Transportation Performance Management

Performance management is a strategic approach to connect investment and policy decisions to help achieve performance goals. Performance measures are indicators of progress toward attaining a goal, objective or target (a desired level of future performance). The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires state departments of transportation (state DOTs), metropolitan planning organizations (MPOs), and transit agencies to conduct performance-based planning by setting data-driven performance targets for several transportation performance measures, and program transportation investments that are expected to result in achievement of the targets.

The federally required measures prescribed through rule-making address the national goal areas of:

- Improving Safety;
- Maintaining Infrastructure Condition;
- Reducing Traffic Congestion;
- Improving the Efficiency of the System and Freight Movement;
- Protecting the Environment; and
- Reducing Delays in Project Delivery.

The Fixing America's Surface Transportation Act (FAST Act) supplements MAP-21 by establishing timelines for state DOTs and MPOs to comply with the requirements of MAP-21. State DOTs are required to establish statewide targets within one year of the performance measures rule release date. The MPOs then have 180 additional days after the state DOT establishes targets to either support the statewide targets or adopt their own quantifiable targets for the MPO's planning area.

Listed below are the performance measures and statewide targets that have been established. The Florida Department of Transportation (Department) worked in collaboration with the MPOs and providers of public transportation, to the extent practicable, to establish these statewide targets.

FHWA Safety Performance Measures	1yr Target	2yr Target	4yr Target
Number of fatalities	0	n/a	n/a
Rate of fatalities per 100 million vehicle miles traveled (VMT)	0	n/a	n/a
Number of serious Injuries	0	n/a	n/a
Rate of serious injures per 100 million vehicle miles traveled (VMT)	0	n/a	n/a
Number of non-motorized fatalities and serious injuries combined	0	n/a	n/a
FHWA Pavement Performance Measures	1yr Target	2yr Target	4yr Target
% of Interstate pavements in Good condition	n/a	n/a	≥ 60.0%
% of Interstate pavements in Poor condition	n/a	n/a	≤ 5.0%
% of non-Interstate NHS pavements in Good condition	n/a	≥ 40.0%	≥ 40.0%
% of non-Interstate NHS pavements in Poor condition	n/a	≤ 5.0%	≤ 5.0%

FHWA Bridge Performance Measures	1yr Target	2yr Target	4yr Target
% of NHS bridges classified as in Good condition by deck area	n/a	≥ 50.0%	≥ 50.0%
% of NHS bridges classified as in Poor condition by deck area	n/a	≤ 10.0%	≤ 10.0%
FHWA System Performance Measures**	1yr Target	2yr Target	4yr Target
% of person-miles traveled on the Interstate that are reliable	n/a	75.0%	70.0%
% of person-miles traveled on the non-Interstate NHS that are reliable	n/a	n/a	50.0%
Truck travel time reliability ratio (TTTR) on the Interstate	n/a	1.75	2.00
FTA State of Good Repair Performance Measures*	1yr Target	2yr Target	4yr Target
% of non-revenue vehicles met or exceeded useful life benchmark (ULB)	TBD	-	-
% of revenue vehicles met or exceeded useful life benchmark (ULB)	TBD	-	-
% of track segments with performance restrictions	TBD	-	-
% of assets with condition rating below 3.0 of FTA TERM Scale	TBD	-	-

*Targets will be established by October 1, 2018.

**FHWA Congestion Mitigation and Air Quality Improvement Program (CMAQ) measures do not apply to Florida at this time because all parts of the state currently are in attainment for National Ambient Air Quality Standards (NAAQS).

It is the policy of the Department to link performance measures to investment policies and project programming decision-making. Therefore, the program of projects in the State Transportation Improvement Program (STIP), once implemented, will make progress toward achievement of the statewide targets. The text below discusses how the STIP is developed as well as how it is aligned with other performance-based plans.

Development of the STIP

The Florida Transportation Plan (FTP) is the single overarching statewide plan that guides Florida's transportation future. The core component of the FTP is the Policy Element, which serves as Florida's long-range transportation plan under both state and federal law. It defines the goals, objectives, and strategies for Florida's transportation future over the next 25 years and provides guidance in making transportation decisions. The Policy Element also establishes the framework for expenditure of state and federal transportation funds flowing through the Department's Work Program.

