

# STATE OF BRIDGES IN NEW MEXICO



US 54 OVER CANADIAN RIVER

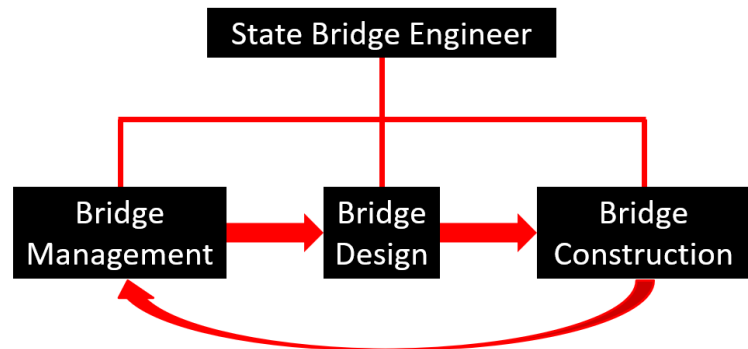
LOGAN, NEW MEXICO

JULY 2025

## New Mexico Department of Transportation (NMDOT) Bridge Bureau

The Bridge Bureau consists of the Bridge Management Section, the Bridge Design Section and the Bridge Construction Engineering Section. All 3 sections are overseen by the State Bridge Engineer.

### NMDOT Bridge Bureau



### Bridge Management Program

NMDOT's Bridge Management Section includes a Bridge Management Section Manager, the Bridge Load Rating group, two (2) Engineering Technicians, and two (2) Management Analysts. The Bridge Rating group is responsible for determining the safe load carrying capacity of all bridges inspected by NMDOT. The Engineering Technicians assist the Districts with bridge inspections (especially specialized inspections) and assist the Districts with their bridge inspection entry into the Bridge Management Program, AASHTOWare BrM. The Management Analysts are responsible for reviewing oversize/overweight permits and their routing through the state of New Mexico.

### Bridge Design Program

NMDOT's Bridge Design Section includes a Bridge Design Section Manager and five (5) Design Units. Each Unit performs internal designs as well as oversight of consultant designs. Each unit includes an Engineer Manager who is a registered professional engineer, an assistant engineer and an engineering technician. One of these units also oversees and updates the Bridge Bureau's Standard Drawings and Specifications.

### Bridge Construction Engineering Program

NMDOT's Bridge Construction Engineering Section provides engineering support to NMDOT's District construction oversight programs. The Section is responsible for responding to any request for information, acceptance of any prefabricated items, and for providing support for bridge construction projects when technical issues are identified. The Section is headed by the Section Manager and currently includes two junior engineers.

## NMDOT Bridge Inventory

Bridges are a vital part of New Mexico’s transportation infrastructure. The NMDOT is committed to ensuring the safety and integrity of the bridges within the state. NMDOT is responsible for the inspection of all public bridges in the state of New Mexico (except for those under the jurisdiction of the Federal government, ie BIA, USFS, BLM, DOE, etc.). The NMDOT is responsible for the maintenance and replacement of all NMDOT owned bridges. The maintenance and replacement of locally owned bridges belongs to the local government owner. Closing or load posting any bridge, particularly bridges on the National Highway System (NHS) could lead to major transportation delays and negatively impact the state’s economy or cause delays for emergency vehicles, school buses, the public and commerce. The NMDOT is committed to responsibly managing our limited resources to address bridge deficiencies in a timely and effective manner and keep the state’s bridge inventory in a state that will serve New Mexico’s transportation needs.



Currently there are 3,758 span bridges and culverts classified as bridges in New Mexico that are inspected by the NMDOT. Of these, 2,976 are state owned, and 782 are locally owned.

NHS/NON-NHS		
	NMDOT OWNED	LOCALLY OWNED
NHS	1603	15
NON-NHS	1373	767

Bridges are categorized by the Federal government as being either on the NHS or off the NHS. Over half of NMDOT owned bridges are on the NHS. However, only 15 locally owned bridges are on the NHS. Until recently, only bridges on the NHS were eligible for the vast majority of federal aid funding.



