

Transportation Asset Management & Highway Conditions

Transportation Infrastructure Revenue Subcommittee 2021

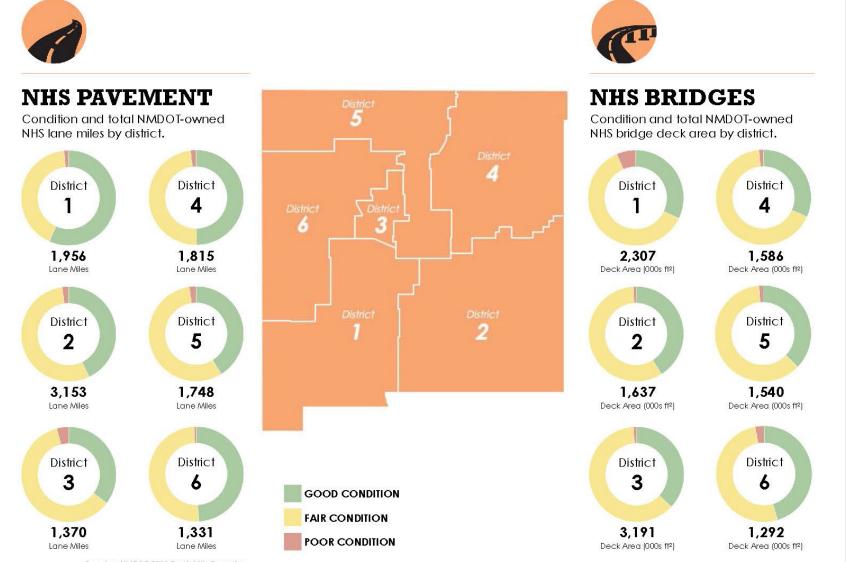


NMDOT

The Pavement and
Bridge Conditions are
based on the FHWA
measures in 23 CFR 490.
Pavement Condition is
based on tenth mile
segments.

PAVEMENT & BRIDGE ASSETS: NHS

2020 PAVEMENT – 2021 BRIDGE (CONDITION BY DISTRICT)



NMDOT

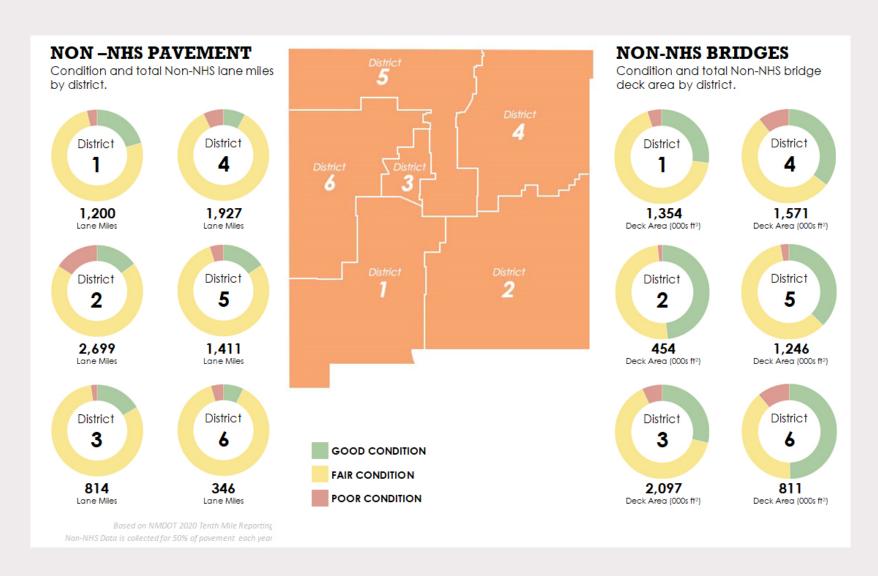
The Pavement and
Bridge Conditions are
based on the FHWA
measures in 23 CFR 490.

Pavement Condition is based on tenth mile segments.

Non-NHS data is collected for 50% of the pavement each year.

PAVEMENT & BRIDGE ASSETS: NON-NHS

2020 PAVEMENT – 2021 BRIDGE (CONDITION BY DISTRICT)





STATE OF GOOD REPAIR (SOGR)

Bridges

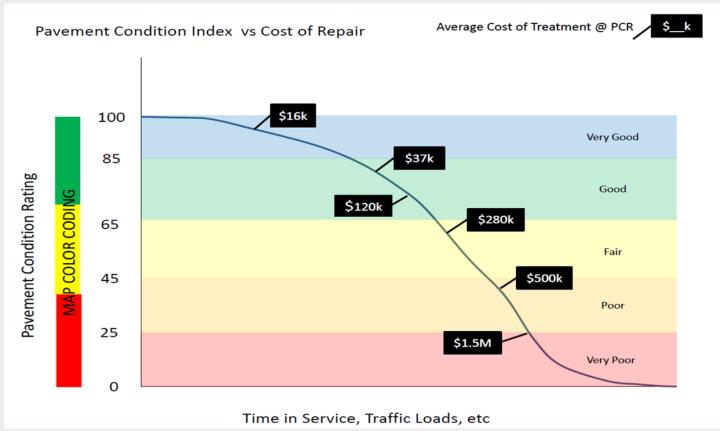
	TAMP	NMDOT
Condition Rating (CR)	6	6
% Bridge Deck above CR	75%	75%