The Program and Resource Plan (PRP) provides the link between the FTP, the Department's numerous programs (as reflected in the project-specific Work Program), and the Department's Legislative Budget Request (LBR). It contains the specific long-range goals and objectives from the FTP, as well as selected operating policies and performance measures, which guide the development of each program in the Department.

The PRP consists of a complete 10-year projected budget for all major agency functions and programs. The PRP is a summary document that contains the approved program alternatives and funding levels by fiscal year to accomplish program goals and objectives within expected revenue. The document reports the Department's planned budget in several different ways including by product area, product support, operations and maintenance, administration, etc. It also provides summary information by funding source. The PRP serves as a link between the FTP, a planning document, and the Adopted and Tentative Work Programs, documents listing all Department projects and expected spending out to a five-year horizon. The PRP establishes the programming framework by which the Work Program is developed.

The process of developing the Work Program involves a series of Program Planning Workshops which are held in May and June of each year. These annual workshops provide an opportunity for the Executive Team (i.e., FDOT Secretary, Assistant Secretaries, and District Secretaries) to set priorities, provide direction, and make funding decisions. The primary objective of these workshops is to determine the level of funding to be allocated over the next 5 to 10 years, which is documented in the 10-year PRP.

During the workshops, presentations are made which provide an assessment of prior years' performance, projections for future performance, and recommended funding levels that ensure all preservation related performance objectives will be met annually as outlined in the Five-Year Work Program and beyond. Executive direction on funding level and priority is also provided during the workshops. The FTP goals and associated performance indicators are used to "set the stage" for these discussions.

After funding levels and allocations have been established, discussions on project selection and prioritization commences. Local projects are included in those discussions. The state's 27 MPOs develop their list of priority projects in coordination with the Department's District Offices. Outside of MPO planning areas, the Department programs projects in cooperation with affected local elected and appointed officials.

The Department programs transportation projects into the Work Program based upon local priority, funding availability, and project schedules. The Department's assessment of needs includes an identification of highly congested roadways, safety and security considerations, access to business and industry, links to military facilities and improvements to major economic assets such as seaports, airports and rail facilities. Project needs are identified by the Department's District Offices in conjunction with local officials with responsibility for transportation.

These project priorities serve as the basis for the district-wide prioritization process. The Department's Central Office reviews the District's programming of projects to ensure adherence to the Department's policies and procedures, established performance measures, and federal requirements. The final list of projects that result from the project selection and prioritization process becomes the Department's Five-Year Work Program. The new STIP becomes effective in October of each year, upon FHWA and FTA approval, based on programming in the Department's Adopted Work Program from the preceding July 1st of the same calendar year.

STIP Relationship to Performance-based Plans

The mission of the Department is to provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities. As previously explained, the PRP contains the specific long-range goals and objectives from the FTP, as well as selected operating policies and performance measures, which guide the development of each program in the Department.

The program of projects in the STIP are established to help ensure significant progress is made towards achieving the statewide targets of the Department's performance-based plans.

Strategic Highway Safety Plan (SHSP)/Highway Safety Improvement Program (HSIP)

Florida shares the national traffic safety vision, "Toward Zero Deaths," and formally adopted its own version of the national vision, "Driving Down Fatalities," in 2012. The Florida Strategic Highway Safety Plan (SHSP) and the FTP both highlight the state's continuing commitment to advancing performance management and a vision of zero deaths.

The Florida Highway Safety Improvement Program (HSIP) annual report documents the statewide interim performance measures toward that zero deaths vision. For the 2017 HSIP annual report, FDOT established statewide HSIP interim safety performance measures and FDOT's 2018 safety targets, which set the target at "0" for each performance measure to reflect the Department's vision of zero deaths.

Two objectives of the FTP's goal of "Safety & Security for Residents, Visitors, and Businesses" are to:

- Prevent transportation related fatalities and serious injuries; and
- Reduce the number of crashes on the transportation system.

These FTP objectives have specific implementation actions that were incorporated in the update of the SHSP, as well as strategies for improving safety of transit and other non-highway modes.

Florida's Highway Safety Plan (HSP) and HSIP echo the goals of the SHSP. All three data-driven initiatives cite the goal of reducing traffic crashes, fatalities, and serious injuries, with an ultimate vision of zero deaths.

