

NEW MEXICO 2040 PLAN

Existing Conditions and Trends

Appendix A

prepared for

New Mexico Department of Transportation

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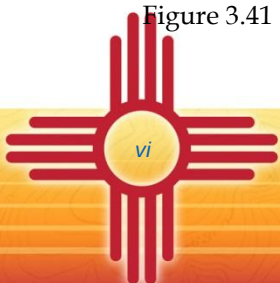
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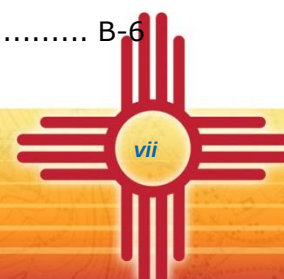


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1.0 Introduction



The New Mexico 2040 Transportation Plan (2040 Plan) provides strategic direction for how the New Mexico Department of Transportation (NMDOT) and its planning partners will invest in the transportation system over the next 25 years. The plan reflects current and future transportation opportunities and challenges, and responds to major external constraints and trends that shape use of the transportation system. The 2040 Plan reflects both national and state priorities. National priorities are established by Federal transportation law, while state priorities are identified through the plan development process.

The 2040 Plan is a performance-based, multimodal transportation plan:

- “Performance-based” means that the plan serves as a framework for NMDOT and its planning partners to make decisions in a more effective, efficient, transparent, and predictable way by using quality data and information to assess projects and programs. The assessment process relies on the vision, goals, objectives, performance measures, and targets specified in the plan. The performance-based nature of the plan means that it explicitly addresses tradeoffs that NMDOT and its partners must make between different investment choices in light of budget constraints.
- “Multimodal” means that the plan establishes investment priorities for moving people and goods using a variety of different transportation modes: cars, trucks, buses, vanpools, freight trains, passenger trains, walking, bicycles, airplanes, and others.

Plan Development Process

The 2040 Plan was developed by the NMDOT, working in close cooperation with the state’s five Metropolitan Planning Organizations (MPOs) and seven Regional Transportation Planning Organizations (RTPOs) (see Figure 1.1). The MPOs have responsibility for transportation planning in urban areas over 50,000 people, while the RTPOs have responsibility for transportation planning in rural New Mexico. The plan also reflects input derived from a robust public engagement process that involved the state’s federally-recognized tribes, other state and federal agencies, stakeholders in the private and non-profit sectors, and the general public.

Key elements of the plan development process, diagramed in Figure 1.2, included:

- **Coordinating Committees.** The project team organized several Coordinating Committees to provide a formal means of discussing and vetting ideas and proposals as they came through the plan development process. The intent was to examine proposals from a variety of key perspectives, including: NMDOT managers; MPO and RTPO planners; New Mexico’s 22 federally-recognized tribes; other state, federal, and tribal executive agencies; freight service providers and users; and “Interested Parties” (as defined in Federal transportation law).
- **Cooperative Roundtable.** Comprised of NMDOT, MPO, and RTPO planners, the Cooperative Roundtable provided oversight on the 2040 Plan development process and provided a venue to coordinate between state and regional transportation planning efforts.

Figure 1.1 NMDOT's Metropolitan and Regional Planning Partners

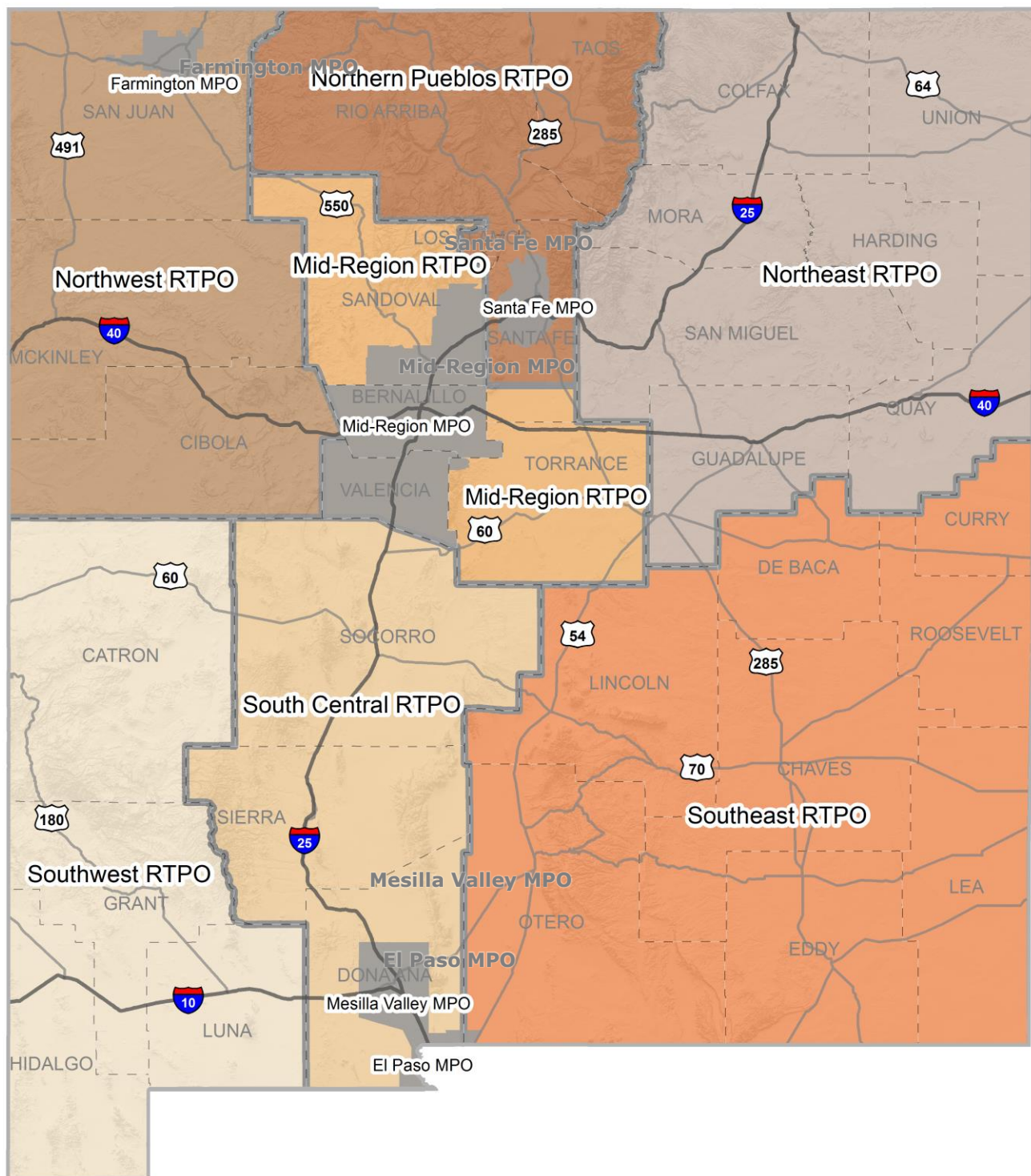
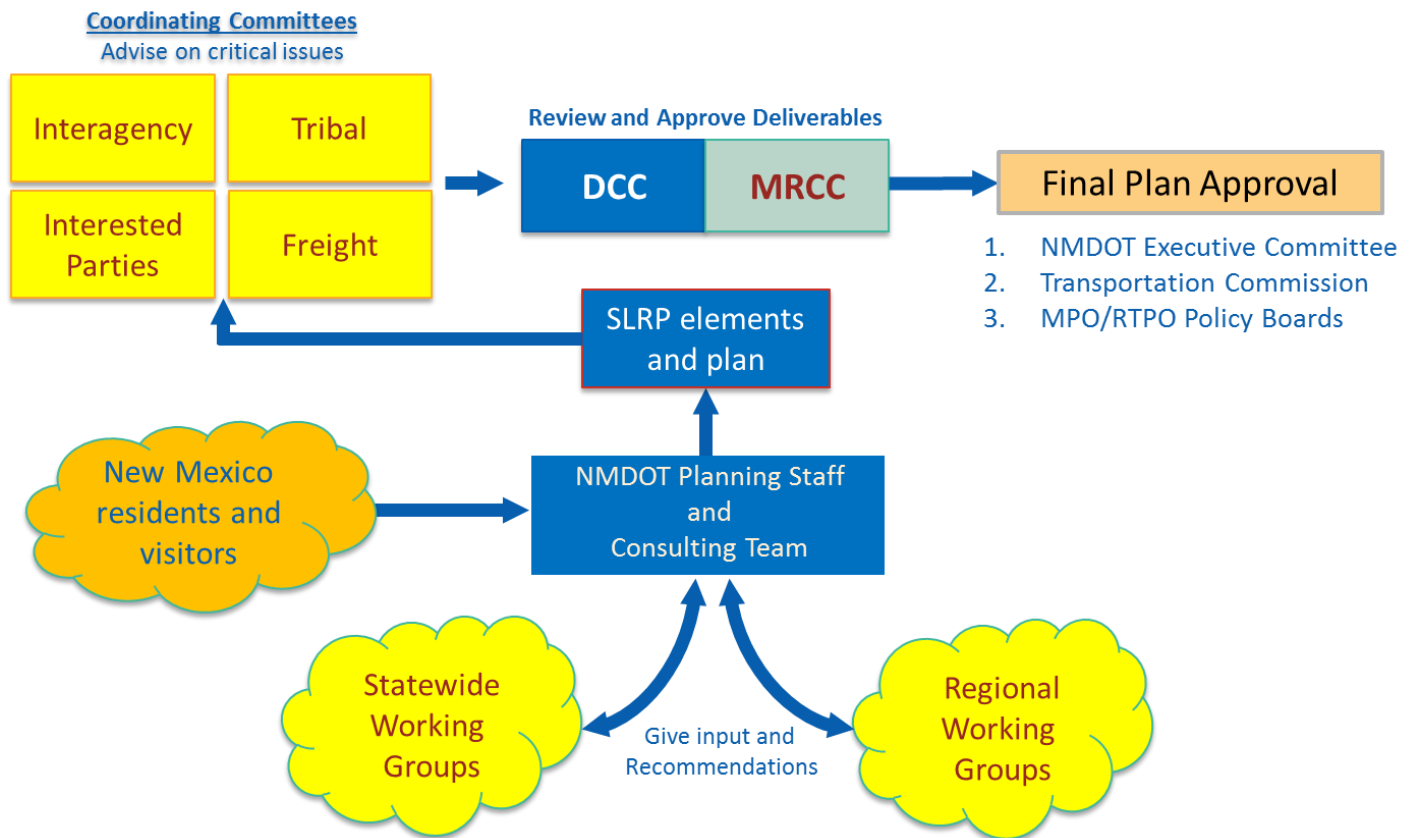


