategic Highway Safety Plan emphasis area goals, objectives, and strategies for recommendation to the Strategic Highway Safety Plan Executive Committee.

The Strategic Highway Safety Plan focuses efforts and resources over the next five years on four emphasis areas and three continuing priority areas:

- Emphasis Areas
  - Aggressive Driving;
  - Intersection Crashes;
  - Vulnerable Road Users (pedestrians, bicyclists, and motorcyclists); and
  - Lane Departures.
- Continuing Priority Areas
  - Occupant Protection;
  - Impaired Driving; and
  - Traffic Data and Decision Support

It is anticipated the SHSP leadership group will focus most of its attention in 2010 toward revising, amending, and/or reaffirming the SHSP. These efforts will include web-based surveys and at least one safety summit to gather input from all safety partners and Florida drivers.

Aggressive Driving

Aggressive driving often manifests itself as a combination of speeding and recklessness, and other dangerous behaviors which threaten motorists, bicyclists, and pedestrians. Failure to yield right-of-way, improper lane changes, following too closely, disregarding traffic controls, speeding, and improper passing are all manifestations of aggressive driving as defined by statute.

In 2008, driver behaviors contributed to about 2% percent of all fatalities. They caused 60 fatalities and 363 severe injuries in Florida. Due to the department's decision to change the definition of aggressive driving to coincide with the statutory definition, there appears to be a dramatic reduction in the number of aggressive driving related fatalities and serious injuries. This is not the case, as the behaviors constituting aggressive driving continue to kill and injure thousands of drivers and their passengers. Thus, special efforts to curb such behaviors continue to be warranted.

Intersection Crashes

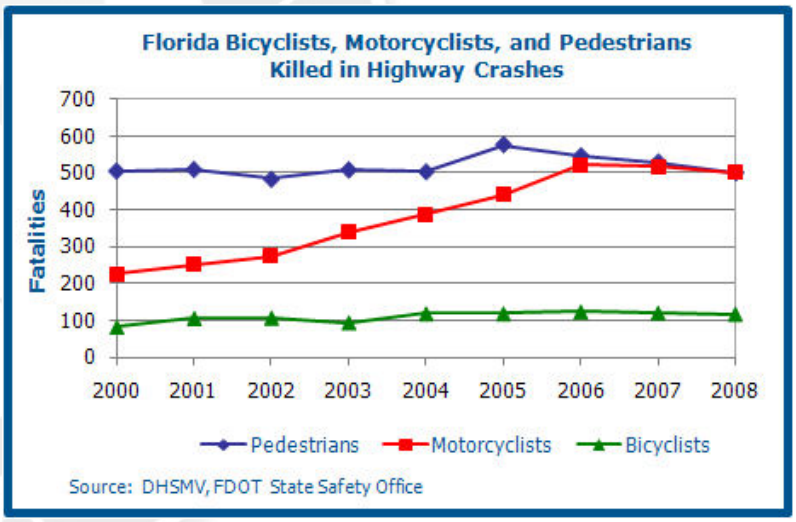
A major contributing factor in intersection crashes is the running of a stop sign or red light. In Florida, the data show both fatalities and serious injuries for running red lights exceed those for running a stop sign.

In Florida, nearly 28 percent of all crashes and 25 percent of all fatal crashes occurred at intersections in 2008. From 2000 to 2008, the number of intersection fatal crashes decreased from 895 to 692 (-22%) while vehicle miles of travel grew by 32%.

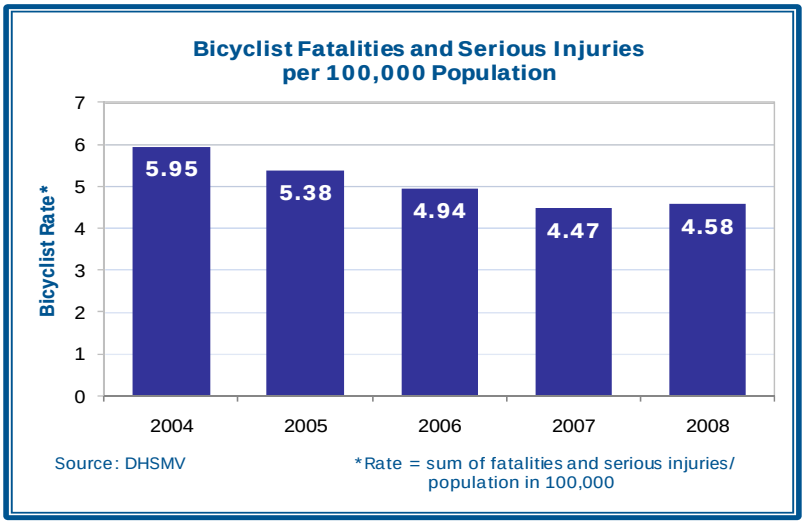
Vulnerable Road Users

The areas of pedestrian, bicyclist, and motorcyclist safety are major challenges in Florida. A significant factor driving the relatively high fatality rates among these road user groups in Florida has probably been climate conducive to walking, cycling, and motorcycling in all seasons. In 2008, 118 bicyclists, 502 pedestrians, 502 motorcyclists, and 30 motorcycle passengers were killed on Florida's roadways. All categories experienced a decline from 2007.

As with other emphasis areas, the SHSP establishes a goal to reduce the combined rate of pedestrian and bicyclist fatalities and serious injuries. Because there are no reliable data on total pedestrian and bicyclist exposure (such as miles traveled), fatal and serious injury rates for these groups have conventionally been calculated relative to population. The bicyclist fatality rate was 0.63 per 100,000 residents in 2008 and the pedestrian rate was 2.68 per 100,000 residents. The combined fatality and injury rate was 11.74 for pedestrians and 4.58 for bicyclists.

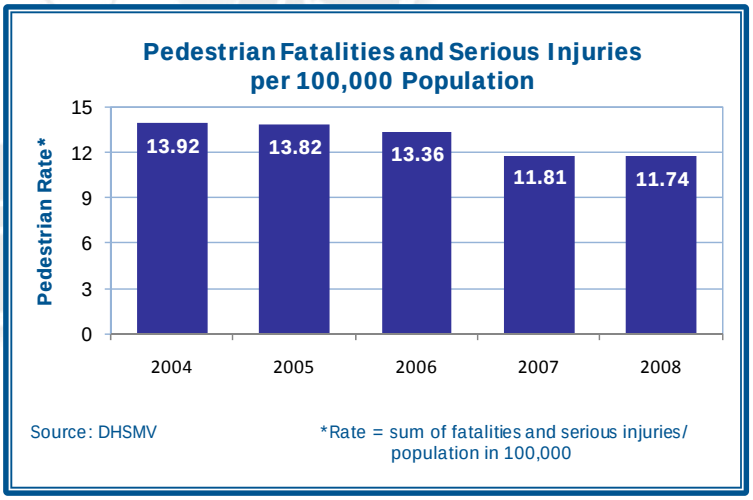


The SHSP goal for motorcyclists is to reduce the rate of fatal and serious injuries per 1,000 licensed motorcyclists (VMT data is not available for motorcyclists). From 2005 to 2008, this rate increased slightly from 3.529 to 3.617[1]per 1,000. At the same time, motorcyclist fatalities increased from 252 in 2001 to 502 in 2008 and 532 when motorcycle passengers are included. Major factors in the continuing rise in fatalities of motorcyclists and their passengers has been the repeal of Florida's universal helmet law in July 2000 and the increase in motorcycle riding while impaired.



[1] Based upon fiscal year data, due to the manner in which data maintained at the Department of Highway Safety and Motor Vehicles for licensed motorcyclists.

The department has studied factors contributing to pedestrian and bicyclist fatalities on the State Highway System. Alcohol use has been identified as a known or possible factor in roughly half of fatal pedestrian and bicyclist crashes. More commonly, alcohol was used by the pedestrian or bicyclist, but nearly 10 percent of drivers involved in fatal crashes with pedestrians on the State Highway System were found to have used some alcohol. The actual percentage of motorist users is probably higher, as complete Blood Alcohol Content (BAC) data is seldom available.



Fatal pedestrian crashes commonly involve mid-block crossings, away from the opportunities for controlled crossings afforded by traffic signals (or stop signs). Provision of raised medians where feasible is often an effective countermeasure for this problem. Over half of both fatal pedestrian and fatal bicyclist crashes occur under dark conditions. Detailed information regarding bicyclist use of lights as required at night is often unavailable in crash reports, but frequent observations of cyclists riding at night without lights suggest failure to use lights may be a common factor in bicyclists' fatal nighttime crashes.

Lane Departure Crashes

Approximately 28% of all traffic fatalities are lane departures. These incidents include running off the road, crossing the center median into oncoming traffic, and sideswipe crashes. Running off the road may also involve a rollover or hitting a fixed object. When a vehicle leaves the roadway, the result can be disastrous. A review of data for lane departure crashes in Florida reveals most lane departure crashes occur on limited access roadways and on rural two-lane roadways.

Head-on collisions are related to crashes involving departure from the roadway. One of the most severe types of crashes occurs when a vehicle crosses into an opposing

traffic lane and crashes head-on with an on-coming vehicle. To reduce the serious injuries and fatalities resulting from lane departures, efforts must be made to:

- Keep vehicles from leaving the road or crossing the center median;
- Reduce the likelihood of vehicles overturning or crashing into roadside objects; and
- Minimize the severity of an overturn

Occupant Protection, Impaired Driving and Traffic Data

Safety belt use is one of the most effective measures to decrease injuries and deaths in a crash. Nevertheless, thousands of people are killed on Florida's roadways simply because they did not buckle up. While 2009 saw Florida reach an all time high of 85.2% in recorded safety belt use, thousands of lives could be saved each year if all vehicle occupants properly used their safety belts and all children were in an age appropriate child restraint.

Florida's Primary Seat Belt Law became effective on June 30, 2009. The National Highway Traffic Safety Administration estimates that, with the passage of its primary seat belt law, Florida will save 124 lives, prevent 1,733 serious injuries and save $408 million in associated costs each year.

Due to their vastly different definitions of impaired driving fatalities and alcohol/drug related fatalities, federal reports show Florida improving in this area, while state reports show otherwise. The fact remains that impaired driving remains a serious problem as evidenced by the fact 1,305 people were killed in 2008 due to an impaired driver. Other than increased use of rumble strips, guardrail, and cable barrier, there are few engineering steps which can be taken to reduce impaired driving fatalities. Enforcement and education are key components of impaired driving initiatives.

Through its applications for federal grant funding, the department has been able to provide over $4 million since 2006 to various agencies to improve their ability to collect, analyze, and share data, as well as improve the consistency, timeliness, and compatibility of those data. These funds have helped move Florida into the forefront in several data areas.

Strategies for Traffic-Related Safety

To help meet its short-range objectives, the department will:

- Develop and implement a statewide public awareness campaign to address aggressive driving and promote courteous driving behaviors.

- Incorporate engineering and design practices proven to reduce aggressive driving behavior.
- Improve intersection design and operation from minimum to optimal standards.
- Promote improved access management at the local government level through the use of state standards (Florida Green Book) and restriction or elimination of turning maneuvers.
- Promote the installation and use of confirmation lights to improve signal enforcement.
- Conduct a public information and education campaign on intersection safety.
- Educate the engineering, design, and operations communities on techniques to improve intersections, signal timing, and elder issues.
- Initiate bicycle, pedestrian, and motorcycle traffic count programs to determine existing rate of walking, bicycling, and motorcycling and analyze crash data using exposure variables.
- Develop, implement, and evaluate countermeasures for the 100 highest crash locations involving pedestrians, cyclists, and motorcyclists on and off the state highway system.
- Finalize and conduct, on an annual basis, bicycle and pedestrian design training.
- Increase implementation of innovative intersection design to minimize conflict severity.
- Improve the safety of roads in rural and economically distressed areas.
- Include a safety improvement component with accountability measures in all aspects of transportation, from planning through implementation and operations.

Safety of Seaport, Rail, Public Transit and Public Airport Facilities

Seaports

In fiscal year 2006/07, 14.1 million cruise passengers embarked and disembarked from Florida's ports. In addition, Florida ports handled over 121 million tons of commodities with a value of over $73 billion.

Over the last several years Florida's seaports have experienced significant increases in security costs. Since September 11, 2001, cargo and passenger safety and security have become increasingly important issues to the local governments and port

authorities owning and operating Florida's seaports. Port security costs, from Florida's 14 deep-water ports, were $12.3 million annually pre-9/11, and grew to $46.8 million in 2005. Seaports are required to develop, design, and deploy enhanced security systems to control and protect both land side and sea side access to meet both state and federal security requirements. Seaports work directly with the Florida Department of Law Enforcement and federal agencies such as the Coast Guard to ensure conformance with these requirements. The Department of Transportation does not track nor have incident information for seaports. Seaports spend a great deal of attention and funds on safety and security including the deployment of on-port law enforcement officers and access approval and monitoring.

