

Transportation Performance Report

A report to Florida's Congressional Delegation February 2015





Florida Department of Transportation

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February 23, 2015

This letter was sent to each member of the Florida Congressional Delegation Washington, D.C.

Dear Senator/Congressperson:

Section 1203 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141, defines national goals for the Federal-aid highway program. Performance measures are to be established through the federal rulemaking process and subsequent target setting and performance reporting by the states. It is important that the ultimate rules add value to the states. Further, implementation flexibility is an overarching principle, recognizing that each state has unique needs. Restrictive rulemaking can actually impede state effectiveness.

The Florida Department of Transportation (FDOT) has a performance reporting history that aligns closely with the MAP-21 performance management requirements. This is our third MAP-21 Performance Report. We began these reports three years ahead of the statutory schedule. Performance summaries for safety, system performance, roadways, bridges, freight, transit and air quality are included. FDOT is committed to achieving further improvement in all areas.

Close collaboration between federal and state government is also essential for achieving the potential envisioned for performance management and measurement. We are also expanding our collaboration with Florida's 27 metropolitan planning organizations (MPOs). FDOT is committed to leading and innovating in this vitally important area of transportation management.

Thank you for your leadership and support. Please contact me if you have any questions or comments regarding this report. I can be reached at 850-414-5206.

Sincerely,

m Boxold

Secretary



Safety

The number of fatalities and serious injuries on Florida's roadways continued to drop in 2013

Moving Ahead for Progress in

the 21st Century

2015 MAP-21 Performance Report

Overview: Because life is precious, FDOT has set the highway safety improvement bar as high as possible with a long-range goal of zero traffic fatalities. This commitment has resulted in a steady decline in average annual fatalities and serious injuries since 2005. FDOT's safety strategy encompasses education, enforcement, engineering and emergency response. Our actions include targeted intersection safety improvements and varied education and enforcement efforts. The "Put It Down" campaign is aimed at reducing distracted driving and pedestrian texting in crosswalks. FDOT also partners to focus on at-risk drivers with other stakeholder organizations such as the Florida Sheriffs Association (which teaches teens safe driving practices) or the Safe Mobility for Life Coalition (which coordinates efforts to reach aging road users). Improved safety for bicyclists, pedestrians, and motorcyclists, and campaigns to address impaired and aggressive driving are pursued through a combination of education, engineering and enforcement.

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)].

Issues:

- Target Setting: Reduce the number of fatalities and injuries by 5 percent each year based on the 5-year average
- The definition of "serious injury" is not consistent from state to state

For More Information: See the Safety & Security Annual Performance Report at <u>FDOTPerforms.org</u> for Florida's strategies to achieve our objectives.





System Performance

85% of rush hour traffic on state highways travels at acceptable operating conditions

2015 MAP-21 Performance Report

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.

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
- Changing to the use of actual vehicle probe data instead of calculation models for some measures
- Setting relevant and realistic targets
- Target Setting: To be determined

For More Information: See the FDOT Source Book at: <u>http://www.dot.state.fl.us/planning/statistics/mobilitymeasures/</u>

Results: for 2009-2013 for recommended performance measures

	2009	2010	2011	2012	2013
Vehicle miles traveled (millions)	286.9	288.2	285.0	284.1	288.0
% travel in generally acceptable operating conditions (peak hour)	85.4%	86.0%	85.2%	86.4%	85.0%
Delay (thousands of hours)	457.6	416.6	414.8	408.8	421.9
Travel time reliability (daily)	92.3%	92.3%	91.9%	92.2%	91.7%
% miles severely congested (peak hour)	2.9%	2.8%	2.7%	2.7%	2.7%





Roadways

Over 90% of Florida Interstate roadways meet MAP-21 good condition criteria

2015 MAP-21 Performance Report

Overview: The Department has a long-standing commitment to ensuring that at least 80% of pavements on the State Highway System (SHS) 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)].

Issues:

- 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.
- The Department ensures that 80% of the pavements on the State Highway System meet Department Standards.
- Currently there is no MAP-21 guidance for reporting, field test data collected/reported according to HPMS Field Manual (2012).

National Highway System		Good (IRI < 95)		Fair (95 <u><</u> IRI <u><</u> 95)		Poor (IRI > 170)		Total
		Lane Miles	% Lane Miles	Lane Miles	% Lane Miles	Lane Miles	%Lane Miles	Lane Miles
State Highway	Interstate	6,449	90%	635	9%	62	1%	7,145
System	Non-Interstate	18,372	77%	4,799	20%	696	3%	23,868
Off S	HS Total**	1,061	46%	953	41%	315	14%	2,330
NF	IS Total	25,882	78%	6,388	19%	1,073	3%	33,343

2014 Florida MAP-21 NHS Pavement Condition*

* Information is based on data collected during 2014. Mileage shown is extrapolated from the Pavement Condition Survey rated sections and includes all structures, railroad crossings and bridges' traveled surface. In addition, 2,512 miles were under construction on the State Highway System during data collection and are not included. International Roughness Index (IRI) are in in/mile.

