

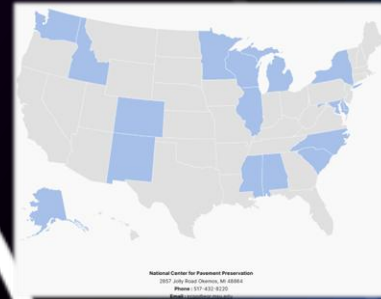
PG III PROJECT NOMINATION



NMDOT

PAVEMENT BUREAU

NM 219



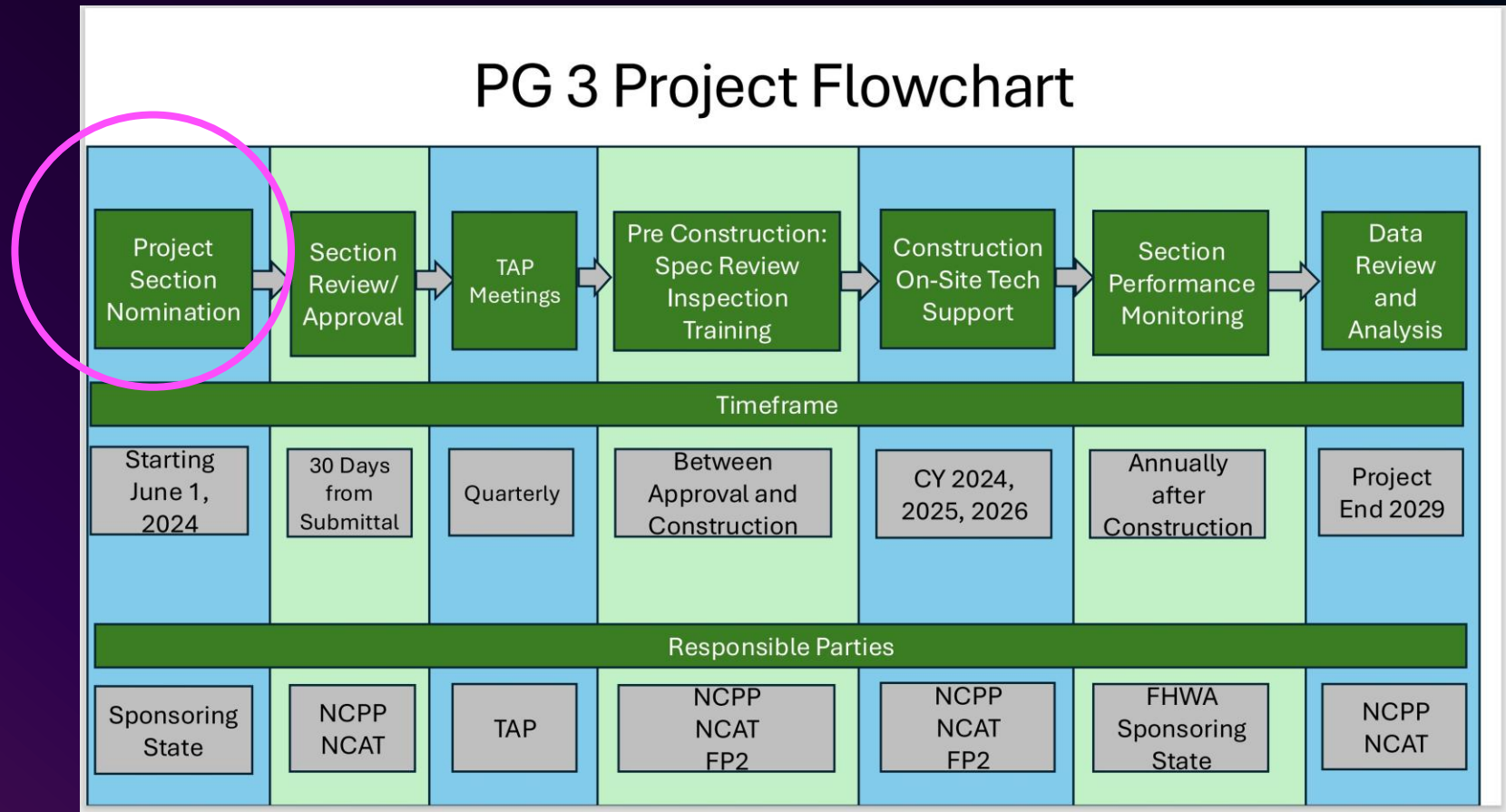
TRANSPORTATION POOLED FUND TPF 5(522)