Rail

Florida has a total of 4,575 at-grade crossings, of which 3,571 are public and 1,004 are private. Approximately 80 percent of them are equipped with active warning devices, or over twice the national average. Crashes and fatalities at crossings declined 75 percent and 60 percent respectively, between the mid-1970s and the mid-1990s. This occurred despite an increase in exposure because of increased highway traffic and operational changes which have resulted in more trains on fewer rail lines. In 2008, there were:

- Twenty-five high-rail grade crossing fatalities;
- Thirty highway-rail crossing injuries;
- Twenty-six pedestrian-trespassing fatalities; and
- Fourteen pedestrian trespassing injuries.

The department uses the latest technology and techniques such as those for grade crossing safety improvements and grade crossing consolidation. Public information is one of the most effective methods of reducing grade crossing incidents. Florida participates in Operation Lifesaver, a non-profit organization dedicated to reduce the number of collisions, deaths, and injuries at rail-highway crossings and on railroad rights of way through public awareness campaigns.

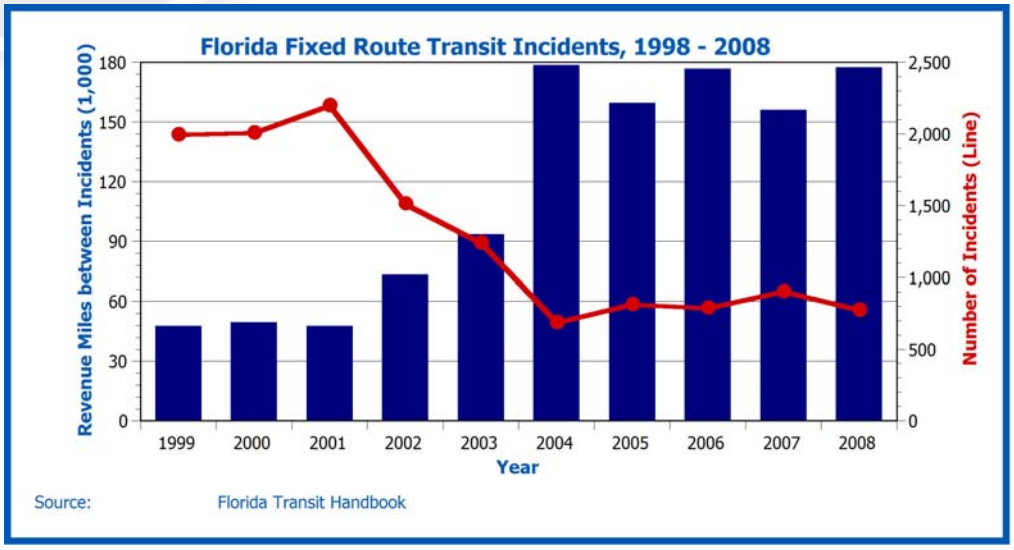
There were 274 train derailments in 1977, the year before the department began its railroad safety inspection program. Derailments have declined to an average of 40 per year over the last 10 years, most of which occur in industrial yard tracks and result in little damage. During the 2001-2008 period, 48 derailments occurred with speeds exceeding 20-miles per hour. In 2008, only 19 derailments occurred, a reduction of 15 derailments from 2007. Annually, the department performs safety inspections on 5,000 miles of track, 3,000 turnouts, 14,000 freight cars, and 500 locomotives, and observes 1,000 operating practices. These inspections supplement

those conducted by the railroads, which have the primary responsibility for safe operations.

Public Transit

The majority of Florida's public transportation systems operate on the roadway system; therefore, roadway incidents can impact the operation of transit services and on-time performance. Similarly, incidents with motorbuses in the roadway can impact the flow of traffic in the vicinity.

"The number of incidents had been on the rise from 1997 to 2001, but experienced a sharp decrease in 2002. The probable cause for the drop was a change in thresholds for reporting. In 2007, there were only 903 incidents reported on Florida's fixed route transit service. Motorbus collision incidents account for 84% of all transit collision incidents in Florida for 2008. This is to be expected because motorbuses serve approximately 87% of public transit passenger trips in Florida for 2008."



In 2008, 773 incidents were reported on Florida's fixed route transit service, a decline of 130 incidents from 2007. Motorbus collision incidents account for 84% of all transit collision incidents in Florida for 2008. This is to be expected because motorbuses served approximately 87% of public transit passenger trips in Florida. For the top ten transit agencies[2] in Florida, 324 collisions occurred resulting in 9

[2] The top ten agencies are Miami-Dade, Broward County, Jacksonville, Hillsborough Area Regional Transit Authority (HART) in Tampa, LYNX in Orlando, Pinellas Suncoast Transit Authority (PSTA), Palm Tran, Regional Transit System (RTS) in Gainesville, StarMetro Transit in Tallahassee, and South Florida Regional Transportation Authority (SFRTA).

fatalities and 565 injuries in 2008. Property damage caused by the collisions was estimated to be $1.85 million.

Florida Transit Safety Data, Top Ten Agencies, 2008

Mode	Collision			
	Number of Incidents	Fatalities	Injuries	Total Property Damage ($1000)
Motorbus	272	8	494	1,559
Demand Response	52	1	71	289
Commuter Rail	0	0	0	0
Heavy Rail	0	0	0	0
Automated Guideway	0	0	0	0
Vanpool	0	0	0	0
Light Rail	0	0	0	0
Total	324	9	565	1,848

Source: National Transit Database. http://www.ntdprogram.gov

Public Airport Facilities

Florida has 19 commercial service airports serving more than 140 million passengers each year. During the decade from 1999 through 2008, Florida experienced a total of 261 fatal aircraft accidents, with a high of 36 in 2002 and a low of 15 in 2001. The average fatal incidents were 26 per year. In 2008, 128 accidents (23 fatal) occurred in Florida which resulted in 51 fatalities. There is no upward or downward trend in fatal aircraft incidents from year to year.

The FDOT, the Federal Aviation Administration (FAA), and local governments share complementary aviation safety responsibilities in Florida. The FAA regulates aircraft, aircraft operations, and pilots. The FAA also places specific safety requirements, such as crash, fire and rescue facilities, on airports before permitting commercial airline operations at an airport.

The FDOT, the FAA, and local governments also share airspace safety responsibilities in Florida. The department and local governments are responsible for permitting structures throughout the state which may impact aviation safety while the FAA assures aircraft flight paths will stay clear of structures.

As of winter of 2009, Florida has a total of 787 (public, private and military) air facilities. More than half (63%) are airports and another one-third (36%) are

heliports. Of these, Florida has 109 public-use facilities poised to meet general aviation needs and provide critical service to their communities. The department regulates Florida's 128 public airports through permitting, safety inspection and licensing. Florida' 633 private air facilities are registered on-line with the department.

Strategies for Safety of Seaport, Rail, Public Transit and Public Airport Facilities

The department will:

- Continue to conduct public education campaigns for awareness of rail-highway crossing safety.
- Conduct research into innovative highway safety devices, including those which prohibit motorists from driving around rail-highway crossing protection systems, and work with appropriate agencies to incorporate research results into program development.
- Identify hazardous roadway locations and features, including those at rail-highway crossings, and establish priorities to correct them.

Security

Transportation security involves entities outside of the transportation field and requires close coordination and effective working relationships with adequate support at all levels. Emergency management, including preparedness planning, response, and recovery activities, is primarily the responsibility of Florida Department of Community Affairs, Division of Emergency Management, at the state level and of local governments at the local level, working as a team with emergency responders and agencies at federal, state, and local levels as well as private sector and volunteer organizations. Security lead roles involve the U.S. Department of Homeland Security/Transportation Security Administration, other designated federal agencies, and the Florida Department of Law Enforcement, with the Florida Department of Transportation, Motor Carrier Compliance Office and other transportation partners in a shared role focused on improving security of the transportation system.

Activities of the Motor Carrier Compliance Office personnel directly related to domestic security include inspection of vehicles transporting, or suspected of transporting, hazardous materials. Such enforcement activities include inspection of shipping papers, placards, markings, packaging and proper loading of hazardous materials containers. Drivers are scrutinized to ensure they are properly licensed, qualified to drive vehicles transporting hazardous materials, and properly employed by the trucking company.

Domestic security visits to motor carriers and shippers of hazardous materials are conducted to ensure compliance with the regulations and to provide education and training to carriers on how to secure their trucks and terminals. This domestic security awareness program is designed to reduce the likelihood such materials and vehicles are used as a weapon. Leads on suspected drivers and other carrier employees have been referred to the Federal Bureau of Investigation and the Florida Department of Law Enforcement for follow up investigation.

An attempt to use commercial vehicles as a weapon would not necessarily involve vehicles known to be transporting hazardous materials. The Office of Motor Carrier Compliance's law enforcement activities directed at commercial vehicle operations in general are a crucial element of domestic security. The officer's specialized knowledge of what constitutes normal activities related to commercial vehicle operations allows for the ability to recognize abnormal activities, worthy of closer scrutiny.

As an integral part of the Florida Department of Transportation, the Office of Motor Carrier Compliance maintains part of the responsibility for ensuring the state's critical transportation infrastructure, i.e., roads, bridges, etc., is protected from any attempt to disrupt the flow of commerce or otherwise deny the use of such structures. Since September 11, 2001 sworn officers of the Motor Carrier Compliance Office have also provided security for the State Capitol, major power plants, transportation of certain classified materials, facilities quarantined during anthrax events, and the like. Motor Carrier Compliance Office personnel also serve on all seven Regional Domestic Security Task Forces throughout Florida as well as Florida's Domestic Security Oversight Board's Executive Committee.

Strategies for Security

- Include a security improvement component with accountability measures in all aspects of transportation, from planning through implementation and operations.
- Implement security policies and strategies to deter and respond to attacks on the transportation system and to deter use of the system to carry out attacks against domestic targets, while maintaining the intended function of the system.
- Increase the use of intelligent transportation systems technology as a tool to improve transportation safety and security.
- Improve compatibility of communications and other critical equipment used by the Florida Department of Transportation and federal, state, and local safety and security responders.

- Support safe and efficient mobility for affected people, freight, services, and response personnel before, during, and after emergencies through appropriate connectivity among all elements of the transportation system.
- Ensure national security transportation needs involving Florida's military facilities can be met during normal and elevated security periods in future planning for the Strategic Intermodal System, including those which are part of the federal Strategic Highway Network (STRAHNET) or the federal Strategic Rail Corridor Network (STRACNET).

Performance Briefs

Quality of Life and Environmental Stewardship

December 2009

This Performance Brief provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.

Our Goal:

Enriched Quality of Life and Responsible Environmental Stewardship

Responding to the challenges of rapid population growth and providing for the transportation needs of the public creates pressures on communities, energy supplies, air quality, water supply and quality, wetlands and wildlife habitats. Transportation investments contribute greatly to quality of life, and at the same time, have direct impacts – both positive and negative – to the human and natural environment. A key consideration in the transportation decision-making process is the evaluation of the benefits of a proposed transportation action as well as the possible negative effects.

Transportation planning should also be integrated and coordinated with land use, natural resource planning, and regional and local government concerns and initiatives. To the maximum extent possible, transportation decisions should be made with careful attention to enriching quality of life while ensuring responsible stewardship of the environment.

Long Range Objective:

Plan, develop, and implement transportation facilities and services with communities and agencies to enhance the livability of communities. If enhancement is not possible, avoid or minimize adverse impacts to communities.

The best transportation decisions enhance quality of life, provide options for mobility, and are compatible and consistent with the needs and desires of the communities they affect. These decisions should be made with the goal of livable communities in mind.

FDOT has instituted a Context Sensitive Solutions (CSS) policy to provide a proactive, collaborative and interdisciplinary approach to planning and developing transportation projects and activities for all modes appropriate to scale, cost, location, and schedule. CSS takes into account the views of stakeholders and the local area where a project will exist, be operated, and be maintained. CSS considers the physical setting in which a project or activity is to be implemented and seeks to enhance and conserve community defining features and environmental resources. In 2010, FDOT will collaborate with the Federal Highway Administration (FHWA) to host a workshop to introduce a comprehensive set of CSS performance measures to department employees and local agency partners. These measures, developed by the Transportation Research Board, quantify the resulting benefits of CSS through all

phases of the transportation process. The workshop is scheduled for April 12 in Fort Lauderdale.

