

# Overview of D6 Highway Conditions and Future Projects



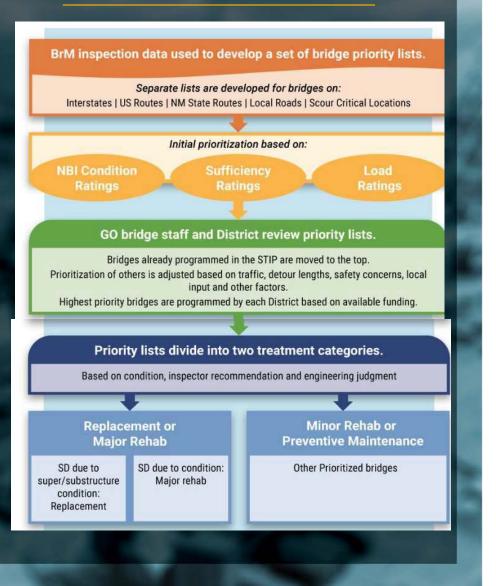
Presented by Lisa Vega, P.E. (Acting) District 6 Engineer



### **TAMP Project Selection Process**

- NMDOT uses a decentralized approach to project selection and prioritization of pavement and bridge projects for inclusion in the Statewide Transportation Improvement Program (STIP).
- Since 2007, NMDOT has allocated federal-aid highway program funds to each District through a process commonly referred to as the District Target formulas. The formula is used to distribute National Highway Performance Program and Surface Transportation Block Grant Program funds to each district using a combination of lane miles, vehicle miles travelled and population after debt service and other reductions like the Statewide Planning & Research funds. In addition, funds for the consultant management program are reserved at a statewide basis and deducted prior to distributing the remaining funds to the Districts.
- The Highway Safety Improvement Program, Congestion Mitigation and Air Quality, Transportation Alternatives Program and Recreational Trails Program funds are distributed through project selection and prioritization processes on a statewide basis.
- The District Targets are determined by the STIP Unit and use an estimate for the obligation limitation each year. Each District is responsible for identifying the projects to be included in each new STIP.

# Bridge Process



## NMDOT

*Information Management* - The Bridge Management Section, led by the BMS Bureau Chief, is responsible for ensuring all bridge inspection data is collected and entered into the NMDOT Bridge Management System (BrM). Bridge inspections are a continual effort and data is collected and entered into the BrM throughout the year.

By March 15 of each year, National Bridge Inventory (NBI) data for all of the bridges in NMDOT's inventory is required to be sent to Federal Highway Administration (FHWA). By March 26 of each year, Bridge Construction Costs for all bridges constructed with federal funds needs to be sent to FHWA.

It is the goal of the BMS to inspect one out of every eight bridges/bridge structures in each District each quarter. This can be accomplished by either certified District or BMS staff. The data contains General Condition Ratings (GCRs) – consisting of Deck, Superstructure, Substructure – and National Bridge Element Ratings (NBEs), which quantify the condition of all of the elements of a bridge. This data is used to prioritize and select bridge projects for programming.



### **Performance Measures and Cost Estimates**

 NMDOT uses performance measures to identify condition targets and required funding levels to manage its bridge inventory. Currently, NMDOT uses a spreadsheet and the BrM to predict future bridge conditions for the NBI based on different funding scenarios. Both systems rely on data to estimate the cost to perform different types of work. Bridge construction costs are computed each year for the direct cost of building new bridges. The number is then multiplied by a factor of 1.8 to account for the indirect costs (e.g. mobilization, removal of structures, traffic control, etc.) associated with bridge construction.

### **Bridge Construction Cost Methodology**

### Bridge Project Type

New Bridge Construction Costs Major Rehabilitation Minor Rehabilitation Preventive Maintenance

### <u>Methodology</u>

1.8 \* Direct Bridge Construction Costs
0.75 \* New Bridge Construction Costs
0.25 \* New Bridge Construction Costs
0.10 \* New Bridge Construction Costs



### Prioritization of Selection of Bridge Projects

 During the month of April, the Bridge Management Section queries the NBI data and identifies bridges in "poor" condition (deck, superstructure or substructure condition rating below a 5) and "fair" condition (deck, superstructure or substructure condition rating of a 5 or 6) along National Highway System (NHS), non-NHS, and locally-owned routes, and for bridges with critical scouring concerns. The Bridge Management Section creates an initial bridge priority list for each District from the queried data and divides the bridges into two categories based on their current condition ratings:

Replacements or Major Rehabilitation
 Minor Rehabilitation or Preventive Maintenance

 Bridges in "poor" condition are targeted for replacements or major rehabilitation (deck and superstructure replacement) projects. Bridge in "fair" condition are targeted for minor rehabilitation (repairs to the deck, superstructure and/or substructure) or preventive maintenance (joint replacements and deck overlays) projects.

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### Prioritization of Selection of Bridge Projects (Continued)

- During the month of May, the Bridge Management Section meets with each District Bridge Section and/or Engineering Section to review the initial lists. Staff from each section consider National Bridge Inventory Condition Ratings, National Bridge Element Data, Sufficiency Rating, Health Index and load ratings.
- In addition, the STIP is reviewed to identify bridges that have been programmed and the priority lists are modified to move those projects to the top of the list. The remaining bridges are prioritized based on conditions, traffic, detour length, local input, and other factors. By the end of June, the Bridge Management Section and each District will finalize their priority lists.