Figure 1.2 2040 Plan Stakeholder Coordination and Plan Approval Process



- **Statewide Working Groups (SWGs).** NMDOT formed nine Statewide Working Groups to give advice during the plan development process (listed on the right). The SWGs were comprised of subject-matter experts from a variety of public, private, and non-profit agencies and organizations. The intent was to bring together individuals with a wide range of knowledge, expertise and opinions to identify issues, generate ideas, and discuss the implications of plan alternatives in nine topic areas. The groups provide depth of information and analysis to support the plan.
- **Regional Working Groups (RWG).** The Regional Working groups were formed cooperatively by NMDOT and the RTPO staff in each of the RTPO regions. Their composition mirrored that of the Statewide Working Groups in that they were comprised of subject-matter experts from a variety of public, private, and non-profit agencies and organizations. Unlike the SWGs, however, the RWGs focused on regional rather than statewide issues and concerns. Their primary purpose was to generate ideas and advise their respective RTPOs and NMDOT on the priority concerns and goals for each of their regions.
- **Targeted meetings and workshops.** The project team held meetings and workshops with various targeted groups to introduce them to the plan and obtain input. (See 2040 Plan Appendix D.) The intent was to supplement the input obtained from the Statewide and Regional Working Groups.
- **Statewide public survey.** The statewide public survey provided a high-level overview of the transportation concerns and priorities of New Mexicans. Conducted in both English and Spanish by Harris Interactive, Inc., it was designed to be representative of the entire state, providing a general sense of which transportation issues and priorities might currently be foremost in the public mind.
- **RWG and Tribal questionnaire.** The project team administered a questionnaire to members of the Regional Working Groups and also distributed the questionnaire to members of the Tribal Coordinating Committee to redistribute to their respective tribal leaders. For comparative purposes, the questions included on the questionnaire were generally identical to those in the statewide public survey.
- **Public gatherings.** Public meetings were held at select points throughout the process. (See list in 2040 Plan Appendix D.) These events gave the public opportunities to learn about and comment on the plan.

Working Group Structure

Statewide working groups:

- SWG-1 Public Health, Safety and Security
- SWG-2 State of Good Repair
- SWG-3 Access, Mobility, and Connectivity
- SWG-4 Economic Vitality – Freight Movement
- SWG-5 Economic Vitality – Regional Development, Border Considerations, Rural/Urban Equity, and Environmental Justice
- SWG-6 Visitor Travel, Recreation, and Tourism
- SWG-7 Federal, State, and Tribal Lands
- SWG-8 Cultural Resources, Historic Resources, Landscapes, and the Natural Environment
- SWG-9 Plan Implementation and Project Delivery

Regional working groups:

- RWG-1 Mid-Region RTPO
- RWG-2 Northeast RTPO
- RWG-3 Northern Pueblos RTPO
- RWG-4 Northwest RTPO
- RWG-5 South Central RTPO
- RWG-6 Southeast RTPO
- RWG-7 Southwest RTPO



- **Public information stations.** In addition to the public meetings, NMDOT and RTPO staff reached out to New Mexicans where they were – at conferences, New Mexico legislature “Transportation Day,” and other events – through deployment of information stations. NMDOT or RTPO planners set up and staffed these at various locations throughout the state as opportunities arose to do so (see list in 2040 Plan Appendix D.) They provided an additional opportunity to engage with the public on the key issues addressed by the plan.
- **Presentations at publicly noticed MPO and RTPO meetings.** During every phase of the plan development process, the 2040 Plan project manager (and sometimes other NMDOT Planning & Safety Division staff) gave presentations to each of the MPO and RTPO technical and policy committees (see list in 2040 Plan Appendix D.) The intent was twofold: First, the presentations kept the committee members up to date on the status of the plan as it was developed. Second, since all of the MPO and RTPO technical and policy committees were publicly noticed, the presentations offered an additional means for the public to learn about the plan.
- **Other presentations:** Throughout the planning process, the 2040 Plan project manager gave presentations on the plan to various interested groups, typically following an invitation to do so from the groups themselves. (See list in 2040 Plan Appendix D.)

Plan Development Phases

Development of the 2040 Plan took place in four phases. Each phase focused on a specific question (see Figure 1.3).



Figure 1.3 Plan Development Phases

PHASE 1: Existing Conditions – “Where Are We Now?”

- Data and Information Needs Assessment
- Existing Conditions and Trends Analysis

PHASE 2: Strategic Direction – “Where Do We Want To Go?”

- Vision, Goals, Objectives, and Performance Measures
- Scenario Analysis
- Target Setting

PHASE 3: Resource Allocation – “How Will We Get There?”

- SLRP Alternatives Analysis

PHASE 4: Implementation – “What Will It Take?”

- Plan Writing, Graphic Design, & Document Management
- Plan Approval and Implementation

1.2 Purpose of Phase I Report

This report describes the existing multimodal transportation system in New Mexico, analyzes key trends impacting its use, and summarizes the critical issues facing the system today. The report summarizes information collected during Phase 1 of the plan development process. Phase 1 answered the question, “Where are we now?” by combining information about the characteristics of the transportation system and the demand for transportation.

This report includes the following information:

- **What comprises the multimodal transportation system in New Mexico?** Section 2.0 presents information about the development of each mode of transportation over time and the use of that mode today across the State.
- **What trends and issues are facing the transportation system in New Mexico?** Section 3.0 describes the New Mexico, national, and international trends that are shaping demand for transportation. These include demographics (population and employment), demand for freight transportation, and other relevant issues.



- **What are the challenges and issues from the perspective of New Mexicans?** Section 4.0 builds off of the statewide survey and information generated from the statewide and regional working groups to provide a summary of key issues and challenges to be addressed in the plan.
- **What are the policy issues and constraints that shape funding and investment in the transportation system?** Section 5.0 describes recent changes in the Federal program and the implication of these changes and New Mexico specific issues for funding transportation investment in the future.

The information collected for Phase I was based on several sources:

- The project team conducted a Data and Information Needs Assessment (DINA) to identify sources of data and information that could be used to describe current conditions and trends. The review was comprehensive and focused on obtaining material that could help gain insights into the extent, use, and performance of the transportation system. Much of the data and information obtained came from NMDOT sources, though other State agencies (e.g., demographic data, land cover, and environmental data), MPOs and other regional agencies (e.g., demographic and land use data), and other sources provided additional material. The DINA is included in Appendix A.
- The project team reviewed studies and information about key trends in the state and external constraints. Existing plans were gathered from NMDOT, other State agencies, MPOs and RTPOs, counties and cities (e.g., Comprehensive, Economic Development, and Land Use Plans), Tribal agencies, and others. A comprehensive listing of plans gathered is presented in Attachment A.
- The project team considered the issues and challenges identified in the stakeholder engagement process to help shape the report. The statewide and regional working groups, statewide public survey, public gatherings, etc. provided many useful ideas and much useful information to help shape the context and key themes addressed in this report.

1.3 A Performance-Based Plan

The NMDOT 2040 Plan is designed to be performance-based. This means that the plan calls for an explicit evaluation of the current performance of the transportation system and its expected performance in the future given various potential investment scenarios. Specific performance measures were developed and presented as part of the Phase II Strategic Direction framework. One of the roles of the statewide working groups (SWG) is to support this effort. The SWGs will help ensure that a wide range of issues are considered in the performance evaluation, including:

- **Public Health, Safety and Security.** SWG-1 will ensure that common performance measures like traffic fatalities and serious injuries are addressed through the process, as well as helping the planning team explore the impact of planning and transportation investment decisions on public health and security. Transportation safety trends and public health considerations are described in Section 3.6. Public health will also be addressed in the Phase II scenario analysis report.



- **State of Good Repair.** SWG-2 will ensure that the current condition of the system is evaluated and that a life cycle cost approach is used when evaluating potential future investments. State of good repair is described in Section 2.1 for roads, Section 2.2 for rail, Section 2.3 for transit, and Section 2.4 for non-motorized transportation.
- **Access, Mobility, and Connectivity.** SWG-3 focuses on core transportation system issues. Trends that impact access and mobility are considered in detail in Section 3.1 (Demographic trends).
- **Economic Vitality – Freight Movement.** Freight movement is a critical part of New Mexico's economy. SWG-4 will help develop a State Freight Plan and identify relevant performance measures. Sections 2.1 and 2.2 include a discussion of the existing highway and rail transportation network used for freight movement, and Section 3.2 considers State, national, and international trends in freight.
- **Economic Vitality – Regional Development, Border Considerations, Rural/Urban Equity, and Environmental Justice.** SWG-5 is focused on a broad set of economic issues. While there is some overlap with SWG-4 (e.g., border issues), SWG-5 will help the team consider the equity of funding in various contexts. A discussion of recent border development opportunities is included in Section 3.4.
- **Cultural Resources, Historic Resources, Landscapes, and the Natural Environment.** SWG-8 will help the team ensure that environmental issues are addressed for current conditions and in the evaluation of alternatives. Environmental trends are described in Section 3.5.

1.4 Key Themes Addressed in this Report

The Phase I effort is directly connected to the stakeholder and public engagement process being conducted for the plan. The statewide and regional working groups have identified a large number of challenges and opportunities to be considered in the plan. Several key cross-cutting themes that have arisen from these groups, along with where these are addressed in the report, include:

- **Need for high quality data and information.** Good data and information are essential for making good decisions. Stakeholders have said that NMDOT needs to become a leader in data collection and analysis, with quality assurance and control becoming a top priority for the Department.
- **Border and freight.** New Mexico is experiencing significant development in the border region in response to growth occurring in Mexico and the recent development of the Union Pacific Railroad's Santa Theresa facility. Activity in and near the Santa Theresa border crossing will mean increased truck and rail traffic into New Mexico and also presents potential opportunities for additional development. Sections 2.1 and 2.2 provide information on the amount of freight moving on New Mexico's roads and railroads and its impact on the condition of the system. Section 3.2 provides a comprehensive review of how state, national, and international freight trends are impacting New Mexico.