**NATIONAL PARTNERSHIP TO IMPROVE THE QUALITY
OF PAVEMENT PRESERVATION TREATMENT
CONSTRUCTION & DATA COLLECTION PRACTICES (PG
PHASE III)**

New Mexico DOT is a Partner in TPF 5(522)

Project Selection Nomination

Following PG III Flowchart



Project Selection Nomination Background

- NM is divided into 6 Districts.
- D4 is located NE of NM, rural and has 2 major Interstates (I-25 and I-40).
- Maintenance section in each district is led by Assistant District Engineer (ADE) for Maintenance.
- D4 does Chip Seal activities internally, other treatments done by contractors such as Hot in Place Recycling.
- Pavement Bureau reached out to D4 ADE Gabriel Lucero and discuss PG III project nomination
- NM 219 is nominated for Chip Seal treatment with RAP using PG III Guidance.



NM 219 - D4

NMDOT: Pavement Design Bureau

Josh.herrera@dot.nm.gov (505)469-7413

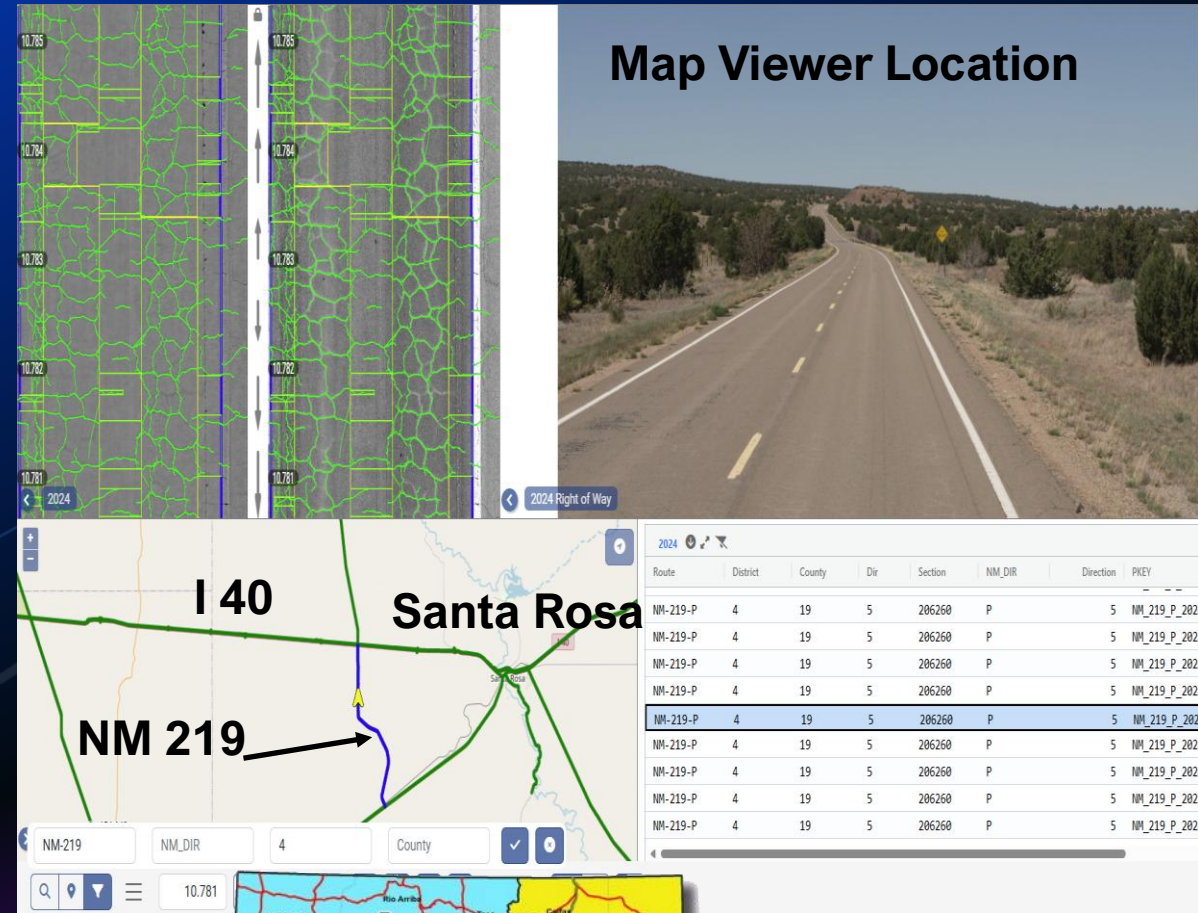
hashem.faidi@dot.nm.gov (505)490-2168

frank.martinez@dot.nm.gov (505)660-0303

camille.valdez@dot.nm.gov (505)469-2155

Project General Information

- New Mexico, Guadalupe County
- General Traffic Route (Major Collector)
- Project Length (around 15 miles)
- BOP MM 0.0 - EOP 15.0
- NM 219
- <https://maps.app.goo.gl/iW6bd2ctzzThpkad8>
- Direction of travel North - South Undivided
- 2 Lanes NB & SB
- Facility Undivided
- District 4

