New Mexico Transportation by the Numbers

MEETING THE STATE'S NEED FOR SAFE, SMOOTH AND EFFICIENT MOBILITY

JANUARY 2024

A National Transportation Research Nonprofit

TRIPNET.ORG

Founded in 1971, TRIP ® of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

NEW MEXICO KEY TRANSPORTATION FACTS

THE HIDDEN COSTS OF DEFICIENT ROADS

Driving on New Mexico roads that are deteriorated, congested and that lack some desirable safety features costs New Mexico drivers a total of $3.3 billion each year. TRIP has calculated the cost to the average motorist in the state's largest urban areas in the form of additional vehicle operating costs (VOC) as a result of driving on rough roads, the cost of lost time and wasted fuel due to congestion, and the financial cost of traffic crashes. The chart below shows the cost of deficient roads statewide and for the average driver in the state's largest urban areas.

Location	VOC	Safety	Congestion	TOTAL
Albuquerque	$958	$746	$1,276	$2,980
Las Cruces	$990	$479	$518	$1,987
Santa Fe	$872	$664	$753	$2,289
NEW MEXICO STATEWIDE	**$1.4 Billion**	**$919 Million**	**$1 Billion**	**$3.3 Billion**

PROJECTS NEEDED TO ADDRESS SAFETY, RELIABILITY AND PRESERVATION

Investment in New Mexico's roads, highways and bridges is funded by local, state and federal governments. A lack of sufficient funding at all levels will make it difficult to adequately maintain and improve the state's existing transportation system. The New Mexico Department of Transportation has identified nearly $6.6 billion in needed but unfunded transportation projects throughout the state to address safety, reliability and preservation challenges.

Route or Corridor	Project Description	Estimated Cost +/- (Millions)
Southwest New Mexico & Border Region (District 1)		
I-25, MP 3.0 to 9.5	Reconstruction of six-lane corrridor with added capacity	$75.0
I-25 at Nogal Canyon	Bridge replacement	$142.5
NM 213 Widening & NM213/NM404 Interchange	Reconstruction of four-lane facility & construction of interchange	$102.0
US 180 at Deming to Bayard	Reconstruction with four-lane or alternating passing lanes	$155.3
I-10 Corridor	Reconstruct pavement & infrastructure to current design standards	$900.0
I-25, MP 0 to 1	Expand to six lanes	$45.0
	DISTRICT ONE TOTAL COST	**$1.420 Billion**
Southeast New Mexico & Permian Basin (District 2)		
US 380/NM 157-242, Roswell to Tatum to State Line	Capacity improvements, alternating passing lanes throughout corridor, roadway reconstruction & pavement rehab	$250.0
NM 31/NM 128 Corridors MP 0.5 to 22.67 & MP 0 to 59.9	Reconstruction with four-lane & alternating passing lanes, bridge replacement & major intesections improvements	$335.0
NM 18, MP 58 to 71 Lovington to Hobbs	Minor pavement rehabilitation	$35.0
US 62/180 MP 36 to 104	Minor pavement rehablilitation	$60.0
NM 18, MP 0 to 58 Hobbs to Jal	Major pavement rehabilitation	$120.0
US 54, MP 0 to 55 South of Alamogordo	Minor pavement rehabilitation	$50.0
US 82, MP 139 to 171 West of Lovington	Roadway reconstruction with addition of shoulders, passing lanes & drainage improvement	$75.0
US 60, MP 328 to 378 Clovis to Ft. Sumner Corridor	Roadway reconstruction, rehabilitation, additions of passing lanes & drainage improvements	$250.0
	DISTRICT TWO TOTAL COST	**$1.175 Billion**

Albuquerque Metro Area & Central Rio Grande Corridor (District 3)		
NM 500 Rio Bravo Bridge over Rio Grande	Replace NM 500 Bridges over Rio Grande	$115.0
I-25 Gibson Interchange MP 223	Reconstruction Gibson I-25 interchange improvements of I-25	$150.0
I-25 Mesa Del Sol Interchange	Design & construction of new I-25 Interchange at Mesa Del Sol	$125.0
I-40 Paseo Del Vulcan Cooridor I-40 to Unser	New PDV Cooridor & interchange ROW design construction	$180.0
I-40 6 Lane & Frontage Roads MP 133 to 153	Design & reconstruction I-40: 3 lanes each way & frontage roads	$400.0
NM 500 MM 4.75 to 7.5 from NM45 Coors to 118th street	Roadway reconstruction, addition of shoulders, turn lanes & drainage improvement, bridge widening	$75.0
I-25 Cesar Chavez to Central	Reconstruction to correct S-Curve I-25	$500.0
	DISTRICT THREE TOTAL COST	**$1.545 Billion**
Northeastern Quadrant of New Mexico, Bordering Texas, Oklahoma & Colorado (District 4)		
NM 39, MP 14.6 to MP 50	Roadway reconstruction, ADA, lighting	$50.0
NM 434, MP 21.1 to MP 25.8	Reconstruction & widening thru Coyote Creek Canyon	$35.0
NM 237, MP 1-2.4	Roadway rehabilitation, ADA, drainage improvements.	$20.0
I-40, MP 272.38	Bridge replacement (#7184, #7185)	$15.0
I-25, MP 412.36	Bridge replacement (#7288, #7289,#7290, #7291)	$20.0
I-40 various MPs from MP 270-370	Roadway reconstruction	$150.0
I-25/US64-87 Interchange	Reconstruction of interchange at exit 451 in Raton	$55.0
US 64/87, MP 349.4 to MP 404	Rehabilitation from Raton to Clayton	$200.0
BL-15, MP 2.37 to MP 3.06	Roadway rehabilitation, ADA	$20.0
US 54, MP 306.1 to MP 356.2	Reconstruction or major rehabilitation	$150.0
	DISTRICT FOUR TOTAL COST	**$715 Million**
Northwest New Mexico & Northern Rio Grande Corridor (District 5)		
US 550, MP 99 to MP 150 (51 mi.)	Roadway centerline wall barrier	$56.6
NM 76, NM 68 to NM 503, MP 0 to MP 10 (10 mi.)	Roadway rehabilitation & drainage improvements	$35.0
NM 68 MP 0.9 - 4.7, Espanola, Ohkay Owengi	Roadway Recon, ADA, lighting, intersection improvements	$65.0
NM 30 MP 0 - 8.36	Roadway reconstruction/add capacity	$111.0
St. Michael's / St. Francis Interchange	Roadway reconstruction	$50.0
I-25 Cerrillos Rd to Lamy Intch., MP 276-291 (15 mi.)	Roadway reconstruction, auxilliary lanes, improved on exit ramp	$40.0
NM 599 at Via Vetaranos in Santa Fe	Interchange construction	$25.0
US 64/ NM 491 Shiprock Bridge	Bridge Replacement	$47.0
US 64 Taos to Tres Piedras (37 miles)	Roadway rehabilitation / widening to add shoulders	$125.0
US 550 Aztec to Colorado State Line	Full depth reclamation	$42.0
	DISTRICT FIVE TOTAL COST	**$596.6 Million**
West-Central New Mexico, Gallup & Grants Area (District 6)		
Allison Corridor - NM 118, BNSF & I-40 overpasses & connection	Phase 2 & Phase 3	$75.0
NM 547, MP 4 to 13.6	Widening, drainage improvements, design & construction	$54.0
I-40 at multiple locations: MP 0-18, 22-39.8, 44.8-132	Design & addition of third lane	$650.0
NM 264, MP 0 to 16	Design & reconstruction	$93.1
I-40 Miyamura Interchange - Gallup	Bridge Replacment/Interchange Recon	$25.0
I-40 MP 17.9-21.9	Design & construct bridge replacement & drainage improvements	$65.0
I-40 MP 8.7-9.7, Bridges 3487, 6128	Bridge Replacement	$50.7
I-40 MP 35 to 36.3, NM 118 MP 30.1 to 35.7	Phases 2-5, Drainage & flood mitigation project	$94.9
	DISTRICT SIX TOTAL COST	**$1.108 Billion**
	TOTAL STATEWIDE COST	**$6.559 BILLION**

NEW MEXICO ROADS PROVIDE A ROUGH RIDE

Due to inadequate state and local funding, 53 percent of major locally and state-maintained roads and highways in New Mexico are in poor or mediocre condition. Driving on rough roads costs the average New Mexico driver $940 annually in additional vehicle operating costs – a total of $1.4 billion statewide. The chart below details pavement conditions on major roads in the state's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Albuquerque	40%	22%	10%	28%
Las Cruces	38%	31%	13%	17%
Santa Fe	34%	24%	11%	31%
NEW MEXICO STATEWIDE	**32%**	**21%**	**11%**	**36%**

According to NMDOT, under current funding constraints, pavement conditions on the state's Interstates will decline, with the share of Interstate lane-miles in poor condition increasing from 2.9 percent in 2002 to 5.6 percent in 2031, and the share in good condition decreasing from 42 percent to 35.9 percent. The condition of non-Interstate pavement on the National Highway System is also projected to decline under current funding conditions, with the share of poor pavements increasing from 3 percent in 2002 to 5.5 percent in 2031.

