

New Mexico Transportation by the Numbers

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



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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 \$2.6 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 details the cost of deficient roads statewide and for the average driver in the state's largest urban areas.

Location	VOC	Safety	Congestion	TOTAL
Albuquerque	\$848	\$330	\$936	\$2,114
Las Cruces	\$829	\$262	\$376	\$1,467
Santa Fe	\$749	\$328	\$578	\$1,655
NEW MEXICO STATEWIDE	\$1.1 Billion	\$767 Million	\$725 Million	\$2.6 Billion

NEW MEXICO ROADS PROVIDE A ROUGH RIDE

Due to inadequate state and local funding, 54 percent of major roads and highways in New Mexico are in poor or mediocre condition. Driving on rough roads costs the average New Mexico driver \$770 annually in additional vehicle operating costs – a total of \$1.1 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	38%	22%	9%	30%
Las Cruces	34%	29%	11%	26%
Santa Fe	32%	19%	15%	34%
NEW MEXICO STATEWIDE	30%	24%	12%	34%

NEW MEXICO BRIDGE CONDITIONS

Six percent of New Mexico's bridges are rated in poor/structurally deficient condition. Bridges that are rated poor/structurally deficient have significant deterioration of the bridge deck, supports or other major components. Fifty-six percent of the state's bridges are rated in fair condition and the remaining 38 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, 48 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.

	Number Poor/ Structurally Deficient	Share Poor/ Structurally Deficient	Number Fair	Share Fair	Number Good	Share Good	Total Bridges
Albuquerque	9	2%	332	67%	151	31%	492
Las Cruces	17	7%	149	57%	94	36%	260
Santa Fe	9	4%	115	46%	126	50%	250
NEW MEXICO STATEWIDE	232	6%	2,259	56%	1,519	38%	4,010

NEW MEXICO ROADS ARE INCREASINGLY CONGESTED

Congested roads choke commuting and commerce and cost New Mexico drivers \$725 million each year in the form of lost time and wasted fuel. In the most congested urban areas, drivers lose up to \$936 and as many as an additional 44 hours per year sitting in traffic as a result of congestion. The TRIP report identifies New Mexico's 20 most congested corridor segments during typical morning and evening peak travel periods. The top ten are below.

Rank	Urban Area	Facility	From	To
1	Albuquerque	I-40	I-25	Juan Tabo Blvd.
2	Albuquerque	Paseo Del Norte Blvd./Route 423	Route 45/Coors Blvd	Barstow St. NE
3	Albuquerque	I-25	Paseo Del Norte Blvd	Comanche Road
4	Albuquerque	Route 528/Alameda Blvd.	Northern Blvd.	I-25
5	Albuquerque	I-40	Atrisco Vista Blvd	I-25
6	Albuquerque	I-25	I-40	Rio Bravo Blvd
7	Albuquerque	Route 45/Coors Boulevard	I-40	Alameda Blvd
8	Santa Fe	Route 285/St. Francis Drive	Rodeo Road	W. Alameda St.
9	Albuquerque	Central Ave SW	Coors Blvd.	Carlisle Blvd. NE
10	Albuquerque	Bridge Blvd. SW	Route 45/Coors Blvd	I-25

NEW MEXICO TRAFFIC SAFETY AND FATALITIES

From 2014 to 2018, 1,853 people were killed in traffic crashes in New Mexico. In 2018, New Mexico had 1.43 traffic fatalities for every 100 million miles traveled, the tenth highest in the nation and significantly higher than the national average of 1.13.

Traffic crashes imposed a total of \$2.3 billion in economic costs in New Mexico in 2017 and traffic crashes in which a lack of adequate roadway safety features were likely a contributing factor imposed \$767 million in economic costs. The chart below details the number of people killed in traffic crashes in the state's largest urban areas between 2014 and 2018, and the cost of traffic crashes per driver.

Location	Average Fatalities 2014-2018	Safety Cost
Albuquerque	83	\$330
Las Cruces	21	\$262
Santa Fe	18	\$328
NEW MEXICO STATEWIDE	371	\$767 Million

TRANSPORTATION FUNDING AND NEEDED PROJECTS

The New Mexico Department of Transportation projects an annual maintenance shortfall of approximately \$103 million. NMDOT has also identified nearly \$2.8 billion in needed but unfunded transportation projects throughout the state, as detailed in the chart below.

