

## Transportation Asset Management - State Highway System Performance Measures

Asset Class	Technical Criteria	Good	Fair	Poor	
Pavements – Area in Lane Miles	GOOD = ALL CRITERIA GOOD, FAIR = ANY ONE FAIR, POOR= TWO ARE POOR*				
Roughness**	International Roughness Index (IRI) to measure pavement roughness (in/mi)	< 95	95-170	>170	
<b>MAP-21</b> <b>Criteria</b>	Cracking	Measures slab cracking in concrete or wheel path cracking in asphalt (%)	< 5	5-10	>10
	Rutting	Measures the depth of depressed longitudinal channels in asphalt pavement (in)	< 0.20	0.2-0.4	>0.4
	Faulting	Measures the vertical distance on faulted joints in concrete pavements (in)	<0.05	0.05-0.15	>0.15
Bridges – Area in Square Feet	ASSIGN THE MOST SEVERE FROM THE CRITERIA BELOW				
<b>MAP-21</b> <b>Criteria</b>	Deck+	National Bridge Inspection Standards rating for Deck condition rating	7,8,9	5,6	0,1,2,3,4
	Superstructure+	National Bridge Inspection Standards rating for Superstructure condition rating	7,8,9	5,6	0,1,2,3,4
	Substructure+	National Bridge Inspection Standards rating for Substructure condition rating	7,8,9	5,6	0,1,2,3,4
	Culvert Rating+	National Bridge Inspection Standards rating for Culvert condition rating (>20ft)	7,8,9	5,6	0,1,2,3,4
Transportation Mgmt. Systems (TMS)	GOOD – BOTH CRITERIA MUST BE GOOD, POOR – ONE CRITERIA IS POOR				
Operational Status	Element is operational	Yes	NA	No	
Obsolete	Element is within expected service life	Yes	NA	No	
Culverts – Length in Linear Feet	AGGREGATE SCORE – 80+ is Good, 50-79 Fair, < 50 is Poor				
Waterway Adequacy	Measures the degree of hydraulic blockage of the culvert. Percent blocked	< 25%	25-50%	> 50%	
Alignment	Measures the how out of alignment the sections are relative to each other.	Minor	Moderate	Severe	
Joints	Measures how well the joints are connected and sealed.	Tight	Separation	Dislocation	
Culvert Material	Measure cracks, spalling or corrosion of the culvert material.	Minor	Moderate	Severe	
Culvert Shape	Measure how well the culvert has retained its shape. Percent deviation.	<10%	10-20%	>20%	

\* - Any one criteria poor is considered poor for continuously reinforced concrete pavements.

\*\* - Urban area roughness criteria 'is considered FAIR for IRI between 95 -220 in/mi and POOR for IRI>220 in/mi if population > 1 Million

+ - Criterion for numerical condition ratings is documented in the "Recording and Coding Guide for the Inventory and Appraisal of the Nations Bridges" published by the Federal Highway Administration

*NOTE: Pavement and bridge performance measure criteria used is defined in a Notice of Proposed Rule Making for the Code of Federal Regulations. The Final Rule may deviate from criteria used in the matrix above.*