Transportation Enhancements (TE) activities are federally-funded, community-based projects which expand travel choices and enhance the transportation experience by improving the cultural, historic, aesthetic and environmental aspects of our transportation infrastructure. TE projects must be one of 12 eligible activities and must relate to surface transportation. In general, TE projects expand travel choice, strengthen the local economy, improve the quality of life, and protect the environment. These projects can include creation of bicycle and pedestrian facilities, streetscape improvements, refurbishment of historic transportation facilities, and other investments which enhance communities and access. Projects can include a sidewalk within a community, an intrastate multi-use trail, a historic train station restoration or a historic lighthouse restoration. FDOT receives an average allocation of about $40 million per year for the Transportation Enhancement Program. The funds are provided through federal surface transportation legislation.

FDOT has conducted a research project to recommend core measures for evaluating the effectiveness of the department's program designed to involve communities in the transportation decision-making process and to assess the potential social, cultural, and economic impacts of transportation actions. Research objectives included identifying performance measures for community impact assessment, measuring the actual impacts after a proposed action, and identifying methods for meaningful feedback to inform future actions. The core measures provided by the research project, along with others under development, are currently being refined into a practical performance management system to assess the department's efforts.

Long Range Objective:

Make transportation decisions that conserve and optimize non-renewable resources and promote the use of renewable resources (materials, facilities, and sources of energy) and include strategies to decrease greenhouse gases and air pollutants.

Florida's efforts to address climate change began in 2007 with the Governor's Climate Change Summit which brought together leaders of business, government, science and advocacy to examine the risks of global climate change to Florida. FDOT participated on the Governor's Energy and Climate Change Action Team and provided technical support. Some of the transportation-related recommendations of the team included:

- Addressing climate change issues during the upcoming update of the Florida Transportation Plan;

- Modifying the Efficient Transportation Decision Making process to include climate change considerations;
- Working with the U.S. Department of Transportation and the U.S. Environmental Protection Agency to improve modeling tools to measure greenhouse gas (GHG) emissions; and
- Working cooperatively with state, regional and local governments and modal partners to identify infrastructure at risk and coordinate adaption efforts

Legislation passed during the 2008 legislative session requires Florida metropolitan planning organizations (MPOs) to minimize GHG emissions as part of the metropolitan planning process. The MPOs also must consider strategies for integrating transportation and land use during the development of their long range plans to provide for sustainable development and to reduce GHG emissions. In addition, energy considerations must be included in all state, regional and local planning. To move these activities forward, FDOT partnered with 1000 Friends of Florida and the Florida Department of Health to hold climate change workshops in Tallahassee, Orlando, and Fort Lauderdale. In addition, the department partnered with the FHWA to hold a peer exchange in Tampa for Florida MPOs.

Long Range Objective:

Plan, develop, implement, and fund the transportation system to accommodate the human scale, including pedestrian, bicycle, transit-oriented, and other community-enhancing features unless inappropriate.

In 2005, the Florida Legislature created the Conserve by Bicycle Program with the goal of improving quality of life through the encouragement of bicycle travel. As an outgrowth of this legislation, FDOT developed and adopted the Conserve by Bicycle Program Study, a project charged with quantifying the benefits of bicycling and of encouraging bicycling. The first phase of the study completed in 2007 evaluated the energy and health-related benefits of providing bicycle facilities and bicycle-related programs. Phase 2, completed in 2009, focused on conducting research recommended in Phase 1 and expanding the scope of research to pedestrian travel. The results of the new research included the development of predictive models for mode choice and induced recreational bicycle travel based on characteristics of a particular roadway and its surrounding area. Another task studied whether a correlation exists between the provisions of bicycling/walking facilities and sustained walking behaviors, with a focus on whether recreational bicycling later leads to the use of walking or bicycling for commuting or running errands. The study recommended future research including increased study of the integration of the bicycle and transit modes, a more focused analysis of bicycle-related components of demand management data, standardization of the identification of bicycle market

segments, and gathering better data regarding the users of web-based bicycle trip-planning services.

The department is working with the Florida Department of Community Affairs (DCA) to develop Transit Oriented Development (TOD) Design Guidelines to promote and implement 'transit ready' development patterns in Florida. TODs are moderate to high density, mixed-use, and walkable developments designed to facilitate transit and accommodate multiple modes of transportation. The guidelines will serve to assist local governments in planning for and implementing transit. Focusing land use and urban design policies towards transit will help to optimize future transit investments and potential transit ridership. These guidelines are proposed to be used in partnership with FDOT to assist in promoting multimodal system planning and managing congestion on state roadways, especially on the Strategic Intermodal System (SIS). FDOT and DCA have held several workshops around the state to introduce the concepts of TOD and to receive comments from local governments, other agencies, and the public.

Long Range Objective:

Improve coordination of land use and transportation decisions among state government, local governments, and metropolitan planning organizations to ensure that future growth is sustainable.

Florida's eleven Regional Planning Councils develop and adopt strategic regional policy plans. Florida's 26 MPOs develop and adopt Long Range Transportation Plans and an annual Transportation Improvement Program of high priority projects. At the local level, all of Florida's nearly 500 local governments have adopted comprehensive plans. The department works closely with each local government on their transportation elements. All development, including public facilities such as highways and transit, must be consistent, to the maximum extent feasible, with the local comprehensive plan. With transportation funding decisions made largely at the state and metropolitan levels, and with land development and infrastructure decisions made almost exclusively at the local government level, coordination is critical for effective transportation and land use planning and optimizing transportation systems to best serve the traveling public.

A key implementation strategy in the 2025 Florida Transportation Plan is "locate transportation facilities in appropriate and environmentally acceptable areas consistent with sound planning principles that foster sustainable communities." The department helps accomplish this strategy through its lead role in implementing the Strategic Intermodal System (SIS). The SIS Strategic Plan calls for the department to strengthen the linkage between transportation and land use planning by working

closely with statewide partners to develop and implement a complementary land use management strategy to protect SIS facilities from incompatible development. In addition, the plan calls for FDOT to coordinate land use planning with SIS planning at the regional level to ensure consistency with strategic regional policy plans and local comprehensive plans. Additional guidance in this area will be included in the updated SIS Strategic Plan, scheduled for adoption in January 2010.

The department works with environmental resource agencies to create linkages between land use, transportation, and environmental resource planning initiatives. This has been accomplished through the Efficient Transportation Decision-Making Process (ETDM) which is Florida's streamlining initiative to provide early involvement of environmental resource and permitting agencies and the public in planning and project development. Resource and regulatory agencies serve as members of an Environmental Technical Advisory Team (ETAT) and perform early project screenings through the use of the web-based Environmental Screening Tool. The ETAT reviews projects early and informs the department and MPOs of potential environmental issues in the vicinity of a proposed project. Along with agency-specific data, comments from the agencies and the public are used by the department to determine the best corridors and locations for roadway improvements to avoid and minimize potential impacts.

Long Range Objective:

Optimize the efficiency of Florida's transportation system by implementing operational, management, access, and land use strategies that support the intended use of each element of the system identified as part of evolving statewide, regional, or community visions.

An example of maximizing the use of existing infrastructure and optimizing efficiency through an operational strategy is the implementation of the I-95 Express project by FDOT in partnership with local transit partners to manage congestion and provide travel options in South Florida. The I-95 Express project in Broward and Miami-Dade Counties is a combined Bus Rapid Transit (BRT)/managed lanes project. Due to the limited amount of right-of-way in South Florida the department developed a project which increased capacity, reduced congestion and added dedicated transit without expanding the I-95 footprint, thus avoiding impacts to adjacent communities. This was accomplished by slightly reducing lane and shoulder widths and re-striping to add an additional lane in each direction of I-95. The existing High Occupancy Vehicle (HOV) lanes and the new lanes were then converted to limited access managed lanes. The managed lanes can be used by the new BRT, I-95 Express Buses, buses of several types (regular transit, public schools and over-the-road coaches), vanpools, registered car pools of three or more passengers, registered

hybrid vehicles and motorcycles for free while other vehicles can use the facility by paying a toll which varies based on congestion. The project is the first link to South Florida's planned network of managed lanes and connects the Miami Central Business District from I-395 to I-595 in Broward County.

The project also instituted ramp signals which have been installed on all I-95 entrances between NW 62nd Street and Ives Dairy Road. Ramp signaling reduces congestion on the highway by preventing too many vehicles from entering at once. These signals will constantly monitor traffic flow on I-95 and allow one or two cars to enter at a time, in effect, forcing drivers to take turns, resulting in better traffic flow.

Long Range Objective:

Provide opportunities for early and continuing proactive public involvement in the transportation decision making process, including easily understood and complete information, timely public notice, and full public access to key decisions.

The department has a long history of being proactive in providing opportunities for the public and our many partners to be engaged and involved in our transportation decisions. The FDOT Public Involvement Policy calls for "information exchange activities in all functional areas using various techniques adapted to local area conditions and project requirements." This means we recognize the importance of flexibility in our efforts to address community needs and desires, while at the same time go above and beyond the various state and federal laws which govern our actions.

From August 2007 to February 2008, FDOT conducted its biennial customer satisfaction surveys, with a response from 7,002 FDOT customers. They included Florida residents (2,803), visitors to Florida (538), government officials (357), Well Elders (501), and commercial drivers (2,803). These groups rated their satisfaction with several aspects of the State Highway System: the visibility of roadway signs and markings, construction zones, traffic flow, rest areas, airports, and overall satisfaction with the transportation system.

In 2009, the department conducted its update of the Strategic Intermodal System Strategic Plan and used extensive partner/public involvement to receive input from interested stakeholders. Twelve regional workshops took place throughout the state and 639 participants attended these workshop. Approximately 1,200 verbal and written comments were gathered at workshops as well. The project team also conducted 150 briefings to statewide, regional and local partners with over 2,350 participants. FDOT will continue its extensive public outreach efforts as it embarks on the update of the Florida Transportation Plan during 2010.

A series of research projects have reviewed national literature on public engagement, surveyed activities in other states, assessed the status of public involvement in our own state, and established performance measures to help us better understand the strengths and opportunities in our public involvement processes. Future research will provide survey instruments and tools for the districts and MPOs to use to evaluate their own efforts.

The department has undertaken an aggressive effort to make sure our communications with the public are easy to understand. The Plain Language Initiative resulted in office-by-office reviews of documents and written materials to assure we are creating communication which is clear, concise and easily understood by any reader. In addition, we have developed a web page which lists all meeting notices required to be posted by Florida's Sunshine Law. The reader can view all meeting notices or just those in a specific geographical area.

Long Range Objective:

Plan, design, and construct transportation facilities in a manner that preserves and, where feasible, restores the function and character of the natural environment, and that avoids or minimizes and mitigates adverse impacts.

The construction and use of some transportation projects can substantially impact wildlife habitats, including those of endangered and threatened species. Where impacts cannot be avoided or minimized, mitigation or conservation efforts are required. Informational signing and reducing speed limits to provide safe passage and connectivity for wildlife are effective options in some instances. The department coordinates with state and federal agencies on appropriate measures such as habitat restoration through wetland mitigation and seagrass bed plantings; wildlife crossings such as those in the Key Deer National Wildlife Refuge and the Paynes Prairie Ecopassage; best management practices including wildlife monitors, exclusion fencing, onsite biologists during construction; and new methods such as contributions to species management funds, including the Bald Eagle Management Fund, required under the Florida Fish and Wildlife Conservation Commission's Bald Eagle Management Plan. In conjunction with the wetlands mitigation program, water management districts can purchase, restore, and manage larger habitats for wildlife.

Historically, roadsides on state highways were managed to prevent roadway erosion and enhance travel safety. Now, roadside vegetation is being planted and managed to conserve energy, protect ground water, reduce storm water runoff, increase and improve wildlife habitat, eliminate invasive species, enhance aesthetics, and improve relationships with neighbors. Recent strategies include increased emphasis on

conservation, restoration, and management of natural areas, re-establishment and management of native plants, prescribed burns, and application of composted materials.

Early collaboration with regulatory agencies, other stakeholders and the public through the ETDM process allows for the identification of potential environmental and sociocultural effects of a project and leads to early and proactive problem-solving and improved decision-making by the department, the resource and regulatory agencies, and MPOs. Information gathered from ETDM screenings are used by the department to improve project scopes, refine analyses, and enhance public involvement as projects move into the project development phase where National Environmental Policy Act (NEPA) requirements are satisfied for federal funding eligibility.

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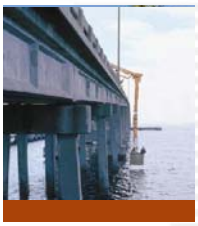
Performance Briefs

Maintenance and Preservation

December 2009

This Performance Brief provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.



Our Goal:
Adequate and Cost-Efficient Maintenance and Preservation of Transportation Assets

Florida has invested billions of dollars in roads, rail networks, airports, transit facilities and services, seaports and other elements of the transportation system. Regular maintenance and improvements keep these assets operating efficiently, extend their useful life and can delay the substantial cost of reconstructing or replacing them.