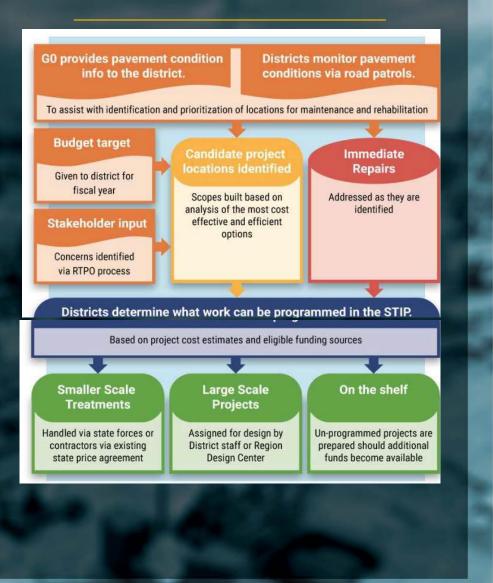
### Bridge Replacements and Major Rehabilitations

- Staff from each District and the Bridge Bureau identify and discuss all bridges that are in a "poor" condition.
- These bridges are targeted for either bridge replacement projects or major rehabilitation projects.
- Projects are selected based on severity of condition, criticality of route, available funding other projects being developed in the area, and other factors (some bridge replacement projects that are driven by bridge capacity rather than bridge condition).
- Bridge replacement and major rehabilitation projects are then programmed into the STIP.

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### Minor Rehabilitations and Bridge Preservation

- NMDOT allocates funding specifically for bridge preservation projects. This funding is divided among the six Districts, and the Bridge Bureau tracks this funding through Bridge Preservation lists.
- Throughout the year, the Bridge Management Section and the Districts select projects for programming for Bridge Preservation projects. Projects are generally funded for bridges rated fair in the bridge priority lists to avoid for these bridges becoming rated as "poor."
- As projects are developed and designs are finalized, Project Development Engineers and Bridge Engineers assigned to the bridge project finalize quantities and cost estimates.
- Projects are then sent through the bidding process through the Plans, Specifications and Estimating (PSE) Bureau for award for construction.

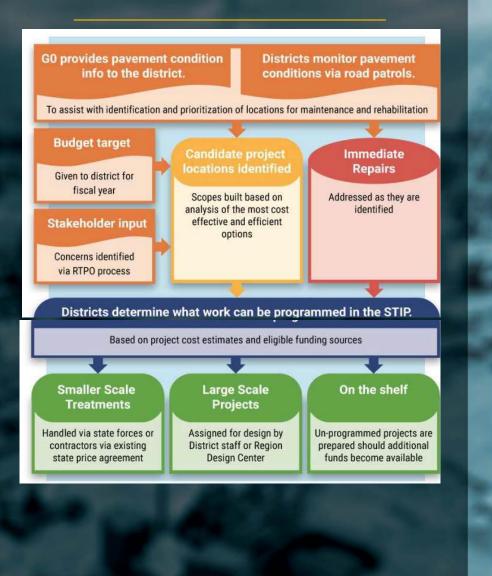


### NMDOT

The NMDOT Pavement Management & Design Bureau, led by the Pavement Management and Design Bureau Chief or designee, is responsible for collecting pavement condition data in accordance with the requirements specified in the Highway Performance Monitoring System (HPMS) Field Manual and in accordance with 23 CFR 490.

This work is conducted throughout the year both in-house and with outsourced consultants and vendors with a goal of having completed all previous calendar year's work and pavement recommendations by May 1 of the current year.

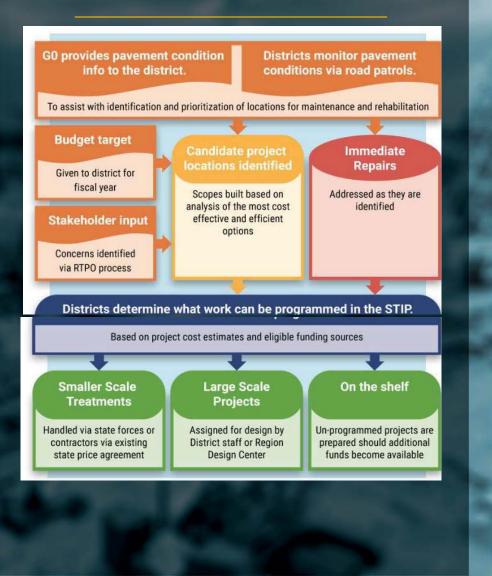
NMDOT utilizes contracts with an outside vendor for an automated data collection process to collect our pavement distress data consistent with the requirements in 23 CFR 490 for rutting, cracking, faulting and International Roughness Index (IRI). The vendor is required to provide a Quality Control Plan that is consistent with the NMDOT Data Quality Management Plan.



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NMDOT collects pavement distress data for the entire NMDOTowned pavement network as well as non NMDOT-owned NHS. The Interstate and non-Interstate NHS pavement condition data is collected on an annual basis. Approximately 50% of the non-NHS pavement condition data is collected each year in order to have data that is no more than two years old. NMDOT began collecting pavement condition data through an automated process in 2013 for the full extent and is now fully compliant with the implementation dates specified in 23 CFR 490.

