



GDOT and MAP-21 PM3: System Performance Rule

PM2 & PM3 Targets

Presented by:

Habte Kassa





AGENDA

- PM2
 - Review Performance targets
- PM3
 - System Performance Rule
 - Data Sources
 - Target Setting Process
 - Review Performance Targets





OVERVIEW

• Effective May 20, 2017

8 Rule makings published by FHWA

Pavement & Bridge Condition performance Measures Final Rule- PM2

System Performance/Freight/CMAQ performance Measure Final Rule-PM3

- Purpose
 - Establish performance measures to carry out the NHPP,
 - Assess freight movement on the Interstate system, and
 - Assess traffic congestion and on-road mobile source emissions for carrying out the CMAQ Program





BRIDGE LEVEL OF SERVICE PERFORMANCE MEASURES-PM2

ASSET	PERFORMANCE MEASURE	DESCRIPTION	TARGET
Bridge Structures	Percent of NHS Bridges in Poor condition as a percentage of total NHS bridge deck area	Bridge Conditions are based on the results of inspections on all Bridge structures. Bridges rated as "Poor" are safe to drive on; however, they are nearing a point where it is necessary to either replace the bridge or extend its service life through substantial rehabilitation investments.	<u><</u> 10% (NHS) in Poor Condition
Bridge Structures	Percent of NHS Bridges in Good condition as a percentage of total NHS bridge deck area	Bridges rated as "Good" will be evaluated as to cost of to maintain Good condition. Bridges rated as "Fair" will be evaluated as to cost of replacement vs. rehabilitation to bring the structure back to a condition rating of Good.	≥ 60% (NHS) in Good Condition

^{*}If you have any questions regarding the bridge targets please contact: Clayton Bennett- Office of Bridge Design at clbennett@dot.ga.gov (404-635-2889)





PAVEMENT LEVEL OF SERVICE PERFORMANCE MEASURES-PM2

ASSET	PERFORMANCE MEASURE	DESCRIPTION	TARGET
Interstate NHS	Percent of Interstate NHS pavements in Poor condition	Pavement conditions are measured through field inspections. Pavements in "poor" condition are in need of work due to either the ride quality or due to a structural deficiency.	≤ 5% in Poor Condition
Interstate NHS	Percent of Interstate NHS pavements in Good condition	Interstate pavement rated as "good" will be considered for potential pavement preservation treatments to maintain the "good" rating.	≥ 50% in Good Condition
Non-Interstate NHS	Percent of NHS pavements in Poor condition	Non-interstate NHS pavements in "poor" condition are in need of major maintenance. These will be evaluated for potential projects.	≤ 12% in Poor Condition
Non-Interstate NHS	Percent of NHS pavements in Good condition	Non-interstate NHS pavements in "good" condition will be evaluated for potential preservation treatments.	≥ 40% in Good Condition

^{*}If you have any questions regarding the pavement targets please contact: Andy Doyle-Office of Maintenance at adoyle@dot.ga.gov (404) 631-1390





SUMMARY OF PM3 PERFORMANCE MEASURES

	Performance Measure	Geographic Extent	Applicable Roadways	Timeframe for Targets
1	Percent of person-miles traveled on the Interstate that are Reliable	Statewide	Interstate	2-year and 4-year targets
2	Percent of person-miles traveled on the non-Interstate NHS that are Reliable	Statewide	Non-Interstate NHS	4-year target
3	Truck Travel Time Reliability (TTTR) Index	Statewide	Interstate	2-year and 4-year targets





SUMMARY OF PM3 PERFORMANCE MEASURES- CMAQ

	Performance Measure	Geographic Extent	Applicable Roadways	Timeframe for Targets
4	Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita*	Atlanta Urbanized Area	Entire NHS	4-year target
O	Percent of Non-Single Occupancy Vehicle (SOV) Travel*	Atlanta Urbanized Area	All Roads	2-year and 4- year targets
6	Total Emissions Reduction *GDOT, Atlanta Regional Commission and	Statewide Cartersville-Bartow	All Roads	2-year and 4- year targets ganization are