The department will continue to make substantial investments in meeting established standards for routine maintenance and the condition of state highway pavement and bridges. Roadways owned by local governments – and other transportation facilities such as bus systems, airports, seaports and railroads which are primarily owned by local governments, public authorities and private companies – are maintained by their owners. The department helps fund some of these facilities, but does not directly build, operate or maintain them.

Managing the transportation system also means making sure the existing system efficiently carries more people and goods to keep up with the demand of population growth, an expanding economy, and ever-increasing travel. The department will increase use of Intelligent Transportation Systems, demand management, access management, incident management and other techniques to maximize the operational efficiency and safety of the system.

The department has primary jurisdiction over the State Highway System. Although this system consists of approximately 12,000 (10 percent) of the 117,000 public road centerline miles in the state, it carries two-thirds of the traffic. One of the department's main responsibilities is keeping the State Highway System in acceptable physical condition. To achieve this, the department resurfaces roads, repairs or replaces bridges and conducts routine maintenance activities such as mowing, litter removal and sign replacement.

Keeping the other facilities which are part of Florida's transportation system in acceptable physical condition is the responsibility of the local governments, authorities and private sector companies which own and operate them. The department will continue to compile available information on condition issues for these facilities and, where authorized, make safety-related inspections.

Our Long-Range Objectives:

The 2025 Florida Transportation Plan identifies three long-range maintenance and preservation objectives:

- Maintain all elements of the transportation system to protect the public's investment for the future.
- Eliminate the illegal operation of commercial motor vehicles exceeding weight limits on Florida's public roads and bridges.

- Maximize the use of alternative, non-roadway modes to transport overweight and oversize loads.

Our Short-Range Objectives:

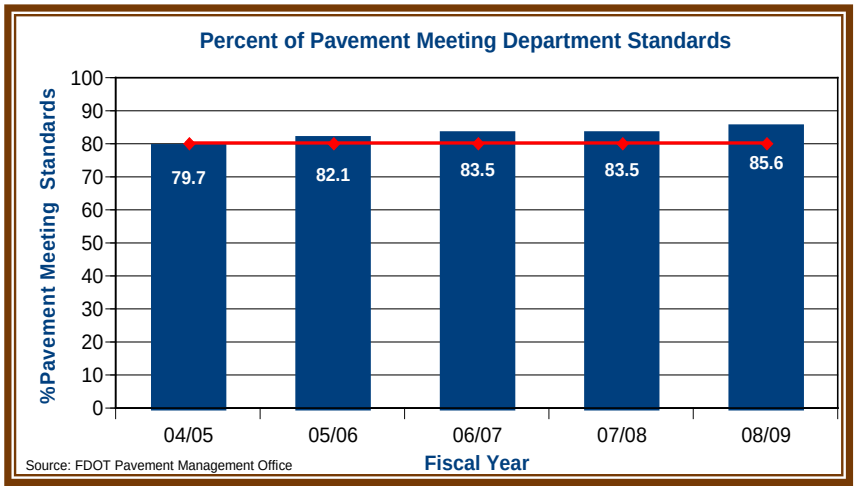
The Florida Department of Transportation sets short-term objectives and strategies to implement the long-term goals and objectives of the Florida Transportation Plan. They provide the policy framework for the department's budget and work program.

- Through 2015, ensure that 80 percent of pavement on the State Highway System meets department standards.
- Through 2015, ensure that 90 percent of FDOT-maintained bridges meet department standards while keeping all FDOT-maintained bridges open to the public safe.
- Through 2015, achieve 100 percent of the acceptable maintenance standard on the State Highway System.

Pavement Condition

The department has a long-standing commitment to keeping the pavement on state highways in acceptable condition. Eighty percent or more of the State Highway System met department standards from the late 1980s through 1998. This percentage has varied since the baseline fiscal year 1995/96 but is forecast to remain slightly above the objective through FY 2014/15.

Pavement on the State Highway System is in relatively good condition, with 86 percent of the pavement currently meeting department standards. The department has identified sufficient funds in its work program to accommodate this objective. The 14 percent of pavement not meeting standards means 5,940 lane miles need resurfacing or reconstruction.



It is important to keep pavement in good shape. When roadway surfaces are not maintained, the roadway must be rebuilt – literally – from the ground up. It is more economical to systematically maintain roadways than to rebuild them.

Truck traffic contributes to wear on roadways, because of the force exerted on the pavement and the way pavement reacts to that force. For example, a five-axle, 80,000 pound semi-trailer truck places a load on the road equal to about 9,600 cars. The department enforces legal weight limits because increases in weight have enormous impacts on pavement wear. Even the arrangement of truck axles or factors as simple as tire pressure can have a significant impact on pavement wear.

State roads needing resurfacing are identified through the department's annual pavement condition survey. This survey evaluates pavement conditions using three factors: ride quality, crack severity and average depth of wheel-path ruts.

"Ride quality" is what the motorist experiences (the smoothness of the ride). It directly affects motor vehicle operating costs. Crack severity, or "cracking," refers to the structural deterioration of the pavement, which leads to loss of smoothness and deterioration of the road base by water seepage, if not corrected. Wheel-path ruts, or "rutting," are depressions in pavement caused by heavy use. These depressions can collect water, creating a safety hazard.

Strategies for Pavement Condition

The department will help ensure the short-range objective is achieved through these actions:

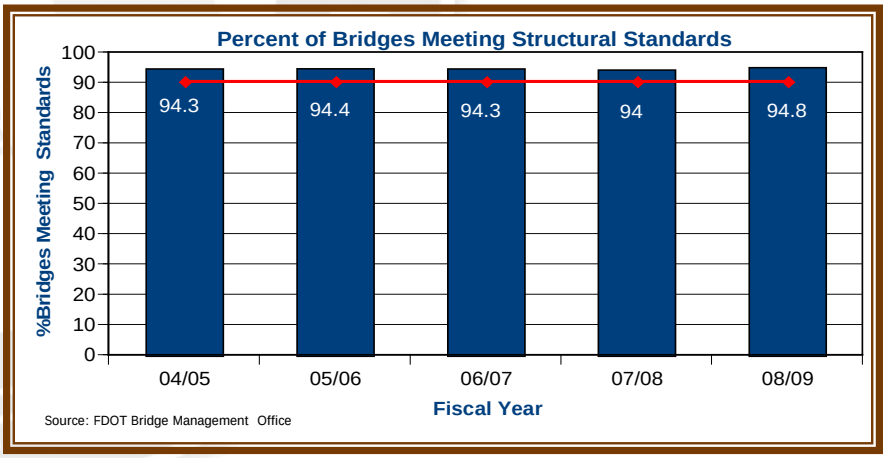
- Resurface at least 5 percent of the State Highway System annually;
- Eliminate the illegal operation of commercial motor vehicles exceeding weight limits on Florida's public roads and bridges; and
- Facilitate training and technical assistance, and maintain current data systems to assist local governments in conducting pavement condition surveys and ratings.

Bridge Condition

The department has also reconfirmed its long-standing commitment to keeping the bridges on state highways in good, safe condition. Ninety percent or more of the bridges on the State Highway System have met department standards since the baseline fiscal year 1995/96. It is anticipated the Florida Department of Transportation will meet this objective through FY 2014/15.

Currently, 95 percent of all FDOT-maintained bridges meet department standards. That means the bridges do not show evidence of structural deterioration and are not limited by weight restrictions. The department takes a proactive approach towards bridge maintenance, which has proven cost effective, as preventative maintenance and repairs are performed prior to the bridge deteriorating to a level where the cost of the repair is much higher. This proactive approach ensures FDOT bridges meet or

exceed their life expectancy, which results in a lower frequency of the large capital cost of replacement. All bridges maintained by the department which are open to the public are safe.



The department maintains 6,549 bridges and is also responsible for inspecting and rating 5,143 other bridges owned by other state and local government jurisdictions. Each bridge is inspected at least once every two years to assess bridge condition and identify which bridges need routine or periodic maintenance, rehabilitation, or replacement. Special inspections are conducted after major weather events, such as floods and hurricanes.

Repairs help a bridge last longer. But, at a certain point, it becomes more cost effective to replace a structure than repair it. Since the department's bridge inspection program began in 1970 there has been a steady improvement in bridge condition on the State Highway System due to an aggressive maintenance and construction program. The department also administers federal programs which help fund repairs and replacements for locally maintained bridges.

Bridges are designed to tolerate a certain amount of structural deterioration and still support legal weight loads. If a bridge is unable to support all legal loads, weight limits are posted or the bridge is closed to traffic until the deficiency can be corrected. Because bridges are actually flexible, vehicles moving across the bridge cause some vertical movement in the bridge structure. Over time, this structural flexing causes deterioration. Another reason bridges wear out is stress caused by saltwater, rain, freezing temperatures and wind. Impacts from colliding motor vehicles, barges and ships also exact their toll.

Most of the damage, though, comes simply from the bridges being used. As on roadways, heavy trucks contribute to wear-and-tear on bridges. So, like pavement, bridges must be designed to take into account how many trucks will pass over them during their design lives.

Strategies for Bridge Condition

The department will help ensure the short-range objective is achieved through these actions:

- Enter project into the Work Program to replace or repair department-maintained bridges within 12 months of deficiency identification.
- Replace or repair all structurally deficient department-maintained bridges and bridges posted for weight restriction within six years of deficiency identification.
- Replace all other department-maintained bridges designated for replacement within nine years of deficiency identification.
- Reduce the illegal operation of commercial motor vehicles exceeding weight limits on Florida's public roads and bridges.
- Continue to monitor bridges scheduled to be replaced and make interim repairs, if necessary, to safeguard the traveling public.

Roadway Maintenance

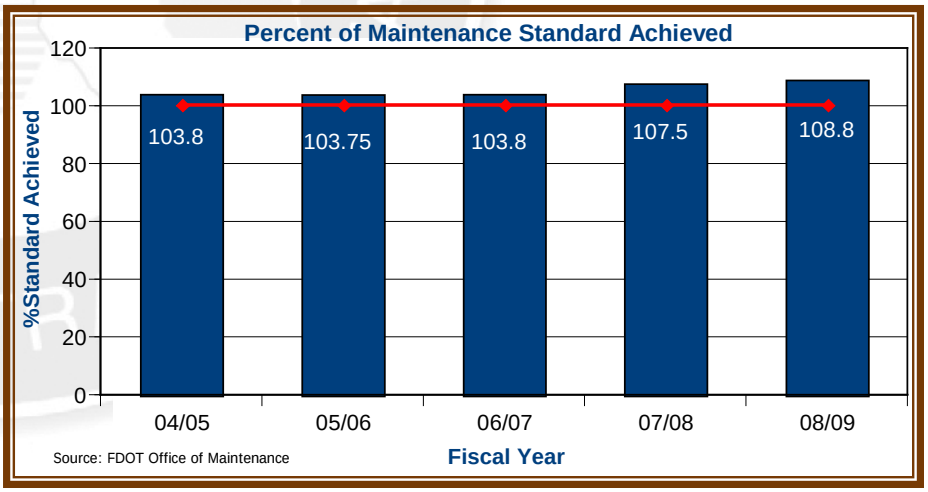
As an integral part of preserving state highways, the department has reconfirmed its long-standing commitment to meeting its maintenance standard on state highways. The department has met or exceeded the acceptable maintenance standard since 1994. It is anticipated the Florida Department of Transportation will meet this objective through FY 2014/15.

Field conditions are evaluated using the Maintenance Rating Program. Each part of the highway environment is rated and the overall maintenance condition is calculated. The conditions are compared to department standards and a composite state score is calculated. The maintenance condition rating system looks at five parts of the highway environment:

1. Roadway - potholes, pavement joints, paved shoulders and pavement distress;
2. Traffic services - signs, lighting, guardrails, striping, attenuators, handrail and pavement markers;
3. Roadside - unpaved shoulders, slopes, sidewalks, and fences;
4. Drainage - storm drains, ditches, roadway sweeping, inlets; and
5. Vegetation/aesthetics – landscaping, mowing, litter removal, turf condition, tree trimming.

It is important that roads be maintained at an optimal level, both for driver safety and comfort, as well as to allow the agency or local government responsible for them to plan a stable program of roadway repair or resurfacing. The department is responsible for scheduling and performing routine maintenance on the State Highway System to help preserve its condition.

Through routine maintenance, highway rest stops are kept clean and attractive, wildflowers are planted along roadsides, roadway striping is reflective for safe nighttime travel, guardrails are repaired, signs are kept clean and visible and potholes are filled. Department staff and contractors also mow the grass, remove litter, perform bridge inspections, make bridge repairs, clean out ditches and storm drains and do many other jobs needed to make highway travel easier and safer.



Strategies for Roadway Maintenance

The department will help ensure the short-range objective is achieved through these actions:

- Continue to identify and implement practices which reduce the time and cost of preserving the State Highway System.
- Emphasize use of state-of-the-art technologies and innovative contracting methods to increase the efficiency of system maintenance.
- Continue to monitor and adjust maintenance standards to preserve our investment and provide safe roadways for Florida motorists, including special population groups.