- **Impacts of oil and gas extraction industries.** Extraction of natural resources (including agriculture) plays an important role in the state's economy; however, the transportation needs of extractive industries place heavy demands on the state's transportation system. In the southeast and northwest parts of the state, for instance, oil and gas production has been placing heavy burdens on the capacity and maintenance of the system (both road and rail). However, the "boom-bust" cycle of extractive industries creates problems for planning transportation infrastructure.
- **Multimodal options and connectivity.** Providing transportation services across New Mexico is challenging, but there is a clear need expressed for providing a rich array of multimodal transportation options throughout the state. One need that has been consistently expressed is to provide sustainable public transit in both urban and rural areas, and in particular, increased coordination among transit providers. Improving the transit user experience (wait times, accessibility to transit, and interconnectivity between services) could help to improve the perception of public transportation in New Mexico. Growing numbers of transit-dependent New Mexicans face challenges accessing services, so greater coordination with human service transit, which provides linkages to medical and other services, and other first/last mile transit accessibility improvements are also needed. For instance, availability and suitability of sidewalks for all populations (children, disabled, elderly, etc.), and the linkage between transit service and sidewalk availability is a particular concern. Another common theme is the desire for better design of infrastructure and coordination of transportation and land use planning to support walking, bicycling, and other "active" transportation modes – improvements that would provide not only mobility benefits, but also substantial public health benefits as well. Section 2.3 describes the existing transit system in New Mexico, and Section 2.4 describes bicycle and pedestrian facilities. Section 3.1 presents information about how demographic changes may change how New Mexicans use the transportation system.
- **State Routes and Main Streets.** While New Mexico's highway network provides an important role connecting communities together across the state, roads often also serve as the main street of many small towns. Striking the appropriate balance between meeting the needs of "through" travelers while also respecting and providing for local needs (through context-sensitive solutions) is a challenge for New Mexico. Section 2.1 describes the highway system and its use and performance, both as a provider of inter-city connections and its use within specific urban areas and towns.
- **Public/private partnerships.** With funding significantly constrained, looking towards creative approaches to addressing needs is critical. The New Mexico Constitution's Anti-donation clause constrains, and protects, the State. But opportunities exist to explore how public/private partnerships could be used to help pay for rest areas, roadways serving special needs (e.g., truck access to the U.S./ Mexico border-related facilities), and other needs. Section 5.0 describes current trends in transportation revenue at the State and Federal levels. Section 3.2 presents information about freight demand that may impact the viability of public/private partnerships in the border region.
- **Understanding the full cost to maintain the existing transportation system.** New Mexico has made significant investments in its highway, rail, and other modal networks over time. Now, the combination of aging infrastructure, increased costs, and, in some locations, declining/low volume use has highlighted the challenge of maintaining and preserving the infrastructure that currently exists. Along with renewed focus from the Federal Highway



Administration (FHWA), the NMDOT is applying the principles of asset management – seeking to minimize the total lifecycle cost (building, maintaining over time, and rebuilding when needed), rather than focusing on the worst infrastructure or only the up-front capital expenditure. New Mexico has struggled to balance the need to maintain existing infrastructure while also tackling new and emerging transportation challenges. Section 5.2 presents information on the costs required to maintain the state’s existing infrastructure.

- **Partnership and coordination.** There are significant opportunities for NMDOT to work with its transportation planning partners, other State agencies, economic development groups, and others to ensure the most efficient use of scarce resources. These include coordinating on installation and upgrade of infrastructure (transportation, utilities, etc.); sharing data collection and management; and prioritizing transportation investments that best reflect both local and statewide needs. Partnership opportunities will be addressed more completely in future reports.
- **Demographic change.** Most of the geographic area that comprises New Mexico is sparsely populated, and a majority of the population resides in urbanized areas or urban clusters. These facts make providing the state’s population with adequate transportation infrastructure and services particularly challenging. Like much of the U.S., New Mexico’s population is aging and many rural areas have experienced population declines. In addition, the transportation preferences of today’s younger residents do not tend to match those of their predecessors, with younger people showing less interest in driving and more interest using other travel modes such as public transit, walking, and bicycling. Section 3.1 describes how changing demographic patterns over the next 25 years may impact the demand for transportation in New Mexico.
- **Technology.** The transportation system is more than just infrastructure, but also the services that go along with it. Technology plays a key role in providing these services, allowing the transportation system to be flexible and adaptive to emerging needs. Communications infrastructure (e.g., to provide for advanced traveler information, emergency management, data collection, etc.) is an important need, helping to ensure the efficient use of existing infrastructure and supporting safety and emergency response needs. Section 2.1 describes the current use of technology on the transportation system. The Phase II scenario analysis report (2040 Plan Appendix C) will explore further how technology may change in the future.
- **Urban and rural equity.** New Mexico is the fifth largest state by area, but is 36th largest by population. The rural character of much of the state presents unique issues and challenges. This plan will have to balance where revenue is generated with the needs for connectivity and the critical role that rural New Mexico plays in the identity and economy of the State. Section 5.0 presents information on how revenue is generated in New Mexico. Throughout Section 2.0, both urban and rural needs are presented, as well as the critical role of the transportation system in connecting urban and rural areas to each other and to other states and the world.
- **Funding.** In addition to the specific public/private partnership issue, there is broad awareness of the challenges New Mexico faces in funding transportation investments. The Federal contribution to transportation is declining (in real terms) and short-term (two-year) surface transportation reauthorization authority makes it more difficult for states to plan for long-term needs. At the same time, the State’s current transportation revenues are losing purchasing power to inflation, losing ground to growing transportation demands, and losing capacity to



maintain the State's substantial investment in its transportation infrastructure. An added challenge is that a significant portion of New Mexico's resources are tied up in debt service, limiting the investments that can be made today. Section 5.0 describes the current state of funding for transportation in New Mexico.

Section 4.0 fleshes out each of these themes more fully by presenting findings from the 2040 Plan public, tribal, freight, and informed stakeholder surveys and by summarizing the working group discussions.



2.0 *Historic and Existing Conditions*



The transportation system supports the economy and quality of life of New Mexicans by facilitating the movement of people and goods throughout and across the state. This section describes the extent of the multimodal transportation system, the key organizations that support the development of each mode, the development of the system over time, and how that system is used today.

The transportation system is an inter-related set of travel modes that support the movement of people and goods. For the purposes of reporting on the extent, condition, and performance of the transportation system, this report divides the system as follows:

- **Highways.** This section focuses on the extent and development of the highway system in New Mexico and on demand for both passenger and freight movement. This section also discusses supporting infrastructure such as Intelligent Transportation Systems (ITS), rest areas, and other elements.
- **Rail.** This section describes the current characteristics of the rail network in New Mexico, both freight and passenger, and identifies issues associated with moving freight and people by rail.
- **Public transit.** This section describes the public transit systems that operate in New Mexico today (both fixed-route and on-demand), the role of regional transit districts in providing these (and other) services, and the ridership on these systems.
- **Bicycle, Pedestrian, and Equestrian Facilities.** This section describes the extent of New Mexico's non-motorized (bicycle, pedestrian, equestrian) infrastructure, the known gaps, and missing information about these networks.
- **Aviation.** This section describes New Mexico's commercial and general aviation airports, the level of use of these airports (to the extent these are known), and their roles in support critical emergency response and other functions.

Each section summarizes the development of the transportation system over time, its current performance, and the issues and challenges revealed by an analysis of the available data.

2.1 Highways

The New Mexico highway system comprises almost 143,000 lane miles and nearly 4,000 bridges and culverts.¹ Nearly 125,000 of the highway miles (or, over 87 percent of the total) are rural and 18,000 are urban (Table 2.1 and Table 2.2). Based on the Census Bureau's estimate of the state's population in 2012 (2,085,538 people), there are currently around 0.0685 lane miles of roadway per capita. Despite changes that have occurred over time in both the lane mileage and population of New Mexico, this rate has remained remarkably consistent since 1995 (Table 2.3). This reflects the fact that the statewide highway system is generally built-out.

Table 2.1 Lane Miles of Rural Roads in New Mexico (1995 to 2012)

YEAR	Interstate	Other Freeways and Expressways	Principal Arterials	Minor Arterial	Major Collector	Minor Collector	Local Roadways	TOTAL
1995	3,603	-	4,395	3,937	8,174	4,782	88,526	113,417
1996	3,603	-	4,432	3,950	8,192	4,586	85,020	109,783
1997	3,603	-	4,462	3,964	8,186	4,585	85,058	109,858
1998	3,595	-	4,501	3,955	8,236	5,125	85,338	110,750
1999	3,613	-	4,615	3,946	8,099	5,112	85,531	110,916
2000	3,606	-	4,676	3,913	8,084	5,068	85,515	110,862
2001	3,606	-	4,924	3,913	8,078	5,068	85,705	111,294
2002	3,593	-	5,487	3,987	8,047	5,091	86,932	113,137
2003	3,481	-	5,470	4,168	7,871	5,257	91,888	118,135
2004	3,386	-	5,474	4,032	7,856	6,299	88,841	115,888
2005	3,386	-	5,522	4,032	7,854	6,276	88,339	115,409
2006	3,386	-	5,530	4,040	7,853	6,289	88,328	115,426
2007	3,386	-	5,550	4,040	7,878	6,282	97,424	124,560
2008	3,386	-	5,550	4,065	7,889	6,300	97,442	124,632
2009	3,386	-	5,550	4,075	7,889	6,300	97,442	124,642
2010	3,390	-	5,557	4,035	7,899	6,279	97,522	124,682
2011	3,429	-	5,733	4,036	7,918	6,275	97,524	124,914
2012	3,429	-	5,669	4,087	7,917	6,275	97,554	124,931

¹ FHWA, "Functional System Length-2011" and "Table HM-57, Bridges by Year Built-2011", Highway Statistics Series, Office of Highway Policy Information, <https://www.fhwa.dot.gov/policyinformation/statistics/2011/index.cfm#hm> (accessed April 14, 2014)



Table 2.2 Lane Miles of Urban Roads in New Mexico (1995 to 2012)

Year	Interstate	Freeway / Expressway	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local Road	TOTAL
1995	492	6	2,067	915	1,018	-	9,406	13,904
1996	493	6	2,107	915	999	-	9,452	13,972
1997	493	6	2,135	925	1,001	-	9,455	14,015
1998	490	6	2,113	944	1,027	-	9,453	14,033
1999	493	6	2,117	911	1,045	-	9,319	13,891
2000	500	6	2,134	950	1,058	-	9,329	13,977
2001	500	22	2,194	954	1,010	-	9,019	13,699
2002	501	22	2,240	955	1,026	-	10,755	15,499
2003	613	10	2,669	1,387	1,530	-	9,484	15,693
2004	708	10	2,808	1,588	3,046	-	10,023	18,183
2005	707	10	2,811	1,588	3,076	-	10,033	18,225
2006	714	10	2,832	1,612	3,116	-	10,031	18,315
2007	714	10	2,831	1,605	3,103	-	10,024	18,287
2008	714	10	2,832	1,609	3,119	-	10,024	18,308
2009	714	10	2,832	1,598	3,119	-	10,024	18,297
2010	698	10	2,666	1,620	-	2,931	10,005	17,930
2011	729	-	2,666	1,579	-	3,090	9,849	17,913
2012	729	-	2,735	1,538	-	3,081	9,849	17,932

Table 2.3 Per Capita Lane Mileage in New Mexico (1995 to 2012)