DATA SOURCES

Performance Measure		Data Source
Percent of Person-Miles Traveled on the	1.	Travel time from NPMRDS,
Interstate that are Reliable	2.	VMT from NPMRDS,
	3.	Occupancy Factors from 2017 NHTS Georgia Add-On
Percent of Person-Miles Traveled on the	1.	Travel time from NPMRDS,
Non-Interstate NHS that are Reliable	2.	VMT from NPMRDS,
	3.	Occupancy Factors from 2017 NHTS Georgia Add-On
Truck Travel-Time Reliability on the	1.	NPMRDS
Interstate		
Annual hours of Peak-Hour Excessive Delay	1.	Hourly VMT from GDOT Office of Transportation Data (OTD)
on the NHS per Capita	2.	Travel time from NPMRDS,
	3.	Vehicle Classification from GDOT- OTD
	4.	Occupancy Factors from 2017 NHTS Georgia Add-On,
	5.	Total Population from American Community Survey
Percent Non-SOV Travel	1.	American Community Survey,
	2.	NHTS
Total Emissions Reduction	1.	CMAQ Public Access Database





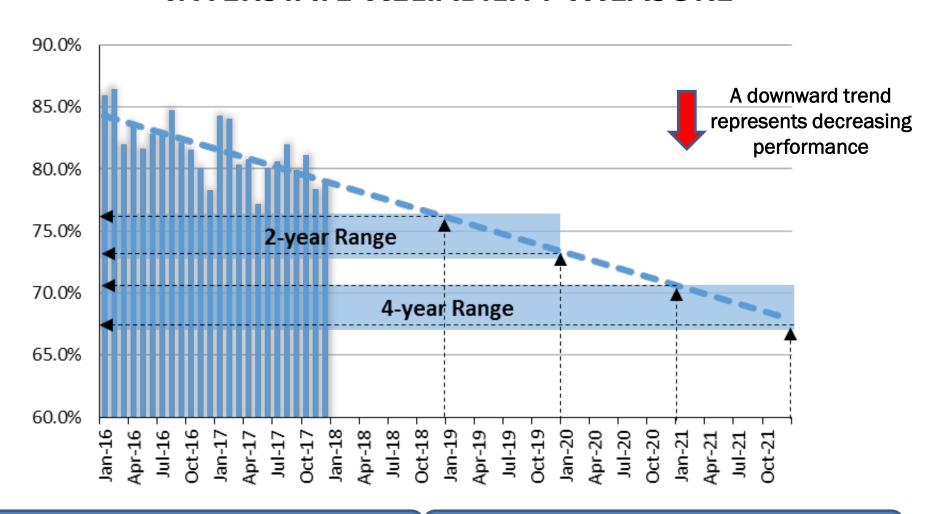
TARGET SETTING PROCESS

- Review external factors
 - Travel demand, economic trends, population
- Review internal factors
 - Projects in the current STIP
- Conduct trend line analysis
- Set targets using a conservative approach
 - Positive trends for external factors
 - Lack of extended historical data





