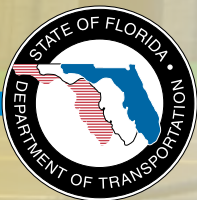


# MAP 21

Moving Ahead for Progress in the 21st Century



## 2013 Performance Report



A report to  
Florida's Congressional Delegation  
February 2013



## SAFETY

### FDOT makes progress towards ambitious highway safety goal

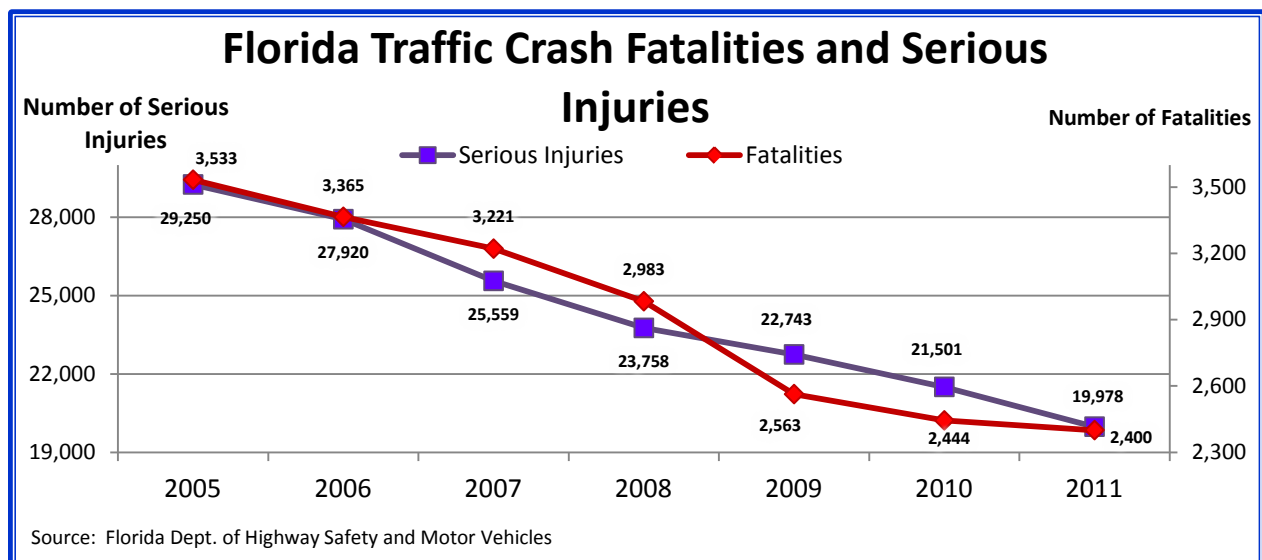


**Overview:** Florida's priority commitment to highway safety has resulted in a steady decline in fatalities (since 2005) and serious injuries (since 2001). FDOT's safety strategy includes education, enforcement, engineering and emergency response (e.g. our "Click It Or Ticket" seat belt campaign which incorporates education and enforcement). The Department leverages research and data to address critical safety challenges. Our response includes safety improvements to address crashes at intersections and involving lane departures; education and enforcement addressing distracted, impaired and aggressive driving; educational campaigns for at-risk drivers (teens and aging road users); and a mix of education, engineering and enforcement actions to reduce crashes involving bicyclists, pedestrians and motorcyclists. Because life is precious, FDOT has set the safety bar as high as possible with a long-range goal of zero traffic fatalities.

**MAP-21 Provisions:** Requires states to have a safety data system for analyses that support the Strategic Highway Safety Plan and the Highway Safety Improvement Program and to use the safety data systems to identify fatalities and serious injuries on all public roads by location and to identify locations and roadway elements that pose dangers to all road users, including vehicle occupants and non-occupant roadway users (e.g. pedestrians and bicyclists) [23 U.S.C. 148 (c)(2)(B)(i) and (iii)].

**Data Issues:** There is no consistent classification of "serious injury" from state to state.

**For More Information:** See the Safety & Security Annual Performance Report at [FDOTPerforms.org](http://FDOTPerforms.org) for Florida's strategies to achieve our crash reduction objectives.





## SYSTEM PERFORMANCE

### 78% of rush hour traffic on state highways travels at acceptable operating conditions



**Overview:** Florida has one of the most complete mobility highway system reporting systems in the nation. We have been reporting the quantity of travel, quality of travel and system utilization for over 10 years. This information helps ensure that the most needed system improvements are identified and implemented.

**MAP-21 Provisions:** Requires states to assess performance of the Interstate Highway System and non-Interstate segments of the National Highway System. It also requires the setting of performance targets, coordination with MPOs; and establishing a performance-based process.

**Data Issues:** The intended use of private data (e.g., freight carriers and shippers) vs. FDOT's data modeling techniques presents various challenges.