Route or Corridor	Project Description	Estimated Cost +/-
Southwest New Mexico and Border Region (District 1)		
I-25, MP 3.0 to 9.5	Reconstruction of six-lane corridor with added capacity	\$75M
I-25 at Nogal Canyon	Bridge replacement	\$30M
US 180 at Deming to Bayard	Reconstruction with four-lane or alternating passing lanes	\$90M
I-10 Corridor	Reconstruct pavement and infrastructure to current design standards.	\$850M
I-25, MP 0 to 1	Expand to six lanes	\$30M
DISTRICT ONE TOTAL COST		\$1.075 BILLION
Southeast New Mexico and Permian Basin (District 2)		
US 380/NM 157-242, Roswell to Tatum to State Line	Capacity improvements including alternating passing lanes throughout corridor	\$75M
NM 18, NM 58 to 71 Lovington to Hobbs	Minor pavement rehabilitation	\$32M
NM 18, Hobbs to Jal	Major pavement rehabilitation	\$92.4M
US 54, MP 0 to 55 South of Alamogordo	Minor pavement rehabilitation	\$55M
US 70, Roswell to Portales	Minor pavement rehabilitation	\$80M
US 82, MP 139 to 171 West of Lovington	Roadway reconstruction with addition of shoulders, passing lanes and drainage improvement	\$64M
DISTRICT TWO TOTAL COST		\$398.4 MILLION
Albuquerque Metro Area and Central Rio Grande Corridor (District 3)		
I-25, Sunport to Big I	Reconstruction and additional capacity	\$500M
Albuquerque River Crossing	New Construction	
I-40 WB, Wyoming to Pennsylvania	Reconstruction	\$15M
NM 45, NM 500 to Eduardo	Reconstruction	\$40M
NM 45, Malpais to NM 500	Reconstruction	\$40M
DISTRICT THREE TOTAL COST		\$595 MILLION
Northeastern Quadrant of New Mexico, Bordering Texas, Oklahoma and Colorado (District 4)		
NM 39, MP 30 to MP 39.6	Pavement reconstruction and rehabilitation to improve safety, economic development, mobility and tourism	\$15M
NM 434, MP 19.7 to 25.5	Reconstruction and widening through Coyote Creek Canyon to improve safety, economic development, mobility and tourism	\$40M
I-25/US 64-87 Interchange	Interchange reconstruction at Exit 451 in Raton to improve safety and relieve backups on corridor heavily used for commerce and tourism	\$20M
US 54, MP 306.1 to 356.2	Reconstruction and major rehabilitation on heavily used corridor	\$80M
US 64/87, Raton to Clayton	Rehabilitation to accommodate freight and tourist traffic	\$120M
DISTRICT FOUR TOTAL COST		\$275 MILLION
Northwest New Mexico and Northern Rio Grande Corridor (District 5)		
US 550, MP 99 to 150	Roadway centerline and barrier	\$56.6M
NM 76, NM 68 to NM 503	Roadway rehabilitation and drainage improvements	\$27.1M
NM 96, NM 512 to US 84	Roadway rehabilitation and widening to add shoulders	\$38.40
Cerrillos Road in Santa Fe/St. Michaels to St. Francis	Roadway reconstruction	\$40M
NM 599 at Via Veteranos in Santa Fe	Interchange construction	\$15M
DISTRICT FIVE TOTAL COST		\$177.1 MILLION

West-Central New Mexico, Gallup and Grants Area (District 6)		
Allison Corridor - NM 118, BNSF and I-40 overpasses and connection	Phase 2 and Phase 3	\$34.2M
NM 547, MP 4 to 13.6	Widening, drainage improvements, design and construction	\$34M
I-40 at multiple locations: MP 18.4-54, MP 96.1-101.4	Design and reconstruction	\$96M
NM 264, MP 0 to 16	Design and reconstruction	\$42M
I-40 MP 35 to 36.3, NM 118 MP 30.1 to 35.7	Phases 2-5, Drainage and flood mitigation project	\$33M
DISTRICT SIX TOTAL COST		\$239.2 MILLION
TOTAL STATEWIDE COST		\$2.76 BILLION