NEW MEXICO BRIDGE CONDITIONS

Five percent of New Mexico's bridges are rated in poor/structurally deficient condition, meaning there is significant deterioration of the bridge deck, supports or other major components. Sixty percent of the state's bridges are rated in fair condition and the remaining 35 percent are in good condition. Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In New Mexico, 47 percent of the state's bridges were built in 1969 or earlier. The chart below details bridge conditions statewide and in the state's largest urban areas.

	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		TOTAL
	Number	Share	Number	Share	Number	Share	BRIDGES
Albuquerque	9	2%	349	70%	141	28%	499
Las Cruces	10	4%	169	64%	84	32%	263
Santa Fe	4	2%	132	52%	118	46%	254
NEW MEXICO STATEWIDE	**201**	**5%**	**2,416**	**60%**	**1,420**	**35%**	**4,037**

While the state has made significant improvements in bridge conditions since 2002 as a result of increased funding for bridge repair, preservation and maintenance, the condition of bridges is projected to decline over the next decade under current funding projections. The share of NHS bridges in the state with deck area in poor condition is projected to increase from 3.3 percent in 2002 to 6 percent in 2031, while the share of deck area in good condition is projected to decline from 34.5 percent to 26.7 precent.

NEW MEXICO ROADS ARE INCREASINGLY CONGESTED

In 2019, the state's transportation system carried 27.8 billion annual vehicle miles of travel (VMT), a 22 percent increase since 2000. Due to the Covid-19 pandemic, vehicle travel in New Mexico dropped by as much as 41 percent in April 2020 (as compared to vehicle travel during the same month the previous year). By 2022, vehicle miles of travel in New Mexico had rebounded to three percent below 2019's pre-pandemic levels. During the first nine months of 2023, as compared to the first nine months of 2022, vehicle miles of travel in New Mexico increased 4.2 percent, the largest increase in the nation during that time.

Congested roads choke commuting and commerce and cost New Mexico drivers $1 billion each year in the form of lost time and wasted fuel. The chart below shows the annual number of hours lost to congestion, the cost of lost time and wasted fuel, and gallons of fuel lost to congestion for the average driver in the state's largest urban areas.

Location	Hours Lost to Congestion	Annual Cost Per Driver	Gallons of Fuel Wasted Per Driver
Albuquerque	48	$1,276	20
Las Cruces	19	$518	9
Santa Fe	28	$753	14

NEW MEXICO TRAFFIC SAFETY AND FATALITIES

From 2018 to 2022, 2,162 people were killed in traffic crashes in New Mexico. In 2022, New Mexico had 1.77 traffic fatalities for every 100 million miles traveled, the third highest rate in the nation and significantly higher than the national average of 1.35.

The number of fatalities in New Mexico increased 10 percent from 2019 to 2022, from 424 to 466, and the state's fatality rate per 100 million VMT increased 16 percent during that time, from 1.53 to 1.77. This increase in the number of fatalities and the rate of fatalities per 100 million VMT happened while vehicle travel in the state decreased by three percent overall from 2019 to 2022.

NEW MEXICO TRAFFIC FATALITY AND VEHICLE MILES OF TRAVEL (VMT) DATA					
	2019	2020	2021	2022	2019-2022 Change
Traffic Fatalities	424	398	481	466	**10%**
Fatalities per 100M VMT	1.53	1.68	1.82	1.77	**16%**
VMT (Billions)	27.8	23.8	26.8	27.0	**-3%**

From 2017 to 2021, 22 percent of those killed in crashes involving motorized vehicles were pedestrians or bicyclists, a total of 422 pedestrian fatalities and 36 bicycle fatalities over the five-year period. The chart below indicates the number of pedestrian, bike and total traffic fatalities in New Mexico from 2017 to 2021 and the overall share of pedestrian and bicycle fatalities.

Year	Total Fatalities	Pedestrian Fatalities	Bicycle Fatalities	Share Bike and Ped.
2017	379	75	2	20%
2018	391	83	11	24%
2019	424	83	9	22%
2020	398	79	8	22%
2021	481	102	6	22%
TOTAL	**2,073**	**422**	**36**	**22%**
AVERAGE	**415**	**84**	**7**	**22%**

Traffic crashes imposed a total of $2.8 billion in economic costs in New Mexico in 2022 and traffic crashes in which a lack of adequate roadway safety features, while not the primary factor, were likely a contributing factor, imposed $919 million in economic costs. The chart below shows the number of people killed in traffic crashes in the state's largest urban areas between 2017 and 2021, and the cost of traffic cashes per driver.

Location	Average Fatalities 2017-2021	Crash Costs per Driver
Albuquerque	179	$746
Las Cruces	37	$479
Santa Fe	35	$664
NEW MEXICO STATEWIDE	**432**	**$579**

In early 2022 the U.S. Department of Transportation adopted a comprehensive National Roadway Safety Strategy, a roadmap for addressing the nation's roadway safety crisis based on a Safe System approach. The Safe System approach, which is also being adopted by state and local transportation agencies has five objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and improved Post-Crash Care.

NEW MEXICO TRANSPORTATION FUNDING

Improvements to New Mexico's roads, highways and bridges are funded by local, state and federal governments. The level of highway investment is set to increase as a result of the five-year federal Infrastructure Investment and Jobs Act (IIJA), signed into law in November 2021, which will provide $3.2 billion in road, highway and bridge funding from 2022 to 2026 resulting in a 38 percent increase in federal funding starting in 2022.

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic analysis by IHS Markit found that that every dollar spent on highway and bridge improvements results in $3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.

The ability of revenue from New Mexico's motor fuel tax – a critical source of state transportation funds – to keep pace with the state's future transportation needs is likely to erode as a result of increasing vehicle fuel efficiency, the increasing use of electric vehicles and inflation in highway construction costs.

The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon. The share of electric vehicles of total passenger vehicle sales in the U.S. is expected to increase to five percent by 2023 and to 60 percent by 2040, by which time electric vehicles will represent approximately 30 percent of the passenger vehicle fleet.

During 2022 and the first three quarters of 2023 the Federal Highway Administration's national highway construction cost index, which measures labor and materials cost, increased by 36 percent.

TRANSPORTATION AND ECONOMIC DEVELOPMENT

The health and future growth of New Mexico's economy is riding on its transportation system. Each year, $143 billion in goods are shipped to and from sites in New Mexico, mostly by trucks. Increases in passenger and freight movement will place further burdens on the state's already deteriorated and congested network of roads and bridges. The value of freight shipped to and from sites in New Mexico, in inflation-adjusted dollars, is expected to increase 53 percent by 2050.

According to a report by the American Road & Transportation Builders Association, the design, construction and maintenance of transportation infrastructure in New Mexico supports approximately 26,000 full-time jobs across all sectors of the state economy. These workers earn $802 million annually.

Approximately 349,000 full-time jobs in New Mexico in key industries like tourism, retail sales, agriculture and manufacturing are completely dependent on the state's transportation network.