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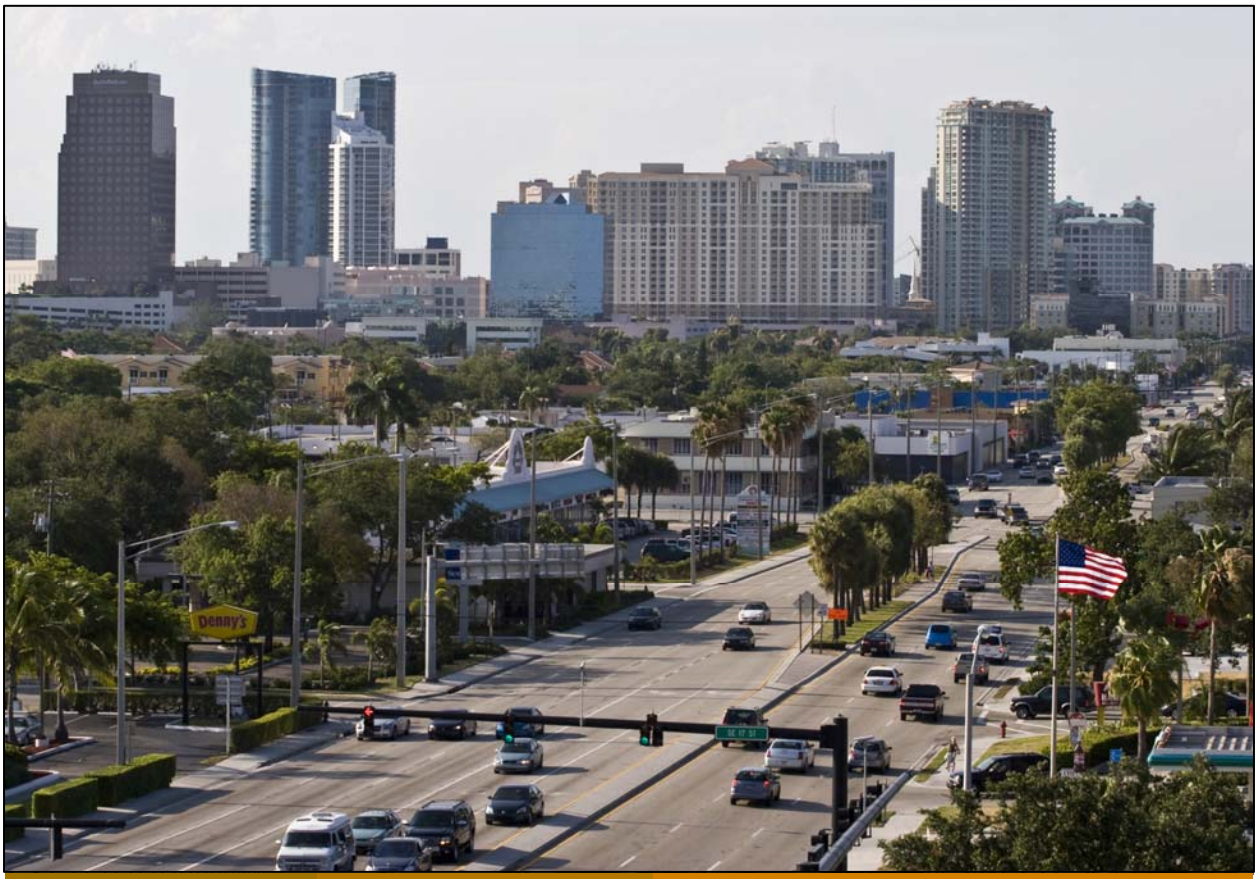


Performance Briefs

Mobility and Economic Competitiveness

December 2009

This Performance Brief provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.

Our Goal:

A Stronger Economy through Enhanced Mobility for People and Freight

Florida's economic competitiveness depends on efficient, affordable, and reliable movement of people and goods. As the demand for moving both people and freight continues to increase, Florida must change the way it plans and manages its transportation system. Transportation decisions must be made from the perspective of the trip – that is, the best solution must be identified for moving people and freight between major trip origins and destinations, with mobility solutions often involving multiple state, regional, local transportation facilities and a combination of modes. Transportation decisions also must increase transportation choice and available modal options which provide accessibility to and connectivity among Florida's economic, community, and recreational assets. This goal addresses three major types of trips – those between regions, states, and nations; those between communities within a common region; and those within communities.

Numerous agencies at the federal, state, regional, and local levels are responsible for meeting Florida's mobility needs for both people and freight. Transportation planning and investment responsibilities are shifting over time from the agencies owning or operating individual facilities to partnerships which work together to plan and implement at the statewide, regional, or local levels. The Florida Department of Transportation (FDOT) is the lead agency responsible for interregional, interstate, and international mobility – delivered primarily through the Strategic Intermodal System – but must work closely through shared decision making with modal partners, other state agencies, metropolitan planning organizations, and local governments to meet these needs. Regional entities, ranging from regional transportation authorities to metropolitan planning organization alliances to new types of organizations which may not exist today, will play the lead role in identifying and addressing regional mobility needs, in partnership with FDOT and local governments. Local governments will have the primary responsibility for identifying and addressing local mobility needs, in partnership with FDOT and regional entities.

Our Long Range Objectives:

The 2025 Florida Transportation Plan identifies several long-range mobility and economic competitiveness objectives:

Mobility Between Regions, States and Nations

- Provide for smooth and efficient transfers for both people and freight between transportation modes and between the Strategic Intermodal System and other transportation facilities.

- Reduce delay on and improve the reliability of Strategic Intermodal System facilities.
- Preserve new capacity on the Strategic Intermodal System for projected growth in trips between regions, states, and nations, especially for trips associated with economic competitiveness.
- Expand the use of modal alternatives to Strategic Intermodal System highways for travel and transport between regions, states, and nations.
- Establish statewide criteria for identifying and developing new Strategic Intermodal System facilities where such facilities are needed to connect the economic regions of the state, especially economically distressed areas, in coordination with regional and community visions.

Mobility Within Regions

- Develop regional visions and action plans that integrate transportation, land use, economic, community, and environmental systems to guide transportation decision making and investments. Focus attention on meeting regional mobility needs that transcend traditional jurisdictional boundaries, and ensuring connectivity between Strategic Intermodal System, regional, and local facilities.
- Facilitate economic development opportunities in Florida's economically distressed areas by improving transportation access from these areas to markets in a manner that reflects regional and community visions.

Mobility Within Communities

- Develop multimodal transportation systems that support community visions.
- Expand transportation choices to enhance local mobility and to maintain the performance of the Strategic Intermodal System and regionally significant facilities.
- Reduce per capita vehicle miles traveled by single occupant vehicles, especially during peak hours of highway use. Ensure that the transportation system is accessible to all users, including young, elderly, disabled, and economically disadvantaged persons.

Mobility Between Regions, States and Nations

The state (led by FDOT, working with its partners) plays the lead role in planning and managing mobility between Florida's diverse regions, as well as between Florida and other states and nations. This is accomplished through implementation of the Strategic Intermodal System (SIS), created by state law in 2003.

The SIS is a statewide network of high-priority transportation facilities, including the state's largest and most significant commercial service airports, spaceport,

deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and highways. Some of the facilities included in the SIS are labeled "Emerging SIS" to indicate their potential for future growth. These generally carry lower volumes of people and freight, but are located in fast-growing areas or rural areas and therefore may grow in importance in the future.

The SIS comprises state highways owned by FDOT as well as airports, seaports, waterways, rail lines and terminals, and roads owned by local governments, independent authorities, and the private sector. These facilities are the workhorses of Florida's transportation system. They carry more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, and 89 percent of all interregional rail and bus passengers. They also account for more than 70 percent of all truck traffic and 55 percent of total traffic on the State Highway System.

All SIS facilities are eligible for state transportation funding, regardless of mode or ownership. The SIS is a primary focus of FDOT and partner funding programs for state transportation capacity improvements; however, it is not a single grant program for funding all of these facilities and their needs.

The SIS Strategic Plan sets policies to guide decisions about which facilities are designated as part of the SIS, where future SIS investments should occur, and how to set priorities among these investments given limited funding. The Plan provides guidance for the dollars FDOT anticipates investing in expanding the capacity of the SIS through its Work Program, as well as additional dollars anticipated to be invested in the SIS by federal agencies, local governments, transportation authorities, and private sector owners and operators of SIS facilities. The Plan also guides FDOT and partners in identifying and setting priorities for investment needs over the next 25 years.

The SIS Strategic Plan:

- Defines the state's primary role in transportation as focusing on international, interstate and interregional travel of passengers and goods, with emphasis on the SIS. At the same time, stronger regional partnerships identify and invest in regionally significant transportation facilities, while local governments have more flexibility to address purely local transportation needs.
- Advances a multimodal approach to planning to increase mobility for people and freight on complete end-to-end trips. Rather than focusing on individual modes and facilities, state funding is used to improve connectivity among individual modes, eliminate bottlenecks and unnecessary delay, improve

travel time reliability and expand the options available for interregional travel.

- Links the state's transportation planning and investment decisions to statewide economic policies, with emphasis on Florida's Strategic Plan for Economic Development. The SIS supports interregional, interstate and international transportation services which support the diversification of Florida's economy by reducing transportation and logistics costs, improving access to markets from urban and rural areas and supporting growth in trade and tourist flows.
- Shifts from reactive to proactive planning of future transportation investments. In the past, transportation investments too often have responded to development instead of proactively advancing statewide goals related to economic growth, rural development, urban revitalization and environmental preservation. The SIS provides a foundation for managing growth in the future by focusing the state's transportation investments.

Detailed information about the SIS and the SIS Strategic Plan is available at Florida's Strategic Intermodal System website at www.dot.state.fl.us/planning/sis.

Short-Range Objective:

- Through 2015, maintain the average growth rate in person-hours of delay on Florida Strategic Intermodal System (SIS) highways at or below 5 percent.

Delay on Strategic Intermodal System (SIS) Highways

The department has transformed its prior focus on the Florida Intrastate Highway System (FIHS) to emphasize the development of highways on the Strategic Intermodal System as the backbone of the multimodal, multi-owner SIS. To that end, the department has converted FIHS activities and financial processes to fully reflect the SIS. In order to provide a simple assessment of system performance, we will concentrate on the amount of delay experienced by drivers on SIS highways

It is obvious the long-term trend is for congestion to get worse. How do we measure it? How do we measure how well a highway system is "working"? How do we assess the potential impact certain funding scenarios will have on the operation of the highway system? Traditionally, transportation agencies judged performance based upon highway "level of service," which essentially measures how well highways accommodate vehicles, not mobility for people and goods. The department, its partners, elected officials and citizens are seeking new ways to measure performance to help answer questions such as:

- How can we improve transportation to serve people and commerce?

- What are we getting from our investments in transportation?
- Are we investing in transportation as efficiently as possible?

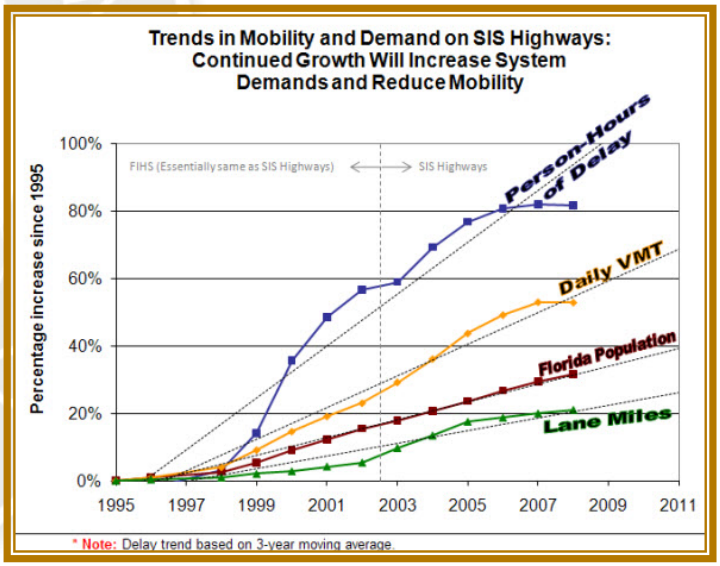
The department has worked with national experts, metropolitan planning organizations and other partners to develop some indicators of mobility performance. Initially, the indicators focused on the past and present operating condition of the Florida Intrastate Highway System We are expanding them to measure mobility on Strategic Intermodal System highways and for other modes of transportation.