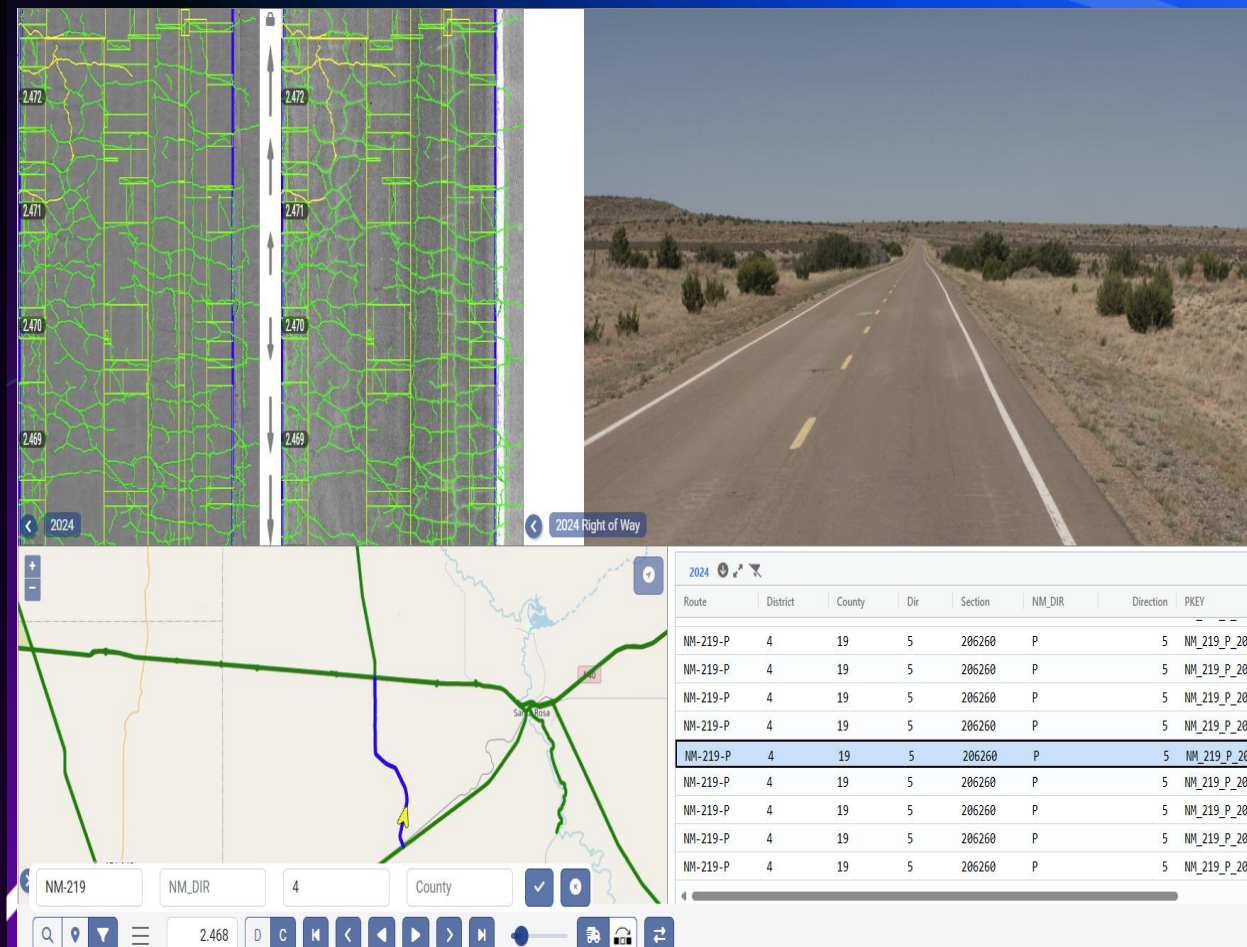


NM 219: SW of D4



Project History

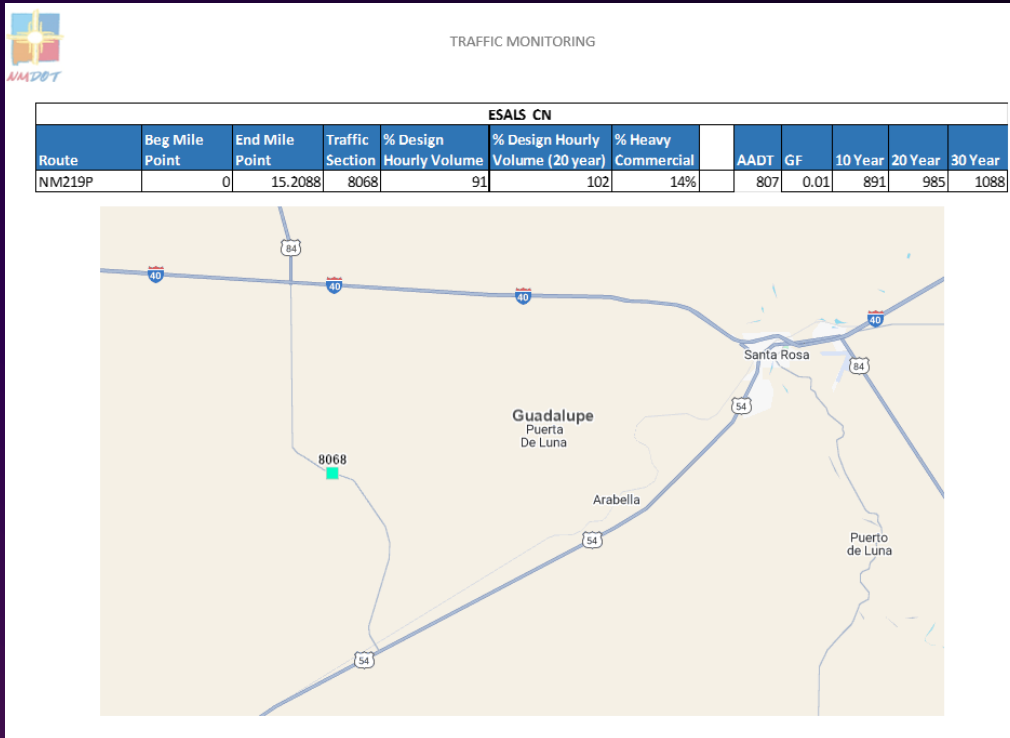
- There are references to a state road with the number 219 established in the early 1950s that was removed from maps within a few years and reappeared in 1988. State Road 219 (NM 219) is 15.213-mile-long constructed in 1994.
- 2011 – MP 0.0 – 14.895 Mirco Surfacing / slurry seal lane miles 29.8
- 2017 – MP 0.0 – 15.208 Blade Patch





