

## **ALDOT's Performance Measures**

### **Background**

In compliance with the Joint Planning Rule from FHWA (23 CFR 450 and 771) and FTA (49 CFR 613), under the MAP-21 and the FAST Act, State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) are to implement a performance-based approach to planning and programming activities. This includes setting data-driven performance targets for transportation performance measures. This approach supports the national goals for the federal-aid highway and public transportation programs. The seven goals are as follows: 1) Improving Safety, 2) Maintaining an Infrastructure Asset System in a State of Good Repair, 3) Reducing Traffic Congestion, 4) Improving the Efficiency of the Surface System, 5) Freight Movement and Economic Vitality, 6) Protecting the Environment, and 7) Reducing Project Delivery Delays.

Under the 23 CFR 490, the DOTs and MPOs are required to establish targets for applicable national performance measures. The Safety Performance Measures (PM1), Bridge/Pavement Measures (PM2), the System Performance Measures (PM3), and the FTA's Transit Asset Management (TAM) Targets have been adopted by ALDOT and the MPOs. Some targets are required to be set on an annual basis while others are set on two (2)-year and four (4)-year cycles.

ALDOT and the MPOs, along with the Transit Providers, have a cooperative agreement in place to coordinate the development of the targets, the sharing of information related to the transportation performance measures, selection of targets, and reporting requirements.

### **STIP Linkage to Performance-Based Planning Documents and Targets:**

The FHWA/FTA Joint Planning Rule required that two years after the rules become effective that STIP/TIPs amendments or updates must meet the Performance-Based Program and Planning (PBPP) requirements (23 CFR 450.226 and 450.340). These "phased-in" requirements became effective in 2018 and 2019. The STIP/TIPs aid in programming investments toward achieving the targets as well as align with the PBPP plans to the maximum extent practicable.

This STIP contains both Highway and Transit Projects. Typical highway projects, such as highway capacity, system preservation, bridge, and safety projects, support the established targets. The same is true for the transit projects that are capital purchases. The STIP project selection criteria considers ALDOT's goals and objectives to preserve the existing system, improve system reliability, promote safety, reduce congestion, and improve the movement of goods and people. ALDOT will continue to coordinate with the MPOs on updates and/or amendments to the STIP/TIPs and support the selected performance targets (to the maximum extent practicable).

## ALDOT Performance Measures & Targets

<b>FHWA Safety Performance Measures (PM1) (Annual Targets)</b>	<b>Calendar Year 2019 Targets</b>	
Number of Fatalities	932	
Rate of Fatalities (per 100 million Vehicle Miles Traveled)	1.33	
Number of Serious Injuries	8469	
Rate of Serious Injuries (per 100 million Vehicle Miles Traveled)	12.08	
Number of Non-motorized fatalities and serious injuries	394	
<b>FHWA Bridge/Pavement Performance Measures (PM2)</b>	<b>2-Year Target 2020</b>	<b>4-Year Target 2022</b>
% of Pavements of the Interstate System in Good Condition	n/a	> 50.0%
% of Pavements of the Interstate System in Poor Condition	n/a	< 5.0%
% of Pavements of the Non-Interstate NHS in Good Condition	> 40.0%	> 40.0%
% of Pavements of the Non-Interstate NHS in Poor Condition	< 5.0%	< 5.0%
% of NHS bridges in Good condition by deck area	≥ 27.0%	≥ 27.0%
% of NHS bridges in Poor condition by deck area	≤ 3.0%	≤ 3.0%
<b>FHWA System Performance Measures (PM3)</b>	<b>2-Year Target 2020</b>	<b>4-Year Target 2022</b>
% of Person-Miles Traveled on the Interstate that are Reliable	96.4%	96.4%
% of Person-Miles Traveled on the Non-Interstate NHS that are Reliable	n/a	93.6%
Truck Travel Time Reliability (TTTR) Index on the Interstate	1.20	1.21
<b>Congestion Mitigation and Air Quality (CMAQ)* On-Road Mobile Source Emissions (kg/day)</b>		
Total Emission Reductions: PM2.5	20.830	42.413
Total Emission Reductions: NOx	168.590	312.667
Total Emission Reductions: VOC	17.207	32.429
<b>Traffic Congestion</b>		
Annual Hours of Peak Hours Excessive Delay (PHED) per capita	n/a for this period	
% Non-Single Occupancy Vehicle Travel (SOV)	n/a for this period	
<b>FTA State of Good Repair Performance Measures</b>	<b>2018</b>	
% of Rolling Stock (Revenue vehicles) meet or exceed Useful Life Benchmark (ULB)	Reduce inventory by 10%	
% of Equipment (over \$50K) meet or exceed Useful Life Benchmark (ULB)	Reduce by 10%	
% of FTA-funded Facilities with condition rating below 3.0 (average) of FTA Average TERM Scale	No more than 20% of facilities rate less than average	