## Bridge Inspection Program

The NMDOT Bridge Management Section is responsible for ensuring that all the requirements of the National Bridge Inspection Standards (NBIS) are met. This includes the inspection of all public bridges (except for those under federal government jurisdiction). The responsibility of bridge inspections falls to each of NMDOT's six (6) individual districts. Each district has bridge inspection staff who go out to each bridge every two years and document the defects and provide the reports to the Bridge Management Section. The NMDOT also has a contract with New Mexico State University to assist with inspecting approximately 22% of the bridges in the state. Additional engineering consultant inspection support is needed for specialty inspections such as underwater diving inspections, specialized timber bridge inspections and climbing operations for bridges such as the Rio Grande Gorge Bridge.



Bridges in New Mexico are inspected on two-year intervals per the requirements of the NBIS. Some bridges in poor condition may require a 12 month or even 6 month inspection cycle until remediation takes place. As required by the NBIS, NMDOT must act on all critical findings immediately. This may require load posting a bridge, restricting lanes on a bridge or a full closure of the bridge.

The NMDOT rates bridges using the overall NBIS ratings of a 0 to 9 scale for Decks, Superstructures, Substructures, and Culverts. Bridges with condition ratings of 0 to 4 are categorized as Poor condition, bridges with condition ratings of 5 and 6 are categorized as Fair condition and bridges with condition ratings of 7 to 9 are categorized as Good condition bridges.

NBI CONDITION RATINGS		
9 EXCELLENT	}	GOOD CONDITION
8 VERY GOOD		
7 GOOD		
6 SATISFACTORY	}	FAIR CONDITION
5 FAIR		
4 POOR	}	POOR CONDITION
3 SERIOUS		
2 CRITICAL		
1 IMMINENT FAILURE		
0 FAILED		

NMDOT is in the process of moving fully to National Bridge Element ratings (NBE's) to provide a more accurate picture of the bridge and its conditions. NBE's provide quantities of individual bridge elements to allow states to better manage their bridge inventories. Using NBEs allows the agency to track individual elements in poor condition, such as the bearing pads or deck joints, and to define new elements that the state finds important.