Sources of information for this report include AAA, the AAA Foundation for Traffic Safety, the American Association of State Highway and Transportation Officials (AASHTO), the American Road & Transportation Builders Association (ARTBA), the Bureau of Transportation Statistics (BTS), the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), the New Mexico Department of Transportation (NMDOT), the Texas Transportation Institute (TTI), The Transportation Research Board (TRB), the U.S. Census Bureau, and the U.S. Department of Transportation. Cover photo credit: iStockPhoto.com.

INTRODUCTION

New Mexico's roads, highways and bridges form vital transportation links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. Modernizing New Mexico's transportation system is critical to quality of life and economic competitiveness in the Land of Enchantment. Inadequate transportation investment, which will result in deteriorated transportation facilities and diminished access, will negatively affect New Mexico's economic competitiveness and quality of life.

To accommodate population and economic growth, maintain its level of economic competitiveness and achieve further economic growth, New Mexico will need to maintain and modernize its roads, highways and bridges by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient, reliable and safe mobility for residents, visitors and businesses. Making needed improvements to New Mexico's roads, highways, bridges and transit systems could also provide a significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

This report examines the condition, use and safety of New Mexico's roads, highways and bridges, and the state's future mobility needs. Sources of information for this report include the Federal Highway Administration (FHWA), the New Mexico Department of Transportation (NMDOT), the American Association of State Highway and Transportation Officials (AASHTO), the Bureau of Transportation Statistics (BTS), the U.S. Census Bureau, the Texas Transportation Institute (TTI), the American Road & Transportation Builders Association (ARTBA), and the National Highway Traffic Safety Administration (NHTSA).

In addition to statewide data, the TRIP report includes regional data for the Albuquerque, Las Cruces and Santa Fe urban areas. An urban area is defined as a region's municipalities and surrounding suburbs for pavement condition and congestion data; bridge and traffic fatality data include a region's major counties.[1]

POPULATION, TRAVEL AND ECONOMIC TRENDS IN NEW MEXICO

New Mexico motorists and businesses require a high level of personal and commercial mobility. To foster quality of life and spur continued economic growth, it is critical that the state provide a safe and modern transportation system that can accommodate future growth in population, tourism, business, recreation and vehicle travel.

New Mexico's population grew to approximately 2.1 million residents in 2022, a 16 percent increase since 2000.[2] New Mexico had approximately 1.5 million licensed drivers in 2021.[3]

From 2000 to 2019, annual VMT in New Mexico increased by 22 percent, from approximately 22.8 billion miles traveled annually to approximately 27.8 billion miles traveled annually.[4] Due to the COVID-19 pandemic, vehicle travel in New Mexico dropped by as much as 41 percent in April 2020 (as compared to vehicle travel during April 2019). By 2022, vehicle miles of travel (VMT) in New Mexico had rebounded to three percent below pre-pandemic levels in 2019.[5] During the first nine months of 2023, as compared to the first nine months of 2022, New Mexico VMT increased 4.2 percent, the largest increase in the nation during that time.[6]

From 2000 to 2021, New Mexico's gross domestic product (GDP), a measure of the state's economic output, increased by 33 percent, when adjusted for inflation.[7] U.S. GDP increased 48 percent during the same period.[8]

CONDITION OF NEW MEXICO ROADS

The life cycle of New Mexico's roads is greatly affected by the state and local governments' ability to perform timely maintenance and upgrades to ensure that road and highway surfaces last as long as possible.

The pavement data in this report, which is for all arterial and collector roads and highways, is provided by the Federal Highway Administration (FHWA), based on data submitted annually by the New Mexico Department of Transportation (NMDOT) on the condition of major state and locally maintained roads and highways. Pavement data for Interstate highways and other principal arterials is collected for all system mileage, whereas pavement data for minor arterial and all collector roads and highways is based on sampling portions of roadways as prescribed by The Federal Highway Administration (FHWA) to ensure the data collected is adequate to provide an accurate assessment of pavement conditions on these roads and highways.

Statewide, more than half of New Mexico's major roads are in poor or mediocre condition. Thirty-two percent of New Mexico's major locally and state-maintained roads are in poor condition and 21 percent are in mediocre condition.[9] Eleven percent of New Mexico's major roads are in fair condition and the remaining 36 percent are in good condition.[10]

The chart below details pavement conditions on major urban roads in the state's largest urban areas and statewide.[11]

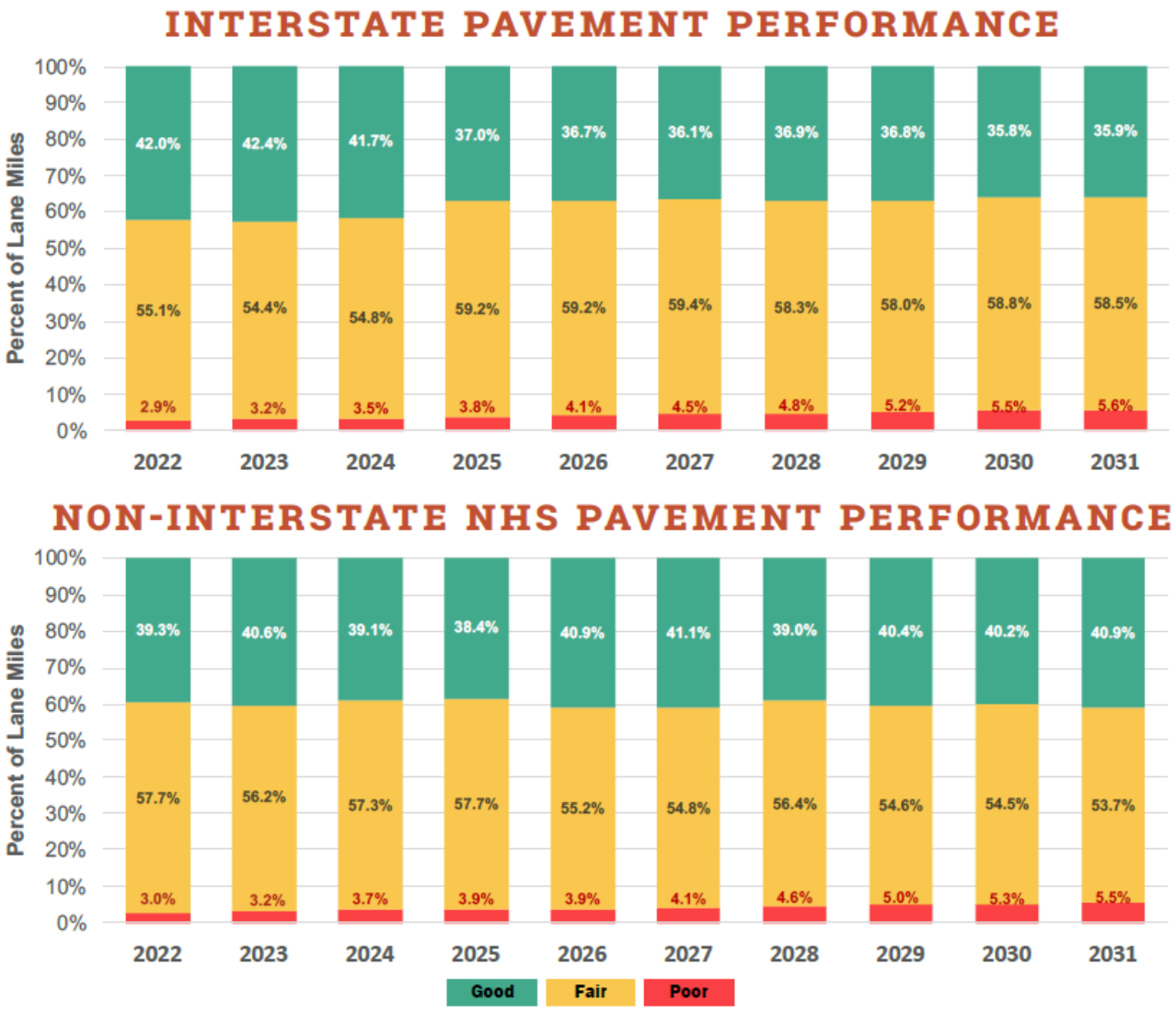
Chart 1. Pavement conditions on major urban roads in New Mexico's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Albuquerque	40%	22%	10%	28%
Las Cruces	38%	31%	13%	17%
Santa Fe	34%	24%	11%	31%
NEW MEXICO STATEWIDE	**32%**	**21%**	**11%**	**36%**

Source: TRIP analysis of Federal Highway Administration data.