Current Traffic

- Approximate AADT range is (805 per day) 500-2,000.
- 14% heavy trucks
- Annual 18-kip ESAls is 32,857
- Existing Surface - Dense-graded asphalt / surface treatment



Traffic Monitoring Program
ESALs by Class and Year for 1/1/2024 - 12/31/2024
Criteria: Location ID = 8068

Local ID 8068 Direction 2-WAY		Community - County (019) Guadalupe		Located On NM HIGHWAY 219 At	
ESAL Parameters:	Flex SN	Flex PT	Rigid D	Rigid PT	
	6	2.5	12	2.5	
Vehicle Class		Average Flex ESAL	Average Rigid ESAL	AADT	
4		0.09	0.11	14	
5		0.58	0.57	74	
6		0.92	1.40	6	
7		1.87	3.86	1	
8		0.62	0.76	5	
9		2.37	4.08	15	

Yearly Totals

Daily Flex ESAL	Daily Rigid ESAL	Volume	Directional Factor	Number Of Lanes	Yearly Flex ESAL	Yearly Rigid ESAL
90.02	121.26	115	0.51		32,857	44,260

Future Trends

Year	Volume	Yearly Flex ESAL	Yearly Rigid ESAL	Total Flex ESAL	Total Rigid ESAL
2024	115	32,857	44,260	32,857	44,260
2025	117	33,515	45,146	66,372	89,406
2026	120	34,185	46,049	100,557	135,455
2027	122	34,869	46,970	135,425	182,424
2028	124	35,566	47,909	170,991	230,333
2029	127	36,277	48,867	207,269	279,200
2030	130	37,003	49,844	244,271	329,045

Generated 8/22/2025



Traffic Monitoring Output

Traffic Monitoring Program
ESALs by Class and Year for 1/1/2024 - 12/31/2024
Criteria: Location ID = 8068

2031	132	37,743	50,841	282,014	379,886
2032	135	38,498	51,858	320,512	431,744
2033	137	39,268	52,895	359,779	484,640
2034	140	40,053	53,953	399,832	538,593
2035	143	40,854	55,032	440,686	593,625
2036	146	41,671	56,133	482,358	649,758
2037	149	42,505	57,256	524,862	707,014
2038	152	43,355	58,401	568,217	765,414
2039	155	44,222	59,569	612,439	824,983
2040	158	45,106	60,760	657,545	885,743
2041	161	46,008	61,975	703,553	947,718
2042	164	46,928	63,215	750,481	1,010,933
2043	168	47,867	64,479	798,348	1,075,412
2044	171	48,824	65,769	847,173	1,141,181
2045	174	49,801	67,084	896,974	1,208,265
2046	178	50,797	68,426	947,771	1,276,691
2047	181	51,813	69,794	999,583	1,346,485
2048	185	52,849	71,190	1,052,432	1,417,675
2049	189	53,906	72,614	1,106,338	1,490,289
2050	192	54,984	74,066	1,161,323	1,564,355
2051	196	56,084	75,548	1,217,406	1,639,903
2052	200	57,206	77,058	1,274,612	1,716,961
2053	204	58,350	78,600	1,332,962	1,795,561



Current Conditions

- HPMS Cracking % = 18.85 Fair
- Rutting Measure = 0.27 Fair
- IRI (International Roughness Index) = 119.58 Fair
- Overall Condition (OCI) = 36.01 Poor
- Pavement Condition Rating (PCR) = 45.02