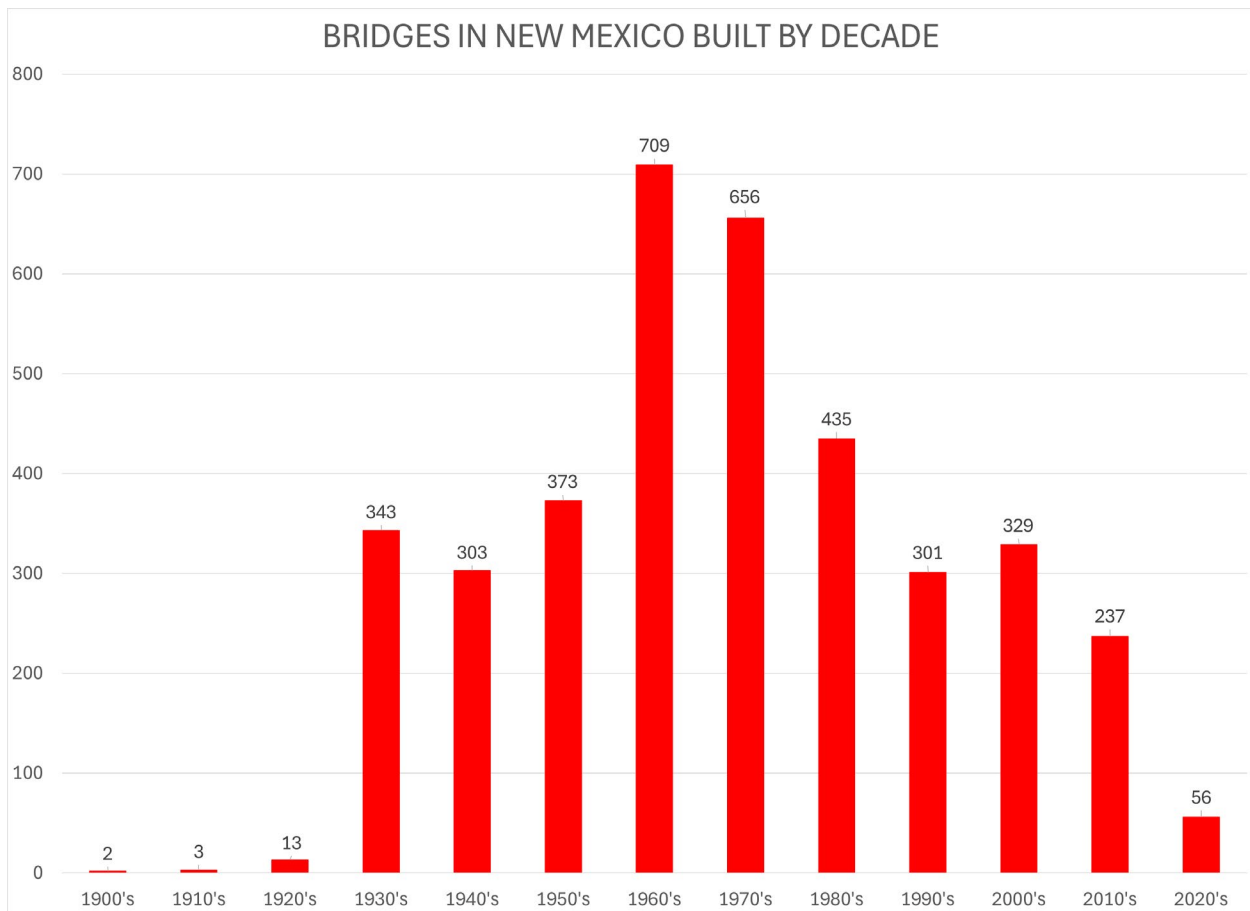
### Current Bridge Conditions

Bridges in the United States are rated either as Good, Fair, or Poor depending on the level of deterioration present. The number of Poor condition bridges owned by NMDOT has been decreasing in the last 20 years; the percentage of Poor condition NMDOT-owned bridges was 19% in 2002 but has been reduced to 3.3% as of June 2025. In total, there are 99 bridges rated as Poor owned by NMDOT. According to the 2025 ASCE Infrastructure Report Card, New Mexico bridges are in better condition than the national average of 6.8% Poor condition nationally. 62.6% of NMDOT owned bridges are rated Fair and 34.1% are rated Good.

	CONDITION OF BRIDGES IN NEW MEXICO		
CONDITION	NMDOT OWNED	LOCALLY OWNED	NATIONAL AVERAGE
POOR	3.3%	5.6%	6.8%
FAIR	62.6%	64.5%	49.1%
GOOD	34.1%	29.9%	44.1%

Although the number of Poor condition bridges in NMDOT's inventory has been greatly reduced, the number of Fair condition bridges continues to rise (nearly 2/3 of the bridges in the state being in a Fair condition). This is due in large part to the age of bridges in New Mexico. The average bridge in New Mexico was constructed in the 1960's and is now over 50 years old. These bridges

require a large amount of maintenance and rehabilitation work to keep them safely functioning. These bridges can rapidly go from a Fair condition to a Poor condition due to the age of the bridge material, most notably the concrete and steel elements. Locked bearings and joints due to corrosion have become a common problem on many of these bridges that are over 50 years of age. This leads to rapid deterioration of the substructure and superstructure. The estimated cost to replace all Poor condition bridges in the state is over \$800 million. In order to bring all of the Fair condition bridges up into a Good condition it will require over \$8 billion dollars. In order to bring NMDOT's good condition percentage (34.1%) up to the national good condition average (44.1%) this will take approximately \$1.6 billion dollars.