Year	Total Lane Miles	New Mexico Population	Lane Miles per Capita
1995	127,321	1,720,394	0.0740
1996	123,755	1,752,326	0.0706
1997	123,873	1,774,839	0.0698
1998	124,783	1,793,484	0.0696
1999	124,807	1,808,082	0.0690
2000	124,839	1,821,204	0.0685
2001	124,993	1,831,690	0.0682
2002	128,636	1,855,309	0.0693
2003	133,828	1,877,574	0.0713
2004	134,071	1,903,808	0.0704
2005	133,634	1,932,274	0.0692
2006	133,741	1,962,137	0.0682



Year	Total Lane Miles	New Mexico Population	Lane Miles per Capita
2007	142,847	1,990,070	0.0718
2008	142,940	2,010,662	0.0711
2009	142,939	2,036,802	0.0702
2010	142,612	2,065,932	0.0690
2011	142,828	2,078,674	0.0687
2012	142,863	2,085,538	0.0685

Source: US Census Bureau and UNM Bureau of Business & Economic Research (BBER)

Highway Functional Classification System

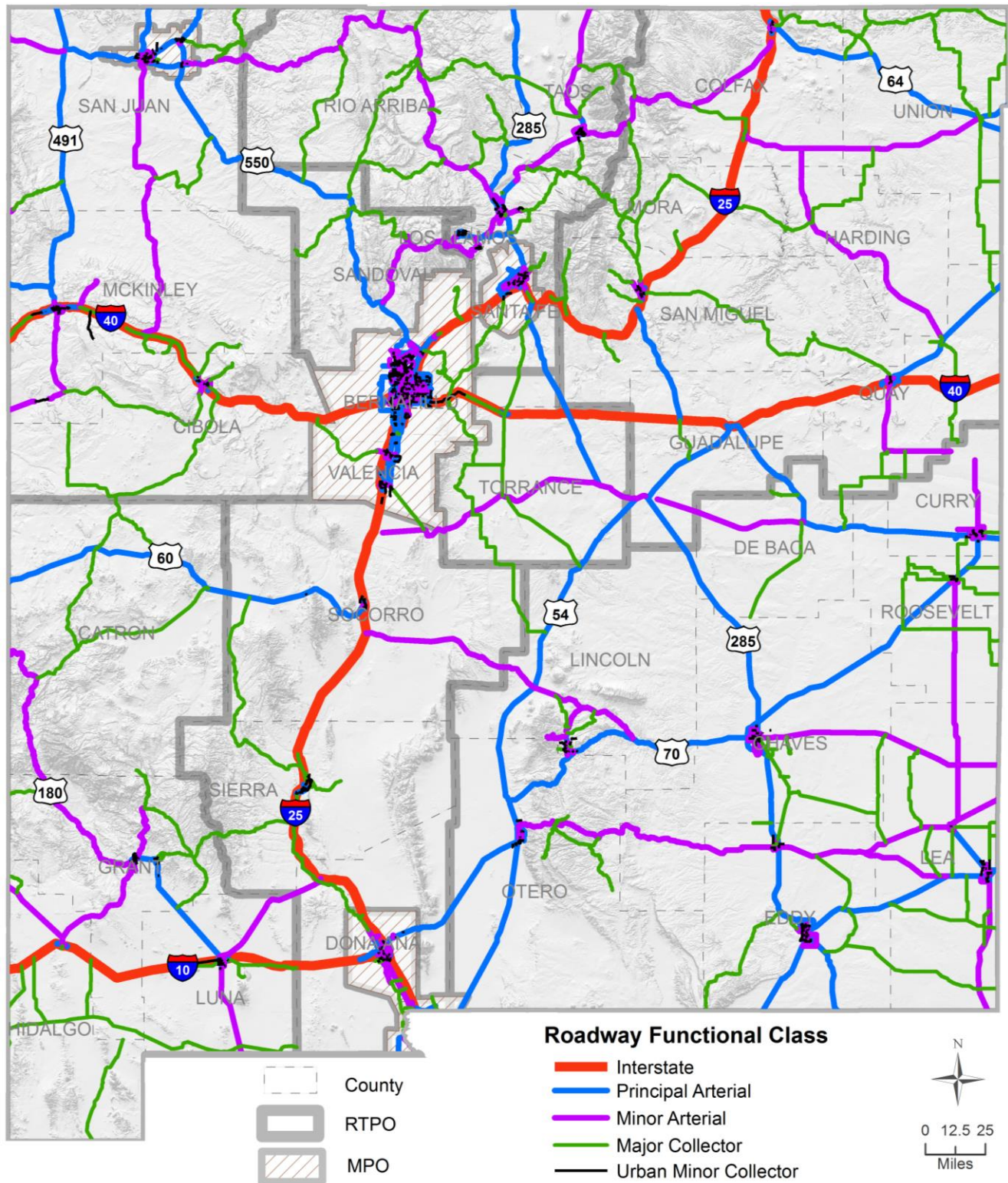
The roadways that make up the New Mexico highway system are either rural or urban and are categorized into different functional classifications that reflect the mobility and access functions that they serve (Figure 2.1).² Functional classifications include:

- **Interstates** are at the top of the highway classification framework. They are limited access, divided highways that are intended to provide the highest levels of mobility for both freight and person movement.
- **Other freeways and expressways** offer the second highest level of mobility and are intended to provide minimal interference to through movement. Highways in this category have directional travel lanes separated by a physical barrier, with access to intersecting roads via a limited number of on- and off-ramps or a small number of at-grade intersections.
- **Other principal arterials** form an integrated network without stub endings except where unusual geographic conditions exist (typically in rural areas). The intent of these highways is to provide a high degree of mobility, but without access control. Access may instead be via either driveways or at-grade intersections; however, driveway access is often consolidated to limit the number of conflicts between local and through movements.
- **Minor arterials** provide a lower level of travel mobility and a higher rate of access than the principal arterial system. Traffic typically operates at moderate speeds on this type of facility. These roadways often have more frequent access points and shorter spacing of intersections than principal arterials.

² FHWA, "Highway Functional Classification Concepts, Criteria, and Procedures 2013"
http://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf (accessed April 14, 2014).



Figure 2.1 New Mexico Functional Classification Map



- **Major and minor collectors** gather traffic from local roads and funnel it to the arterial network. They generally serve intra-county or intra-city rather than statewide travel, with vehicles typically traveling at moderate speeds. Major collectors serve traffic generators and distribute trips between the arterial system and the local street network. Minor collectors serve both land access and traffic circulation in lower density residential and commercial/industrial areas. Compared to minor collectors, major collectors are typically longer, have lower connecting driveway densities, higher speed limits, greater network spacing, higher annual average traffic volumes, and (sometimes) more travel lanes.
- **Local roadways** include any road segment not otherwise classified. They are not intended for use in long distance travel, except at the origin or destination of the trip, and provide direct access to abutting land. They are often designed to discourage through traffic but should be accessible for public use.

Recent Highway System Expansion: The CHAT and GRIP programs

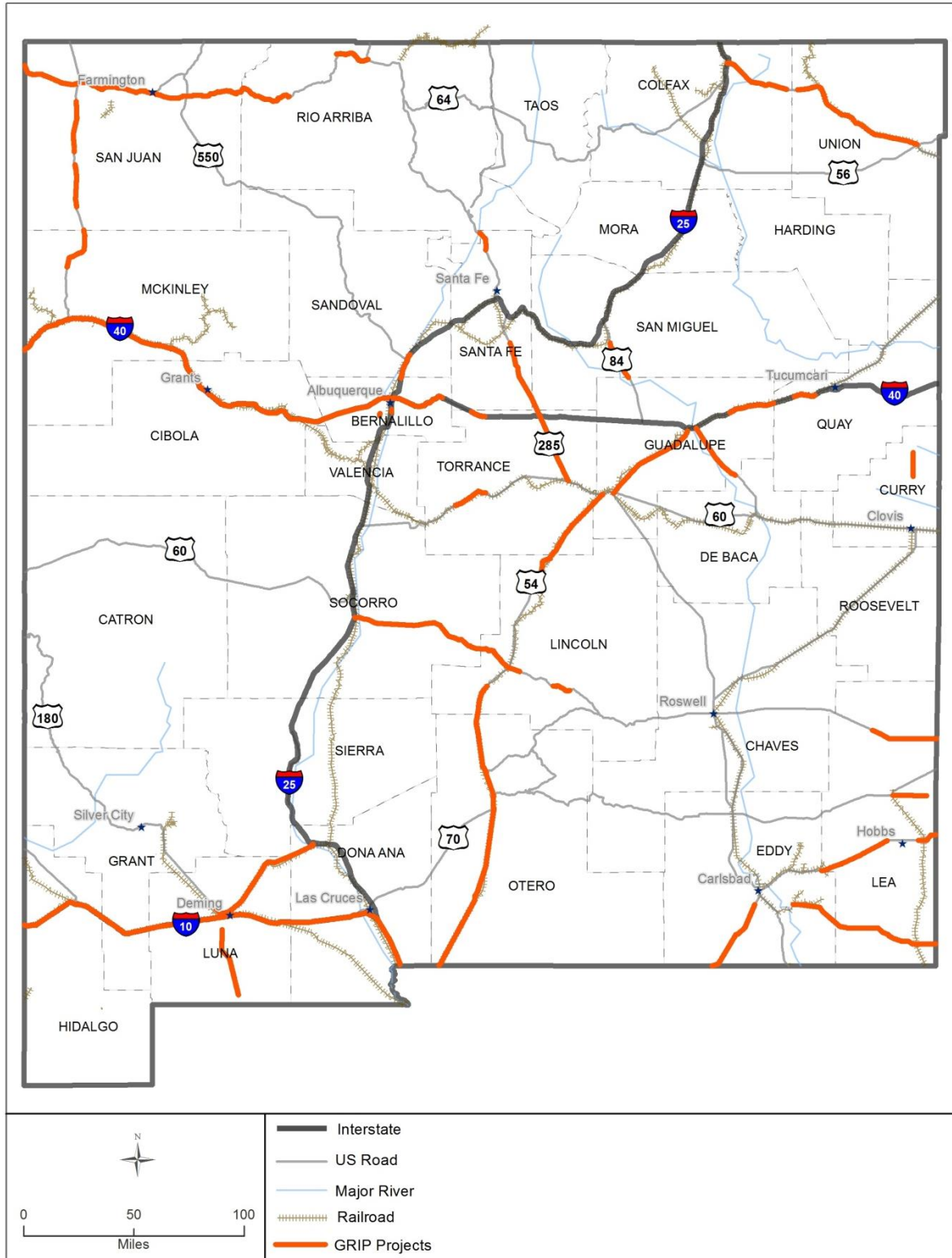
While New Mexico's highway network has gradually expanded over time (Tables 2.1 and 2.2), two major gubernatorial initiatives in recent years dramatically expanded the network.