To see how well the Strategic Intermodal System provides its intended high-speed and high-volume traffic movement, the department has developed some measures of mobility. There are four different dimensions of mobility, each with more than one measure:

- **Quantity of travel** – reflects the magnitude of the use of a facility or service. The measures are person miles traveled, truck miles traveled and vehicle miles traveled.
- **Quality of travel** – describes travel conditions and the effects of congestion on travelers. The measures are average speed and delay.
- **Accessibility** – describes the ease with which people can connect to the multimodal transportation system. The measures are connectivity to intermodal facilities, dwelling unit proximity, employment proximity and industrial/warehouse facility proximity.
- **Utilization** – indicates whether or not a transportation system is properly sized and has the ability to accommodate growth. The measures are percent system heavily congested, percent travel heavily congested, vehicles per lane mile and duration of congestion.

All of the measures above are important and should be examined together to get a complete picture of mobility. In order to provide a simple assessment of system performance, we have chosen to concentrate on the amount of delay experienced by drivers. Delay is the difference between the uncongested travel time (at a realistic speed, including effects of signals and other road conditions) and the estimated travel time (using estimated average speed for the traffic and road conditions).

The accompanying chart shows historical data for SIS highways. Since 1995[1], the average annual increase in person-hours of delay has been 4.6 percent. In general, vehicle miles travelled (VMT) on the SIS highways are growing at a faster rate than population and lane miles.



In 2008, daily person-hours of delay on the SIS highways was 391,000 hours. The growth in VMT and delay compared to a slower growth in lane miles indicates the current rate of capacity expansion of SIS highways will not keep up with travel demand.

Measure	2008 Data
Population	18.8 million
Daily Person Hours of Delay on SIS highways	391 thousand hours
Daily Vehicle Miles Traveled on SIS highways	168 million
Lane Miles on SIS highways	17.9 thousand

It is important to note that person-hours of delay highlights problems in urbanized areas, since that is where most of the delay occurs. However, there are clearly concerns for travel on SIS highways between urban areas as well. The department is developing a measure to assesses the travel conditions between urban areas.

Mobility Within Regions

Strong regional partnerships will provide a structure for identifying and implementing regional priorities in both urban and rural areas. Regional transportation investments should reflect the balance between facilitating efficient travel and transport and maintaining unique community and environmental resources within each region.

[1] Data for the years 1995 through 2002 were compiled for the Florida Intrastate Highway System, which was overwhelmingly similar to Strategic Intermodal System highway corridors (data for 2003 and subsequent years).

Transportation decisions should be made in the context of an integrated transportation, economic development, and land use vision reflecting the input of the region's elected officials, residents, and other stakeholders, including key transportation partners, economic development organizations, and resource agencies.

To support and facilitate the development of regional visions and action plans:

- Regional visions should be developed for relatively large geographic areas throughout the state through a bottom up process in which all jurisdictions join one or more regions;
- Regional visions and action plans should be the result of close coordination and harmonization with Florida Department of Transportation partners;
- Regional visions and action plans should augment and build upon existing entities, processes, and plans;
- The regional planning process should result in key outcomes, including priorities for investments in a regional transportation network including multimodal options and reflecting the balance between efficient regional travel and community and environmental resources within each region; and
- Transportation funding from various sources should be identified to help provide significant, recurring, and reliable support for developing and implementing regional visions.

Coalitions of counties and cities in at least seven regions of Florida are collaborating today on long-term growth visions. Such visions can indicate how regions desire to grow in the future, and provide important information about likely long-term development patterns. These visions and related action plans also may provide guidance about critical environmental, community, and economic assets, including those which would benefit from enhanced access, and those where transportation impacts should be avoided or minimized.

It is important that planning for future corridors and other major statewide and regional transportation investments be consistent with these regional visions where they exist. Where regional visions are underway – as is the case in most regions today – it is also important for these critical transportation decisions to be made as the broader vision is determined, so transportation needs do not "drive" the vision.

Key Challenges Facing the Regional Visioning Process

Faced with the challenges and opportunities associated with the projected doubling of its population in 45 years, the seven-county Central Florida Region gave its residents the opportunity to be the first in Florida to create a shared vision to answer the question, "How Shall We Grow?". The result has been an 18-month endeavor

which engaged residents, community leaders, and elected officials from throughout the Central Florida Region (defined as Brevard, Lake, Orange, Osceola, Polk, Seminole, and Volusia counties) in intensive "community conversations" to create a 50-year vision and policy framework to guide future growth in Central Florida. The conversations included all 86 cities in these seven counties, as well as dozens of other community and business groups.

The project approach included four primary components, occurring in parallel.

- **Leadership engagement** –Informing elected officials, business leaders, and community leaders, obtaining their input on key issues and solutions, and building consensus around the vision.
- **Community engagement** – Informing, obtaining input from, and building consensus among a broad-cross section of Central Florida residents. Nearly 20,000 citizens were involved over a 18-month period in a series of community and regional workshops in creating a shared growth vision for the region.
- **Communication strategies** – Informing leaders and citizens about the progress of the regional vision, in support of the more targeted engagement activities. These included outreach to the general public as well as key targeted audiences, and extensive media coordination.
- **Technical activities** – Developing the data, maps, and scenarios leaders and citizens used in making decisions about future growth.

The key outcomes of this process included the development of the following:

- A high-level, 50-year vision embracing a future different than the current growth trend focusing on four key themes (conservation, countryside, centers, and corridors), including principles which should guide future growth decisions;
- A policy framework as well as an implementation plan to guide state, regional, and local agencies to ensure their future decisions are consistent with the vision;
- Continued collaboration among the 10 organizations which partnered during this process to discuss issues and next steps for implementing the vision; and
- Formation of the Central Florida Congress of Regional Leaders (which includes 16 elected officials representing city and county governments and the school boards of the seven counties) to help encourage implementation of the growth vision by developing common policies and practices around regional principles adopted in the Central Florida growth vision.

Short-Range Objective:

- By 2010, 100 percent of Florida's counties will have entered into regional partnerships to compete for Transportation Regional Incentive Program (TRIP) funds.

The Transportation Regional Incentive Program (TRIP)

The Transportation Regional Incentive Program was created as part of major Growth Management legislation enacted during the 2005 Legislative Session. The purpose of the program is to encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners.

Local in-kind matches such as right of way donations and private funds made available to the regional partners are allowed. Federal funds attributable to urbanized areas over 200,000 population may also be used for the local/regional match.

A key feature of this flexible program allows metropolitan planning organizations, counties, or multi-county regional transportation authorities to participate with neighboring jurisdictions. Partners must establish an interlocal agreement which at a minimum:

- Identifies the entity to coordinate the development of a regional transportation plan;
- Delineates the boundaries of the regional transportation area;
- Provides the duration of the agreement and how it may be changed;
- Describes the planning process; and
- Defines a dispute resolution process.

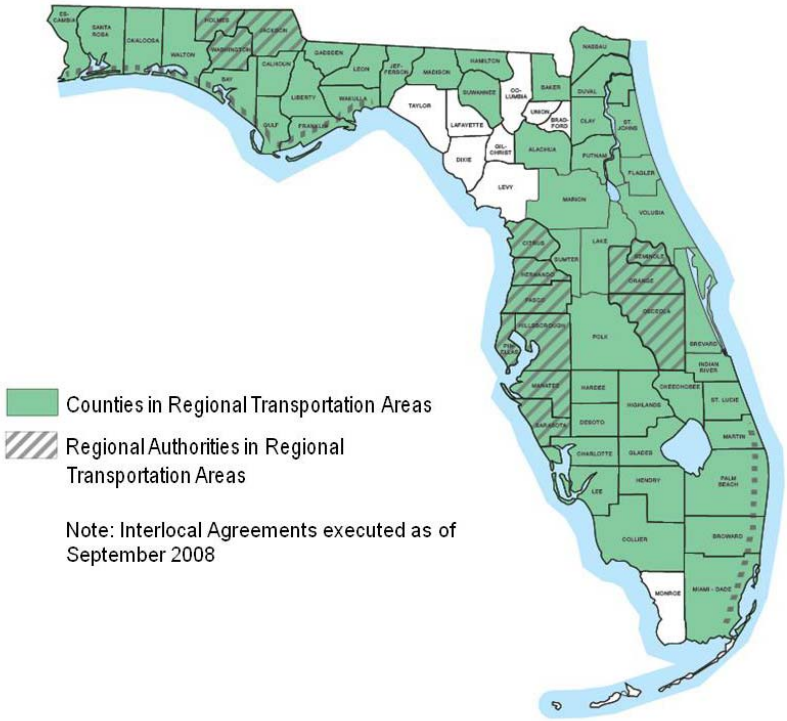
To be eligible for Transportation Regional Incentive Program (TRIP) funding, regional transportation areas must develop a regional transportation plan identifying regionally significant transportation facilities in the regional transportation area; and containing a prioritized list of regionally significant projects.

Projects selected for funding through the TRIP must:

- Support facilities serving national, statewide, or regional functions and functioning as an integrated transportation system;
- Be identified in appropriate local government capital improvements program(s) or long-term concurrency management system(s) which are in compliance with state comprehensive plan requirements;
- Be consistent with the Strategic Intermodal System;
- Be in compliance with local corridor management policies; and
- Have commitment of local, regional, or private matching funds.

As of October 2008, 58 out of the 67 eligible Florida counties (87 percent) plus three regional authorities (Tri-County Airport Authority and US 98 Corridor Authority in District 3, and LYNX in District 5) entered into an interlocal agreement as part of a regional transportation area. The goal is to enter 100 percent of the counties into an interlocal agreement pursuant to the Transportation Regional Incentive Program by 2010. Some of the non-participating counties have discussed a potential partnership. Most of the non-participating counties are located in District 2.

The Transportation Regional Incentive Program would not only benefit growing urban regions but it should also benefit rural and economically disadvantaged localities. As such, there is also an established long-range objective aimed at improving transportation access to Florida's rural and economically distressed counties and communities which are currently eligible for the Rural Economic Development Initiative in a manner which reflects regional and community visions. These economically distressed areas are characterized by factors including low per capita income, low per capita taxable values, high unemployment, high underemployment, low weekly earned wages compared to the state average, high percentages of the population receiving public assistance, high poverty levels and low housing values compared to the state average, and a lack of year round stable employment opportunities. As regional visions unfold and the Transportation Regional Incentive Program becomes widely implemented, a more quantifiable short-



range objective related to transportation access to more disadvantaged regions will be developed.

System Operations

The department recognizes additional roadways and facility improvements, by themselves, will not solve our traffic problems. The solution will be a diverse set of options requiring funding commitments, as well as a variety of changes in the ways transportation systems are used. Travel choices, Intelligent Transportation Systems and land use must be considered. Use of access management increases safety and as well, extends the useful life of our existing roadways.

Travel on the State Highway System in heavily congested conditions, as measured by vehicle miles traveled, has been increasing. Relieving congestion with operational improvements can help improve traffic flow.

In the last decade, the transportation industry has made great progress in using Intelligent Transportation Systems tools to enhance the nation's transportation systems. Many other tools and efforts such as Transportation System Management and Operations are being used to improve the operation of the existing system and reduce travel demand. The purpose of Transportation System Management and Operations is to emphasize the importance of managing and operating existing roadways, systems and infrastructure as efficiently and effectively as possible. Development of additional short-range objectives will be coordinated with implementation of the department's Intelligent Transportation Systems Strategic Plan and our partners, many of whom plan and implement Intelligent Transportation Systems, transportation system management and demand management strategies.

The department routinely constructs turn lanes, revises median openings and designs, improves traffic signalization and signal systems, and makes other improvements to the operation of state highways and affected local government roads. Many of these activities take place as an added component of resurfacing state roads as part of the highway preservation program. These kinds of improvements are known as transportation system management strategies.

Transportation demand management strategies to reduce auto travel can help with managing the system – both by reducing the number and length of trips and by increasing vehicle occupancy. The department works with local governments and other partners to encourage the use of transportation demand management techniques such as bicycle and pedestrian programs, commuter computer matching and ridesharing, car pooling, park-and-ride lots, transit, commuter rail, telecommuting, alternative work hours, trip reduction ordinances, congestion pricing and other ways to reduce peak hour demand on roadways.

The development of master plans and action plans for the Strategic Intermodal System includes support for all modes of transit and the provision of a premium travel experience for high occupancy vehicles by incorporating special purpose lanes with exclusive connections to park and ride lots and transit services. The staged implementation of these plans is progressing consistent with the availability of funds. The department contracts with the Florida Highway Patrol to enforce the use of high occupant vehicle lanes, which helps maintain the integrity of the lanes and the benefits they provide.

Access Management

Comprehensive access management is an effective strategy to address traffic congestion, crashes, and loss of street capacity. Access management programs address the location and design of public street and driveway connections to the roadway, as well as subdivision and site design practices. Because it involves both land use and transportation, access management also requires cooperation within and among government agencies responsible for transportation and land development decisions.