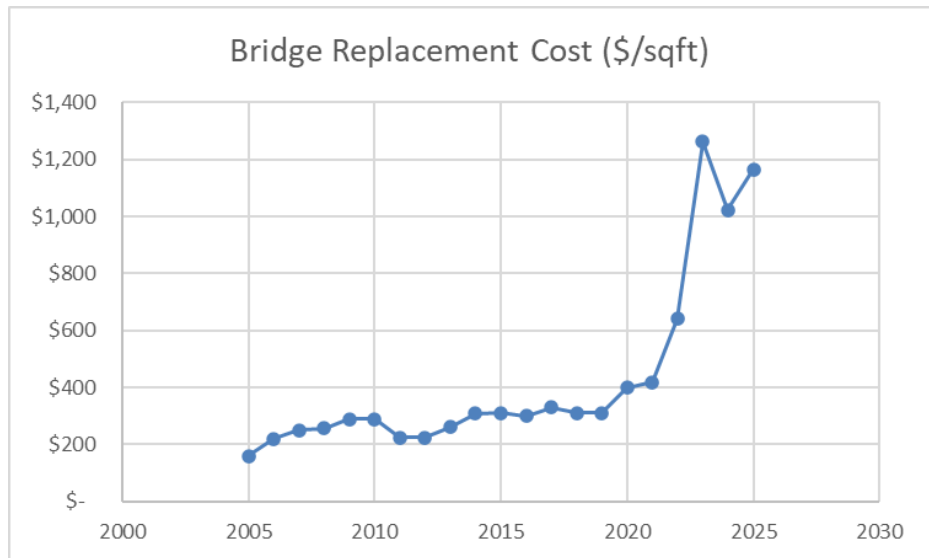
### **NMDOT Bridge Prioritization and Bridge Needs**

NMDOT prioritizes bridge work based on bridge conditions. Each year, the Bridge Bureau and the Districts meet and discuss individual bridge needs. Bridges are divided up by NHS, non-NHS, and locally owned bridges. Bridge condition data, engineering judgement, critical findings, bridge load capacity, traffic capacity needs and budgets dictate which projects are programmed by each District. A sample Bridge prioritization list is shown below.

RANK	BRIDGE_ID	FACILITY	FEATINT	MILEPOST	YEARBUILT	DECK	SUPER	SUB	CULV	RATING
1	7370	I-25 NBL	ARROYO HONDO RD	285.3	1975	7	5	4	N	POOR
2	7371	I-25 SBL	ARROYO HONDO RD	285.3	1975	7	5	5	N	FAIR
3	6221	US-550 SBL	HAMPTON ARROYO	160.7	1961	6	6	5	N	FAIR
4	6222	US-550 NBL	HAMPTON ARROYO	160.7	1961	6	6	5	N	FAIR
5	1792	IRR/US64/491 WBL	SAN JUAN RIVER	22.1	1936	3	4	4	N	POOR
6	7501	I-25 NBL	SF Southern R/R	282.0	1974	7	5	6	N	FAIR
7	7502	I-25 SBL	SF Southern R/R	282.0	1974	7	5	6	N	FAIR
8	5767	US-84/285	UNNAMED WATERWAY	166.7	1955	N	N	N	4	POOR
9	6012	I-25 NBL/SBL	VALENCIA EXIT	297.0	1957	N	N	N	4	POOR

### Bridge Work Costs

NMDOT averages about \$80 million on the replacement, rehabilitation and maintenance of bridges each year. The cost per square foot of new bridges and the cost of rehabilitation and maintenance of bridges has increased greatly during the last



five (5) years. The average cost to build a bridge has increased from \$400/SF in 2020 to over \$1,100/SF in 2025.

Scheduled maintenance is required for bridges to meet their design service life. Failure of providing preventive maintenance will lead to a need for major rehabilitation projects or an early replacement of the bridge. Estimated bridge costs for typical bridge work are as listed.

Bridge Work Activity	Example	Approximate Cost, 2025, (per square foot)
Preventive Maintenance	Deck sealing, expansion joint and bearing maintenance, paint element maintenance	\$ 117
Rehabilitation	Concrete repair, expansion joint and bearing replacement	\$ 583
Major Rehabilitation	Deck replacement, superstructure rehabilitation	\$ 875
Replacement	Bridge replacement	\$ 1,166
Culvert replacement	Culvert replacement (replacement of entire length)	\$ 875



## Bridge Life Cycle Maintenance



Most bridges built in the mid to late 1900's were designed for 50-year design lives. Today's bridge designs are for a 75-year design life. With improved materials and proper maintenance, today's service lives should meet this 75-year design life. Bridges require scheduled maintenance such as deck cleaning and sealing, bearing and joint maintenance and replacement, steel element painting and concrete repair. A typical bridge should be maintained at scheduled intervals.