TRANSPORTATION AND ECONOMIC DEVELOPMENT

With an economy based largely on natural resource extraction, agriculture, tourism and manufacturing, the health and future growth of New Mexico’s economy is riding on the quality and efficiency of its transportation system. These industries – particularly the state’s burgeoning energy extraction sector – are heavily reliant on the state’s transportation system to move products and people and rely on well-maintained, safe and efficient roads and bridges. Each year, \$123.5 billion in goods are shipped to and from sites in New Mexico. The value of freight shipped to and from sites in New Mexico, in inflation-adjusted dollars, is expected to increase 110 percent by 2045 and 126 percent for goods shipped by trucks, placing an increased burden on the state’s already deteriorated and congested network of roads and bridges.

The amount of freight transported in New Mexico and the rest of the U.S. is expected to increase significantly as a result of further economic growth, changing business and retail models, increasing international trade, and rapidly changing consumer expectations that place an emphasis on faster deliveries, often of smaller packages or payloads.

According to a [report by the American Road & Transportation Builders Association](#), the design, construction and maintenance of transportation infrastructure in New Mexico support approximately 26,300 full-time jobs across all sectors of the state economy. These workers earn \$802 million annually. Approximately 350,000 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.

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. Some of the most critical sectors of New Mexico's economy - namely the energy extraction, agriculture and tourism areas – require a surface transportation system that is well-maintained, efficient and safe. 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 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 2018, a 15 percent increase since 2000.² New Mexico had approximately 1.5 million licensed drivers in 2018.³ In 2018, the state's transportation system carried 27.3 billion annual vehicle miles of travel (VMT), a 20 percent increase since 2010 and an increase of nine percent from 2013 to 2018.⁴ From 2000 to 2018, New Mexico's gross domestic product (GDP), a measure of the state's economic output, increased by 29 percent, when adjusted for inflation.⁵ U.S. GDP increased 41 percent during the same period.⁶

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 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 FHWA to insure the data collected is adequate to provide an accurate assessment of pavement conditions on these roads and highways.

Statewide, 54 percent of New Mexico's major roads are in poor or mediocre condition. Thirty percent of New Mexico's major locally and state-maintained roads are in poor condition and 24 percent are in mediocre condition.⁷ Twelve percent of New Mexico's major roads are in fair condition and the remaining 34 percent are in good condition.⁸

Thirty-eight percent of New Mexico's major locally and state-maintained urban roads and highways have pavements rated in poor condition and 25 percent are in mediocre condition.⁹ Thirteen percent of New Mexico's major urban roads are rated in fair condition and the remaining 24 percent are rated in good condition.¹⁰

Twenty-eight percent of New Mexico's major locally and state-maintained rural roads and highways have pavements rated in poor condition and 24 percent are in mediocre condition.¹¹ Twelve percent of New Mexico's major rural roads are rated in fair condition and the remaining 37 percent are

rated in good condition.¹² The chart below details pavement conditions on major urban roads in the state’s largest urban areas and statewide.¹³

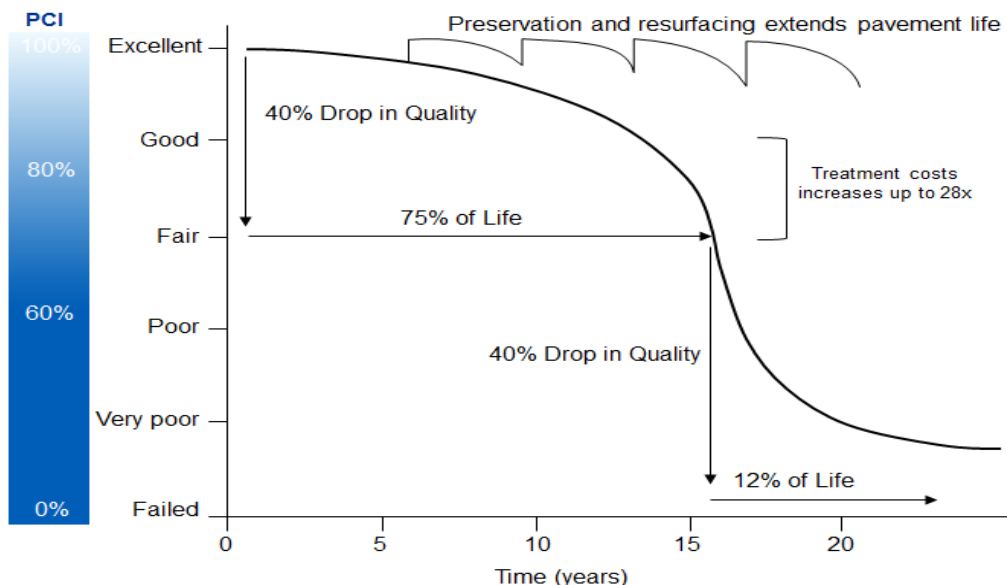
Chart 1. Pavement conditions on major roads in New Mexico’s largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Albuquerque	38%	22%	9%	30%
Las Cruces	34%	29%	11%	26%
Santa Fe	32%	19%	15%	34%
NEW MEXICO STATEWIDE	30%	24%	12%	34%

