

15 | Performance Measures

15.1 OVERVIEW

A vision, with goals and objectives, forms a framework and gives direction for decisions about the transportation system. Measuring performance provides the ability to assess the results of transportation funding and policy decisions. By measuring the outcomes – through data collection, operational experience, and public input – managers of the transportation system can evaluate whether projects and policies are trending toward targets and achieving goals.

MAP-21 transportation legislation requires the US Department of Transportation (USDOT) to establish a set of performance measures to be used at the state and metropolitan level. As a division of USDOT, Federal Highway Administration (FHWA) is establishing the measures. State Departments of Transportation and MPOs will then set their own targets. Each measure is an attribute of the system operations of the transportation system, vehicle miles traveled or crash rate. A target is a desired outcome for a given measure.

15.2 PERFORMANCE MEASURES, TARGETS & DATA COLLECTION

FHWA is publishing measures relating to Safety, Pavement and Bridge Condition, Congestion Mitigation and Air Quality, and Freight Movement. As of February 3, 2015, measures for Safety and Pavement and Bridge Condition had been published. Table 15-1 summarizes current, proposed performance measurement guidance, including the individual measures within the first two categories. Where guidance on targets has been proposed, this is also listed. Each measurement area is explained in separate sections in this chapter. Measures in the incomplete categories are expected during 2015.



USDOT will also establish measures for transit performance measurement centered on maintaining a “state of good repair” for equipment, the rolling stock, infrastructure and facilities. All these only proposed measures until finalized by USDOT later in 2015.

NMDOT will use the Federal guidance as a basis for performance measurement within the state, and the MPO may also identify and establish measures consistent with its own regional goals. The MPO will collaborate with the local, state and federal agencies to establish and complete these measures on an ongoing basis. Based on the measures established and the data to be collected by NMDOT, the MPO may need to expand the scope of its own data collecting activities.

Table 15-1 – Performance Measures for the Farmington MPO

Safety	Baseline	Target	Trend
Total fatalities of vehicle passengers (5-year rolling average)			
Total injuries of vehicle passengers (5-year rolling average)			
Fatalities of vehicle passengers per 100 million vehicle miles travelled (5-year rolling average)			
Injuries of vehicle passengers per 100 million vehicle miles travelled (5-year rolling average)			
Pedestrian fatalities			
Pedestrian fatalities per capita			
Bicyclist fatalities			
Bicyclist fatalities per capita			

System Performance on NHS			
Pending from FHWA			

Paving and Infrastructure Condition			
Percentage of Non-Interstate system National Highway System pavement lane miles in Good condition			
Percentage of Non-Interstate system National Highway System pavement lane miles in Poor condition			
Percentage of bridges on National Highway System in Good condition			
Percentage of bridges on National Highway System in Poor condition			

Congestion Mitigation			
Pending from FHWA			

Air Quality			
Pending from FHWA			

Freight Movement			
Pending from FHWA			

Transit			
Percentage of Equipment in State of Good Repair			
Percentage of Rolling Stock in State of Good Repair			
Percentage of Infrastructure in State of Good Repair			
Percentage of Facilities in State of Good Repair			
Ridership			
Cost per rider			
Ridership rate/riders per available seats			

15.3 SAFETY PERFORMANCE MEASUREMENT

To carry out the purposes of the federal Highway Safety Improvement Program, FHWA proposes safety performance measures as the 5-year rolling averages for total fatalities and serious injuries and, for fatalities and serious injuries per 100 million vehicle miles traveled. These measures will be applicable to all public roads regardless of ownership or functional classification.

According to federal guidance on these safety measures, NMDOT will set targets for each and, within 180 days, the MPO will support the NMDOT target or set its own numerical target.

15.4 PAVING & INFRASTRUCTURE CONDITION

In order to implement the purposes of the National Highway Performance Program, FHWA proposes measures that would be applicable to all Non-Interstate NHS pavements regardless of ownership or maintenance responsibility. FHWA proposes to measure the lane miles of pavement in Good condition and in Poor condition. Further, FHWA proposes to measure the condition all bridges on the NHS, regardless of ownership or maintenance responsibility. The bridges would be measured as the percentage of bridges on the NHS in Good condition and those in Poor condition.

According to Federal requirement for reporting, the MPO will set its own 4-year targets for the measures, in coordination with NMDOT. The target for lane miles in Good condition in the MPO is [to be determined] and for lane miles in Poor condition is [to be determined]. The status of lane miles in Good condition and Poor condition [is to be completed with NMDOT]. The State will report the status of these measures in biennial performance reports. Map 11-1 shows the locations of roads and bridges on the NHS.

15.5 CONGESTION MITIGATION & AIR QUALITY

[Federal guidance for this measure is forthcoming.]

15.6 FREIGHT MOVEMENT

[Federal guidance for this measure is forthcoming.]

15.7 TRANSIT

Federal guidance on performance measurement for the transit system is focused on the state of good repair of the assets of a provider receiving Federal funds. The measures assess whether there is a “State of Good Repair” in four areas: the Equipment, Rolling Stock, Infrastructure and Facilities.

The MPO, together with Red Apple Transit, will also measure ridership. In the past, measurement has been extrapolated from revenue, though rides with monthly passes were only estimated. Actual ridership counts had occurred only during summer months along with a survey administered by MPO interns. Red Apple Transit is pursuing software and equipment to count all rides on all routes.

Map 15-1 – National Highway System Roads and Bridges in FMPO