#### Other Issues:

- The need for national consistency in setting performance measure thresholds such as travel time meeting generally acceptable operating conditions, delay, and travel time reliability
- Calculation methodologies will need to be valid and reliable
- Network coverage for each measure may not be possible in the short run
- Setting relevant and realistic targets

**For More Information:** See the FDOT Source Book which includes mobility performance measures: <http://www.dot.state.fl.us/planning/statistics/mobilitymeasures/>

**Preliminary results:** for 2008-2011 for recommended performance measures

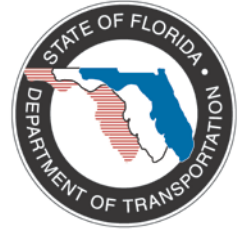
	2008	2009	2010	2011
Vehicle miles traveled (millions)	309.7	300.4	301.5	298.2
% travel in generally acceptable operating conditions during the peak hour	75.3%	78.1%	78.8%	78.4%
Delay (thousands of hours)	509.3	390.7	383.3	384.4
Travel time reliability	92.7%	94.8%	94.7%	94.3%
% miles severely congested	6.8%	5.6%	5.5%	5.4%





## ROADWAYS

**Over 94% of Florida Interstate roadways meet MAP-21 good condition criteria**



**Overview:** The Department has a long-standing commitment to ensuring that at least 80% of pavements on the State Highway System meet Department standards for non-deficiency. One of the MAP-21 Program's performance goals is to maintain the pavements (including the traveled surface of bridges) on the National Highway System (NHS) in good condition.

### MAP-21 Pavement Provisions:

- USDOT will establish performance measures on pavement condition and performance of the Interstate System and the remainder of the National Highway System within 18 months of enactment. [§1203; 23 USC 150(c)].
- States will set performance targets in support of those measures within one year of the USDOT final rule on performance measures. [§1203; 23 USC 150(d)].
- USDOT will establish minimum thresholds for Interstate pavement condition. [§1203; 23 USC 150(c) (3)].
- Each state will maintain minimum thresholds for Interstate pavement condition [§1106; 23 USC 119(f)].

**Data Issue(s):** The Florida portion of the NHS expanded from 4,500 miles to more than 8,000 miles under new MAP-21 definitions for that system. This creates a greater demand on state resources to collect, store, analyze, and report the additional NHS pavement data.

**Other Issue(s):** None.

### 2012 Florida MAP-21 NHS Pavement Condition \*

NHS	Good - IRI < 95		Fair - IRI 95 to 170		Poor - IRI > 170		Total
	Lane-Miles	% Lane-Miles	Lane-Miles	% Lane-Miles	Lane-Miles	% Lane-Miles	
Interstate	7,277.3	94.1	407.2	5.3	45.8	0.6	7,730.3
Non-Interstate	19,251.7	73.1	6,156.8	23.5	795.9	3.0	26,204.4
Total	26,529		6,564		842		33,935

\* Includes roadways on and off the State Highway System as well as the bridges' traveled surface.

\* IRI are in in/mile



## BRIDGES

**Over 95% of state-maintained bridges meet standards and all state bridges open to the public are safe**



**Overview:** Florida is committed to keeping state highway bridges in a good and safe condition. The Department maintains 6,661 bridges and inspected 2,496 other bridges owned by other state and local jurisdictions last year. The Department takes a proactive maintenance approach which has proven cost-effective. Preventative maintenance and repairs are performed to prevent bridges from deteriorating to a level at which the repair cost would be much greater. This approach ensures that our bridges meet or exceed their design life, resulting in a lower frequency of large capital bridge replacement costs.

**MAP-21 Provisions:** States must maintain minimum thresholds for National Highway System (NHS) bridges (no more than 10% of total NHS bridge deck area may be on structurally deficient bridges). [§1106; 23 USC 119(f)].

**Data Issues:** The specific data elements and ranges to be used for categorizing bridges as good, fair or poor are still being discussed among states.

**Other Issues & Opportunities:** The Florida portion of the National Highway System expanded from 4,500 miles to more than 8,000 miles as MAP-21 redefined what comprises the NHS. Our preliminary assessment is that less than 2% of the total deck area of NHS bridges in Florida are on structurally deficient bridges.

**For More Information:** See the Maintenance & Operations Annual Performance Report at [FDOTPerforms.org](http://FDOTPerforms.org) for Florida's strategies for achieving our bridge objectives.

Results based on defining 8,9 as Excellent, 6,7 as Good; 5 as Fair and 4 as Poor				
Bridges & Culverts	Number	Percent by Number	Deck Area SF	Percent by Deck Area
Good or Excellent	5292	96.22 %	115,008,856	91.78%
Fair	187	3.40 %	8,168,917	6.52 %
Poor	21	0.38 %	2,125,881	1.70 %
Total	5500	100 %	125,303,654	100 %



## **FREIGHT**

**Over 90% of freight traveling on Florida's roadways arrives on time**



**Overview:** Florida has an extensive freight mobility monitoring program. The information helps to ensure that the most needed improvements to the freight network are identified and implemented.