Source: TRIP analysis of Federal Highway Administration data.

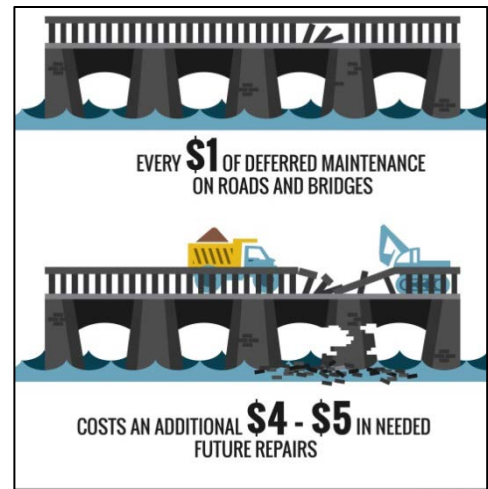
Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road’s foundation. Road surfaces at intersections are more prone to deterioration because the slow-moving or standing loads occurring at these 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 2. 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 \$1.1 billion annually, an average of \$770 per driver statewide.¹⁶ The chart below details additional VOC per motorist in the state’s largest urban areas.

Chart 3. Vehicle operating costs per motorist as a result of driving on deteriorated roads.

Location	VOC
Albuquerque	\$848
Las Cruces	\$829
Santa Fe	\$749
NEW MEXICO STATEWIDE	\$1.1 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.

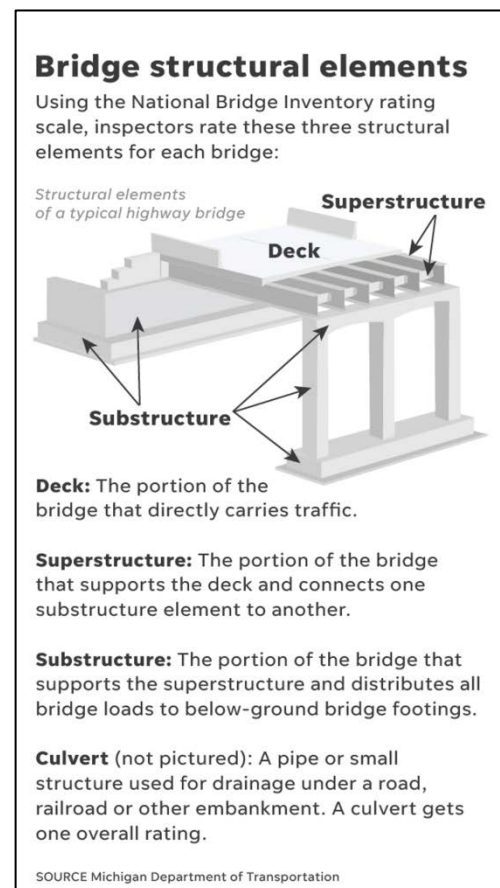
BRIDGE CONDITIONS IN NEW MEXICO

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.

Six percent (232 of 4,010) 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 poor/structurally deficient if there is significant deterioration of the bridge deck, supports or other major components.

Bridges that are poor/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.

Fifty-six 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 38 percent of the state's bridges are rated in good condition.²¹



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

Chart 4. Bridge conditions statewide and in New Mexico’s largest urban areas.