In the mid-1990s, Governor Gary Johnson launched a highway construction program financed through bonding. The program was named after the "Citizens Highway Advisory Taskforce" (CHAT), a group convened to develop the project list. It was designed to connect parts of rural New Mexico to the Interstate system and major metropolitan areas through the construction of four-lane highways. One of its aims was to facilitate freight movement throughout the state. It was also influenced by the "Ports to Plains Corridor" concept identified in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Just as Ports to Plains aimed to expedite the transportation of goods and services from Mexico to Colorado, the CHAT program facilitated easier transport throughout New Mexico. Major efforts during the CHAT bonding program included expanding several state-owned roads from two to four lanes. These included US 550 from Bernalillo to the Colorado border (174 miles) and US 285 from Clines Corners to Carlsbad (217 miles). The program also involved construction of bypasses around Santa Fe and Roswell to facilitate transportation of nuclear waste to the Waste Isolation Pilot Plant (WIPP) in Carlsbad.

The second major recent expansion program was undertaken between 2000 and 2008. Governor Bill Richardson expanded the bonding program to include several other major transportation projects around New Mexico. Whereas CHAT was targeted to facilitate specific transportation routes, Governor Richardson's Investment Partnership (GRIP) was designed to spur economic development statewide. Major GRIP projects included the I-40/Coors Interchange in Albuquerque, expanding 68 miles of US 491 on the Navajo Nation to four lanes, and developing the Rail Runner commuter train service from Belen to Santa Fe (Figure 2.2).



Figure 2.2 GRIP Projects throughout New Mexico

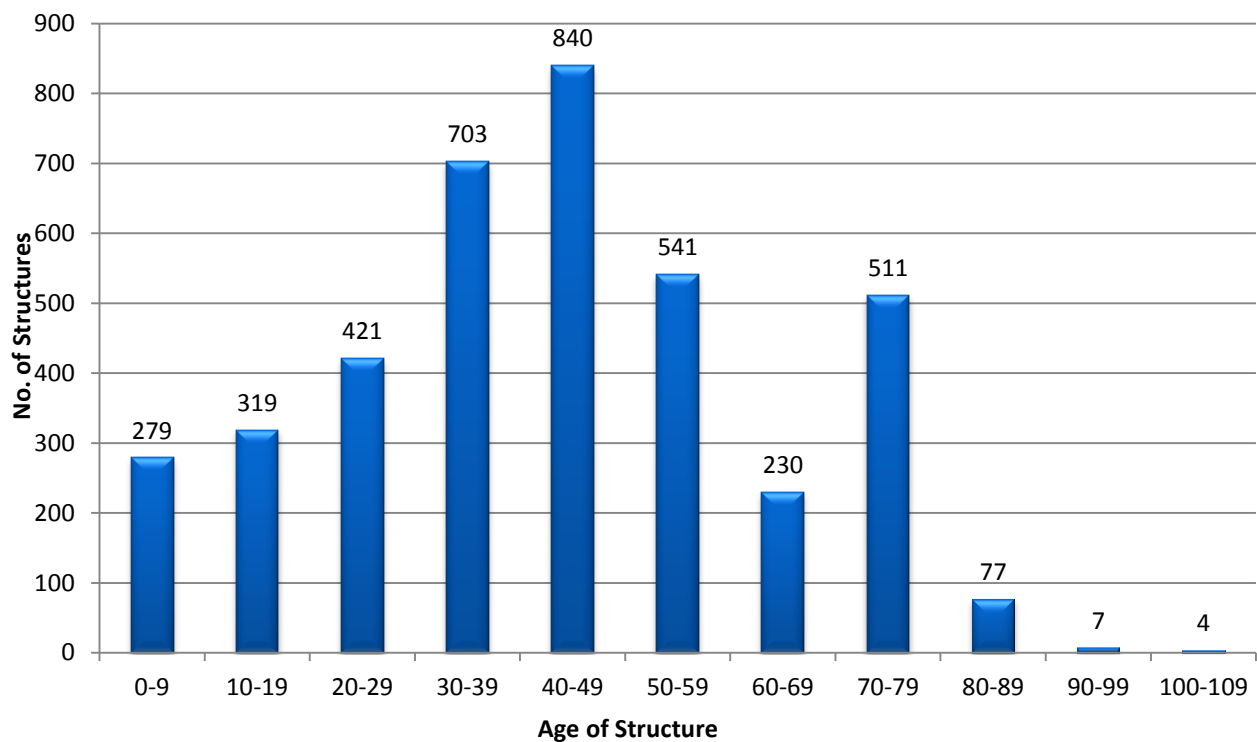


The combined cost of the CHAT and GRIP bonding programs totaled \$1.6 billion. All of the bonds for these projects are anticipated to be retired by 2027. The current debt service level ranges from \$136 million to \$177 million per year, paid through a combination of State Road Revenues (primarily the gasoline excise tax, special fuel excise tax, weight distance tax, and Motor vehicle registration fees) and Federal funds from the Federal-Aid Highway Program.³

Bridges and Culverts

There are currently 3,932 bridges and culverts on the New Mexico Highway System. The majority of these are 40 years old or older (Figure 2.3). NMDOT currently maintains inspection reports for 3,001 bridges. Ninety-five percent (95 percent) of the structures on the National Highway System (NHS) and 88 percent on non-NHS routes are in fair or better condition.⁴

Figure 2.3 Distribution of Bridges by Age



³ New Mexico Finance Authority, 2013

⁴ New Mexico Department of Transportation, 2013 Annual Report.

Intelligent Transportation Systems (ITS)

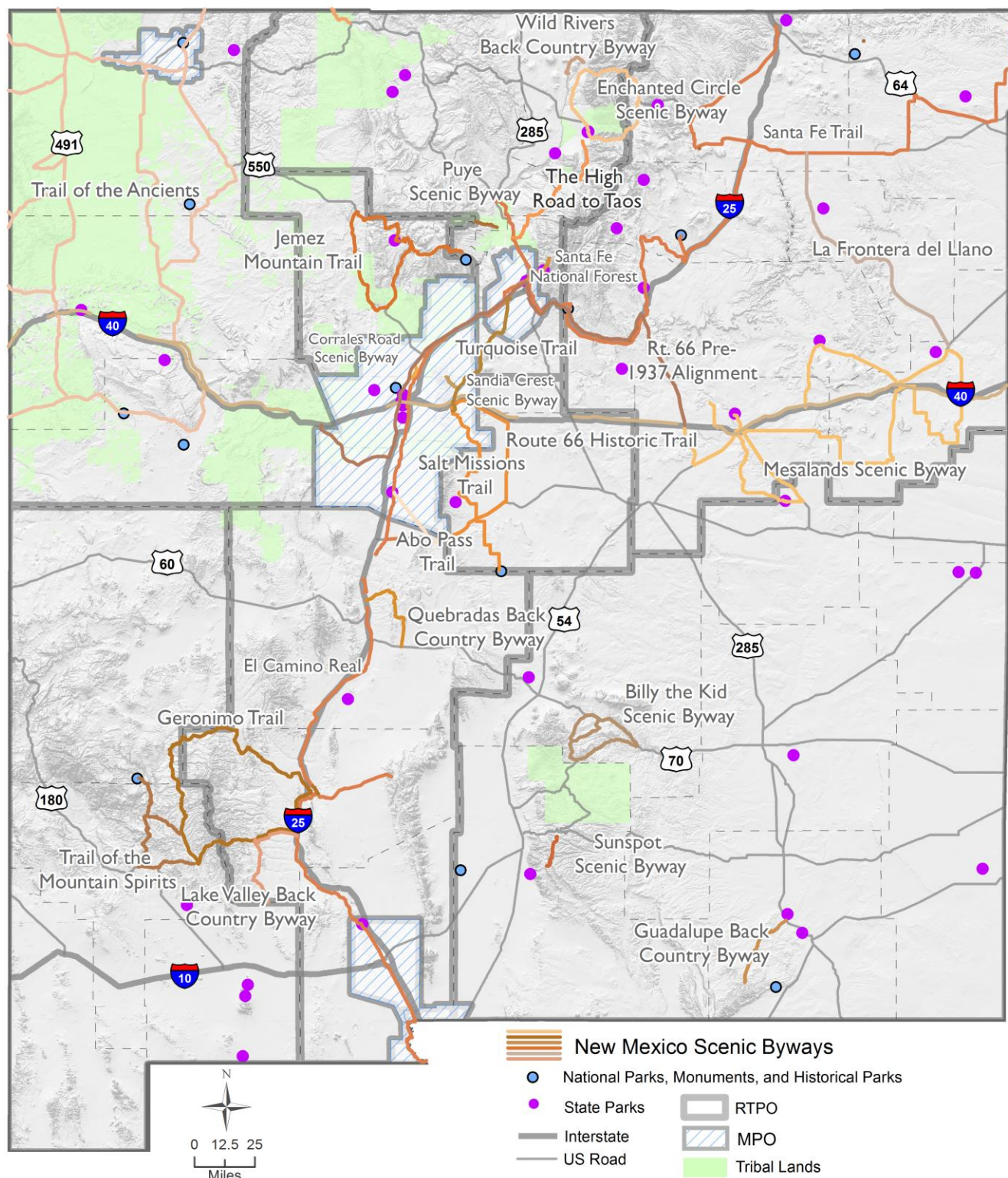
The NMDOT has been deploying Intelligent Transportation System (ITS) technology for more than a decade. While the majority of ITS assets are located in the Albuquerque metropolitan area, ITS is truly a statewide program in New Mexico. ITS field devices -- such as Dynamic Message Signs (DMS), Closed Circuit Television (CCTV) cameras, and Road Weather Information Systems (RWIS) -- are deployed to meet specific site needs. Many of the devices are intended to improve safety at key locations. Within the Albuquerque metropolitan planning area, the NMDOT operates a Traffic Management Center (TMC). Staff at the TMC observe traffic conditions and coordinate operations along the Interstate system by conveying real-time weather, crash, and travel time information to motorists using Dynamic Message Signs (DMS). The staff also has the capability to direct Courtesy Patrol vehicles to locations where they can efficiently clear incidents that impede traffic flow. Additionally, each NMDOT District is connected with the statewide ITS software platform to provide input to www.nmroads.com, a web and app-based interactive portal that allows users to view real-time information on road conditions (including closures, alerts, and special events).