The goal of our program is to limit and separate traffic conflict points. By reducing conflict, we can increase safety and traffic operations. Florida's access management standards and regulations – developed using national standards and research undertaken or sponsored by the department – help provide safer and more efficient travel.

Virtually all the department's new multi-lane highway projects are designed with restrictive medians, which greatly enhance the safety of the traveling public. Because access management can be controversial, the department makes a significant effort to work with the public during the planning of these projects. Each district has a team to handle access management issues at the district level. Public attendees at District Access Management Committee meetings are encouraged to complete a customer survey form. These forms indicate a very high degree of fairness and professionalism.

Short-Range Objective:

- Through 2015, improve safety and traffic flow by reducing the number of commercial vehicle crashes on the State Highway System to or below 7.7 per 100 million vehicle miles traveled.

Incident and Emergency Management

Commercial vehicles are large trucks – trucks weighing more than 10,000 pounds – and other vehicles such as interstate buses. Crashes involving commercial vehicles often have significant impacts on local or regional traffic, particularly if highways must be partially or fully closed as a result of a crash. The department enforces Florida's weight, size, and safety laws to make the roads a safe place to operate for trucks and other vehicles. It plays a key role in working with local Incident Response Teams when highway crashes involve large trucks. Florida is also vulnerable to a variety of other hazards which threaten our communities, businesses, and the environment. Potential hazards include hurricanes, floods, wildfires, and acts of terrorism.

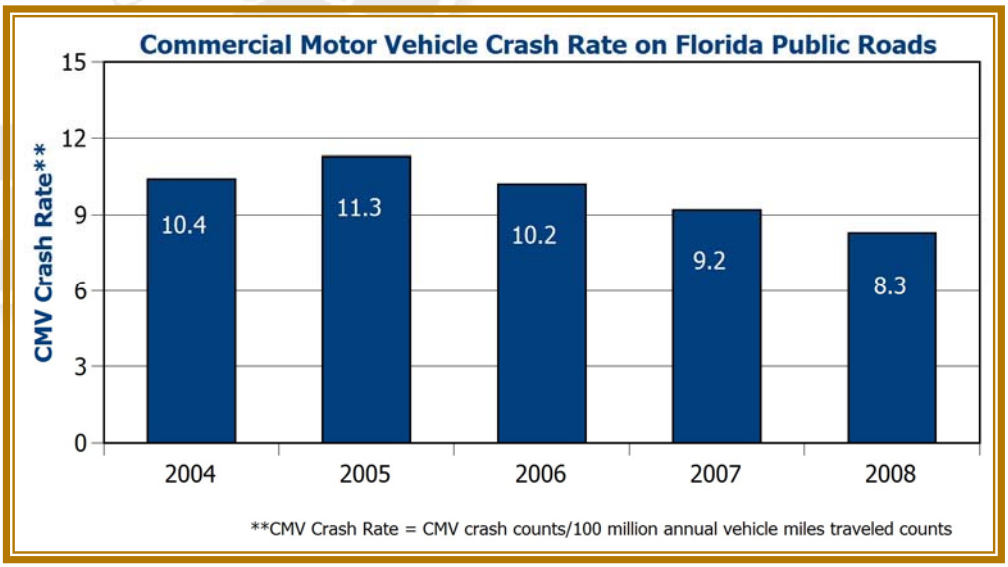
Vehicle crashes on highways often affect far more travelers and businesses than just those directly involved in the crash. It is critical that crash victims be attended to as soon as possible to reduce the possibility of deaths or serious injuries. At the same time, it is not unusual for major highways to be partially or fully closed while vehicles and debris are removed, which creates or compounds traffic congestion and causes delay for users in the vicinity of the crash. Occasionally, hazardous materials – some of which can be life-threatening – and other commodities are spilled as a result of these crashes or as a result of crashes on other transportation modes such as the railroad network.

Incident Response Teams have been formed in all 67 counties and many urban areas to respond rapidly to these incidents. The teams include local emergency response services, the Florida Highway Patrol and local law enforcement officers, state and local traffic engineers, state and local maintenance personnel, and the staff and resources of other partners which may be needed. These teams work together to reduce the severity of injuries resulting from crashes and to restore transportation facilities to normal operating conditions as soon as possible. The department is an active participant, providing traffic engineering, maintenance and Motor Carrier Compliance personnel and resources to work with other team members. Communication between team members is a critical part of cooperation.

Measures of Effectiveness	Baseline FY2000/01	FY2008/09 Data
Number of commercial motor vehicle safety inspections performed	62,813	107,085

In an effort to provide the traveling public a cost effective and high quality transportation infrastructure, the department and the Florida Highway Patrol have implemented the "Open Roads Policy". The goal of the "Open Roads Policy" is to

clear damaged vehicles, spilled cargo, and debris as soon as it is safe to do so. It is understood damage to vehicles or cargo may occur as a result of clearing the roadway on an urgent basis. While reasonable attempts to avoid such damage shall be taken, the highest priority is restoring traffic to normal conditions. It is a combined goal of all agencies that all incidents be cleared from the roadway within 90 minutes of the arrival of the first responding officer, with the understanding this goal may not be obtainable with more complex scenarios, which may require additional time for complete clearance.



The department now requires specialized equipment and trained operators to quickly remove heavy trucks hauling larger loads after an incident. Consistent with the "Open Roads Policy," several Districts have adopted an innovative clearance strategy by implementing the Rapid Incident Scene Clearance (RISC) Program in order to significantly reduce the time it takes to clear major accidents and incidents. This program utilizes vendors which can provide specialized heavy-duty wreckers and equipment to rapidly clear the roadway on limited access facilities.

Further, the department is committed to expanding the service and coverage of the Road Rangers. The United States Department of Transportation estimates service patrols (Road Rangers) can reduce delays up to 45 percent. The primary focus of the Road Rangers is to assist in the clearance of traffic crashes, in addition to continuously roving the roadway in the service area looking for stranded motorists, debris on the road, traffic crashes or other incidents. The Road Rangers assist in these situations to help motorists and ultimately to keep traffic moving. The service is free and if the repair exceeds the Road Ranger's capabilities, they will move the

disabled vehicle to a safe place and have the Highway Patrol contact another towing service to assist. The other towing service is at the motorists' expense.

Six districts and the Turnpike Enterprise provided Road Rangers services in fiscal year 2008/2009. For the period July 2008 to June 2009, there were 255,049 Road Rangers stops made statewide along 1,062.4 miles of coverage. District 3 is making progress toward implementation of service in the next fiscal year. Several of the Districts currently provide Road Ranger service on a "24/7" basis. Also, the vast majority of the 125 total statewide Road Ranger vehicle fleet is equipped with automatic vehicle location capabilities.

Florida has a State Emergency Response Team composed of staff from key state agencies to ensure the state is prepared to respond to emergencies, recover from them, and mitigate their impacts. The State Emergency Operations Center provides direction and coordination of emergency response and recovery efforts before, during and after times of impending or serious emergencies or disasters. When the magnitude of the emergency or disaster exhausts local response capabilities, the Center may be activated to meet the needs.

Short-Range Objective:

- Through 2015, improve system efficiency by deploying Intelligent Transportation Systems (ITS) technology on critical state corridors.

Intelligent Transportation Systems

In order to better accommodate our rapid growth in population, tourism, and commerce, the Florida Department of Transportation is committed to develop and deploy sophisticated, fully-integrated, statewide Intelligent Transportation Systems in a cost-efficient manner. These systems represent the application of real-time information systems and advanced technologies as transportation management tools to improve the movement of people, goods, and services. Intelligent Transportation Systems use advanced technologies to remedy mobility and safety problems, which may delay or possibly eliminate building new roads and expanding existing ones. As ITS evolves in Florida, the development and reporting of operations performance measures is a high priority for FDOT to demonstrate and document the benefits of ITS. When the ITS Program began addressing performance in 2004, the districts had no automated data collection systems and were initially limited to measures of basic production and usage (*output*). The initial output measures reported statewide were 511 calls, Road Rangers assists, and centerline miles of limited access highways managed by ITS.

As ITS deployment and integration proliferate, measures of performance and resulting benefits (or *outcome*) can be more accurately documented and reported. Three ITS *outcome* performance measures were identified by FDOT: incident duration, travel-time reliability, and customer satisfaction.

Miles Managed

As of the end of June 2009, 739 miles are managed by ITS. This represents 35% ITS coverage of the Florida FIHS. Extensive ITS deployment took place during the 2008/2009 fiscal year in all Districts and the Turnpike Enterprise. Compared to the previous period of documentation (June 2007 to July 2008), the Miles Managed by ITS increased 42% percent statewide.

511 Call System

The 511 call system provides accurate, real-time information to travelers on traffic and road conditions, alternate route information (during incidents), construction information, weather-related problems, and public transportation information/options.

In June 2009, Florida's statewide 511 services integrated all the Florida regional 511 services into one statewide system creating the new Statewide Florida 511 Traveler Information System. The fully integrated, bilingual resource offers statewide roadway coverage, the addition of more than 50 new travel partners and personalized services. System integration allows users to request customized calls or texts to inform them of incidents in areas of interest to them.

Since inception of the aforementioned systems, over 40 million 511 calls have been made in Florida. Approximately 3.4 million 511 calls were made during the 12-month period from July 2008 through June 2009.

Strategies for Systems Operations

The department will:

- Incorporate Intelligent Transportation Systems technologies such as traffic control systems and aggressive incident management techniques to keep traffic moving on the Strategic Intermodal System.
- Increase the use of Intelligent Transportation Systems technology as a tool to improve transportation safety and security.
- Expand the use of the electronic toll collection system known as SunPass®.
- Develop a Intelligent Transportation System consistent with the Ten-Year Cost Feasible Plan.
- Support commuter assistance programs for sharing rides to work.
- Continue the department's Access Management Program.

- Improve commercial motor vehicle safety by conducting safety inspections and enforcement of safety requirements for commercial vehicles; install inspection pits at weigh stations; and improve the out-of-service verification program.
- Use information from post-crash inspections of fatal crashes involving commercial vehicles to target resources in high crash locations and to identify problem carriers.
- Coordinate with partners in revising the regional evacuation plans.

Mobility Within Communities

Local transportation investments primarily should reflect the importance of community building, based on the unique vision of each urban or rural community. Accessibility to and availability of transit options are crucial for the enhancement of local mobility and community livability. An objective was developed to measure the success in establishing transit as an alternative mode of transportation. for professional, recreational, and other purposes at the local level by increasing transit ridership at twice the average rate of population growth.

Department staff members from Districts One and Four have been participating in development of the Heartland Rural Mobility Plan intended to improve the economic health of the Heartland region through development and implementation of an overall mobility improvement process. The plan covers six rural counties and the four Glades-area communities. Recommendations from the plan will be used to establish a Mobility Working Group (MWG) to serve as an initial public transportation planning organization for the region. The MWG will use the Heartland Rural Mobility Plan as the foundation of its efforts to coordinate, develop and implement public transportation improvements in the region.

Short-Range Objective:

- Through 2015, increase transit ridership at twice the average rate of population growth.

Transportation Choices

Local transportation needs cannot be met by building more and wider roads alone. Local mobility demands make it necessary to focus on additional means of travel and increase mobility for those who do not have access to automobiles.

The single occupant vehicle is the dominant means of work travel in Florida, accounting for about 94 percent of all work trips in 2005. Floridians, like the remainder of the country, are highly reliant on the personal vehicle with very modest

use of other travel means and low vehicle occupancies. Reliance on the automobile has increased traffic congestion in and between local communities.

As of 2008, 3.3 million Floridians, (over 17 percent of total population) were age 65 and over. Providers of alternative modes need support to preserve today's services and to attract more riders by expanding services and improving reliability especially in urban areas and elder communities. By partnering with the Department of Elder Affairs and their Communities for a Lifetime initiative, elder issues such as transportation choices, accessibility, safety, and "elder friendly" transit ridership can be addressed and improved upon. Transit is also a viable solution in reducing greenhouse gases and providing a sustainable transportation system.