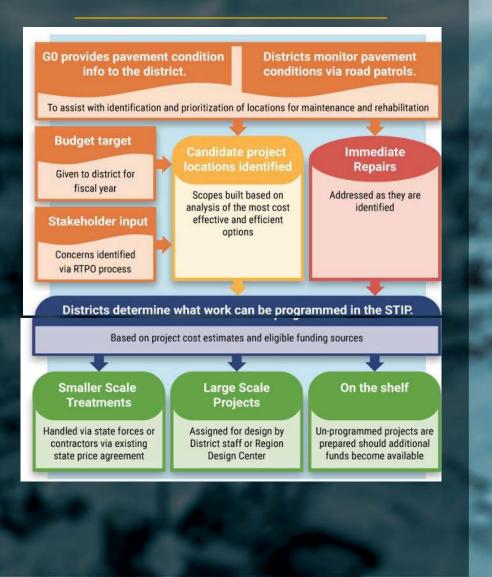
The Pavement Distress Data is stored in the Agile Assets Pavement Management System (PMS), which is managed by the Pavement Management and Design Bureau Chief or designee. A key function of the PMS is to forecast pavement performance using the state's current Pavement Condition Ratings (PCR). The PCR is calculated based on the amount and type of pavement distresses collected for each pavement type. The methodology for determining the Overall Condition Index (OCI) and PCR was developed using a collaborative effort within NMDOT. The methodology is documented in the PMS Database Configuration Document.



In addition, the forecast of future performance using a life cycle approach was established through this collaborative effort and included in the configuration document. The PMS database utilizing this configuration and data collection method has been in place since 2016. Each District has access to the PMS and is able to perform independent analysis of the data to determine pavement improvements.

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The PMS provides recommended treatments based on data of last treatment and current pavement condition.



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District staff, generally led by the ADE of Engineering Support or designee, in consultation with the ADE of Maintenance and the ADE of Construction, and with the support of the District Engineer – identify proposed project locations based on pavement condition data, maintenance management system data, stakeholder input, and field observations by District staff. This information is reviewed in order to determine proposed treatments and identify preliminary cost estimates for each proposed treatment. Pavement priorities are organized into three categories:

- 1) Small-scale district lead projects;
- 2) Large-scale projects for the STIP;
- 3) Projects to develop as shelf projects should additional funding become available.

Each District prioritizes their pavement projects based on traffic volume, pavement condition, economic enhancements, and local priorities. Typically, the Interstate is the highest priority, followed by other National Highway System Routes and other federal-aid eligible routes, in order to identify projects to include in the STIP. Each District evaluates pavement priorities to determine how to utilize their road betterments (state) funds each year.



### Statewide Transportation Improvement Program

- Each District prioritizes their pavement and bridge projects based on available funding and overall condition of each asset. Since MAP-21 eliminated a separate funding program for bridges, each District must balance pavement and bridge needs with their available District Target funding for each funding category.
- Due to the limited amount of funding in the District Target funding allocations and the rate
  of deterioration of the system, the Districts are challenged with determining which project
  treatments to program in the STIP. At times, proposed treatments and length of projects
  are determined based on available funding and a lesser design life may be chosen or
  projects may be funded across multiple years of the STIP.
- In order to meet performance targets and address a life-cycle approach to treatments, the NMDOT recognizes that improvements need to be made in identifying and prioritizing projects as well as investigating alternate approaches to funding allocations.

### Proposed Project Selection Process

 The following processes are under consideration by the Asset Management Executive Steering Committee.

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- The processes would build upon existing project selection efforts. Under a proposed allocation system, certain funds would be distributed, and project selection decisions delegated to each District.
- A statewide project selection process would be applied for other NMDOT funds and resources.
- Therefore, project selection processes for District and statewide decision-making are under consideration. The processes should be considered draft and are subject to additional data considerations.

### Proposed Project Selection Process – District Level Decision-Making

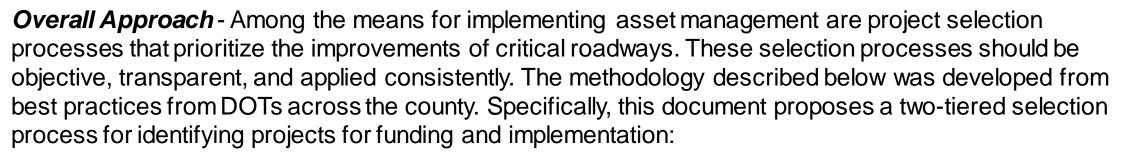


Step 1: District Level Project Categorization	Step 2: Assign Appropriate Data Factors for Each Project/Category
1. Categorize Proposed Projects	1. Pavement
a. Pavement	<ul> <li>PMS Data (condition, cost, automated rec based on budget)- models run annually by May 1 – lead- pavement management bureau chief</li> </ul>
b. Bridge	b. HMS Cost Data – State or District Maintenance Engineer
c. Safety	c. AADT – State or District Traffic Engineer
d. Freight	2. Bridge
e. Socio/Economic	a. Bridge Inspection Ratings – State Bridge Engineer
f. Mobility	b. AADT – State or District Traffic Engineer
	3. Safety         a. Crash Data – Traffic Safety Division Bureau Chief
	b. AADT – State or District Traffic Engineer
	4. Freight
	a. AADT - Technical and Freight Planning Supervisor
Notes: Data will be assembled by various District	b. Truck Volumes - Technical and FreightPlanning Supervisor
Leadership Team members through the accountable sources listed in Step 2	5. Socio/Economic
sources listed in Step 2	a. Projected Economic Growth – Chief Financial Officer or Designee (NMDOT Economist)
	6. Mobility
	<ul> <li>a. Pedestrian, Equestrian, Bicycle Counts – Active Transportation Programs Supervisor /BPE Coordinator</li> <li>b. AADT projections for capacity improvement (add lanes) Planning/Data Management Bureau Chief</li> </ul>