The Department and its many traffic safety partners share a high concern for the upward trending of traffic crashes, both statewide and nationally. The safety initiatives and projects within the STIP are being initiated in an attempt to reverse these trends.

The STIP Safety program includes projects designed to improve vehicle and pedestrian safety on the city, county, and state highway systems. The Safety program is divided into two subprograms:

- Highway Safety Improvement Program (HSIP)
- Highway Safety Grant Program (HSGP)

The FAST Act continued the HSIP to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State owned public roads. To be eligible for HSIP funds, all safety improvement projects must address at least one of the 13 SHSP emphasis areas, be identified through a data-driven process, and contribute to a reduction in fatalities and serious injuries. The 13 emphasis areas in the 2016 Florida SHSP are:

- Lane Departure Crashes;
- Intersection Crashes;
- Impaired Driving Crashes;
- Pedestrians and Bicyclists;
- Unrestrained Occupants;

- Aging Drivers;
- Motorcyclists;
- Commercial Motor Vehicle Crashes;
- Speeding and Aggressive Driving Crashes;
- Teen Driver Crashes;
- Distracted Driving Crashes;
- Work Zone Crashes; and
- Traffic Records and Information Systems.

FDOT receives an annual allocation of about \$120 million in HSIP funds. Projects included in the Safety program address the four HSIP main safety categories of intersections, lane departure mitigation, pedestrian and bicyclist safety, and other programs representing the remaining SHSP emphasis areas. All of the federal funding allocated for safety is spent on safety projects. In addition, Florida design and construction standards include safety criteria and countermeasures, which are incorporated in every construction project; these safety measures are implemented as part of the total project, and are funded using a combination of state and/or federal funds beyond allocated federal safety dollars.

The HSGP is administered by the National Highway Traffic Safety Administration (NHTSA) for the purpose of assisting the state in designing traffic safety programs to reduce traffic crashes, deaths and injuries. Florida's action plan for distribution of NHTSA highway safety funds is documented in the HSP. The HSP is based on Florida's SHSP goals and objectives, crash data, and federal requirements. NHTSA funding is used for the HSGP areas such as impaired driving countermeasures, police traffic services, community traffic safety, and occupant protection.

In addition to these specific safety programs, the STIP includes specific investment priorities that support all of Florida's goals including safety. The STIP prioritization process continues to use a data-driven method and stakeholder input to evaluate projects that have an anticipated effect of reducing both fatal and injury crashes. For example, for those projects that are part of the Strategic Intermodal System (SIS), the development of the SIS Five-Year Plan by FDOT considers scores on 51 measures including safety as part of FDOT's Strategic Investment Tool (SIT). FDOT's goal of reducing fatal and serious injury crashes is linked to this investment plan and the process used in prioritizing the projects is consistent with federal requirements.

The Department envisions a fatality-free system and established safety as its highest priority at least 35 years ago. This vision is well documented in the Department's mission and vision and in the first goal of the Florida Transportation Plan (Safety & Security for Residents, Visitors, and Businesses). Florida's Legislature enacted state law in 1984 placing top priority on safety, Section 334.046(2), Florida Statutes:

"(2) The mission of the Department of Transportation shall be to provide a safe statewide transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of our environment and communities."

The State adopted the federal goal of Vision Zero in 2012. The federally-mandated target for fiscal year 2019, which the Department set as zero, is consistent with our prior State goal of zero. The Department's long-standing practice includes monitoring safety performance measures, much like those established by the federal government. The Department continues to prioritize projects in the STIP related to potential

safety improvements. This is evidenced in the Department's other performance-based plans, Work Program instructions, and tools, like SIT.

This STIP plans to make significant process towards achieving the zero safety targets established by the Department through continued prioritization of safety enhancements, inclusion of safety standards in design and construction, and the use of 100% of federal safety funding to safety projects.

The Department and its many traffic safety partners, including the MPOs, share a high concern for the upward trending of traffic crashes, both statewide and nationally. The safety initiatives and projects within the STIP are being initiated in an attempt to reverse these trends. These projects have been coordinated through the MPOs, following federal and state rules and regulations.

Florida law requires FDOT to work with the partners and public to update the Florida Transportation Plan and the Strategic Highway Safety Plan every five years and the Department's Work Program annually. Projects are reviewed and prioritized in coordination with the MPOs, to align with the legislative mandate related to safety as the State's top priority.