Measures of Effectiveness	**Baseline Data 2000**	**FY2006/07 Data**
Number of one-way public transit passenger trips	184M	257M
Number of one-way trips provided for transportation disadvantaged. (TDTF funded)	5.7M	6.8M
Measures of Effectiveness	**Baseline Data 2000**	**FY2007/08 Data**
Operating cost per total passenger trips	$4.99	$7.99
Operating cost per TD trip	$14	$22

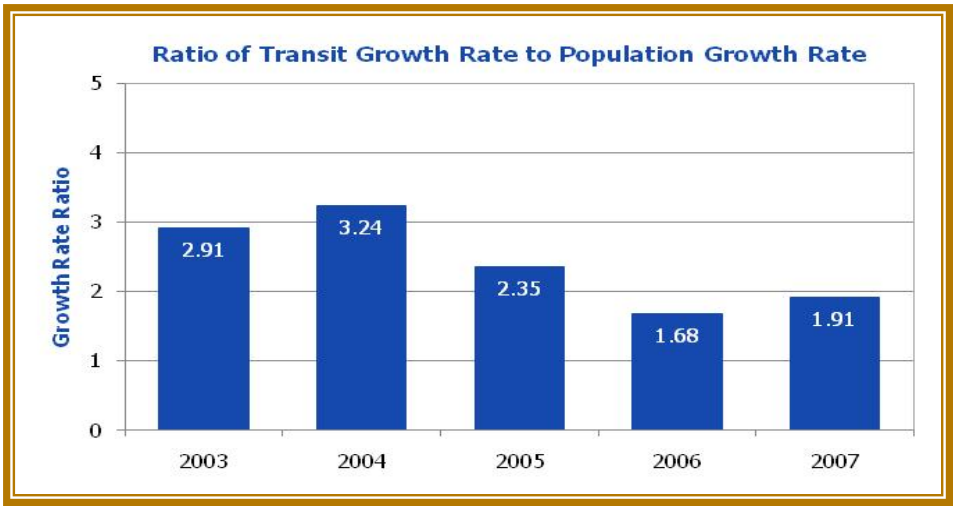
Since 1997 transit ridership has been generally increasing at a rate greater than the rate of population. The department is committed to assisting partners in increasing transit ridership. Some 84 percent of Floridian's live in urban areas and 71 percent live within the service area of a transit system.

Strategies for Enhanced Mobility

To help ensure the proposed short-range objectives related to statewide, regional, and local mobility and economic competitiveness are achieved, the department will:

- Fully implement the Strategic Intermodal System Strategic Plan.
- Update the Strategic Intermodal System designation and Strategic Plan at least once every five years based the Florida Transportation Plan.

- Protect the global competitiveness and extend the capacity of Strategic Intermodal System hubs by supporting facility upgrades to accommodate new generation vehicles and technology.
- Identify and invest in regionally significant facilities under the Transportation Regional Incentive Program which support regional economic development and growth management strategies.
- Ensure the implementation of the Strategic Intermodal System and regional programs give appropriate attention to the balance between mobility and community, and environmental needs in fast-growing, emerging regions.
- Identify and invest in local transportation infrastructure and services which support locally defined visions and comprehensive plans.
- Make optimal use of existing transportation facilities and services through strategies which address traffic operations, incident, and emergency management, access management and surrounding land uses before expanding those facilities and services.
- Promote more effective use of existing rail and water corridors to move freight and people.
- Introduce new modal options or develop new transportation hubs or corridors when existing facilities cannot meet mobility or connectivity needs.
- Create institutional structures which support statewide, regional, and local mobility needs, building upon closer coordination between transportation, land use, and economic development decisions.



Economic Impacts of Work Program Investments

In response to a legislative mandate to analyze the macroeconomic implications of transportation investments and to provide an understanding about how

transportation impacts Florida's competitive position, the department developed a macroeconomic analysis methodology to evaluate the long-term economic benefits of the department's Work Program.

These benefits include increases in personal income to Florida residents, employment, and the State's Gross Domestic Product (i.e., the total value of goods and services produced). The key objective of the legislative requirement is to ensure "that the state has a clear understanding of the economic consequences of transportation investments . . . [and to] develop a macroeconomic analysis of the linkages between transportation investment and economic performance" at the state and district levels.

This legislation specifically requires the analysis to assess:

1. the state's and district's economic performance relative to the competition;
2. the business environment as viewed from the perspective of companies evaluating Florida as a place to do business; and
3. Florida's capacity to sustain long-term growth.

The macroeconomic model developed by Florida Department of Transportation directly analyzes the impact of Work Program investments on travel conditions in the state including travel time, vehicle-operating costs, and economic costs associated with safety. The model quantifies the benefits from Work Program investments in highway, transit, seaports and rail projects which reduce transportation costs, and then translates those benefits into cost savings for Florida's businesses.

Benefit-Cost Summary of the FDOT Work Program
(All monetary values reported in billions of 2008 dollars)

BENEFITS	
Present Value of Personal Income Change	$ 59.5
Present Value of Non-Business User Benefits	$ 79.7
Total Discounted Benefits	$139.2
COSTS	
Present Value of Total Costs	$ 28.3
Net Present Value (Benefits Minus Costs)	$110.9
Benefit-Cost Ratio	4.92

The reduced cost of doing business in Florida allows businesses to be more competitive and increase their market share. Direct user benefits include travel time

savings, reduction in vehicle operating costs, and reduction in the number of crashes. Secondary business benefits associated with long-term changes in productivity expressed in this model are increased output (sales), hiring additional workers, and ultimately increasing the personal income of Florida's residents.

In 2009, every $1 invested in FDOT's work program for highway, rail, seaports, and transit facilities in the state will generate $4.92 in user and economic benefits over 30 years. The macroeconomic model represents a significant milestone in evaluating the economic benefits of investments in Florida's transportation system and guiding future transportation investment policies and legislation.

In addition, a 2007 U.S. Federal Highway Administration (FHWA) analysis concluded an additional $1 billion spending on highway construction is associated with an additional 9,500 person-year jobs in construction or closely related occupations. There are likely to be an additional 18,500 jobs in supporting industries and from higher consumer spending resulting from increased employment.

Performance Briefs

Sustainable Investments

December 2009

This Performance Brief provides performance information used by the Florida Department of Transportation and others to guide the development and investment decisions for Florida's transportation systems. Additional Briefs and related information on transportation performance reporting in Florida are available at http://www.dot.state.fl.us/planning/performance.

Our Goal:
Sustainable Investments for Florida's Future

Investments in Florida's transportation system are investments in the backbone of the State's economy. Transportation revenue sources must be sustainable and predictable so planned projects – which represent commitments by local governments in their comprehensive plans – are not delayed.

State, metropolitan, and local plans indicate the costs of needed improvements exceed available revenues. Narrowing the gap will require additional revenues, "joint funding" of projects through public and private partnerships, and major efforts to reduce costs.

Our Long-Range Objectives:

The 2025 Florida Transportation Plan identifies four long-range sustainable investment objectives:

- Provide sufficient resources to reduce the identified backlog in transportation needs and meet growth needs at the state, regional, and local levels.
- Establish transportation investment priorities recognizing that the Strategic Intermodal System meets a strategic and essential state interest, and that regional and local systems must be adequately funded.
- Reduce the cost of providing and operating transportation facilities.
- Document the gap between funding resources (local, regional, state, and federal) and needs across all levels and all modes in a consistent and compatible format.

The department will serve in a leadership role and be a catalyst in identifying long range needs at all levels, identifying reliable alternative revenue sources and financial tools, and cost reduction techniques. All partners must cooperate in seeking a consensus among Floridians and federal, state, and local elected officials on how to better meet identified needs.

Our Short-Range Objective:

Through 2015, allocate up to 75 percent of new discretionary capacity funds to the Strategic Intermodal System (SIS)

The development and adoption of the Strategic Intermodal System redefined the State's role by focusing limited State resources on those facilities which promote statewide and interregional mobility, enhance Florida's economy, and open the door to increased investments in non-highway modes. The 2025 Florida Transportation Plan strengthened the policy framework for looking at transportation in the context of broader economic, community, and environmental goals and enhanced the emphasis on regional planning. The 2005 Growth Management Bill strengthened the need to coordinate transportation and land use decisions, especially at the regional level, and created new funding programs such as the Transportation Regional Incentive Program to better meet the increasing demand for regional travel and commerce.

With major reductions in revenues beginning in 2006, the department is faced with the increasing need to consider a full range of issues and impacts in making investment decisions. This includes allocating up to 75 percent of new discretionary capacity funds to the SIS, taking into consideration the impact of revenue reductions on facilities not located on the SIS.

Public-Private Partnerships (P3)

While Public-Private Partnerships (P3s) are an established method of project delivery in other parts of the world, they represent a relatively new delivery tool for transportation infrastructure development in the United States and Florida. The P3 approach delivers a project faster than traditional pay-as-you-go financing and also offers an alternative to typical tax-exempt government bonds and other debt instruments used by state and local governments in the United States. This method is particularly well suited for large or complex projects.

The department primarily utilizes P3s to obtain financial assistance from the private sector to advance priority projects. The private partner is reimbursed, either by department funds or user-generated revenues, over a period of time extending beyond the completion of construction. The department has the authority to utilize this approach under state laws for Public-Private Transportation Facilities (s. 334.30, F.S.). For more information on Public-Private Partnership financing, go to www.dot.state.fl.us/financialplanning. Following is a summary of the department's Public-Private Partnership approaches:

Design-Build-Finance (DBF) and Build-Finance (BF)
This method involves private partners providing the funding to "advance" projects which are programmed in the outer years of the department's 5-Year Work Program or major projects in the 10-Year Strategic System Plan. The contractor receives reimbursement as specified in a Cash Availability Schedule provided by the department during the procurement process and financed in the Work Program. Once construction is complete, the department assumes operations and maintenance responsibilities. The department has ten DBF or BF public-private partnerships under contract or in procurement. For descriptions of these projects, please visit: www.dot.state.fl.us/financialplanning/finance/private_transportation_facilities.shtm.

Availability Payments
Availability Payment Concession Agreements allow a complex project (or series of projects which have been combined) to be developed using a design/build/finance/operate/maintain approach where the "owner," meaning the government entity, pays the Public-Private Partnership team an annual "availability payment" which is only made to the extent the facility is open to traffic and meets contractual performance specifications for operations and maintenance. The term of the Concession Agreement often spans several decades of operations and maintenance by the private partner. Additional milestone payments may be made at key points during construction or at the completion of construction. Examples include the I-595 Corridor Improvements and the Port of Miami Tunnel projects.

Development of a New Facility Using a Public-Private Partnership Development Approach
This method typically awards a long-term concession agreement for the private sector to develop certain segments of new tolled expressways. The private sector commits to design, build, finance, operate, and maintain the expressway. The development of these projects is heavily influenced by a financial calculation of the total project costs compared to the future value of the toll revenue stream. An example of this type of public-private partnership is the First Coast Outer Beltway.

Infrastructure Asset Leasing Approach ("Asset Monetization")
This approach takes an existing revenue producing infrastructure asset such as a toll road, and forms a long-term lease to a private concessionaire who will operate and maintain the asset in return for rights to future toll revenues. The department did not receive bids for a 2009 procurement for the lease of Alligator Alley.

Consistency of Long Range Plans

Historically, statewide, metropolitan and local long range transportation plans have not been coordinated and consistent. The plans have covered different time periods, did not always identify all needs and funding shortfalls, and were expressed in different financial terms (2002 dollars, 2006 dollars, etc.). This made it extremely difficult to compile a statewide assessment of needs, revenues and shortfalls.

All 26 metropolitan planning organizations (MPOs) will be updating their long range plans over the next few years. To assist in implementing the 2025 FTP, the Metropolitan Planning Organization Advisory Council (MPOAC) adopted guidelines for the development of needs and cost feasible plans through 2035, financial reporting in those plans, and for long range state, federal, and local revenue forecasting. Department, MPO and Federal Highway Administration staff cooperated in developing the guidelines. Implementation of this guidance will greatly enhance statewide documentation of needs, revenues, and shortfalls in Florida's metropolitan areas.

The department published a *2030 SIS Mulit-modal Unfunded Needs Plan* in 2006 and is currently revising its *Draft SIS 2035 Highway Component Cost Feasible Plan*. The department and Florida's MPOs will continue to develop more consistent and compatible plans as they update individual plans.

Strategies for Sustainable Investments

In addition to ensuring the proposed short-range objective for allocating 75 percent of discretionary capacity funds to Strategic Intermodal System facilities, the department will continue to work with its partners to:

- Provide greater choices and flexibility for raising sustainable local, regional, and state transportation resources which keep up with inflation.
- Encourage the development of strategies to fund transportation alternatives.
- Maximize the return of federal funds for all modes.
- Encourage the development of strategies to fund transportation alternatives.
- Provide state, local, and private sector incentives to encourage funding.
- Encourage the use of tolls, user fees, and "market choices" such as express lanes, express buses, and innovative transportation and transit options, consistent with local government comprehensive plans.
- Seek alternative revenue sources to traditional sources, such as fuel taxes, which may be negatively affected by changes in vehicle technology or increasing costs.

- Address increasing right-of-way costs through corridor planning, corridor management, advanced acquisition, and improvements to the statutory framework for the acquisition process.
- Implement technological improvements which increase efficiency of planning, design, and construction; intelligent transportation systems; and toll facilities operations.
- Systematically identify transportation needs, revenues, and shortfalls in regional, urban, transitioning, and rural areas.