Pavements

Interstate					
Overall Condition Index (OCI)	70	70			
% Pavement above OCI	65%	65%			
Non-Interstate NHS					
Overall Condition Index (OCI)	60	55			
% Pavement above OCI	50%	40%			
Non-NHS					
Overall Condition Index (OCI)	50	50			
% Pavement above OCI	35%	40%			



PAVEMENT CONDITION RATING



PCR Range	Condition	Suggested Treatment
100-86	Very Good	Monitor to Minor preservation, fog seals, surface coats, chip seal
85-66	Good	Major preservation, overlays to minor rehabilitation, thin mill, and inlay.
65-46	Fair	Minor to Major rehabilitation – mill and inlay between 2.5 and 5 inches
45-26	Poor	Major rehabilitation 5 inches deep to PPC, FDR
25-0	Very Poor	Reconstruction



Condition Ratings (CR) for Deck, Superstructure, Substructure, and Culvert

CR Value	Condition	Suggested Treatment	_
9	Excellent	Do Nothing	
8	Very Good	Do Nothing	GOOD
7	Good	Do Nothing	
6	Satisfactory	Deck - Maint - Deck Overlay, Deck Patching, Replace Bridge Joints Super - Maint - Epoxy Injection, Replace Bearings, Spot Beam Repairs, Repaint Steel Beams Sub - Maint - Repaint Steel Piles, Abutment and Pier Cap Concrete Repair	- FAIR
5	Fair	Deck - Maint / Rehab - Deck Overlay, Deck Patching, Replace Bridge Joints Super - Maint / Rehab - Epoxy Injection, Replace Bearings, Spot Beam Repairs, Repaint Steel Beams Sub - Maint / Rehab - Repaint Steel Piles, Abutment and Pier Cap Concrete Repair	TAIN
4	Poor	Deck - Rehab / Major Rehab / Repl - Bridge Deck Replacement & New Bridge Railing or Replace Bridge Super - Major Rehab / Repl - Replace Beams or Replace Bridge Sub - Repl - Replace Bridge	
3	Serious	Deck - Rehab / Major Rehab / Repl - Bridge Deck Replacement & New Bridge Railing or Replace Bridge Super - Repl - Replace Bridge Sub - Repl - Replace Bridge	POOR
2	Critical	Repl - Replace Bridge	
1	Imminent Failure	Repl - Replace Bridge	
0	Failed	Repl - Replace Bridge	

Examples:

Deck/Super/Sub Ratings = 4/6/6 - Suggested Treatment = Rehab - Deck Replacement, Super Repair, & Sub Repair
Deck/Super/Sub Ratings = 4/4/6 - Suggested Treatment = Major Rehab - Deck Replacement, Super Replacement, & Sub Repair
Deck/Super/Sub Ratings = 4/4/4 - Suggested Treatment = Repl - Bridge Replacement

Description	Unit Cost	nit Cost % of Repl		Rating After Work		
Description	(\$/sq.ft.)	Cost	Deck	Super	Sub	Culv
Do Nothing	\$ -	0%	N/A	N/A	N/A	N/A
Maint - Repairing Deck, Super, & Sub	\$ 37.08	10%	7	7	7	N/A
Major Rehab - Replacing Deck & Super, Sub Repair	\$ 278.10	75%	9	9	7	N/A
Rehab - Replacing Deck, Super & Sub Repair	\$ 185.40	50%	9	7	7	N/A
Repl - Replacing Bridge	\$ 370.80	100%	9	9	9	N/A
Culv Repl - Replacing Culvert	\$ 556.20	150%	N/A	N/A	N/A	9

NMDOT

These Bridge Scenarios are based on February 2021 inventory.

TAMP BRIDGE SCENARIOS

- Average Deck/Super/Sub Condition Rating (CR) ≥ 6 After 10 Years
 - NHS: \$16,200,000/Year for Next 10 Years
 - Non-NHS: \$12,400,000/Year for Next 10 Years
- Average Deck/Super/Sub Condition Rating (CR) ≥ 7 After 10 Years
 - NHS: \$58,200,000/Year for Next 10 Years
 - Non-NHS: \$37,600,000/Year for Next 10 Years
- Bridge Needs = \$0 or All BCR's Have Been Worked on
 - NHS: \$65,600,000/Year for Next 10 Years
 - Non-NHS: \$44,000,000/Year for Next 10 Years



TRAFFIC MONITORING PROGRAM

- NMDOT relies on accurate and quality traffic data to support its planning, engineering and operation activities
- Traffic Monitoring is responsible for programming, collecting, analyzing and reporting traffic monitoring data
- The Traffic Monitoring Program is responsible for ensuring all traffic counts collected and shared with NMDOT meet our quality standards
- Data is collected using manual counts, portable counters (road tube and radar) and permanent counters (Continuous Count Stations (CCS) and Weigh-in Motion (WIM) stations)