** Off SHS sections are not maintained by the State.





Bridges Over 95% of statemaintained bridges meet standards and all state bridges open to the public are safe

2015 MAP-21 Performance Report

Overview: Florida is committed to keeping state highway bridges in a good and safe condition. The Department maintains 6,783 bridges and inspected 3,248 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)].

Issues:

- The specific data elements and ranges to be used for categorizing bridges as good, fair or poor are still being discussed among states.
- 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. Less than 3% of the total deck area of NHS bridges in Florida are on structurally deficient bridges.
- Using current NBI element data, it is not possible to obtain an accurate value of equivalent deck area for culverts. Currently, 2 of 787 culverts on the NHS are structurally deficient.
- Target Setting: Ensure that 90 percent of Department-maintained bridges meet standards while keeping all Department-maintained bridges open to the public safe.

For More Information: See the Maintenance & Operations Annual Performance Report at <u>FDOTPerforms.org</u> for Florida's strategies for achieving our bridge objectives.

Bridge Performance by Condition Ratings									
Bridges	Number	Percent by Deck Area							
Good or Excellent	4,477	96.3%	114,688,697	91.5%					
Fair	148	3.2%	8,384,731	6.7%					
Poor	26	0.5%	2,311,518	1.8%					
Total	4,651	100.0%	125,384,946	100.0%					
Ratings: Excellent – 8 or 9; Good – 6 or 7; Fair – 5; Poor -4 Data include MDX and OOCEA									

Does not include culverts.





Freight

Freight travel on Florida's main highways is reliable over 90% of the time

2015 MAP-21 Performance Report

Overview: Florida has a comprehensive 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, and establish a performance-based process.

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
- Network coverage
- There should be national consistency in setting threshold for performance measures such as travel time reliability
- Changing to the use of actual vehicle probe data instead of calculation models for some measures
- Target Setting: To be determined

For More Information: See the FDOT Source Book at: <u>http://www.dot.state.fl.us/planning/statistics/mobilitymeasures/</u>

Results: for 2009-2013 for recommended performance measures

	2009	2010	2011	2012	2013
Combination truck miles traveled (millions - daily)	13.6	12.7	12.7	13.4	13.9
Travel time reliability (daily)	92.1%	92.1%	91.7%	92.0%	91.4%
Combination truck delay (thousands of hours - daily)	10.7	9.2	9.2	10.0	12.1
% miles severely congested (peak hour)	2.9%	2.8%	2.7%	2.7%	2.7%





Transit

Transit is improving Florida's mobility

2015 MAP-21 Performance Report

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 30 urban fixed-route transit systems using data contained in the NTD. Since 2003, public transit ridership has increased by over 30% 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.

Issues:

- Florida reports on the urban transit systems only. MAP-21 requires a new system for reporting the performance measures for the rural transit agencies to be developed at the state level.
- Target Setting: Performance targets for transit state of good repair and safety have not been established.

For More Information: See the Florida Transit Information Handbook at: <u>http://www.dot.state.fl.us/transit/Pages/2014FloridaTransitHandbook.pdf</u> for the performance of Florida's urban transit agencies.



Note: In 2007, NTD set new requirements in reporting safety data, which explains the increase in incidents between 2007 and 2008.





Congestion Mitigation and Air Quality

The entire State of Florida will maintain compliance with current air quality standards

2015 MAP-21 Performance Report

Overview: The entire state of Florida is in compliance with present air quality standards. Florida receives Congestion Mitigation and Air Quality (CMAQ) Federal funds.

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

Issues:

- Air quality standards could change making some areas nonattainment 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?
- If performance measures are required, will they just be for Transportation Management Areas over 1 million population?
- Data to assess on-road mobile source emissions is obtained from the Motor Vehicle Emission Simulator (MOVES) Air Quality model.
 FDOT is not required to run the MOVES model due to attainment status.
- Target Setting: FDOT/MPO target setting will be discussed with the MPOs at the April, 2015 Statewide meeting.

For More Information: Contact FDOT's Office of Policy Planning or Environmental Management Office.

Preliminary Measures: Vehicle miles traveled and the percentage of travel severely congested could be used as performance indicators as shown below.

	2009	2010	2011	2012	2013
Vehicle miles traveled (millions)	286.9	288.2	285.0	284.1	288.0
% travel severely congested (daily)	2.5%	2.5%	2.6%	2.5%	2.6%





Produced by The Florida Department of Transportation