According to NMDOT, under current funding constraints, pavement conditions on the state's Interstates will decline, with the share of Interstate lane miles in poor condition increasing from 2.9 percent in 2002 to 5.6 percent in 2031, and the share in good condition decreasing from 42 percent to 35.9 percent.[12] The condition of non-Interstate pavement on the National Highway System is also projected to decline under current funding conditions, with the share of poor pavements increasing from 3 percent in 2002 to 5.5 percent in 2031.[13]

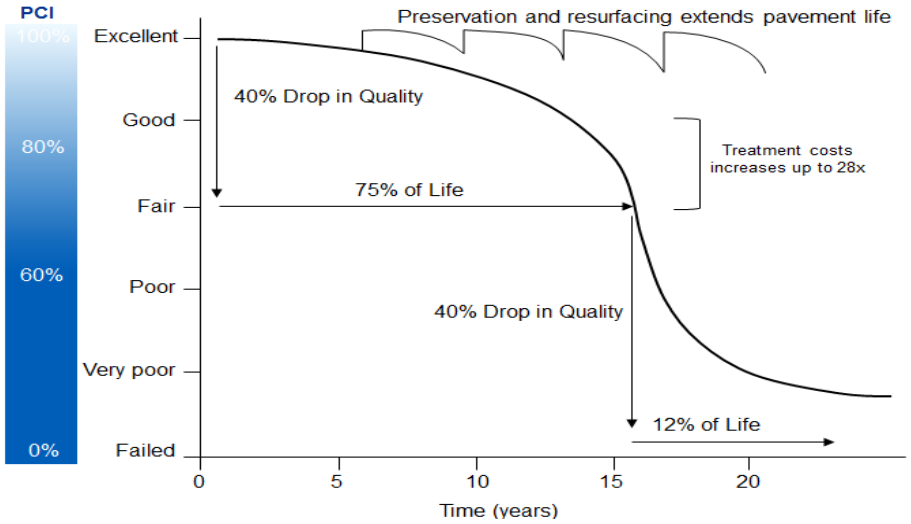
Chart 2. Current and projected pavement conditions.



Source: New Mexico Department of Transportation 2022 Transportation Asset Management Plan.

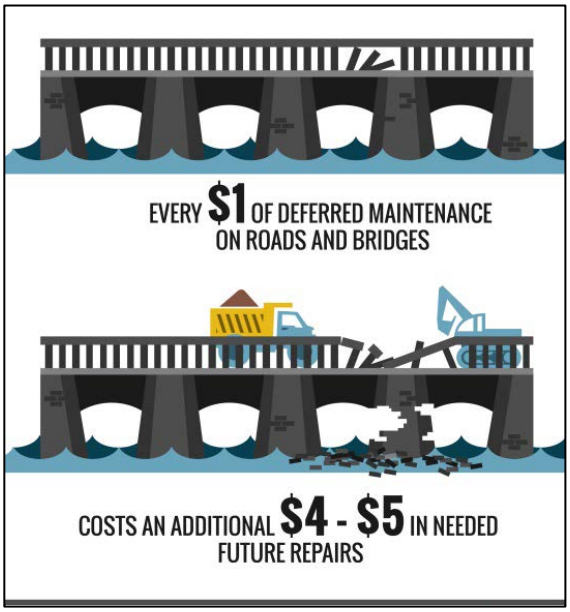
Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road's foundation. Road surfaces at intersections are more prone to deterioration because the slow-moving or standing loads occurring at these sites subject the pavement to higher levels of stress. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.[14] As roads and highways continue to age, they will reach a point of deterioration where routine paving and maintenance will not be adequate to keep pavement surfaces in good condition and costly reconstruction of the roadway and its underlying surfaces will become necessary.

Chart 3. Pavement Condition Cycle Time with Treatment and Cost



Source: North Carolina Department of Transportation (2016). 2016 Maintenance Operations and Performance Analysis Report.

Long-term repair costs increase significantly when road and bridge maintenance is deferred, as road and bridge deterioration accelerates later in the service life of a transportation facility and requires more costly repairs. A report on maintaining pavements found that every $1 of deferred maintenance on roads and bridges costs an additional $4 to $5 in needed future repairs.[15]



THE COST TO MOTORISTS OF ROADS IN INADEQUATE CONDITION

TRIP has calculated the additional cost to motorists of driving on roads in poor, mediocre or fair condition. When roads are in poor, mediocre or fair condition – which may include potholes, rutting or rough surfaces – the cost to operate and maintain a vehicle increases. These additional vehicle operating costs (VOC) include accelerated vehicle depreciation, additional vehicle repair costs, increased fuel consumption and increased tire wear. TRIP estimates that additional VOC borne by New Mexico motorists as a result of deteriorated road conditions is $1.4 billion annually, an average of $940 per driver statewide.[16] The chart below shows additional VOC per motorist in the state's largest urban areas.

Chart 4. Vehicle operating costs per motorist as a result of driving on deteriorated roads.

Location	VOC
Albuquerque	$958
Las Cruces	$990
Santa Fe	$872
NEW MEXICO STATEWIDE	**$1.4 Billion**

Source: TRIP estimates.

Additional vehicle operating costs have been calculated in the Highway Development and Management Model (HDM), which is recognized by the U.S. Department of Transportation and more than 100 other countries as the definitive analysis of the impact of road conditions on vehicle operating costs. The HDM report is based on numerous studies that have measured the impact of various factors, including road conditions, on vehicle operating costs.[17] The HDM study found that road deterioration increases ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface. Similarly, tire wear and fuel consumption increase as roads deteriorate since there is less efficient transfer of power to the drive train and additional friction between the road and the tires.

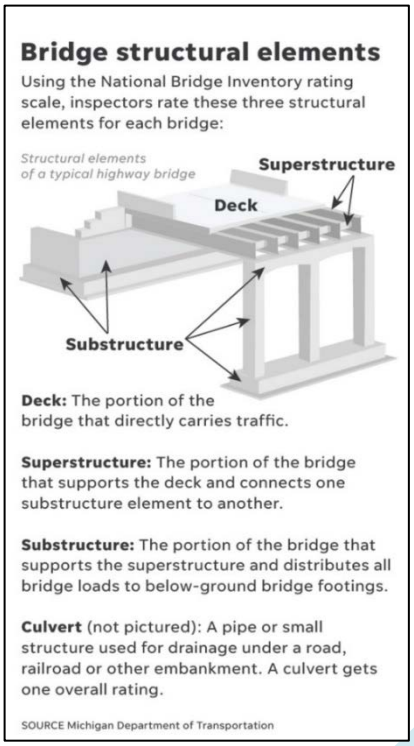
TRIP's additional VOC estimate is based on taking the average number of miles driven annually by a motorist, calculating current VOC based on AAA's driving cost estimates and then using the HDM model to estimate the additional VOC paid by drivers as a result of substandard roads.[18] Additional research on the impact of road conditions on fuel consumption by the Texas Transportation Institute (TTI) is also factored into TRIP's vehicle operating cost methodology.

BRIDGE CONDITIONS IN NEW MEXICO

New Mexico's bridges form key links in the state's highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

Five percent (201 of 4,037) of New Mexico's locally and state-maintained bridges are rated in poor/structurally deficient condition.[19] This includes all bridges that are 20 feet or more in length. A bridge is deemed structurally deficient if there is significant deterioration of the bridge deck, supports or other major components.

Bridges that are structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid posted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.



Sixty percent of New Mexico's locally and state-maintained bridges have been rated in fair condition.[20] A fair rating indicates that a bridge's structural elements are sound but minor deterioration has occurred to the bridge's deck, substructure or superstructure. The remaining 35 percent of the state's bridges are rated in good condition.[21]

The chart below details the condition of bridges statewide and in New Mexico's largest urban areas.