Scenic Byways

The Scenic Byways program was established by ISTEA to recognize roads having outstanding scenic, historic, cultural, natural, recreational, and/or archaeological qualities. New Mexico has 26 Scenic Byways (Figure 2.4), six of which are designated as National Scenic Byways. Designation as a scenic byway serves both to protect the intangible assets of New Mexico's roadways but also to promote activities that have direct financial impact on the state and its special regions and communities. Scenic Byways are logical locations for co-planning and construction of pedestrian, bicycle and equestrian facilities. The State's Scenic Byways program is discussed in more detail in Section 3.3.



Figure 2.4 New Mexico's Scenic Byways Network



Rest Areas

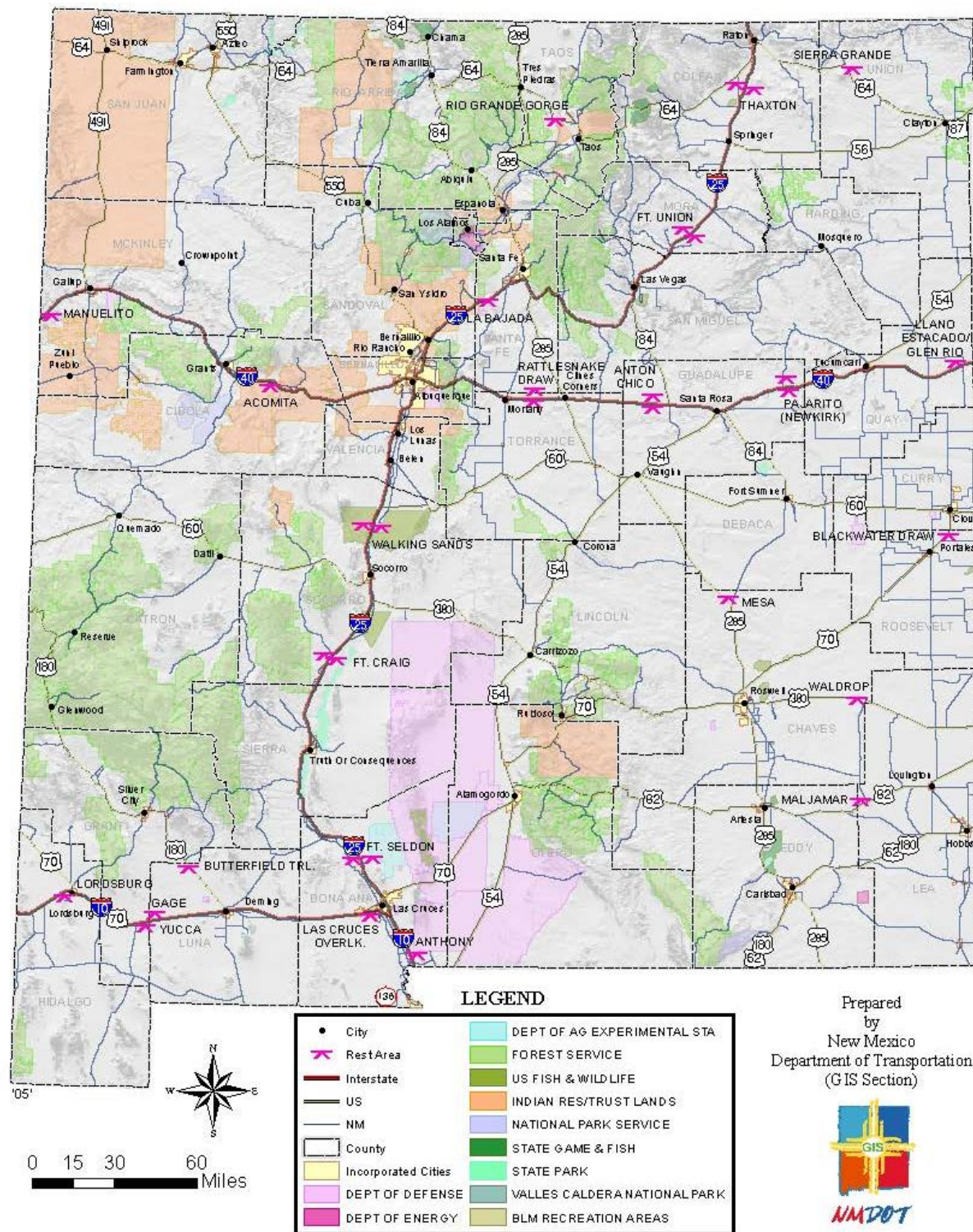
NMDOT maintains a total of 32 rest areas throughout the state, including eight locations with separate facilities for each direction (Table 2.4). Twenty five are located along Interstate highways and seven are on U.S. highways (Figure 2.5).

Table 2.4 New Mexico Rest Areas

Count	Name	Route	Two Rest Areas
1	Anthony	I-10	
2	Gage	I-10	
3	Las Cruces Overlook	I-10	
4	Lordsburg	I-10	
5	Yucca	I-10	
6	Fort Craig	I-25	✓
7	Fort Seldon	I-25	✓
8	Fort Union	I-25	✓
9	La Bajada	I-25	
10	Thaxton	I-25	✓
11	Walking Sands	I-25	✓
12	Acomita	I-40	
13	Anton Chico	I-40	✓
14	Llano Estacado/ Glen Rio	I-40	
15	Manuelito	I-40	
16	Pajarito (Newkirk)	I-40	✓
17	Rattlesnake Draw	I-40	✓
18	Butterfield Trail	US-180	
19	Mesa	US-285	
20	Waldrop	US-380	
21	Rio Grande Gorge	US-64	
22	Sierra Grande	US-64	
23	Blackwater Draw	US-70	
24	Maljamar	US-82	



Figure 2.5 Rest Areas in New Mexico



International Ports of Entry

There are three international land ports of entry (POE) between New Mexico and the Mexican State of Chihuahua. These include Santa Teresa, located south of Las Cruces and just west of El Paso on the NM 136; Columbus, on NM 11 south of Deming; and Antelope Wells, on NM 81 in the southwestern corner of the State (Figure 2.6). The POEs help sustain trade and tourism between New Mexico and Mexico, and are important for the economic vitality of the state.

Figure 2.6 New Mexico's International Ports of Entry



Source: New Mexico Border Authority

Highway System Use

One measure of highway system use is Average Annual Daily Traffic (AADT) per lane mile of roadway. Traffic volumes tend to reflect the functional classification of each roadway, with the highest volumes typically found on the Interstate system and intermediate volumes on arterial and collector highways. Minor Collectors and Local roadways often serve many short distance, frequent trips and carry relatively high volumes per lane mile as well (Table 2.5 and Figure 2.7).

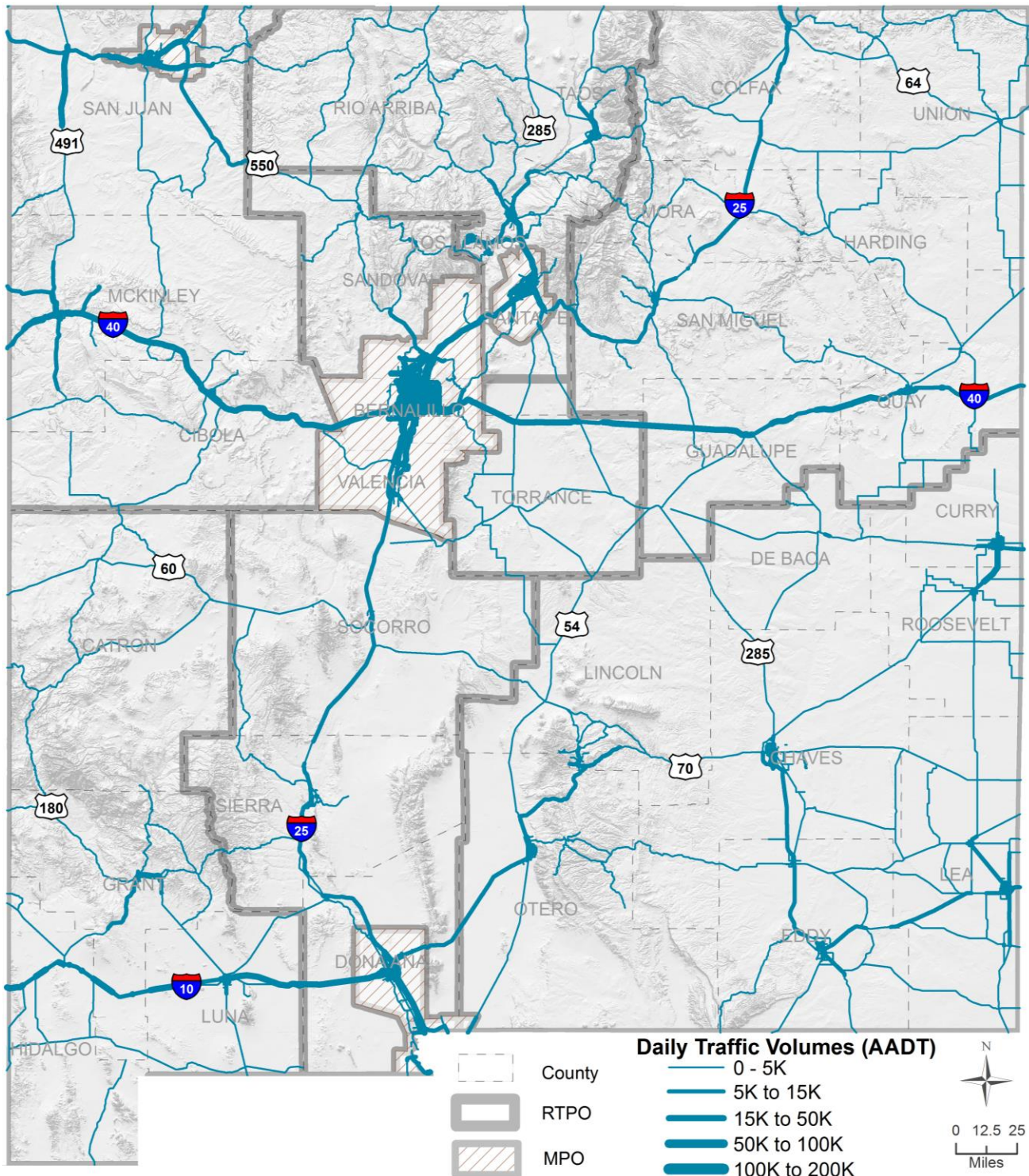
Table 2.5 AADT by Functional Classification (2012)

Functional Class	Lane Miles	AADT	AADT per Lane Mile
Interstate	4,158	19,781	4.76
Principal Arterial (including other highways)	8,418	8,070	0.96
Minor Arterial	5,625	2,937	0.52
Major Collector	7,917	888	0.11
Urban Minor Collector	3,081	3,469	1.13

Source: Highway Performance Monitoring System, Federal Highway Administration



Figure 2.7 New Mexico Average Daily Traffic Volumes (2012)