Step 3: Prioritize Projects based on Data, Field Patrol, and Engineering Judgement	Step 4: Select Projects based on Goals, Prioritization, and Funding Availability
1. Prioritize Projects (by category) based on Data	1. Improve Pavement Statewide to meet state of good repair
- District Leadership Team	2. Improve Bridge Rating Statewide to Meet state of good repair
2. Meet with Maintenance Patrols to confirm data	3. Reduce Crashes and Fatalities
- District Leadership Team	4. Improve Freight Movement
3. Apply Best Engineering Judgement based on all information available	5. Improve the Economy Statewide
- District Leadership Team	6. Improve Statewide Mobility
4. Reprioritize projects based on data, field review, and Engineering Judgement	
- District Leadership Team	

At the District level, the District Engineer along with the three Assistant District Engineers and associated staff generally follow a four-step process for project selection.

### Proposed Project Selection Process – Statewide Decision-Making



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- 1. Project Identification (monthly and quarterly)
- 2. Project Evaluation and Selection (monthly and quarterly)

A project short list can be proposed by each District based on local needs or respond to statewide priorities and funding availability. Once a short-term list of projects has been developed, districts can collect the additional information needed to prioritize projects. An evaluation committee will utilize the prioritization process to determine the merits of those projects. This two-tiered approach will limit the data collection and project justification efforts to those projects that are logical candidates for funding in a given year. For maintenance and preservation projects that advance asset management objectives, the decision on the specific type of treatment or improvement can come at a later point.

### Step 1: Project Identification: Create District Project Short List

### Step 1: District Level Short List

- Pavement and bridge conditions information
- Safety
- Engineering judgment
- **Community needs**

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Districts will identify a set of projects for consideration for funding based on local community needs, growth and land use, engineering judgment, pavement and bridge condition information, and other considerations previously described. Projects may also respond to policy guidance or targets set by the NMDOT Secretary, the project selection committee, and/or the TAMP ESC.

For each project proposed for the funding short-list, Districts should complete a **Project Feasibility Form** (PFF) with the following information:

- Existing conditions data
- Basic project description
- Rationale and benefits
- Connection to existing plans and policies

### Long-Term Project Lists

Districts will be encouraged to develop a long-term wish list comprising all of the projects they would like to implement over the next 10-20 years. The projects proposed for funding in a particular year should be taken from the long-term wish list. Districts make the determination of which projects go from the "long list" to "short list." Districts should identify why they are advancing a project to the short list and identify on the PFF.

### Step 2: Project Evaluation and Selection

#### Step 2: Prioritization Process

- Utilize evaluation criteria
- Develop scoring lists by project type
  - Capacity/Mobility
  - Preservation Bridge
  - Preservation Pavement
- Test scenarios to determine benefits

#### Step 3: Project Selection

- Project selection based on results of prioritization process
- Final review and incorporation into the STIP

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Evaluation Criteria should be based on NMDOT Strategic Plan goal areas. Separate processes can be applied for capacity/mobility projects and for preservation projects. Within the preservation category, separate lists should be created for bridge and pavement projects.

Evaluation Criteria by Project Type

CATEGORY	MOBILITY / CAPACITY	PRESERVATION - BRIDGE	PRESERVATION - PAVEMENT
<b>SAFETY</b> (DATA LEAD): Traffic Safety Division Bureau Chief	<ol> <li>Number of crashes</li> <li>Number of fatalities</li> </ol>	<ol> <li>Number of crashes</li> <li>Number of fatalities</li> </ol>	<ol> <li>Number of crashes</li> <li>Number of fatalities</li> </ol>
<b>MOBILITY</b> (DATA LEAD): State Planning Bureau Chief, Technical & Freight Planning Supervisor	<ol> <li>AADT</li> <li>Freight AADT</li> <li>NM 2040 Plan Tier</li> <li>ITS Components</li> </ol>	<ol> <li>AADT</li> <li>Freight AADT</li> <li>NM 2040 Plan Tier</li> </ol>	<ol> <li>AADT</li> <li>Freight AADT</li> <li>NM 2040 Plan Tier</li> </ol>
<b>PRESERVATION</b> (DATA LEAD): State Maintenance Engineer or designee	<ol> <li>Pavement condition (PCR)</li> <li>Pavement lane miles improved</li> </ol>	1. Bridge condition	<ol> <li>Pavement condition (PCR)</li> <li>Pavement lane miles improved</li> </ol>
<b>ECONOMIC DEVELOPMENT</b> (DATA LEAD): Chief Financial Officer, Technical & Freight Planning Supervisor or designee	<ol> <li>Freight corridor</li> <li>Improved access or benefitsto economic development initiatives</li> </ol>	1. Freight corridor	1. Freight corridor
<b>PLANNING FACTORS</b> (DATA LEAD): State Planning Bureau Chief	<ol> <li>Connection to study or planning effort</li> <li>Anticipated growth</li> <li>Socioeconomic conditions</li> </ol>		<ol> <li>Connection to study or planning effort</li> </ol>
<b>ALTERNATIVE MODES</b> (DATA LEAD): Active Transportation Programs Supervisor / BPE Coordinator	<ol> <li>NM Bike Plan priority tier</li> <li>Bicycle/Pedestrian Improvements</li> </ol>		1. NM Bike Plan priority tier*