**MAP-21 Provisions:** Requires states to assess the performance of the National Freight Network; set performance targets; coordinate with MPOs; establish a performance-based process.

### **Data Issues:**

- Use of proprietary data vs. public data
- Establishing reliable and sufficient origin and destination of shipments data
- Having reasonably good estimates of the value of cargo being shipped

### **Other Issues:**

- Network coverage
- There should be national consistency in setting threshold for performance measures such as travel time reliability
- Calculation methodologies
- Setting relevant targets

**For More Information:** See the FDOT Source Book which includes mobility performance measures: <http://www.dot.state.fl.us/planning/statistics/mobilitymeasures/>

**Preliminary results:** for 2008-2011 for recommended performance measures

	2008	2009	2010	2011
Combination truck miles traveled (millions)	15.0	14.3	12.8	12.9
Travel time reliability	92.7%	94.8%	94.7%	94.3%
Combination truck delay (thousands of hours)	12.0	8.4	7.4	7.9
% miles severely congested	6.8%	5.6%	5.5%	5.4%



## TRANSIT

Transit is improving Florida's mobility



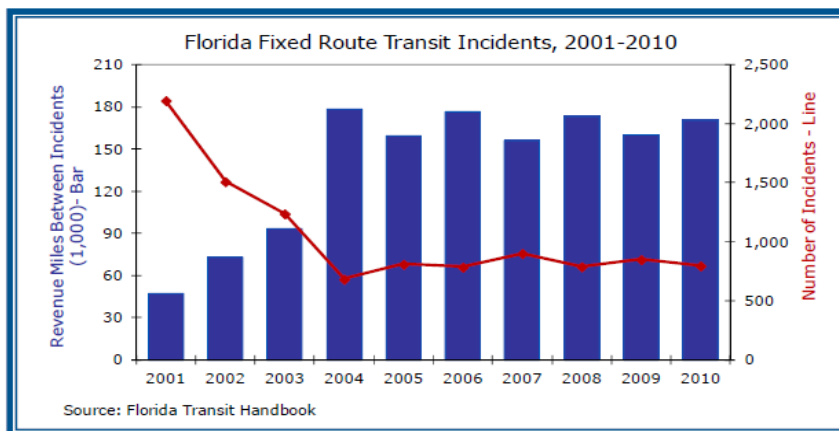
**Overview:** The Federal Transit Agency (FTA), requires both rural and urban transit agencies to report transit related data to the National Transit Database (NTD). Over the last 10 years, Florida has reported on the performance of their 29 urban transit systems using data contained in the NTD. Since 2000, public transit ridership has increased by over 40% underscoring its strategic value for improving mobility. Florida performance measures range from annual ridership to operating costs per mile, and include indicators for state of good repair and safety, such as revenue miles between incidents (breakdowns) and accidents. Additionally, the annual number of transit related incidents and fatalities are also included in the Annual Performance Report for the Florida Transportation Plan.

**MAP-21 Provisions:** Requires transit agencies and states to develop performance measures for State of Good Repair and Safety based on agency Asset Management and Safety Plans. Data and metrics used to report this information will be identified by FTA through rulemaking.

**Data Issues:** None. Data will be made available from the agency plans and NTD.

**Other Issues and opportunities:** Florida reports on the urban transit systems only. As required by MAP-21, a new system for reporting the performance measures for the rural transit agencies will need to be developed at the state level.

**For More Information:** See the Florida Transit Information Handbook at: <http://www.dot.state.fl.us/transit/Pages/2012TransitHandbook.pdf> for the performance of Florida's urban transit agencies.

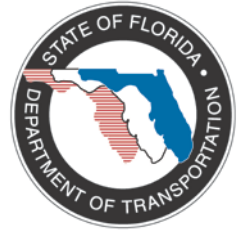


*The sharp decline in incidents from 2001 to 2004 was due to a change in the reporting threshold.*



## CONGESTION MITIGATION AND AIR QUALITY

### All of Florida meets current air quality standards



**Overview:** The entire state of Florida is in compliance with present air quality standards. The next ozone review is underway and EPA will propose revisions, if necessary, in 2013, to be finalized in 2014.

**MAP-21 Provisions:** For the purpose of carrying out the Congestion Mitigation and Air Quality Improvement Program USDOT shall establish measures for state use to assess:

- Traffic congestion
- On-road mobile source emissions

**Data Issues:** None

**Other Issues:**

- Air quality standards could change making some areas non-attainment designated areas for ozone or other criteria pollutants.
- Although the title of the national program includes congestion mitigation, this program primarily relates to air quality. Will congestion mitigation be required regardless of air quality issues?
- Which performance measures, if any, are relevant if all of Florida meets air quality standards?

**For More Information:** Contact FDOT's Office of Policy Planning

**Preliminary results:** for 2008-2011 for possible congestion mitigation performance measures

	2008	2009	2010	2011
Vehicle miles traveled (millions)	309.7	300.4	301.5	298.2
% miles severely congested	6.8%	5.6%	5.5%	5.4%