Chart 5. Bridge conditions statewide and in New Mexico's largest urban areas.

	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		
	Number	Share	Number	Share	Number	Share	TOTAL BRIDGES
Albuquerque	9	2%	349	70%	141	28%	499
Las Cruces	10	4%	169	64%	84	32%	263
Santa Fe	4	2%	132	52%	118	46%	254
NEW MEXICO STATEWIDE	**201**	**5%**	**2,416**	**60%**	**1,420**	**35%**	**4,037**

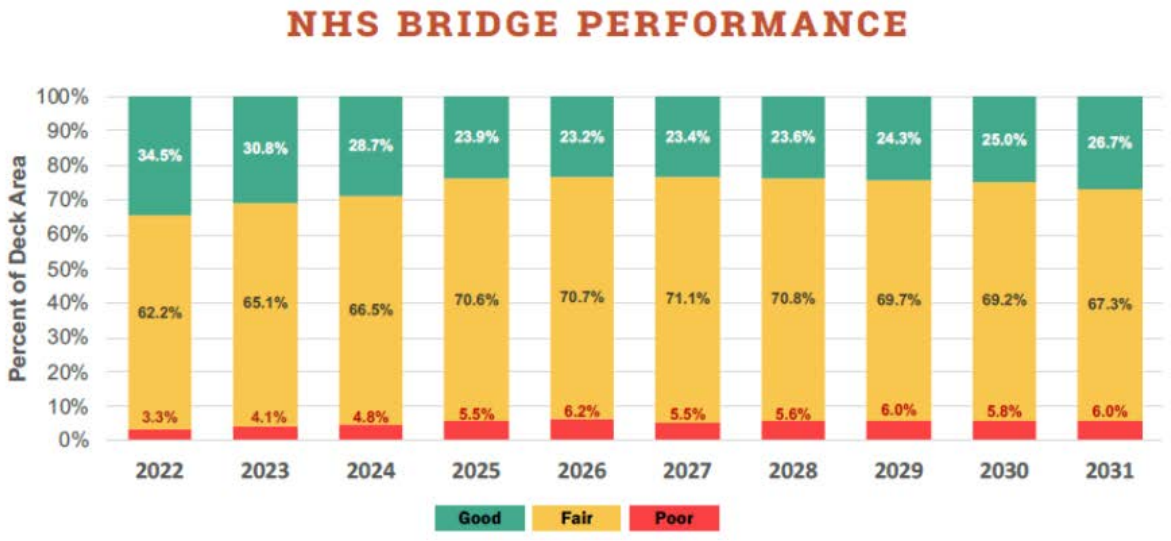
Source: TRIP analysis of Federal Highway Administration National Bridge Inventory (2023).

Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In New Mexico, 47 percent of the state's bridges were built in 1969 or earlier.[22]

New Mexico has made significant strides in improving bridge conditions since 2002 as a result of considerable investment in bridge preservation by funding rehabilitation projects to address bridges in poor condition and preventative maintenance projects to extend the service life of bridges in fair or good condition. The percentage of NMDOT bridges (weighted by deck area) in poor condition has decreased from a high of over 16% in 2004 to less than 5% today.[23]

However, under current funding forecasts, bridge conditions in New Mexico are projected to decline in the future. The share of NHS bridges in the state with deck area in poor condition is projected to increase from 3.3 percent in 2002 to 6 percent in 2031, while the share of deck area in good condition is projected to decline from 34.5 percent to 26.7 precent.[24]

Chart 6. Current and projected NHS bridge conditions, by deck area.



Source: New Mexico Department of Transportation 2022 Transportation Asset Management Plan.

The service life of bridges can be extended by performing routine maintenance such as resurfacing decks, painting surfaces, ensuring that a facility has good drainage and replacing deteriorating components. But most bridges will eventually require more costly reconstruction or major rehabilitation to remain operable.

TRAFFIC SAFETY IN NEW MEXICO

A total of 2,162 people were killed in New Mexico traffic crashes from 2018 to 2022, an average of 432 fatalities per year.[25]

Chart 5. Traffic Fatalities in New Mexico 2018-2022.

Year	Fatalities
2018	392
2019	425
2020	398
2021	481
2022	466
TOTAL	**2,162**
AVERAGE	**432**

Source: National Highway Traffic Safety Administration.

New Mexico's overall traffic fatality rate of 1.77 fatalities per 100 million vehicle miles of travel in 2022 is the third highest in the nation and significantly higher than the national average of 1.35.[26]

The chart below shows the average number of people killed in traffic crashes in the state's largest urban areas between 2017 and 2021 and the cost of traffic crashes per driver. According to a 2015 National Highway Traffic Safety Administration (NHTSA) report, the economic costs of traffic crashes includes work and household productivity losses, property damage, medical costs, rehabilitation costs, legal and court costs, congestion costs, and emergency services.[27]

Chart 6. Average fatalities between 2017 and 2021 and the annual cost of crashes per driver.

Location	Average Fatalities 2017-2021	Crash Costs per Driver
Albuquerque	179	$746
Las Cruces	37	$479
Santa Fe	35	$664
NEW MEXICO STATEWIDE	**432**	**$579**

Source: TRIP analysis of NHTSA data.

Three major factors are associated with fatal vehicle crashes: driver behavior, vehicle characteristics and roadway features. Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design.

Traffic crashes in New Mexico imposed a total of $2.8 billion in economic costs in 2022.[28] TRIP estimates that roadway features, while not the primary cause of a crash, were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in $919 million in economic costs in New Mexico in 2022.[29] According to a 2015 National Highway Traffic Safety Administration (NHTSA) report, the economic costs of traffic crashes includes work and household productivity losses, property damage, medical costs, rehabilitation costs, legal and court costs, congestion costs, and emergency services.[30]

The number of fatalities in New Mexico increased 10 percent from 2019 to 2022, from 424 to 466, and the state's fatality rate per 100 million VMT increased 16 percent during that time, from 1.53 to 1.77.[31] This dramatic increase in the number of fatalities and the rate of fatalities per 100 million VMT happened while vehicle travel in the state decreased by three percent overall from 2019 to 2022 as a result of the COVID-19 pandemic.

Chart 7. New Mexico traffic fatality and VMT data, 2019-2021.

NEW MEXICO TRAFFIC FATALITY AND VEHICLE MILES OF TRAVEL (VMT) DATA					
	2019	2020	2021	2022	2019-2022 Change
Traffic Fatalities	424	398	481	466	10%
Fatalities per 100M VMT	1.53	1.68	1.82	1.77	16%
VMT (Billions)	27.8	23.8	26.8	27.0	-3%

Source: National Highway Traffic Safety Administration and Federal Highway Administration.

From 2017 to 2021, 22 percent of those killed in crashes involving motorized vehicles were pedestrians or bicyclists, a total of 422 pedestrians and 36 bicycle fatalities over the five-year period.[32] The chart below indicates the number of pedestrian, bicyclist and total traffic fatalities in New Mexico from 2017 to 2021 and the overall share of pedestrian and bicyclist fatalities.

Chart 8. New Mexico bicycle and pedestrian fatalities 2017-2021.

Year	Total Fatalities	Pedestrian Fatalities	Bicycle Fatalities	Share Bike and Ped.
2017	379	75	2	20%
2018	391	83	11	24%
2019	424	83	9	22%
2020	398	79	8	22%
2021	481	102	6	22%
TOTAL	**2,073**	**422**	**36**	**22%**
AVERAGE	**415**	**84**	**7**	**22%**

Source: National Highway Traffic Safety Administration.