\*Points would only be awarded if shoulders or other infrastructure are paved as part of the proposed project

### Transfer of Selected Projects to the State Transportation Improvement Plan



**Process Overview**- Upon completion of the Statewide decision-making prioritization process, selected projects shall be programmed into State Transportation Improvement Plan (STIP) by the respective District in which the project resides. Project programming for NMDOT is accomplished through the STIP which lists funded and prioritized projects over a four-year period.

By federal law, transportation programs must be updated at least every four years, although the NMDOT practice is to update the STIP every two years. A critical step for initiating a project within the STIP is obtaining a project control number. To aid in the process, the NMDOT uses a project definition, initial cost estimate, and project control number request form.

The District ADE of Engineering Support shall act as the lead in submitting the project control number request. The District Engineer and respective Assistant District Engineers have identified the project definition phase during the District level short list submittal. Based on the project definition, the ADE of Engineering Support will determine the level of effort required, developing an accurate budget and schedule, which in turn will assist with developing or adjusting the overall project budget and design/construction schedule programmed in the STIP.

### **District Critical Needs**



Route	Begin MP	End MP	Condition	Cost
I-40	57.1	57.6	Poor	\$2,000,000.00
US 60	3.6	3.8	Poor	\$400,000.00
US 60	6	6.2	Poor	\$400,000.00
US 180	27	31	Poor	\$8,000,000.00
US 491	4.4	5.7	Poor	\$5,200,000.00
US 491	40.5	40.9	Poor	\$1,600,000.00
US 550	21	23.7	Poor	\$10,800,000.00





### Projects needed to keep roadway from falling into "Poor" condition

Route	Begin MP	End MP	Condition	Cost
I-40	4.8	12	Fair	\$14,400,000.00
I-40	15	18	Fair	\$6,000,000.00
I-40	21	35	Fair	\$28,000,000.00
I-40	38	43	Fair	\$10,000,000.00
I-40	50	60	Fair	\$20,000,000.00
I-40	77	81	Fair	\$8,000,000.00
I-40	91	99	Fair	\$16,000,000.00
I-40	101	106	Fair	\$10,000,000.00
I-40	119	131	Fair	\$24,000,000.00



### Projects needed to keep roadway from falling into "Poor" condition

Route	Begin MP	End MP	Condition	Cost
US 60	0	24	Fair	\$24,000,000.00
US 60	27	29	Fair	\$2,000,000.00
US 60	36	45	Fair	\$9,000,000.00
US 60	61	72	Fair	\$11,000,000.00
US 60	79	92.6	Fair	\$13,600,000.00
US 180	0	34	Fair	\$34,000,000.00
US 180	39	43	Fair	\$4,000,000.00
US 180	44	47.3	Fair	\$3,300,000.00

### **District Additional Needs**



### Projects needed to keep roadway from falling into "Poor" condition

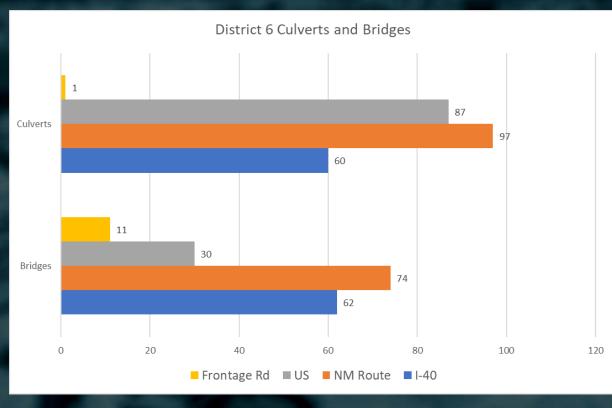
Route	Begin MP	End MP	Condition	Cost
US 491	0	8	Fair	\$16,000,000.00
US 491	11	14.5	Fair	\$3,500,000.00
US 491	15.6	24	Fair	\$8,400,000.00
US 491	38	53	Fair	\$15,000,000.00
US 491	55	61	Fair	\$6,000,000.00
US 550	10	17	Fair	\$14,000,000.00
US 550	20	25	Fair	\$10,000,000.00
US 550	27	31	Fair	\$8,000,000.00
US 550	71	80	Fair	\$18,000,000.00
US 550	87	101	Fair	\$28,000,000.00
US 550	37	70	Fair (Various Spots)	\$66,000,000.00