Asset Management Plan (Pavement and Bridge Conditions)

The Department considers asset management a central tenet of its long-range planning process and has a well-established philosophy, supported by statutes, to preserve its assets before adding capacity to the transportation system. This approach sets the framework for all capacity enhancements and service additions to the transportation network. As such, this philosophy serves as a solid foundation to meet and build upon federally required asset management focused practices.

The Department is mandated by Florida Statute, s. 334.046, to preserve the state's transportation infrastructure to specific standards:

- Ensuring that 80 percent of the pavement on the State Highway System (SHS) meets Department standards;
- Ensuring that 90 percent of Department-maintained bridges meet Department standards; and
- Ensuring that the Department achieves 100 percent of the acceptable maintenance standard on the SHS.

To adhere to the statutory guidelines, the Department prioritizes funding allocations to ensure the investments made in the current transportation system are adequately preserved and maintained before funding is allocated for capacity improvements. These statutory guidelines envelope the statewide federal targets that have been established for the pavements and bridges.

MAP-21 requires each state DOT to develop a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP must include investment strategies leading to a program of projects that would make progress toward achievement of the state DOT targets for asset condition and performance of the NHS. FDOT's TAMP was updated to reflect MAP-21 requirements in 2018.

The STIP investments in pavement and bridge condition include pavement replacement and reconstruction, bridge replacement and reconstruction, and new bridge and pavement capacity. The five-year Work Program will fund \$2.005 billion for bridges and \$4.008 billion for resurfacing.

System Performance

Florida's Strategic Intermodal System (SIS) is composed of transportation facilities of statewide and interregional significance. The SIS is a primary focus of FDOT's capacity investments and is Florida's primary network for ensuring a strong link between transportation and economic competitiveness. These facilities, which span all modes and includes highways, are the workhorses of Florida's transportation system and account for a dominant share of the people and freight movement to, from and within Florida. The SIS includes 92 percent of NHS lane miles in the state. Thus, the focus on improving performance of the SIS goes hand-in-hand with improving the NHS, which is the focus of the FHWA's TPM program. The development of the SIS Five-Year Plan by FDOT considers scores on a range of measures including safety, preservation, mobility, and economic competitiveness as part of FDOT's Strategic Investment Tool (SIT).

The STIP investments in NHS system performance and reliability include corridor improvements, intersection improvements, and managed lanes. The five-year Work Program will fund \$15.298 billion in SIS highway capacity improvements.

Freight Reliability

FDOT's Freight Mobility and Trade Plan (FMTP) defines policies and investments that will enhance Florida's economic development efforts into the future. The FMTP was developed and completed in two phases, a Policy Element and Investment Element. The Policy Element is intended to lay out the policy framework and identify responsibilities for implementation. The Investment Element builds on the Policy Element and is specifically intended to identify freight needs, identify criteria for state investments in freight, and prioritize freight investments across modes. In February 2018, FHWA approved the FMTP as FDOT's State Freight Plan.

FDOT also developed and refined a methodology to identify freight bottlenecks on Florida's SIS on an annual basis using vehicle probe data and travel time reliability measures. Identification of bottlenecks and estimation of their delay impact aids FDOT in focusing on relief efforts and ranking them by priority. In turn, this information is incorporated into FDOT's Strategic Investment Tool (SIT) to help identify the most important SIS capacity projects to relieve congestion.

Transit Asset Management

Every transit agency that receives FTA funds must develop a Transit Asset Management (TAM) plan. Transit agencies that meet certain criteria may participate in a group TAM plan, which is compiled by a group TAM plan sponsor. FDOT serves as the sponsor and has prepared a Group TAM for those transit systems that have opted to be included. FDOT's transit program also provides funds to transportation disadvantaged service providers.

In the STIP, transit funds are used for capital improvements, including vehicle acquisitions, and operating assistance. Funds are also provided to public agencies for commuter assistance activities such as ridesharing. The five-year Work Program will fund \$2,048 billion in transit improvements.

Consistency

The STIP is consistent with the Department's performance-based plans. As previously stated, the Program and Resource Plan (PRP) guides the development of each program in the Department. Based on those plans, which are designed to achieve the specific goals and objectives from the FTP, the program of projects in the STIP are derived. Performance measures are then used to help monitor progress toward attainment of the Department's mission.