The significant increase in traffic fatalities since the onset of the pandemic appears largely related to increased risks being taken by drivers. In an October 2021 report, the National Highway Traffic Safety Administration found that "after the declaration of the public health emergency in March 2020, driving patterns and behaviors in the United States changed significantly. Of the drivers who remained on the roads, some engaged in riskier behavior, including speeding, failure to wear seat belts, and driving under the influence of alcohol or drugs."[33]

The AAA Foundation for Traffic Safety (AAAFTS) drew similar conclusions about the role of increased risks being taken by drivers during the pandemic. A survey taken of drivers in October and November 2020 by the AAAFTS asked whether their level of driving had decreased, remained the same or increased since the beginning of COVID-19 related restrictions, and whether the motorist had engaged in a variety of risky driving behaviors in the previous 30 days.[34] In a February 2022 brief about the survey, the AAAFTS noted that drivers who maintained or increased their pre-COVID travel levels indicated that they were more likely to engage in risky driving behavior, including speeding, not wearing a seat belt, being impaired and driving aggressively. "It is possible that many of the individuals who were willing to travel—and even increase their travel—despite the health risks associated with the pandemic were already more willing than average to take other risks," the AAAFTS report found.[35]

In early 2022 the U.S. Department of Transportation adopted a comprehensive National Roadway Safety Strategy, a roadmap for addressing the nation's roadway safety crisis based on a Safe System approach that acknowledges the following: humans make mistakes and are physically vulnerable; traffic deaths and serious injuries are unacceptable; traffic deaths and serious injuries need to be reduced by the provision of a redundant transportation system that reduces or minimizes crashes and ensures that, if crashes do occur, they do not result in serious injury or death.[36]

Chart 9. The Safe System Approach.

Source: Federal Highway Administration.

The Safe System approach, which is also being adopted by state and local transportation agencies has five objectives:

- Safer People: Encourage safe, responsible behavior by people who use our roads, and create conditions that prioritize their ability to reach their destination unharmed.
- Safer Roads: Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- Safer Vehicles: Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.

- Safer Speeds: Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement.
- Post-Crash Care: Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

Improving safety on the nation's roadways will require that additional steps are taken to make further progress in achieving the Safe System's objectives. NHTSA, which provides states with roadway safety grants, requires states to submit annually a state highway safety plan. The state plans outline numerous steps states are taking to improve traffic safety. Elements of these state roadway safety plans aimed at addressing the Safe System objectives include:

- Safer People: education on speeding, impaired or disadvantaged driving; education on safe pedestrian and bicycling behavior; education on driving safely around large commercial vehicles; enforcement of commercial driver license and vehicle weight requirements; extension of safety belt laws and their enforcement to include all passenger vehicle occupants; enhancing enforcement action of speeding, impaired, aggressive and distracted driving, particularly at high-risk locations; increase penalties, particularly for repeat offender drivers; and increased enforcement at work zones.
- Safer Roads: converting intersections to roundabouts; removing or shielding roadside objects; the addition of left-turn lanes at intersections; improved signalization and lighting at intersections; adding or improving median barriers; improved roadway lighting; adding centerline or shoulder rumble strips; improving pedestrian and bicycle facilities, including sidewalks and bike lanes and providing pedestrian crossing islands; improved work zone safety measures; wider lanes and paved shoulders; upgrading roads from two lanes to four lanes; providing or improving lane markings; updating rail crossings; eliminating vertical pavement drop-offs; and providing large truck parking spaces.
- Safer Vehicles: Support the development, testing and deployment of connected and autonomous vehicle technology such as collision avoidance, lane departure avoidance systems and turning detection systems.
- Safer Speeds: Where appropriate, provide roadway features to encourage safer speeds, including traffic roundabouts and curb extensions; improved signage and dynamic speed signing at high-risk locations; education on the consequences of speeding; and increased speeding enforcement, particularly at high-risk locations.
- Post-Crash Care: Reduce crash response time including the use of emergency vehicle preemption technology; improve emergency response to multi-vehicle or hazardous material crashes; and increase access to level one or two trauma centers for seriously-injured crash victims.

Improving safety on New Mexico's roadways can be achieved through further improvements in vehicle safety; improvements in driver, pedestrian, and bicyclist behavior; and, a variety of improvements in roadway safety features. The severity of serious traffic crashes could be reduced through roadway improvements, where appropriate, such as converting intersections to roundabouts; removing or shielding roadside objects; the addition of left-turn lanes at intersections; the signalization of intersections; adding or improving median barriers; improved lighting; adding centerline or shoulder rumble strips; providing appropriate pedestrian and bicycle facilities, including

sidewalks and bicycle lanes; providing wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; providing better road and lane markings; and updating rail crossings.

The U.S. has a $146 billion backlog in needed roadway safety improvements, according to a 2017 report from the AAA Foundation for Traffic Safety. The report found implementing these cost-effective and needed roadway safety improvements on U.S. roadways would save approximately 63,700 lives and reduce the number of serious injuries as a result of traffic crashes by approximately 350,000 over 20 years.

TRAFFIC CONGESTION IN NEW MEXICO

Increasing levels of traffic congestion cause significant delays in New Mexico, particularly in its larger urban areas, choking commuting and commerce. Traffic congestion robs commuters of time and money and imposes increased costs on businesses, shippers and manufacturers, which are often passed along to the consumer. Increased levels of congestion can also reduce the attractiveness of a location to a business when considering expansion or where to locate a new facility.

Based on TTI methodology, TRIP estimates the value of lost time and wasted fuel in New Mexico is approximately $1 billion a year. The chart below shows the number of hours lost to congestion annually for each driver in the state's largest urban areas, the per-driver cost of lost time and wasted fuel due to congestion, and the gallons of fuel lost annually.

Chart 10. Annual hours lost to congestion and congestion costs per driver.

Location	Hours Lost to Congestion	Annual Cost Per Driver	Gallons of Fuel Wasted Per Driver
Albuquerque	48	$1,276	20
Las Cruces	19	$518	9
Santa Fe	28	$753	14

Source: TRIP analysis based on TTI Urban Mobility Report.

TRANSPORTATION AND ECONOMIC GROWTH

Today's culture of business demands that an area have well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. Global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement, making the quality of a region's transportation system a key component in a business's ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and e-commerce. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push-style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation's trucks literally becoming rolling warehouses.

Highways are vitally important to continued economic development in New Mexico. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways and major arterial roads.

The ability of the nation's freight transportation system to efficiently and safely accommodate the growing demand for freight movement could be hampered by inadequate transportation capacity, a lack of adequate safety features on some transportation facilities, institutional barriers to enhancing the nation's freight facilities, a lack of adequate funding for needed improvements to the freight network and a shortage of drivers.

The need to improve the U.S. freight network is occurring at a time when the nation's freight delivery system is being transformed by advances in vehicle autonomy, manufacturing, warehousing and supply chain automation, increasing e-commerce, and the growing logistic networks being developed by Amazon and other retail organizations in response to the demand for a faster and more responsive delivery and logistics cycle.

In 2022, $143 billion in goods were shipped to and from sites in New Mexico.[37] Sixty-two percent of the goods shipped annually to and from sites in New Mexico are carried by truck and another 10 percent are carried by courier services or multiple-mode deliveries, which include trucking.[38] The value of freight shipped to and from sites in New Mexico, in inflation-adjusted dollars, is expected to increase by 53 percent by 2050.[39]

Investments in transportation improvements in New Mexico play a critical role in the state's economy. A report by the American Road & Transportation Builders Association found that the design, construction and maintenance of transportation infrastructure supports the equivalent of approximately 26,000 full-time jobs across all sectors of the state economy, earning these workers approximately $802 million annually.[40] These jobs include approximately 13,000 full-time jobs directly involved in transportation infrastructure construction and related activities. Spending by employees and companies in the transportation design and construction industry supports an additional 13,000 full-time jobs in New Mexico.[41] Transportation construction in New Mexico contributes an estimated $146.3 million annually in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.[42]

Approximately 349,000 full-time jobs in New Mexico in key industries like tourism, retail sales, agriculture and manufacturing are dependent on the quality, safety and reliability of the state's transportation infrastructure network. These workers earn $12.1 billion in wages and contribute an estimated $2.2 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.[43]

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway access has a significant impact on the competitiveness of a region's economy. In a 2023 survey of corporate executives by Area Development Magazine, 78 percent of corporate executives said that highway accessibility was an important or very important factor in making decisions about expansion or investment.[44]

IMPROVING TRANSPORTATION SAFETY, RESILIENCY AND EFFICIENCY

Recognizing that extreme weather, sea level change, and changes in environmental conditions may threaten the condition and longevity of the nation's transportation infrastructure, transportation agencies have begun to assess vulnerabilities and consider the resilience of their transportation assets during the transportation planning process. Transportation agencies across the country have begun to

incorporate resilience in asset management plans, addressing resilience in project development and design and optimizing operations and maintenance practices.[45]

In 2021 NMDOT conducted a resilience study to evaluate risks to its infrastructure, prioritize vulnerable areas and generate a ranked list of state-owned facilities according to their vulnerability. The study included a screening of vulnerable state-owned roadways and bridges based on their current condition as well as their resilience to potential natural hazards including extreme weather, floods, wildfires and rockfalls.