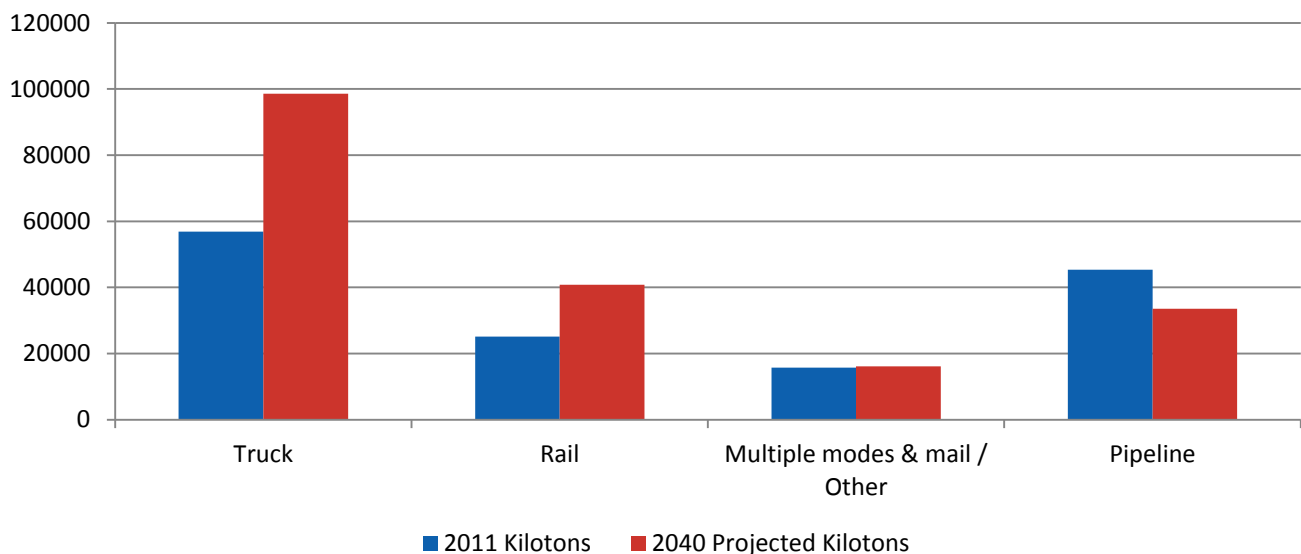


Trends in System Use

Movement of Freight in New Mexico

In 2011, more than 143 million tons of goods moved to, from, or within New Mexico. By 2040, total tonnage is expected to increase by 32 percent to 189 million tons (Figure 2.8). New Mexico is also a major corridor for through traffic due in large part to its location on two transcontinental rail corridors and significant through truck traffic on Interstate 40 (Figure 2.9). Almost 90 percent of all rail traffic on New Mexico's rail network passes through the state. New Mexico also has significant air freight volumes which are a critical source of total freight value, but constitute a very small share of freight tonnage. New Mexico inbound and outbound air cargo was valued at almost \$1 billion which compares with \$68.4 billion for trucking and \$3.9 billion for rail.

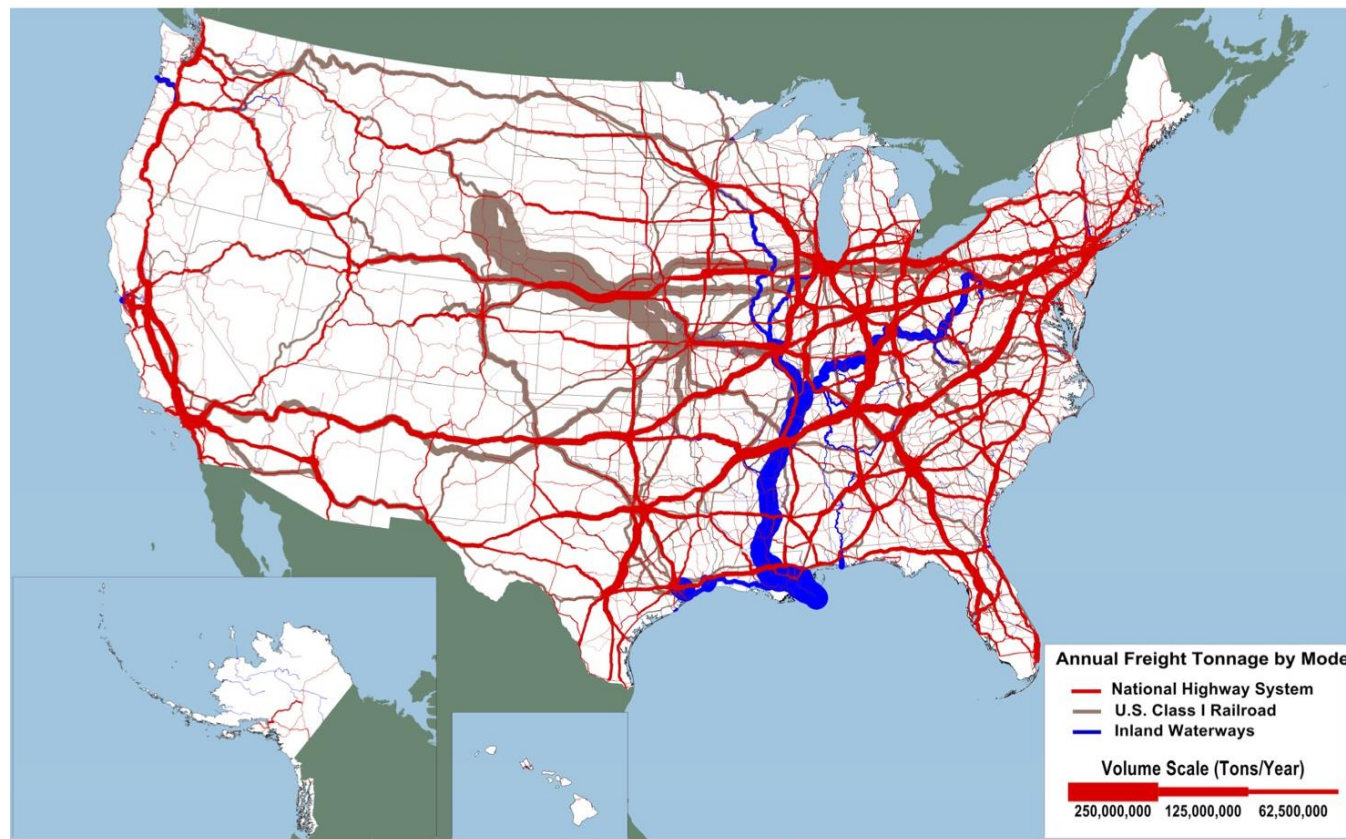
Figure 2.8 Total Freight Tonnage Originating and Terminating in New Mexico 2011-2040



Source: FHWA Freight Analysis Framework, 2013



Figure 2.9 Tonnage on Highways, Railroads, and Inland Waterways, 2007



Source: USDOT, 2013, http://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/tonhwyrrww2007.htm

Border Crossing Trends

In 2013, over 93,000 commercial trucks and 750,000 private vehicles entered New Mexico via the three POEs. During the same period, almost 443,000 pedestrians and 1,400 buses used the ports.⁵ Santa Teresa is New Mexico's most important POE for truck and private vehicle crossings, with over 87 percent of all trucks and 57 percent of private vehicles using that border crossing. The majority of the remaining private vehicles cross at the Columbus POE (42.5 percent), which has the highest rate of pedestrian crossings (68 percent). There is a six-mile radius around the Columbus and Santa Teresa POEs in which commercial vehicles can carry up to 96,000 lbs.⁶ Livestock crossing is

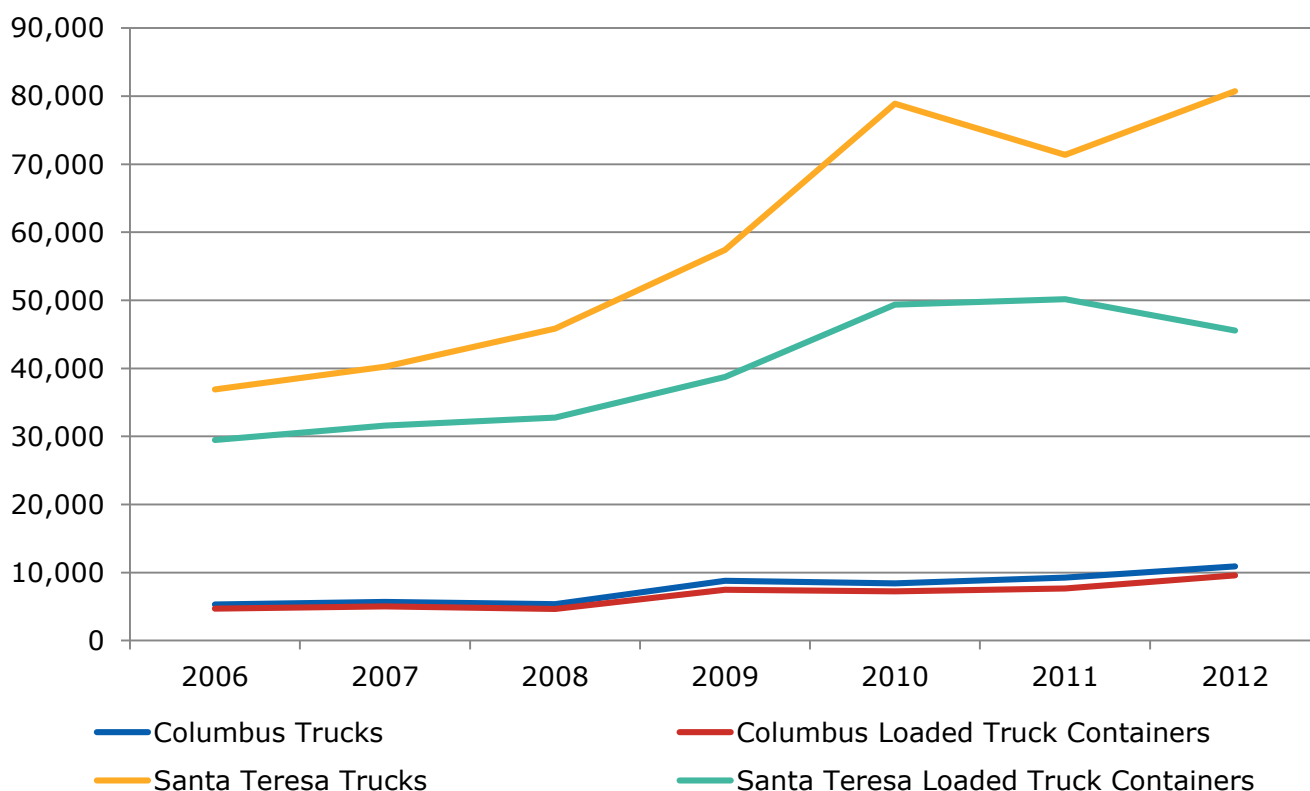
⁵ NMDOT – New Mexico border crossing data – 2013 Monthly

⁶ New Mexico Economic Development Department. <http://www.gonm.biz/Borderplex.aspx>.

also important to those two POEs; almost one-third of all cattle the U.S. imports from Mexico are processed in these ports, valuing over \$250 million. Over 85 percent of all buses use the Antelope Wells POE, but fewer than 1 percent of private vehicles and no pedestrians or commercial trucks use the Antelope Wells crossing.⁷ There are also five border crossings in and around El Paso, Texas. By way of these POEs, in 2013, there were over 6 million pedestrian crossings, 10.8 million private vehicles, 21,500 buses, and 746,000 commercial vehicles.⁸

For New Mexico's largest border crossing, Santa Teresa, there has been a recent trend of increased truck crossings; however, a significant percentage of these are empty trucks (Figure 2.10). The Columbus border crossing has seen modest growth but has not shown a similar discrepancy between total and loaded trucks.