INTERSTATE RELIABILITY MEASURE



2-yr Target

73.0%

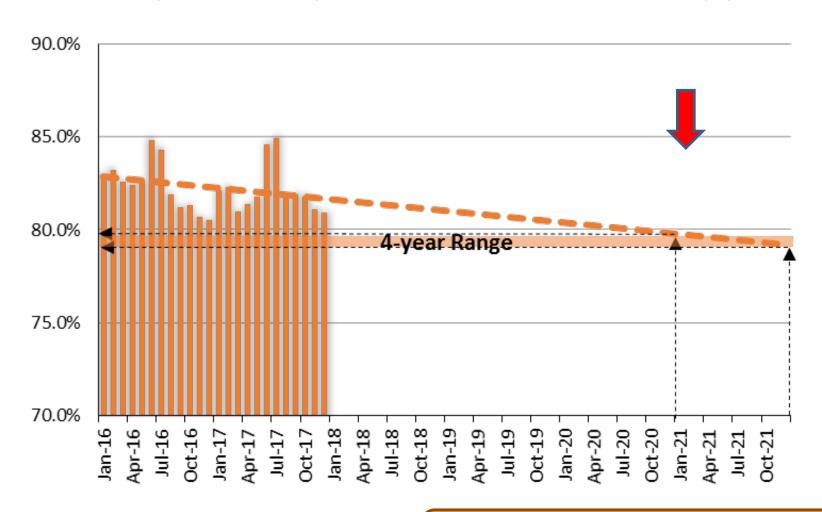
4-yr Target

67.0%





Non-Interstate Reliability Measure



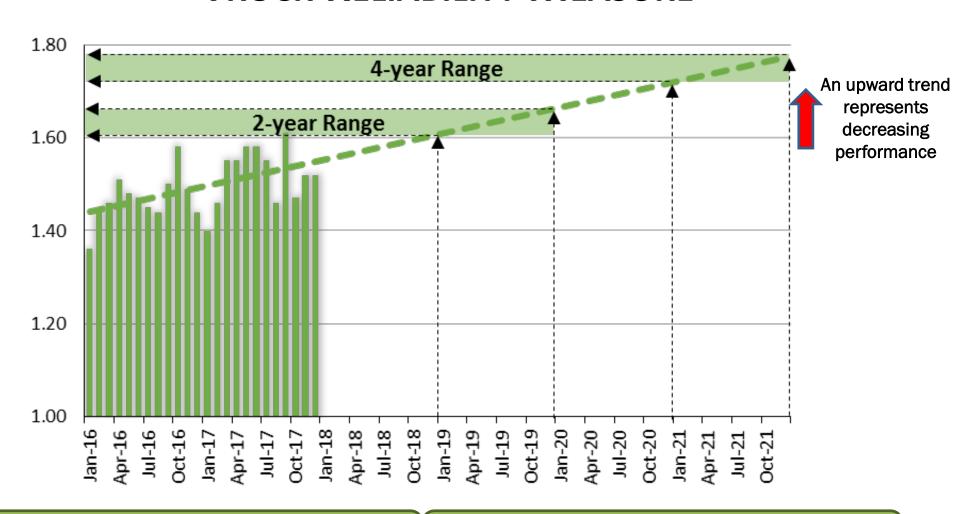
4-yr Target

81.0%





TRUCK RELIABILITY MEASURE



2-yr Target

1.66

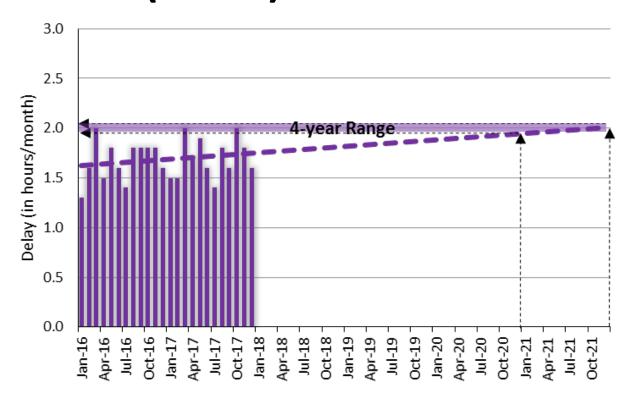
4-yr Target

1.78





ANNUAL HOURS OF PEAK HOUR EXCESSIVE DELAY (PHED) PER CAPITA



4-yr Target 24.6 hours





SUMMARY OF PM3 PERFORMANCE MEASURES

	Performance Measure	2-year Target	4-year Target
1	Percent of person-miles traveled on the Interstate that are Reliable	73.00%	67.00%
2	Percent of person-miles traveled on the non-Interstate NHS that are reliable	n/a	81%
3	Truck Travel Time Reliability (TTTR) Index	1.66	1.78





SUMMARY OF PM3 PERFORMANCE MEASURES-CMAQ

	Performance Measure	2-year Target	4-year Target
-	Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita	n/a	24.6 hours
5	Percent of Non-Single Occupancy Vehicle (SOV) Travel	22.10%	22.10%
6	Total Emissions Reduction		VOC: 748.185 kg/day; NOx: 1347.270 kg/day

GDOT will have an opportunity to revisit and adjust (if necessary) the 4-year target in 2020