	Number Poor/ Structurally Deficient	Share Poor/ Structurally Deficient	Number Fair	Share Fair	Number Good	Share Good	Total Bridges
Albuquerque	9	2%	332	67%	151	31%	492
Las Cruces	17	7%	149	57%	94	36%	260
Santa Fe	9	4%	115	46%	126	50%	250
NEW MEXICO STATEWIDE	232	6%	2,259	56%	1,519	38%	4,010

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory (2018).

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, 48 percent of the state’s bridges were built in 1969 or earlier.²²

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 1,853 people were killed in New Mexico traffic crashes from 2014 to 2018, an average of 371 fatalities per year.²³

Chart 5. Traffic Fatalities in New Mexico 2014 – 2018.

Year	Fatalities
2014	383
2015	298
2016	402
2017	379
2018	391
2014-18 Ave.	371
TOTAL	1,853

Source: National Highway Traffic Safety Administration.

Three major factors are associated with fatal vehicle crashes: driver behavior, vehicle characteristics and roadway features. It is estimated that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes. 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.

New Mexico’s overall traffic fatality rate of 1.43 fatalities per 100 million vehicle miles of travel in 2018, the tenth highest in the U.S. and significantly higher than the national average of 1.13.²⁴

The chart below details the average number of people killed in traffic crashes in the state’s largest urban areas between 2014 and 2018, and the cost of traffic crashes per driver.

Chart 6. Average fatalities between 2014 and 2018 and crash cost per driver.

Location	Average Fatalities 2014-2018	Safety Cost
Albuquerque	83	\$330
Las Cruces	21	\$262
Santa Fe	18	\$328
NEW MEXICO STATEWIDE	371	\$767 Million

Source: TRIP analysis.

Traffic crashes in New Mexico imposed a total of \$2.3 billion in economic costs in 2018.²⁵ TRIP estimates that roadway features were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in \$767 million in economic costs in New Mexico in 2018.²⁶ 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

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 company when considering expansion or where to locate a new facility.

Based on TTI analysis, TRIP estimates the total value of lost time and wasted fuel in New Mexico is approximately \$725 million a year. The chart below shows the number of hours lost annually for each driver in the state's largest urban areas, and the per-driver cost of lost time and wasted fuel due to congestion.

Chart 7. Annual hours lost to congestion and congestion costs per driver.

Location	Hours Lost to Congestion	Annual Cost Per Driver
Albuquerque	44	\$936
Las Cruces	18	\$376
Santa Fe	28	\$578

Source: Texas Transportation Institute Urban Mobility Report, 2019.

TRIP has identified and ranked the most congested corridors in New Mexico based on an analysis of delays during typical morning and evening peak travel periods, as reported by Google.²⁸ The 20 most congested corridors are listed below.

Chart 8. Most congested New Mexico corridors.

Rank	Urban Area	Facility	From	To
1	Albuquerque	I-40	I-25	Juan Tabo Blvd.
2	Albuquerque	Paseo Del Norte Blvd./Route 423	Route 45/Coors Blvd	Barstow St. NE
3	Albuquerque	I-25	Paseo Del Norte Blvd	Comanche Road
4	Albuquerque	Route 528/Alameda Blvd.	Northern Blvd.	I-25
5	Albuquerque	I-40	Atrisco Vista Blvd	I-25
6	Albuquerque	I-25	I-40	Rio Bravo Blvd
7	Albuquerque	Route 45/Coors Boulevard	I-40	Alameda Blvd
8	Santa Fe	Route 285/St. Francis Drive	Rodeo Road	W. Alameda St.
9	Albuquerque	Central Ave SW	Coors Blvd.	Carlisle Blvd. NE
10	Albuquerque	Bridge Blvd. SW	Route 45/Coors Blvd	I-25
11	Albuquerque	Wyoming Blvd	Paseo Del Norte Blvd	I-40
12	Albuquerque	Gibson Boulevard	I-25	Wyoming Blvd. SE
13	Albuquerque	Montano Road NW	Route 45/Coors Blvd	Edith Blvd. NE
14	Santa Fe	Route 14/Cerrillos Road	I-25	Paseo de Peralta
15	Santa Fe	Route 466/St. Michaels Dr/Old Pecos Trail	Cerrillos Road	Zia Road
16	Santa Fe	Paseo de Peralta	Juanita Street	Fiesta Street
17	Las Cruces	Route 188/North Valley Drive	W. Picacho Dr.	I-10
18	Las Cruces	E. University Ave.	I-10	S. Telshor Blvd.
19	Las Cruces	El Paseo Rd./E. Union Ave.	W. Lohman Ave.	I-10
20	Albuquerque	San Mateo Blvd	I-25	Central Ave. SE