Failure to provide proper maintenance may lead to the bridge requiring a major rehabilitation or an early replacement. Due to heavy traffic and heavy truck traffic loads, many NMDOT owned bridges on the interstate system typically require bridge deck replacements after about 30 to 40 years.

Year	Maintenance Activity
Year 1	Deck Sealing
Year 15	Deck Sealing, Expansion joint and Bearing Maintenance, Paint Element Maintenance
Year 30	Bearing Replacement, Deck Replacement, Substructure Rehabilitation
Year 45	Deck Sealing, Expansion Joint and Bearing Maintenance, Paint Element Maintenance

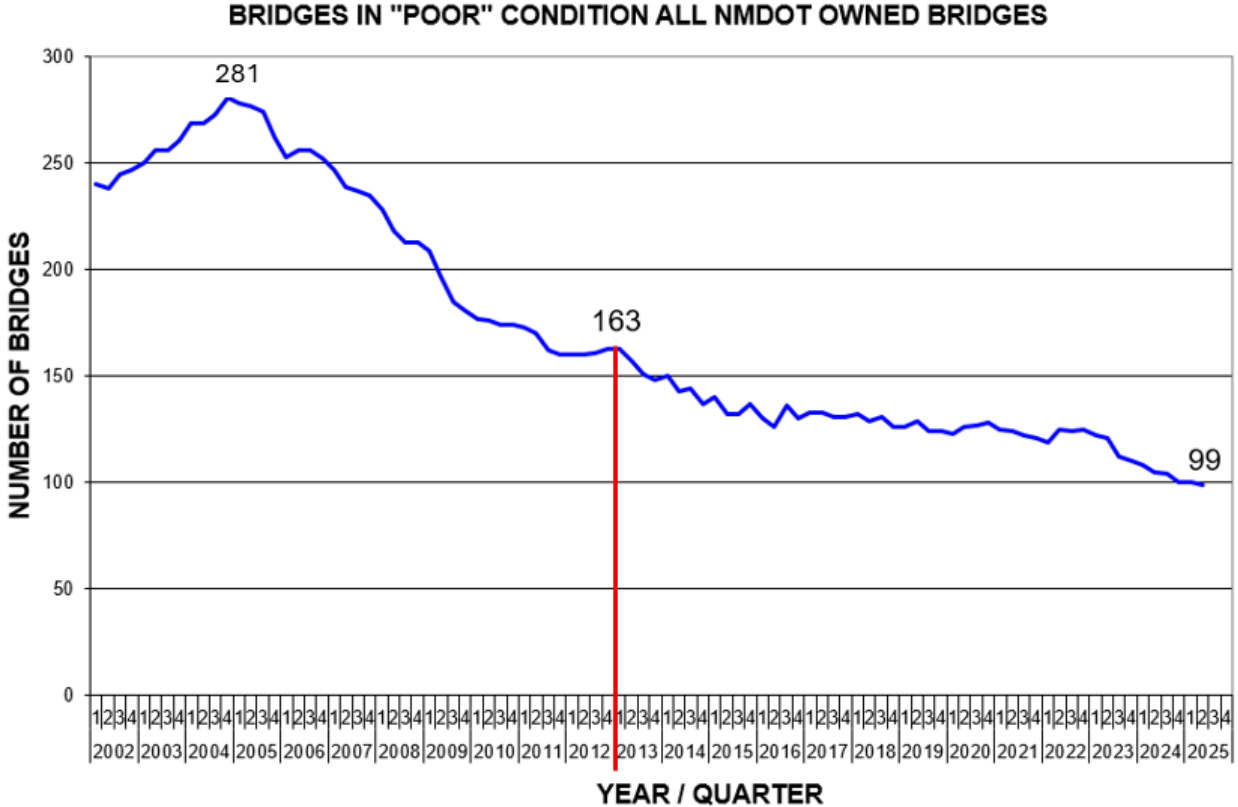
## Bridge Preservation Program

In the late 1990's, the NMDOT began tracking Poor condition bridges and began noticing a trend of bridges with severe deterioration and limited service life of their bridge decks. This was more apparent on interstate bridges. At this time, the Department began a bridge preventive maintenance program and through the use of price agreements and federal funding began prioritizing bridges for preventive maintenance work.