Based on the importance of maximizing the level and safety of mobility provided by its transportation system, transportation agencies are adopting Transportation Systems Management and Operations (TSMO) practices and incorporating improved resiliency into their transportation network. While a TSMO program does not eliminate the need for capacity expansions along some routes, it helps enhance the mobility of an existing corridor as much as possible.

A TSMO program adopts an integrated set of strategies to improve traffic flow and safety on a portion of a roadway, including work zone management, traffic incident management, freight management, traveler information, traffic signal coordination, ramp management, transit management and improved bicycle and pedestrian crossings.[46] The benefits of TSMO can include reduced traffic congestion, reduced fuel consumption and reduced emissions.

PROJECTS NEEDED TO ADDRESS SAFETY, RELIABILITY AND PRESERVATION

Investment in New Mexico's roads, highways and bridges is funded by local, state and federal governments. A lack of sufficient funding at all levels will make it difficult to adequately maintain and improve the state's existing transportation system. NMDOT has identified nearly $6.6 billion in needed but unfunded transportation projects throughout the state, as detailed in the chart below.

Chart 11. Needed but unfunded New Mexico transportation projects.

Route or Corridor	Project Description	Estimated Cost +/- (Millions)
Southwest New Mexico & Border Region (District 1)		
I-25, MP 3.0 to 9.5	Reconstruction of six-lane corrridor with added capacity	$75.0
I-25 at Nogal Canyon	Bridge replacement	$142.5
NM 213 Widening & NM213/NM404 Interchange	Reconstruction of four-lane facility & construction of interchange	$102.0
US 180 at Deming to Bayard	Reconstruction with four-lane or alternating passing lanes	$155.3
I-10 Corridor	Reconstruct pavement & infrastructure to current design standards	$900.0
I-25, MP 0 to 1	Expand to six lanes	$45.0
	DISTRICT ONE TOTAL COST	**$1.420 Billion**
Southeast New Mexico & Permian Basin (District 2)		
US 380/NM 157-242, Roswell to Tatum to State Line	Capacity improvements, alternating passing lanes throughout corridor, roadway reconstruction & pavement rehab	$250.0
NM 31/NM 128 Corridors MP 0.5 to 22.67 & MP 0 to 59.9	Reconstruction with four-lane & alternating passing lanes, bridge replacement & major intesections improvements	$335.0
NM 18, MP 58 to 71 Lovington to Hobbs	Minor pavement rehabilitation	$35.0
US 62/180 MP 36 to 104	Minor pavement rehablilitation	$60.0
NM 18, MP 0 to 58 Hobbs to Jal	Major pavement rehabilitation	$120.0
US 54, MP 0 to 55 South of Alamogordo	Minor pavement rehabilitation	$50.0
US 82, MP 139 to 171 West of Lovington	Roadway reconstruction with addition of shoulders, passing lanes & drainage improvement	$75.0
US 60, MP 328 to 378 Clovis to Ft. Sumner Corridor	Roadway reconstruction, rehabilitation, additions of passing lanes & drainage improvements	$250.0
	DISTRICT TWO TOTAL COST	**$1.175 Billion**

Albuquerque Metro Area & Central Rio Grande Corridor (District 3)		
NM 500 Rio Bravo Bridge over Rio Grande	Replace NM 500 Bridges over Rio Grande	$115.0
I-25 Gibson Interchange MP 223	Reconstruction Gibson I-25 interchange improvements of I-25	$150.0
I-25 Mesa Del Sol Interchange	Design & construction of new I-25 Interchange at Mesa Del Sol	$125.0
I-40 Paseo Del Vulcan Cooridor I-40 to Unser	New PDV Cooridor & interchange ROW design construction	$180.0
I-40 6 Lane & Frontage Roads MP 133 to 153	Design & reconstruction I-40: 3 lanes each way & frontage roads	$400.0
NM 500 MM 4.75 to 7.5 from NM45 Coors to 118th street	Roadway reconstruction, addition of shoulders, turn lanes & drainage improvement, bridge widening	$75.0
I-25 Cesar Chavez to Central	Reconstruction to correct S-Curve I-25	$500.0
	DISTRICT THREE TOTAL COST	**$1.545 Billion**
Northeastern Quadrant of New Mexico, Bordering Texas, Oklahoma & Colorado (District 4)		
NM 39, MP 14.6 to MP 50	Roadway reconstruction, ADA, lighting	$50.0
NM 434, MP 21.1 to MP 25.8	Reconstruction & widening thru Coyote Creek Canyon	$35.0
NM 237, MP 1-2.4	Roadway rehabilitation, ADA, drainage improvements.	$20.0
I-40, MP 272.38	Bridge replacement (#7184, #7185)	$15.0
I-25, MP 412.36	Bridge replacement (#7288, #7289,#7290, #7291)	$20.0
I-40 various MPs from MP 270-370	Roadway reconstruction	$150.0
I-25/US64-87 Interchange	Reconstruction of interchange at exit 451 in Raton	$55.0
US 64/87, MP 349.4 to MP 404	Rehabilitation from Raton to Clayton	$200.0
BL-15, MP 2.37 to MP 3.06	Roadway rehabilitation, ADA	$20.0
US 54, MP 306.1 to MP 356.2	Reconstruction or major rehabilitation	$150.0
	DISTRICT FOUR TOTAL COST	**$715 Million**
Northwest New Mexico & Northern Rio Grande Corridor (District 5)		
US 550, MP 99 to MP 150 (51 mi.)	Roadway centerline wall barrier	$56.6
NM 76, NM 68 to NM 503, MP 0 to MP 10 (10 mi.)	Roadway rehabilitation & drainage improvements	$35.0
NM 68 MP 0.9 - 4.7, Espanola, Ohkay Owengi	Roadway Recon, ADA, lighting, intersection improvements	$65.0
NM 30 MP 0 - 8.36	Roadway reconstruction/add capacity	$111.0
St. Michael's / St. Francis Interchange	Roadway reconstruction	$50.0
I-25 Cerrillos Rd to Lamy Intch., MP 276-291 (15 mi.)	Roadway reconstruction, auxilliary lanes, improved on exit ramp	$40.0
NM 599 at Via Vetaranos in Santa Fe	Interchange construction	$25.0
US 64/ NM 491 Shiprock Bridge	Bridge Replacement	$47.0
US 64 Taos to Tres Piedras (37 miles)	Roadway rehabilitation / widening to add shoulders	$125.0
US 550 Aztec to Colorado State Line	Full depth reclamation	$42.0
	DISTRICT FIVE TOTAL COST	**$596.6 Million**
West-Central New Mexico, Gallup & Grants Area (District 6)		
Allison Corridor - NM 118, BNSF & I-40 overpasses & connection	Phase 2 & Phase 3	$75.0
NM 547, MP 4 to 13.6	Widening, drainage improvements, design & construction	$54.0
I-40 at multiple locations: MP 0-18, 22-39.8, 44.8-132	Design & addition of third lane	$650.0
NM 264, MP 0 to 16	Design & reconstruction	$93.1
I-40 Miyamura Interchange - Gallup	Bridge Replacment/Interchange Recon	$25.0
I-40 MP 17.9-21.9	Design & construct bridge replacement & drainage improvements	$65.0
I-40 MP 8.7-9.7, Bridges 3487, 6128	Bridge Replacement	$50.7
I-40 MP 35 to 36.3, NM 118 MP 30.1 to 35.7	Phases 2-5, Drainage & flood mitigation project	$94.9
	DISTRICT SIX TOTAL COST	**$1.108 Billion**
	TOTAL STATEWIDE COST	**$6.559 BILLION**

Source: New Mexico Department of Transportation.