Line #	Route	Segment	Length (mi)	HPMS Rating	IRI	Cracking (%)	Overall Condition Index (OCI)	Overall Condition Rating (OCR)	Overall Condition Rating (OCR)	
2024	NC25P	0.0000 - 0.1000	0.10	2000	P	94	41000	800	3.000	54.426
2024	NC25P	0.1000 - 0.2000	0.10	2000	P	97	46.000	2400	11.000	49.921
2024	NC25P	0.2000 - 0.3000	0.10	2000	P	95	49.000	2300	6.700	53.470
2024	NC25P	0.3000 - 0.4000	0.10	2000	P	235	50.000	2300	1.900	48.846
2024	NC25P	0.4000 - 0.5000	0.10	2000	P	180	51.000	2200	1.700	58.250
2024	NC25P	0.5000 - 0.6000	0.10	2000	P	96	55.000	1600	2.600	61.708
2024	NC25P	0.6000 - 0.7000	0.10	2000	P	75	58.000	1400	1.100	65.470
2024	NC25P	0.7000 - 0.8000	0.10	2000	P	106	56.000	2600	2.500	61.742
2024	NC25P	0.8000 - 0.9000	0.10	2000	P	95	56.000	1500	1.500	62.574
2024	NC25P	0.9000 - 1.0000	0.10	2000	P	104	54.000	1200	6.300	68.474
2024	NC25P	1.0000 - 1.1000	0.10	2000	P	104	49.000	3900	11.000	56.404
2024	NC25P	1.1000 - 1.2000	0.10	2000	P	107	48.000	1300	6.300	55.495
2024	NC25P	1.2000 - 1.3000	0.10	2000	P	93	52.000	1500	2.300	58.196
2024	NC25P	1.3000 - 1.4000	0.10	2000	P	101	45.000	1700	4.400	53.324
2024	NC25P	1.4000 - 1.5000	0.10	2000	P	98	50.000	1700	2.400	57.933
2024	NC25P	1.5000 - 1.6000	0.10	2000	P	103	39.000	2300	15.700	48.882
2024	NC25P	1.6000 - 1.7000	0.10	2000	P	122	42.000	2700	15.300	49.853
2024	NC25P	1.7000 - 1.8000	0.10	2000	P	93	47.000	2400	8.800	55.196
2024	NC25P	1.8000 - 1.9000	0.10	2000	P	105	45.000	3000	15.500	52.205
2024	NC25P	1.9000 - 2.0000	0.10	2000	P	153	61.000	2600	34.700	29.251
2024	NC25P	2.0000 - 2.1000	0.10	2000	P	95	57.000	1400	6.000	64.006
2024	NC25P	2.1000 - 2.2000	0.10	2000	P	100	54.000	1400	1.300	60.690
2024	NC25P	2.2000 - 2.3000	0.10	2000	P	123	35.000	3000	22.800	43.983
2024	NC25P	2.3000 - 2.4000	0.10	2000	P	106	14.000	3100	39.200	22.546
2024	NC25P	2.4000 - 2.5000	0.10	2000	P	107	6.000	2700	41.800	16.829
2024	NC25P	2.5000 - 2.6000	0.10	2000	P	104	45.000	1800	11.400	51.922
2024	NC25P	2.6000 - 2.7000	0.10	2000	P	129	52.000	1600	3.000	57.274
2024	NC25P	2.7000 - 2.8000	0.10	2000	P	92	50.000	1700	5.800	57.951
2024	NC25P	2.8000 - 2.9000	0.10	2000	P	94	43.000	2200	7.200	52.278
2024	NC25P	2.9000 - 3.0000	0.10	2000	P	90	50.000	2200	7.800	50.824
2024	NC25P	3.0000 - 3.1000	0.10	2000	P	105	33.000	2200	23.600	42.914
2024	NC25P	3.1000 - 3.2000	0.10	2000	P	101	23.000	2400	31.000	34.785
2024	NC25P	3.2000 - 3.3000	0.10	2000	P	107	35.000	1600	23.300	45.005
2024	NC25P	3.3000 - 3.4000	0.10	2000	P	104	38.000	2300	20.200	42.502
2024	NC25P	3.4000 - 3.5000	0.10	2000	P	92	50.000	1300	7.500	57.951
2024	NC25P	3.5000 - 3.6000	0.10	2000	P	107	51.000	1100	7.500	57.985
2024	NC25P	3.6000 - 3.7000	0.10	2000	P	90	55.000	1500	2.800	62.824
2024	NC25P	3.7000 - 3.8000	0.10	2000	P	101	52.000	1400	5.100	60.491
2024	NC25P	3.8000 - 3.9000	0.10	2000	P	87	48.000	1700	12.700	56.833
2024	NC25P	3.9000 - 4.0000	0.10	2000	P	143	51.000	2800	9.900	55.595
2024	NC25P	4.0000 - 4.1000	0.10	2000	P	103	56.000	2100	6.500	62.260
2024	NC25P	4.1000 - 4.2000	0.10	2000	P	142	55.000	2100	3.800	59.783
2024	NC25P	4.2000 - 4.3000	0.10	2000	P	98	53.000	1400	6.300	59.983
2024	NC25P	4.3000 - 4.4000	0.10	2000	P	97	47.000	2100	15.000	55.249
2024	NC25P	4.4000 - 4.5000	0.10	2000	P	150	5.000	2300	35.800	27.546
2024	NC25P	4.5000 - 4.6000	0.10	2000	P	158	12.000	4100	39.900	23.945
2024	NC25P	4.6000 - 4.7000	0.10	2000	P	92	46.000	2800	15.400	54.783
2024	NC25P	4.7000 - 4.8000	0.10	2000	P	95	57.000	2400	1.300	63.374
2024	NC25P	4.8000 - 4.9000	0.10	2000	P	103	49.000	2100	9.500	55.382
2024	NC25P	4.9000 - 5.0000	0.10	2000	P	100	25.000	3500	27.800	38.950