In 2013, the Department set aside \$14 million dollars exclusively for rehabilitation and preventive maintenance work. Since the early 2000's, when NMDOT began to focus on preventive



maintenance, the NMDOT has successfully reduced the number of state-owned Poor condition bridges from 281 to 99. In 2021, the Department increased this funding to \$25 million dollars for rehabilitation and preventive maintenance work where the additional funding was used on Non-NHS Bridges primarily.



In 2017 the Federal Highway Administration (FHWA) stopped participating with the use of federal funds on price agreements to perform preventive maintenance and rehabilitation work. Around the beginning of 2018, the NMDOT decided to only pay for price agreement work with State Contract Maintenance Funds. This limits the amount of projects that NMDOT has the ability to work on and in particular when dealing with emergency repair projects. Two (2) current emergency repair projects that NMDOT is using price agreements to do emergency work on is Bridge 7301 (Lordsburg Interchange Bridge, I-10 WB @ Exit 24) which was struck by an overheight vehicle on



Bridge 7301 (Lordsburg Interchange Bridge, I-10 WB @ Exit 24) which was struck by an overheight vehicle on



March 7, 2025, and for Bridge 9030 (US-285 SB @ MP 88) where a good majority of the north embankment was washed out by a large flood back in October 2024. If these projects had to go through the bidding process it would take at least 2 years in order to get the bridges repaired. Currently both of these bridges are closed and out of service but NMDOT is anticipating that both of these bridges will be reopened by the beginning of next year.

## 2022 Transportation Bill - Bridge Formula Funds

The 2022 Transportation Bill included Bridge Replacement Funds specifically targeting bridge work. This included \$45 million dollars per year for New Mexico for 5 consecutive years. The Transportation Bill also awarded New Mexico \$18 million per year for 2022 and 2023. The Transportation Bill states that a minimum of 15% of the funding was to be spent on non-NHS bridges. NMDOT made the decision to spend 15% on locally owned bridges. Projects that were funded with these Bridge Replacement Funds are shown in the table.

Control Number	Local Agency Bridge Projects	Amount
LC00540	Dona Ana County	\$ 7,800,000
2104850	City of Roswell	\$ 2,400,000
2104840	City of Carlsbad	\$ 2,201,720
6101810	City of Grants	\$ 3,000,000
6101820	Sandoval County	\$ 3,964,807
		\$19,366,527

Also shown in the table below are Transportation Project Fund (TPF) projects since 2022 to present. These TPF funds are funded annually through House Bill 2, they cannot be mixed with federal funding, and they are broken down by a 95% funded by the NMDOT and 5% funded from the local entity. There were a total of 32 bridges that were worked on or designed with these TPF funds and they total an amount of \$36.4 million dollars funded by NMDOT.

