



Pavement Performance Measure and Targets

Pavement Asset Management Section
Maintenance Division





- For NHS roads

Metric	Good	Fair	Poor
IRI (inches/mile) (all types)	<95	95-170	>170
Cracking (%)			
Asphalt Concrete Pavement	<5	5-20	>20
Jointed Concrete Pavement	<5	5-15	>15
Continuously Reinforced Concrete Pavement	<5	5-10	>10
Faulting (inches) (JCP only)	<0.10	0.10-0.15	>0.15
Rutting (inches) (ACP only)	<0.20	0.20-0.40	>0.40

§490.313 Calculation of performance management measures.

A pavement section shall be rated an overall condition of

- Good** only if the section is exhibiting **Good** ratings for **all three conditions** (IRI, Cracking_Percent, and Rutting or Faulting)
- Poor** if **two or more of the three conditions are exhibiting Poor ratings** (at least two ratings of Poor for IRI, Cracking_Percent, and Rutting or faulting)
- Fair** if it **does not meet the criteria (1) or (2)**

- Texas NHS Roads

Highway	Performance Measure	2019	2020	2021	2022
IH	Good	65.7%	66.6%	65.8%	64.5%
	Poor	0.2%	0.1%	0.1%	0.1%
Non-IH	Good (IRI Only)		55.2%	54.5%	57.8%
	Good	46.8%	49.2%	48.5%	51.7%
	Poor (IRI Only)		13.5%	13.7%	11.6%
	Poor	1.2%	1.4%	1.3%	1.3%

Performance Progress Report (2022)



- Original target was developed with 5 year moving average method
- In 2020 4-year target was adjusted
 - With 3 year moving average method
 - only including automated pavement data
- 2022 actual measures
 - Interstate pavements in Good condition missed the target.
 - Interstate pavements in Poor condition, Non-IH pavement in both Good and Poor conditions meet the target.

Highway	Performance Measure	2018 Baseline	2020 2-Year Condition/ Performance	2020 2-Year Target	2022 4-Year Target	2022 4-Year Adjustment	2022 Actual
IH	Good		66.6%		66.4%	66.5%	64.5%
	Poor		0.1%		0.3%	0.2%	0.1%
Non-IH	Good (IRI Only)	54.5%	55.2%	52.0%	52.3%	54.1%	57.8%
	Good						
	Poor (IRI Only)	14.0%	13.5%	14.3%	14.3%	14.2%	11.6%
	Poor						



- In 2022, targets are developed for the 2023-2026 cycle
 - All distress measures are considered for both IH and Non-IH NHS pavements.
 - 4 year moving average(MA) is used
 - Target setting formula:
 - Targets for Good category:
 - 4-yr MA– 1 Standard Deviation (stdev) OR
 - 4-yr MA– 2 Standard Deviations (stdev)
 - Targets for Poor category:
 - 4-yr MA + 1 Standard Deviation (stdev) OR
 - 4-yr MA + 2 Standard Deviations (stdev)

Recommended 2-Year and 4-Year Targets



Highway	Performance Measure	2022 Baseline	2024 2-Year Targets		
			Average Target	Average Target with 1stdev	Average Target with 2stdev
IH	Good	64.5%	65.6%	64.8%	63.9%
	Poor	0.1%	0.1%	0.2%	0.2%
Non-IH	Good	51.7%	49.6%	47.6%	45.5%
	Poor	1.3%	1.3%	1.4%	1.5%

Highway	Performance Measure	2022 Baseline	2026 4-Year Targets		
			Average Target	Average Target with 1stdev	Average Target + 2stdev
IH	Good	64.5%	65.3%	64.4%	63.6%
	Poor	0.1%	0.1%	0.2%	0.2%
Non-IH	Good	51.7%	50.0%	48.0%	46.0%
	Poor	1.3%	1.3%	1.4%	1.5%



Thank you!