Source: TRIP analysis of typical morning and evening peak travel periods as reported by Google.

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.

With an economy based largely on natural resource extraction, agriculture, tourism and manufacturing, the health and future growth of New Mexico's economy is riding on the quality and efficiency of its transportation system. These industries – particularly the state's burgeoning energy extraction sector – are heavily reliant on New Mexico's transportation system to move products and people and rely on well-maintained, safe and efficient roads and bridges. Every year, \$123.5 billion in goods are shipped to and from sites in New Mexico.²⁹ Sixty-nine percent of the goods shipped annually to and from sites in New Mexico are carried by truck and another 13 percent are carried by courier services or multiple-mode deliveries, which include trucking.³⁰ The value of freight shipped to and from sites in New Mexico, in inflation-adjusted dollars, is expected to increase 110 percent by 2045 and 126 percent for goods shipped by trucks.³¹

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.

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 26,300 full-time jobs across all sectors of the state economy, earning these workers approximately \$802.3 million annually.³² 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 13,200 full-time jobs in New Mexico.³³ 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.³⁴

Approximately 350,000 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.³⁵

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 accessibility was ranked the third highest site selection factor behind the availability of skilled labor and labor costs in a 2018 [survey](#) of corporate executives by Area Development Magazine.³⁶

NEEDED PROJECTS AND TRANSPORTATION FUNDING IN NEW MEXICO

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 projects an annual maintenance shortfall of approximately \$103 million. NMDOT has also identified nearly \$2.8 billion in needed but unfunded transportation projects throughout the state, as detailed in the chart below.

Chart 9. Needed but unfunded transportation projects in New Mexico.

Route or Corridor	Project Description	Estimated Cost +/-
Southwest New Mexico and Border Region (District 1)		
I-25, MP 3.0 to 9.5	Reconstruction of six-lane corridor with added capacity	\$75M
I-25 at Nogal Canyon	Bridge replacement	\$30M
US 180 at Deming to Bayard	Reconstruction with four-lane or alternating passing lanes	\$90M
I-10 Corridor	Reconstruct pavement and infrastructure to current design standards.	\$850M
I-25, MP 0 to 1	Expand to six lanes	\$30M
DISTRICT ONE TOTAL COST		\$1.075 BILLION