FY	District	CN	Entity	State Amount 95%	Entity Amount 5%	Total
2022	1	LP10010	Village of Santa Clara	\$ 570,000.00	\$ 30,000.00	\$ 600,000.00
	1	LP10026	Sierra County	\$ 855,000.00	\$ 45,000.00	\$ 900,000.00
	1	LP10028	Socorro County	\$ 1,710,000.00	\$ 90,000.00	\$ 1,800,000.00
	4	LP40022	Guadalupe County	\$ 451,250.00	\$ 23,750.00	\$ 475,000.00
	4	LP40023	Colfax County	\$ 1,425,000.00	\$ 75,000.00	\$ 1,500,000.00
	5	LP50015	City of Bloomfield	\$ 363,850.00	\$ 19,150.00	\$ 383,000.00
	5	LP50016	Taos County	\$ 470,250.00	\$ 24,750.00	\$ 495,000.00
	5	LP50023	Rio Arriba County	\$ 190,000.00	\$ 10,000.00	\$ 200,000.00
	5	LP50029	Village of Questa	\$ 507,300.00	\$ 26,700.00	\$ 534,000.00
	6	LP60019	Pueblo of Jemez	\$ 2,958,300.00	\$ 155,700.00	\$ 3,114,000.00
	6	LP60025	McKinley County	\$ 1,900,000.00	\$ 100,000.00	\$ 2,000,000.00
	6	LP60027	Cibola County	\$ 1,187,500.00	\$ 62,500.00	\$ 1,250,000.00
	6	LP60030	Sandoval County	\$ 807,500.00	\$ 42,500.00	\$ 850,000.00
6	LP60031	Sandoval County	\$ 1,330,000.00	\$ 70,000.00	\$ 2,105,300.04	
2022 Total				\$ 14,725,950.00	\$ 775,050.00	\$ 16,206,300.04
2023	1	LP10036	Village of Hatch	\$ 547,822.96	\$ 28,832.79	\$ 576,655.75
	1	LP10037	Town of Mesilla	\$ 445,223.20	\$ 23,432.80	\$ 468,656.00
	1	LP10038	City of Socorro	\$ 332,500.00	\$ 17,500.00	\$ 350,000.00
	1	LP10048	Sierra County	\$ 1,425,000.00	\$ 75,000.00	\$ 1,500,000.00
	2	LP20034	Chaves County	\$ 1,187,500.00	\$ 62,500.00	\$ 1,250,000.00
	2	LP20035	City of Carlsbad	\$ 2,850,000.00	\$ 150,000.00	\$ 3,000,000.00
	5	LP50033	Taos County	\$ 950,000.00	\$ 50,000.00	\$ 1,000,000.00
	6	LP60032	Cibola County	\$ 1,900,000.00	\$ 100,000.00	\$ 2,000,000.00
2023 Total				\$ 9,638,046.16	\$ 507,265.59	\$ 10,145,311.75
2024	4	LP40047	City of Raton	\$ 504,758.99	\$ 26,566.26	\$ 531,325.25
	4	LP40058	Harding County	\$ 373,350.00	\$ 19,650.00	\$ 393,000.00
	5	LP50048	Santa Fe County	\$ 1,140,000.00	\$ 60,000.00	\$ 1,200,000.00
	5	LP50052	Village of Questa	\$ 541,500.00	\$ 28,500.00	\$ 570,000.00
	6	LP60039	Cibola County	\$ 1,900,000.00	\$ 100,000.00	\$ 2,000,000.00
	6	LP60041	Sandoval County	\$ 1,238,725.19	\$ 65,196.06	\$ 1,303,921.25
	6	LP60042	Village of Milan	\$ 2,850,000.00	\$ 150,000.00	\$ 3,000,000.00
2024 Total				\$ 8,548,334.18	\$ 449,912.32	\$ 8,998,246.50
2025	1	LP10070	Village of Santa Clara	\$ 444,600.00	\$ 23,400.00	\$ 468,000.00
	2	LP20058	Otero County	\$ 380,000.00	\$ 20,000.00	\$ 400,000.00
	6	LP60046	Cibola County	\$ 2,660,000.00	\$ 140,000.00	\$ 2,800,000.00
2025 Total				\$ 3,484,600.00	\$ 183,400.00	\$ 3,668,000.00
<b>Grand Total</b>				<b>\$ 36,396,930.34</b>	<b>\$ 1,915,627.91</b>	<b>\$ 39,017,858.29</b>

Meeting federal funding requirements has proven to be difficult for most of the smaller New Mexico local governments. Federal funds require qualified local government personnel to provide oversight and are required to be trained in the reporting and management of projects.





requested routes by overweight permit applicants. NMDOT also uses ProMiles Oversize/Overweight Quote Manager in the permitting process. Trucking companies will enter their loading configuration and destination into ProMiles and all loads that are over 170,000 pounds and all self-propelled vehicles will require review by the NMDOT Bridge Management Section.

The emergence of the wind energy industry and the heavy oilfield activity in the southeastern part of New Mexico has resulted in a large demand for oversize and overweight permits to be issued by NMDOT. The vehicles used by the oil industry can weigh up to 400,000 pounds but as oil extracting technology improves these weights are expected to get even heavier. The continued passing of these heavy vehicles leads to early deterioration and increased repair and maintenance of NMDOT bridges. More funding will be required to maintain or replace these bridges impacted by the oil industry. The amount of funding needs has yet to be quantified.