Average IRI

115.50

Fair

Running Measure

38.81

Good

HPMS Cracking Percent

18.85

Fair

Pavement Condition Rating

45.82

Poor

IRI (mi/mi)

Good

IRI (mi/mi)

Fair

IRI (mi/mi)

Poor

Overall Condition Index (OCI):

54.426

Good

Rating (mi)

Good

Rating (mi)

Fair

Rating (mi)

Poor

Cracking (%)

Good

Cracking (%)

Good

Cracking (%)

Fair

Cracking (%)

Poor

PCR-Rate

Condition

Suggested Treatment

Very Good

Minor - none to minor preservation, log seals or other surface care

Good

Major preservation, sealings - to minor and medium, top mill and patch

Fair

Major to major rehabilitation - mill and place between 1.5 and 3 inches

Poor

Reconstruction

Very Poor

Major rehabilitation - full depth to PPC, FDR

Reconstruct

PMS Output

PMS Output

NMDOT Pavement Condition Rating System PCR

FHWA Guidelines

Pavement Condition	Roughness (IRI)* (inches/mile)	Rutting** (inches)	Cracking Percent *** (%)
Good	<95	<0.20	<5
Fair	95 - 170	0.20 - 0.40	5 - 20
Poor	> 170	> 0.40	> 20

*IRI is a statistic used to estimate the amount of roughness in a measured longitudinal profile measured in inches per mile.

**Rutting is the average rut depth of both wheel paths.

***Cracking percent is the percent area with fatigue type cracking of all severity levels in the wheel paths within the total section area.

TABLE I

Pavement Condition Rating Categories

PCR Range	Condition	Suggested Treatment
86-100	Very Good	Monitor – none to minor preservation, fog seals or other surface coats.
66-85	Good	Major preservation, overlays – to minor rehabilitation, thin mill and inlay.
51-65	Fair	Minor to major rehabilitation – mill and inlay between 2.5 and 5 inches
46-50	At Risk	Minor to major rehabilitation
26-45	Poor	Major rehabilitation 5 inches deep to PPC, FDR
0-25	Very Poor	Reconstruction



Project Flow Chart

- Project Nomination / Review and Approval / TAP Meeting
- Pre Construction: Spec Review & All Training set-up also Post construction data collection requirements.
- Establish Rap Pile selection & establish Test Cell location
- Coordinate District 4 and NCPP Technical Team construction dates for onsite support.
- Date of construction initiates and project moves forward
- Prior to and as construction proceeds material samples are collected to be shipped to NCAT for testing.
- Section Performance Monitoring criteria will follow NCPP protocols post construction.

Questions ???