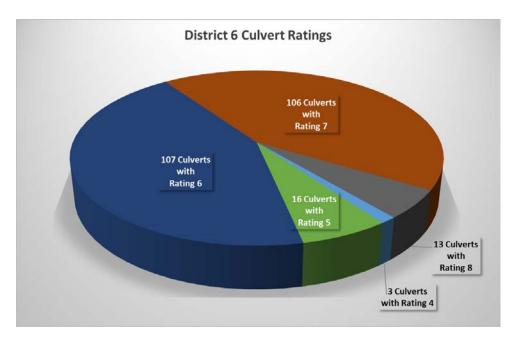
### **District Culverts & Bridges**



- Total Structures: 422
  - Total Bridges: 177
  - Total Culverts: 245



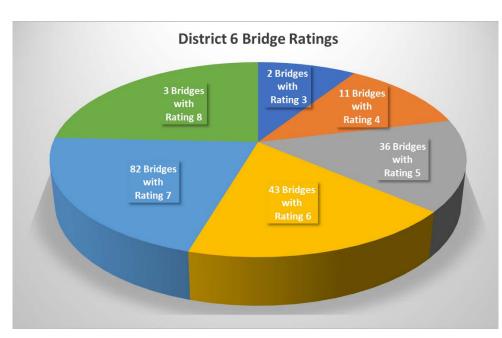
### Current Status of District Culverts



Rating	Condition	Definition
9	Excellent Condition	
8	Very Good Condition	No problems noted.
7	Good Condition	Some minor problems.
6	SatisfactoryCondition	Structural elements show some minor deterioration.
5	Fair Condition	All primary structural elements a re sound but may have minor section loss, cracking, spalling, or scour.
4	Poor Condition	Advanced section loss, deterioration, spalling, or scour.
3	Serious Condition	Loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2	Critical Condition	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure Condition	Major deterioration of section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic, but corrective action may put back in light service.
0	Failed Condition	Out of service, beyond corrective action.

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### Current Status of District Bridges



Rating	Condition	Definition
9	Excellent Condition	
8	Very Good Condition	No problems noted.
7	Good Condition	Some minor problems.
6	Satis factory Condition	Structural elements show some minor deterioration.
5	Fair Condition	All primary structural elements are sound but may have minor section loss, cracking, spalling, or scour.
4	Poor Condition	Advanced section loss, deterioration, spalling, or scour.
3	Serious Condition	Loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2	Critical Condition	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure Condition	Major deterioration of section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic, but corrective action may put back in light service.
0	Failed Condition	Out of service, beyond corrective action.

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# District Roadways & Lane Miles



NMDOT D-6 ROADWAYS			
Route	From	То	Lane Miles
NM 4	San Ysidro	Los Alamos County Line	93
NM 6	I-40, Exit 126	SE of the Cibola/Valencia County Line	36
NM 12	Jct. US 180/NM 12	Datil	148
NM 32	Apache Creek	Quemado	82
NM 36	Quemado	Jct. NM 53/NM 36	144
NM 53	Arizona State Line	Grants	172
NM 96	US 550 at Cuba	Regina	18
NM 103	Jct. NM 32/NM 103	Quemado Lake	8
NM 117	Jct. NM 117/NM 36	Grants	132
NM 118	Arizona State Line	Iyanbito	102
NM 122	Continental Divide	Grants (Exit 85)	106
NM 124	Jct. NM 117/NM 124 (Skyway)	Laguna	52
NM 126	Cuba	La Cueva	77
NM 134	Sheep Springs	Crystal	45
NM 197	US 550 at Cuba	Torreon	61
NM 264	Arizona State Line	Yah-ta-Hey	65
NM 279	NM 124 at Laguna	Seboyeta	27
NM 290	NM 4	Ponderosa	16
NM 371	I-40 at Thoreau	Lake Valley	61
NM 400	Jct. NM 118/NM 400	McGaffey	21
NM 412	I-40 at Prewitt	Bluewater Lake	12
NM 435	Reserve	Lower San Francisco Plaza	10
NM 485	NM 4	Gilman	8
NM 509	Jct. NM 509/NM 605 (Jay's)	Whitehorse	71
NM 537	US 550	Rio Arriba County Line	10
NM 547	Grants	Mt. Taylor	26
NM 564	Jct. NM 118/NM 564	Jct. NM 602/NM 564	13
NM 566	Church Rock	End of Pavement	23
NM 568	Jct. NM 122/NM 568 (West of Milan)	NMDOT Maintenance Yard (Milan)	2
NM 601	Quemado	Cibola/Catron County Line (Dirt Road)	54
NM 602	Jct. NM 53/NM 602	Gallup	64
NM 603	Pie Town	NM 36 (Dirt Road)	46
NM 605	Milan	San Mateo	44
NM 606	Jct. NM 122 (West of Grants)	End of Pavement (Bluewater)	2
NM 608	9 <sup>th</sup> Street (Gallup)	9 <sup>th</sup> Street (Gallup)	8
NM 609	Maloney Street (Gallup)	Maloney Street (Gallup)	10
NM 610	2 <sup>nd</sup> Street (Gallup)	2 <sup>nd</sup> Street (Gallup)	8
NM 612	I-40 at Thoreau	Bluewater Lake	26
NM 615	Horizon Boulevard (Milan)	Horizon Boulevard (Milan)	3
US 60	Arizona State Line	VLA (Very Large Array)	186
US 180	Arizona State Line	Alma	95
US 491	I-40 at Gallup	Little Water	271
US 550	North of Bernalillo	North of San Ysidro	376
Other Routes	Frontage Roads/Interchanges	Frontage Roads/Interchanges	56
I-40	Arizona State Line	To'hajiilee	528
	TOTAL LANE MI		3,418