Revenue from New Mexico's motor fuel tax – a critical source of state transportation funding -- is likely to erode as a result of increasing vehicle fuel efficiency, the increasing use of electric vehicles and the impact of highway construction inflation. The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon.[47] The share of electric vehicles of total passenger vehicle sales in the U.S. is expected to increase to five percent by 2023 and 60 percent by 2040, by which time electric vehicles will represent approximately 30 percent of the passenger vehicle fleet.[48]

During 2022 and the first three quarters of 2023, the Federal Highway Administration's national highway construction cost index, which measures labor and materials cost increased by 36 percent.[49]

In addition to state funds, the federal government is a critical source of funding for New Mexico's roads, highways, bridges and transit systems and provides a significant return in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax.

Most federal funds for highway and transit improvements in New Mexico are provided by federal highway user fees, largely an 18.4 cents-per-gallon tax on gasoline and a 24.4 cents-per-gallon tax on diesel fuel.

The level of highway investment is likely to increase as a result of the five-year federal Infrastructure Investment and Jobs Act (IIJA), signed into law in November 2021, which will provide $3.2 billion in road, highway and bridge funding from 2022 to 2026 resulting in a 38 percent increase in federal funding starting in 2022.[50]

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic analysis by IHS Markit found that that every dollar spent on highway and bridge improvements results in $3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.[51]

According to the Status of the Nation's Highways, Bridges, and Transit, 24th Edition, submitted to Congress by the United States Department of Transportation (USDOT) in 2021, the nation faces a $1 trillion backlog in needed repairs and improvements to the nation's roads, highways and bridges.[52] The USDOT report found that the nation's annual investment in roads, highways and bridges by all levels of government should be increased by 55 percent annually to improve the conditions of roads, highways and bridges, relieve traffic congestion and improve traffic safety.[53]

The USDOT report also found that the nation faces a $105 billion backlog in needed repairs and improvements to the its transit systems.[54] The USDOT report found that the nation's annual investment in transit repairs and improvements by all levels of government should be increased by 30 percent to improve the condition and expand the service of the nation's transit systems.[55]

CONCLUSION

As New Mexico works to enhance its thriving, growing and dynamic state, it will be critical that it is able to address the most significant transportation issues by providing a 21st century network of roads, highways, bridges and transit that can accommodate the mobility demands of a modern society.

New Mexico will need to continue to modernize its surface transportation system by improving the physical condition of its transportation network and enhancing the system's ability to provide efficient, safe and reliable mobility for residents, visitors and businesses. Making needed improvements to the state's roads, highways, bridges and transit systems would provide a significant boost to the economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access. Despite federal funding provided by the IIJA and New Mexico state funding, numerous projects to improve the condition and expand the capacity of the state's roads, highways, bridges and transit systems will not proceed without a substantial boost in funding.

If New Mexico is unable to complete needed transportation projects it will hamper the state's ability to improve the condition and efficiency of its transportation system or enhance economic development opportunities and quality of life.

# # #

ENDNOTES

[1] Bridge condition data and safety data for each urban area includes the counties noted: Albuquerque- Bernalillo County; Las Cruces – Dona Ana County; Santa Fe – Santa Fe County.
[2] U.S. Census Bureau Quick Facts (2023).
[3]Highway Statistics (2021). Federal Highway Administration. DL-1C.
[4] U.S. Department of Transportation - Federal Highway Administration: Highway Statistics 2000 and 2019.
[5] U.S. Department of Transportation - Federal Highway Administration: Highway Statistics 2019 and 2022.
[6] Ibid.
[7] TRIP analysis of Bureau of Economic Analysis data (2019). https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1
[8] Ibid.
[9] New Mexico Department of Transportation, 2024. Response to TRIP Survey.
[10] Ibid.
[11] Ibid.
[12] New Mexico Department of Transportation. 2022 Transportation Asset Management Plan. June 2022.
[13] Ibid.
[14] Selecting a Preventative Maintenance Treatment for Flexible Pavements. R. Hicks, J. Moulthrop. Transportation Research Board. 1999. Figure 1.
[15] Pavement Maintenance, by David P. Orr, PE Senior Engineer, Cornell Local Roads Program, March 2006.
[16] TRIP calculation.
[17] Highway Development and Management: Volume Seven. Modeling Road User and Environmental Effects in HDM-4. Bennett, C. and Greenwood, I. 2000.
[18] Your Driving Costs. American Automobile Association. 2023.
[19] Federal Highway Administration National Bridge Inventory. 2023.
[20] Ibid.
[21] Ibid
[22] TRIP analysis of Federal Highway Administration National Bridge Inventory data (2023).
[23] New Mexico Department of Transportation. 2022 Transportation Asset Management Plan. June 2022.
[24] Ibid.
[25] Federal Highway Administration National Highway Traffic Safety Administration, 2017-2021.
[26] TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data (2022). .
[27] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised) (2015). National Highway Traffic Safety Administration. P. 1. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013
[28] TRIP estimate based on NHTSA report "The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), 2016. P. 146.
[29] Ibid.
[30] The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised) (2015). National Highway Traffic Safety Administration. P. 1. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013
[31] Ibid.
[32] TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data (2021).
[33] Continuation of Research on Traffic Safety During the COVID-19 Public Health Emergency: January-June 2021. U.S. Department of Transportation National Highway Traffic Safety Administration.
[34] Self-Reported Risky Driving in Relation to Changes in Amount of Driving During the COVID-19 Pandemic. February 2022. AAA Foundation for Traffic Safety.
[35] Ibid.
[36] U.S. Department of Transportation National Roadway Safety Strategy, 2022. https://www.transportation.gov/NRSS
[37] TRIP analysis of Federal Highway Administration Freight Analysis Framework data, U.S. Department of Transportation. Freight Analysis Framework (FAF) (ornl.gov).
[38] Ibid.
[39] Ibid.
[40] American Road & Transportation Builders Association (2015). The 2015 U.S. Transportation Construction Industry Profile. https://www.transportationcreatesjobs.org/pdf/Economic_Profile.pdf
[41] Ibid.
[42] Ibid

[43] Ibid.
[44] Area Development Magazine, Q1 2023. 37th Annual Corporate Survey. https://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2023/37th-annual-corporate-survey-decison-makers-feel-economic-pressures.shtml
[45] Federal Highway Administration (2019. Resilience. https://www.fhwa.dot.gov/environment/sustainability/resilience/
[46] Federal Highway Administration (2019). What is TSMO? https://ops.fhwa.dot.gov/tsmo/index.htm#q1
[47] KPMG. (2019). Evaluating Sustainable Transportation Funding Options.
[48] BloombergNEF (2019) New Energy Outlook 2019. https://about.bnef.com/new-energy-outlook/
[49] Federal Highway Administration (2023). National Highway Construction Cost Index. https://www.fhwa.dot.gov/policy/otps/nhcci/
[50] American Road & Transportation Builders Association (2024). Federal Highway Program Impaxt: New Mexico Infrastructure Investment & Jobs Act.https://www.artba.org/economics/highway-dashboard-iija/federal-highway-program-impact-iija/?state=New%20Mexico

[51] IHS Markit (2021). Economic Impacts of Transportation Infrastructure. ARTBA_EIA_IIJA_Report_Sept2021.pdf
[52] United States Department of Transportation (2021). 24th Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance. Executive Summary, Chapter 7. 24th Ed. Status of the Nation's Highways, Bridges, and Transit Conditions and Performance Report - Policy | Federal Highway Administration (dot.gov)
[53] Ibid.
[54] United States Department of Transportation (2021). 24th Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance. Executive Summary, Chapter 7. 24th Ed. Status of the Nation's Highways, Bridges, and Transit Conditions and Performance Report - Policy | Federal Highway Administration (dot.gov)
[55] Ibid.