\*only applicable to Regional Planning Commission of Greater Birmingham

### **Performance-Based Plans Descriptions:**

Listed below are brief descriptions of ALDOT's PBPP Plans. All of the plans align with their respective performance measures and targets and this STIP.

#### **Strategic Highway Safety Plan (SHSP) and Highway Safety Improvement Program (HSIP) Report (HSIP) (PM1)**

The SHSP is a data-driven, multiyear comprehensive plan that establishes ALDOT's traffic safety goals, objectives, priorities and areas of focus, and facilitates engagement with safety stakeholders and partners. The SHSP provides a comprehensive framework for reducing fatalities and serious injuries on all public roads, with the ultimate vision of eradicating the State's roadway deaths. The strategies detailed in the plan integrate the efforts of partners and safety stakeholders from the 4 Es of safety (Engineering, Education, Enforcement and Emergency Medical Services).

The Alabama SHSP 3<sup>rd</sup> Edition was completed in July 2017 and the current focus of Alabama's SHSP is the National Goal of "Toward Zero Deaths" initiative which is to reduce fatalities by 50% by 2035.

The HSIP is an annual report required by states that documents the statewide performance measures toward the zero deaths vision. It identifies and reviews traffic safety issues around the state to identify locations with potential for improvement.

#### **Transportation Asset Management Plan (TAMP) (PM2)**

The TAMP is a focal point for information about the bridge and pavement assets, their management strategies, long-term expenditure forecasts, and business management processes. The development of ALDOT's TAMP is consistent with ALDOT's desire to make data-driven spending decisions related to its assets. In short, ALDOT puts into practice, both on a regular basis and more specifically in the TAMP, better decision making based upon quality information and well-defined objectives. The TAMP will be a central resource for multiple ALDOT Bureaus for asset information, management strategies around those assets, financial sources and forecasting, and business management processes.

#### **System Performance Measures (PM3)**

System Performance Measures (PM3) assess the performance of the Interstate and Non-Interstate National Highway System (NHS) for the purpose of carrying out the National Highway Performance Program (NHPP); to evaluate freight movement on the Interstate System; and to analyze traffic congestion and on-road mobile source emissions for the purpose of carrying out the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.

The Alabama Statewide Long-Range Plan provides a high-level description of existing and projected travel and maintenance conditions of Alabama's infrastructure. This Plan places emphasis on the roadway system because it is the primary mode of transportation for the

movement of people and goods. The targets support system reliability along Alabama's infrastructure system.

The Alabama Statewide Freight Plan (FP) provides an overview of existing and projected commodity flow by mode (truck, rail, waterway, air and pipeline) along existing and projected network characteristics through data analysis. In general, the FP provides an overall profile of Alabama's multimodal freight network, existing and projected freight flows by truck, and congested areas of concern throughout the state. The targets support the movement of freight which affects economic vitality.

The targets were set utilizing the FHWA's dataset source for travel time called National Performance Management Research Data Set (NPMRDS), Regional Planning Commission of Greater Birmingham's Air Quality Conformity Data, and other resources.

#### Transit Asset Management (TAM)

Transit Asset Management (TAM) is a business model that uses the condition of assets to guide the optimal prioritization of funding at transit properties to keep transit networks in a State of Good Repair (SGR). The benefits of the plan are: improved transparency and accountability, optimal capital investment and maintenance decisions, more data-driven decisions, and has potential safety benefits. This plan aligns with the transit targets under Transit Asset Management.