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### Current Status of District Roadways



#### FHWA Guidelines based on 23 CFR 490

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

#### **Overall Project Condition**

Pavement Condition	3 Metric Rating (IRI, Rutting & Cracking
Good	All three metrics rated "Good"
Poor	≥ 2 metrics rated "Poor"
Fair	All other combinations

D6 Routes	Good	Fair	Poor
Interstate	67.6%	32.4%	0%
US	36.5%	62.5%	1.0%
NM	7.5%	90%	2.5%

### **Current Status of Interstate 40**



I-40:	Total Lanes Miles: 528.4
Poor	Less than 2 miles
Fair	170.63 Lane Miles
Good	355.96 Lane Miles

Begin MP	End MP	Condition	Location
4.8	12	Fair	East of Manuelito to west of Mentmore
15	18	Fair	West Gallup
21	35	Fair	Gallup to east of Iyanbito
38	43	Fair	West of Refinery/Jamestown to west of Coolidge
50	60	Fair	East of Continental Divide to west of Prewitt
57.1	57.6	Poor	East of Thoreau
77	81	Fair	West and East of Milan
91	99	Fair	Skyway to west of San Fidel
101	106	Fair	East of San Fidel to east of Cubero/Budville
119	131	Fair	East of Mesita to To'hajiilee (various spots)

### Current Status of US Routes



US Routes:	Total Lanes Miles: 840
Poor	8.6 Lane Miles
Fair	525.48 Lane Miles
Good	306.48 Lane Miles

Route	Begin MP	End MP	Condition	Location
	0	34	Fair	AZ/NM Border to 13 miles north of Alma
US 180	27	31	Poor	6 miles south of Jct. US 180/NM 12 (various spots)
05 160	39	43	Fair	7 miles north of Alma
	44	47.3	Fair	just north of Alma
	0	8	Fair	NB & SB Gallup to Yah-ta-Hay
	4.4	5.7	Poor	Gamerco to T&R Market
	11	14.5	Fair	SB Twin Lakes to Yah-ta-Hay
US 491	15.6	24	Fair	NB Twin Lakes to Tohatchi
	38	53	Fair	NB San Juan/McKinley County Line to Sheep Springs
	40.5	40.9	Poor	South of Naschitti
	55	61	Fair	NB Newcomb to Little Water

### Current Status of US Routes



US Routes:	Total Lanes Miles: 840
Poor	8.6 Lane Miles
Fair	525.48 Lane Miles
Good	306.48 Lane Miles

Route	<b>Begin MP</b>	End MP	Condition	Location
	10	17	Fair	North of Bernalillo to Zia Pueblo
	20	25	Fair	North of Zia Pueblo to North of San Ysidro
	21	23.7	Poor	South of San Ysidro (various spots)
US 550	27	31	Fair	North of San Ysidro
	71	80	Fair	North of Jct. US 550/NM 96 (La Jara)
	87	101	Fair	North of Jct. US 550/NM 537 to north of Counselor
	37	70	Fair	North of San Ysidro to North of Cuba (various spots)
	0	24	Fair	NM/AZ Border to west of Quemado
	3.6	3.8	Poor	Just east of the NM/AZ Border
	6	6.2	Poor	East of the NM/AZ Border
US 60	27	29	Fair	6 miles west of Quemado
	36	45	Fair	Quemado to west of Pie Town
	61	72	Fair	East of Pie Town to Datil
	79	92.6	Fair	East of Datil to VLA

### Current Status of NM Routes



NM Routes:	Total Lanes Miles: 229.73
Poor	5.77 Lane Miles
Fair	206.69 Lane Miles
Good	17.26 Lane Miles

Route	Begin MP	End MP	Condition	Location
NM 96	0	9.1	Fair	La Jara to Regina (off of US 550)
NM 118	0	16	Fair	NM/AZ Border to West Gallup (2 -lane)
NM 118	16	17	Poor	West Gallup (Old Hwy 66)
NM 118	27	36.8	Fair	East of Gallup to Iyanbito (2-lane)
NM 118	17	26.9	Fair	West Gallup to East Gallup (Old Hwy 66) (4 -lane)
NM 122	23.5	29	Fair	East of Prewitt to West of Milan
NM 122	29	31.5	Fair	West of Milan
NM 122	34	38.7	Fair	C&E Concrete (Milan) to Exit 85 (Grants Walmart)
NM 122	Small sporad	ic sections	Poor	
NM 609	0	2.2	Fair	East Maloney from US 491 to NM 118 (Old Hwy 66)
NM 609	Small spora	dic sections	Poor	

### **District Maintenance Challenges**

- Maintenance of I-40: The challenge for District Six is to maintain I-40 for the traveling public and freight hauling at a high level of service. There are between 10,000 and 15,000 heavy trucks utilizing this roadway daily, along with an equal amount of automobiles. The District maintains 528 lane miles of interstate.
- <u>Snow Removal Operations</u>: The District is centered along the Continental Divide. This brings heavy winter storms, which require snow removal operations, and takes its toll on personnel, equipment and supplies.
- <u>Maintenance of Secondary Roads</u>: Along with maintaining I-40 and its inherent heavy traffic volumes, the District maintains 2890 lane miles of secondary roads in McKinley, Cibola, Catron, Sandoval and portions of San Juan, Rio Arriba, Valencia and Socorro counties.
- <u>Urban Growth in a Rural District</u>: The Municipality of Gallup is growing continuously and development has exceeded the infrastructure. Congestion and limited access