Southeast New Mexico and Permian Basin (District 2)		
US 380/NM 157-242, Roswell to Tatum to State Line	Capacity improvements including alternating passing lanes throughout corridor	\$75M
NM 18, NM 58 to 71 Lovington to Hobbs	Minor pavement rehabilitation	\$32M
NM 18, Hobbs to Jal	Major pavement rehabilitation	\$92.4M
US 54, MP 0 to 55 South of Alamogordo	Minor pavement rehabilitation	\$55M
US 70, Roswell to Portales	Minor pavement rehabilitation	\$80M
US 82, MP 139 to 171 West of Lovington	Roadway reconstruction with addition of shoulders, passing lanes and drainage improvement	\$64M
DISTRICT TWO TOTAL COST		\$398.4 MILLION
Albuquerque Metro Area and Central Rio Grande Corridor (District 3)		
I-25, Sunport to Big I	Reconstruction and additional capacity	\$500M
Albuquerque River Crossing	New Construction	
I-40 WB, Wyoming to Pennsylvania	Reconstruction	\$15M
NM 45, NM 500 to Eduardo	Reconstruction	\$40M
NM 45, Malpais to NM 500	Reconstruction	\$40M
DISTRICT THREE TOTAL COST		\$595 MILLION
Northeastern Quadrant of New Mexico, Bordering Texas, Oklahoma and Colorado (District 4)		
NM 39, MP 30 to MP 39.6	Pavement reconstruction and rehabilitation to improve safety, economic development, mobility and tourism	\$15M
NM 434, MP 19.7 to 25.5	Reconstruction and widening through Coyote Creek Canyon to improve safety, economic development, mobility and tourism	\$40M
I-25/US 64-87 Interchange	Interchange reconstruction at Exit 451 in Raton to improve safety and relieve backups on corridor heavily used for commerce and tourism	\$20M
US 54, MP 306.1 to 356.2	Reconstruction and major rehabilitation on heavily used corridor	\$80M
US 64/87, Raton to Clayton	Rehabilitation to accommodate freight and tourist traffic	\$120M
DISTRICT FOUR TOTAL COST		\$275 MILLION
Northwest New Mexico and Northern Rio Grande Corridor (District 5)		
US 550, MP 99 to 150	Roadway centerline and barrier	\$56.6M
NM 76, NM 68 to NM 503	Roadway rehabilitation and drainage improvements	\$27.1M
NM 96, NM 512 to US 84	Roadway rehabilitation and widening to add shoulders	\$38.40
Cerrillos Road in Santa Fe/St. Michaels to St. Francis	Roadway reconstruction	\$40M
NM 599 at Via Veteranos in Santa Fe	Interchange construction	\$15M
DISTRICT FIVE TOTAL COST		\$177.1 MILLION
West-Central New Mexico, Gallup and Grants Area (District 6)		
Allison Corridor - NM 118, BNSF and I-40 overpasses and connection	Phase 2 and Phase 3	\$34.2M
NM 547, MP 4 to 13.6	Widening, drainage improvements, design and construction	\$34M
I-40 at multiple locations: MP 18.4-54, MP 96.1-101.4	Design and reconstruction	\$96M
NM 264, MP 0 to 16	Design and reconstruction	\$42M
I-40 MP 35 to 36.3, NM 118 MP 30.1 to 35.7	Phases 2-5, Drainage and flood mitigation project	\$33M
DISTRICT SIX TOTAL COST		\$239.2 MILLION
TOTAL STATEWIDE COST		\$2.76 BILLION

Source: New Mexico Department of Transportation.

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.

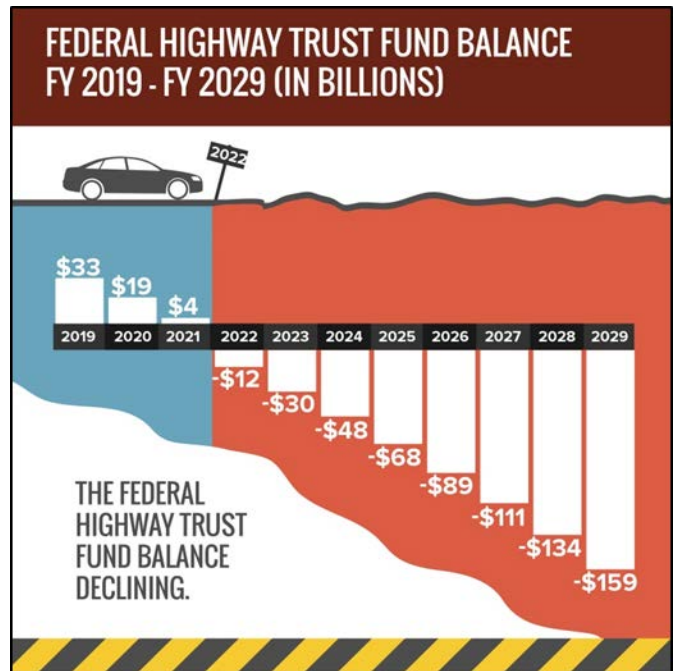
Most federal funds for highway and transit improvements in New Mexico are provided by federal highway user fees, largely an 18.4 cents-per-gallon tax on gasoline and a 24.4 cents-per-gallon tax on diesel fuel. Since 2008 revenue into the federal Highway Trust

Fund has been inadequate to support legislatively set funding levels so Congress has transferred approximately \$53 billion in general funds and an additional \$2 billion from a related trust fund into the federal Highway Trust Fund.³⁷

Signed into law in December 2015, the [Fixing America’s Surface Transportation Act \(FAST Act\)](#), provides modest increases in federal highway and transit spending. The five-year bill also provides states with greater funding certainty and streamlines the federal project approval process. But the FAST Act does not provide adequate funding to meet the nation’s need for highway and transit improvements and does not include a long-term and sustainable funding source.

The five-year, \$305 billion FAST Act will provide a boost of approximately 15 percent in highway funding and 18 percent in transit funding over the duration of the program, which expires in 2020.³⁸ In addition to federal motor fuel tax revenues, the FAST Act will also be funded by \$70 billion in U.S. general funds, which will rely on offsets from several unrelated federal programs including the Strategic Petroleum Reserve, the Federal Reserve and U.S. Customs.

According to the [Status of the Nation’s Highways, Bridges, and Transit, 23rd Edition](#), submitted to Congress by the United States Department of Transportation (USDOT) in 2019, the nation faces an \$786 billion backlog in needed repairs and improvements to the nation’s roads, highways and bridges.³⁹ This backlog includes \$435 billion for highway rehabilitation; \$125 billion for bridge rehabilitation; \$120 billion for system expansion and \$106 billion for system enhancement.⁴⁰ The USDOT report found that the nation’s current \$105 billion investment in roads, highways and bridges



by all levels of government should be increased by 29 percent to \$136 billion annually to improve the conditions of roads, highways and bridges, relieve traffic congestion and improve traffic safety.

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 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.

Numerous projects to improve the condition and expand the capacity of New Mexico's roads, highways, bridges and transit systems will not be able to proceed without a substantial boost in local, state or federal transportation 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.

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ENDNOTES

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- 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 (2018).
- ³ Highway Statistics (2018). Federal Highway Administration. DL-1C.
- ⁴ U.S. Department of Transportation - Federal Highway Administration: Highway Statistics 2013 and 2018 and analysis of Federal Highway Administration Traffic Volume Trends (2018)
https://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm
- ⁵ 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>
- ⁶ ibid.
- ⁷ Federal Highway Administration, Highway Statistics 2018 (2019).
- ⁸ ibid.
- ⁹ ibid.
- ¹⁰ ibid.
- ¹¹ ibid.
- ¹² ibid.
- 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. 2019.
- ¹⁹ Federal Highway Administration National Bridge Inventory. 2018.
- ²⁰ ibid.
- ²¹ ibid.
- ²² TRIP analysis of Federal Highway Administration National Bridge Inventory data (2018).
- ²³ Federal Highway Administration National Highway Traffic Safety Administration, 2013-2017.
- ²⁴ TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data (2019). Data is for 2018.
- ²⁵ TRIP estimate based on NHTSA report “The Economic and Societal Impact of Motor Vehicle Crashes, 2010 (Revised), 2016. P. 146.
- ²⁶ ibid.
- 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 analysis based on typical morning and evening peak travel periods as reported by Google.
- ²⁹ TRIP analysis of Bureau of Transportation Statistics, U.S. Department of Transportation. 2016 Commodity Flow Survey, State Summaries.
- ³⁰ ibid.
- ³¹ ibid.
- ³² American Road & Transportation Builders Association (2015). The 2015 U.S. Transportation Construction Industry Profile. https://www.transportationcreatesjobs.org/pdf/Economic_Profile.pdf
- ³³ ibid.
- ³⁴ ibid.
- ³⁵ ibid.
- ³⁶ Area Development Magazine (2019). 33rd Annual Survey of Corporate Executives: Availability of Skilled Labor New Top Priority. <http://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2019/33nd-annual-corporate-survey-15th-annual-consultants-survey.shtml>
- ³⁷ “Surface Transportation Reauthorization and the Solvency of the Highway Trust Fund,” presentation by Jim Tymon, American Association of State Highway and Transportation Officials (2014).
- ³⁸ 2015 “Fixing America’s Surface Transportation Act.” (2015) American Road and Transportation Builders Association. <http://www.artba.org/newsline/wp-content/uploads/2015/12/ANALYSIS-FINAL.pdf>

³⁹ United States Department of Transportation (2015). 2015 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance. Executive Summary, Chapter 8. <https://www.fhwa.dot.gov/policy/2015cpr/es.cfm#8h>

⁴⁰ Ibid.