NMDOT

### **District Contract Maintenance**



Contract Maintenance Projects				
District-Wide Traffic Service	\$220,000.00			
District-Wide Bridge Maintenance	\$190,000.00			
District-Wide Contract Trucking	\$1,000,000.00			
NM 602, MP 10.0 – 15.0 (Overlay)	\$2,000,000.00			
NM 53, MP 76.8 – 73.8 (Hot in Place w/Overlay)	\$2,350,000.00			
US 491, MP 7.8 – 3.3 (Overlay)	\$1,402,900.00			
NM 509, MP 15 (Railroad Maintenance)	\$62,000.00			
District-Wide Striping	\$1,119,900.00			

# District Field Supplies Budget FY22



Description	Amount
Materials for Contract Overlay	\$612,400.00
Fog Seal	\$500,000.00
District Shop	\$15,100.00
Monumentation	\$2,000.00
Traffic Section	\$120,000.00
Grants Patrol	\$210,000.00
Mesita Patrol	\$150,000.00
Cuba Patrol	\$190,000.00
San Ysidro Patrol	\$190,000.00
TOW Patrol	\$210,000.00
Ramah Patrol	\$120,000.00
Datil Patrol	\$90,000.00
Quemado Patrol	\$110,000.00
Fence Lake Patrol	\$100,000.00
Rest Area	\$22,800.00

Description	Amount
Reserve Patrol	\$90,000.00
Gallup Patrol	\$210,000.00
Inmate Crews	\$10,000.00
Vegetation Management	\$50,000.00
District Lab	\$15,500.00
Gallup Project Office 1	\$3,000.00
Gallup Project Office 2	\$3,000.00
Milan Project Office 1	\$3,000.00
Milan Project Office 2	\$3,000.00
Chip Seal	\$1,300,000.00
Bridge Crew	\$100,000.00
Heavy Maintenance	\$1,300,000.00
Buffalo Springs Patrol	\$150,000.00
Rest Area Maintenance	\$242,000.00

### **District STIP**



Projects in the Engineering and Development Stage (STIP)		
Description/Termini	Funded Amount	FY Target Date
Bridge Replacement (Bridge No. 7157) NM 566 MP 0.2	\$16,600,000	2022/2023
Bridge Replacement (Bridge No. 7158) NM 566 MP 6.46	\$6,199,188	2022/2023
Bridge Repairs (Bridge No. 7144) NM 53 MP 85.4	\$1,828,992	2020/2022
Culvert Replacement NM 53 MP 15.5 to 19.5	\$6,750,000	2021/2022
DESIGN ONLY Bridge Replacement (Bridge No. 6489 & 6488) I-40 MP 105.9-106.4	\$10,200,000	2022
DESIGN ONLY Drainage Improvements NM 117 MP 47-50	\$3,121,001	2022
DESIGN ONLY Bridge Replacement Drainage Improvement Study I-40 MP 29.7	\$26,500,000	2022
DESIGN ONLY Bridge Replacement Drainage Improvement Study I-40 MP 35.0	\$2,900,000	2022/2023/2027
Bridge Replacement (Bridge No. 6840) US 550 MP 64.55	\$7,464,540	2023/2024
New Drainage Structures NM 612 MP 8.0-11.0	\$3,300,000	2023
Pavement Reconstruction NM 118 MP 26.5-30.0	\$10,000,000	2023
Roadway Reconstruction NM 264 MP 0 to 16	\$1,500,000	2023/2024
Multi-Use Ped NM 4 MP 4.1 to 5.8	\$4,954,912	2020/2021/2022/2023

### **District STIP**



Projects in the Engineering and Development Stage (STIP)		
Description/Termini	Funded Amount	FY Target Date
Bridge Overlay (Bridge No. 7183,7251,7393,7317) I-40 MP 72.2-85.1	\$1,500,000	2023
Roadway Reconstruction NM 264 MP 4 to 20	\$27,000,000	2022/2023/2024
New Bridge, Allison Corridor, NM 118 & BNSF	\$9,000,000	10/21/2022
NM 547 (Roosevelt Ave) Roadway Reconstruction and Bridge Replacement	\$3,000,000	TBD
NM 547 Cutler Hot and Replace Recycle	\$2,235,586	2022
Roadway Improvements I-40 MP 36 to 47	\$34,000,000	TBD
Roadway Realignment NM 124 MP 0 to 1.15	\$950,000	TBD
Roadway Reconstruction I-40 MP 17.9 to 21.9	\$14,500,000	2024
Bridge Replacement(No. 3487) Bridge Rehab( No. 6128) I-40 MP 8.7-9.7	\$8,750,000	2024/2025
Drainage Improvements NM 117 MP 47 to 50	\$3,121,001	2025
Pavement Preservation I-40 MP 9.2 to 16.0	\$5,255,863	2023/2024
Additional Lane EB/WB I-40 MP 36 to 47	\$3,400,000	2023



# Thank You