Figure 2.10 New Mexico Truck Crossings and Loaded Truck Containers
2006 to 2012



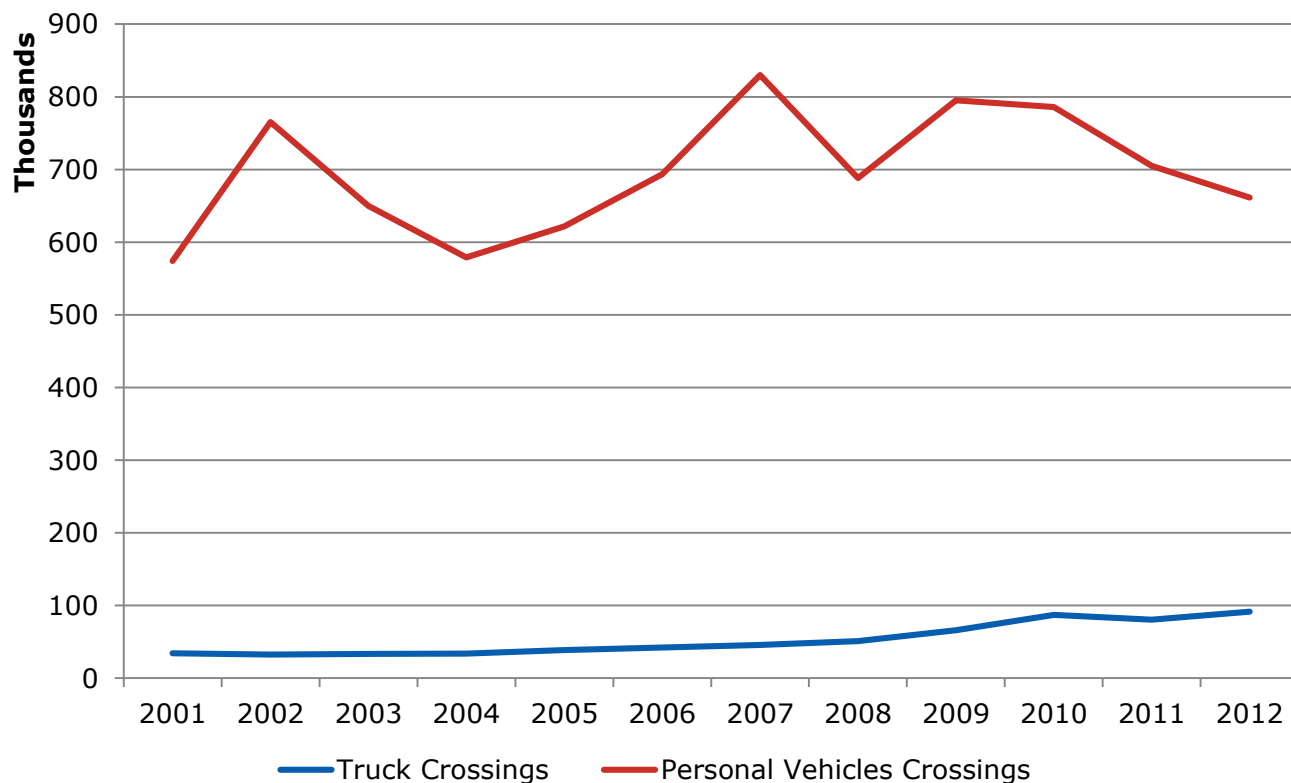
Source: BTS Border Crossing Data

⁷ NMDOT – New Mexico border crossing data – 2013 Monthly

⁸ NMDOT – Texas border crossing data – 2013 Monthly

When comparing the pattern of truck crossings at New Mexico border POEs to personal vehicle crossings, far more variability is seen in the personal vehicles than for trucks. Since the recession in 2009, personal vehicle crossings have shown a decline while truck crossings have shown steady growth (Figure 2.11).

Figure 2.11 New Mexico Border Crossings
Trucks and Personal Vehicles



Source: BTS Border Crossing Data

2.2 Freight and Passenger Rail

Extent of the System

The New Mexico rail system includes 2,055 miles of railroad right-of-way, listed in Table 2.6 and shown in Figure 2.12. Two Class I railroads, BNSF Railway (BNSF) and Union Pacific (UP), own 84 percent of the State's railroad right-of-way and operate two major transcontinental rail corridors critical for the movement of goods on the national freight network. Five Class III railroads (generally referred to as shortline railroads) own 8 percent of the state's rail network and provide rail connectivity to support local industries. The system also includes two long-distance Amtrak routes (the Southwest Chief and the Sunset Limited), a commuter railroad (the New Mexico Rail Runner Express) serving the cities of Belen, Albuquerque, and Santa Fe, and the narrow gauge

Cumbres and Toltec Scenic Railroad, a tourist excursion steam train that operates along the New Mexico-Colorado state border. There are also two private freight railroads that transport coal mined in the northwest part of the state.

Table 2.6 Railroads in New Mexico

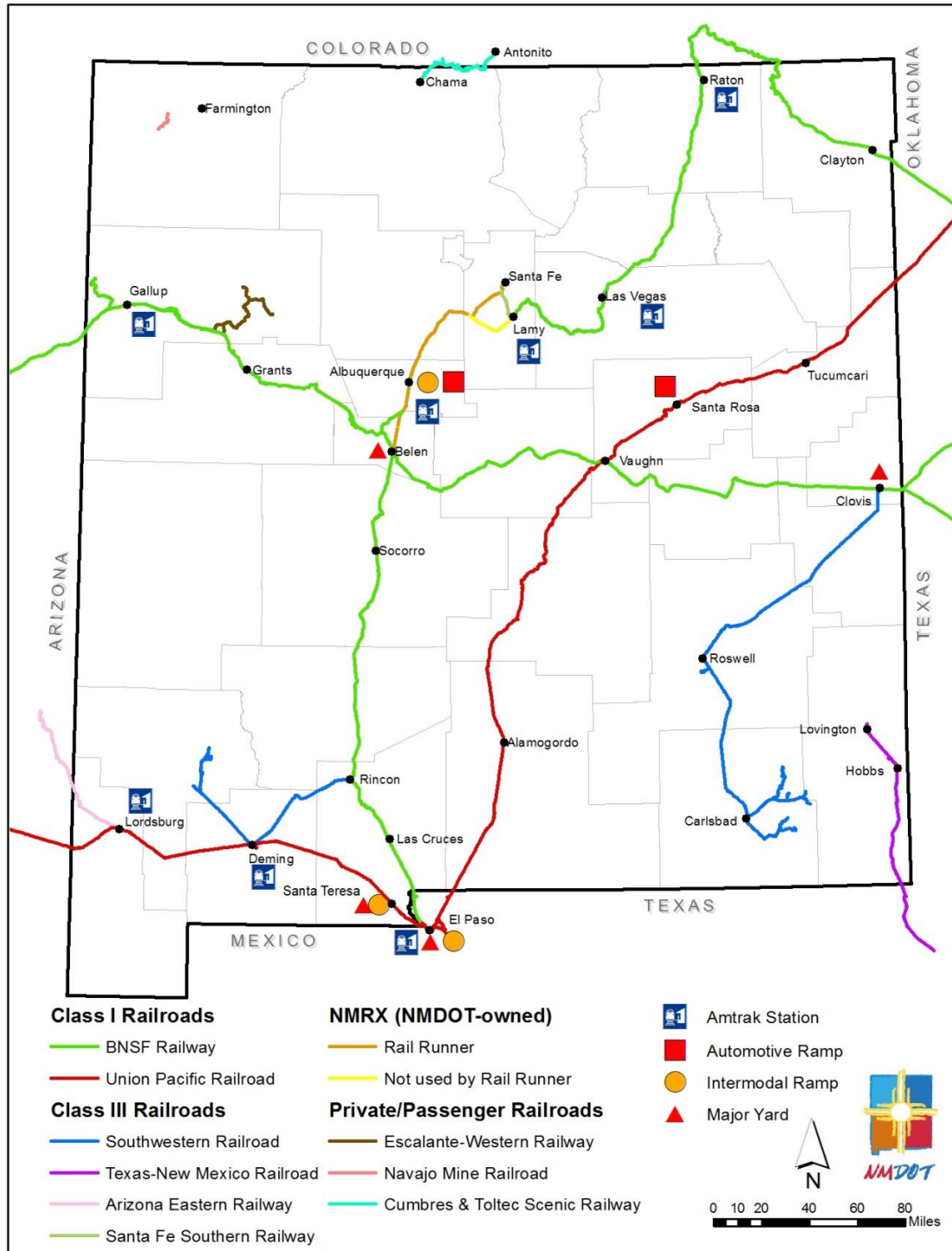
	Miles of Line Owned	Operated, excluding Trackage Rights	Operated, including Trackage Rights^b
Class I Railroads			
BNSF Railway	1,194.2	917.7	1,379.9
Union Pacific Railroad	533.6	533.6	618.2
<i>Subtotal Class I</i>	<i>1,727.8</i>	<i>1,451.3</i>	<i>1,998.1</i>
Shortline Railroads			
Arizona Eastern Railway	25.3	25.3	52.4
Texas New Mexico Railroad	76.0	76.0	76.0
Southwestern Railroad	57.1	333.6	333.6
Santa Fe Southern Railway	0.3	13.5	18.0
Verde Logistics Railroad, LLC	2.3	0.0	0.0
Santa Teresa Southern Railway	0.0	2.3	2.3
New Mexico Department of Transportation	133.4	0.0	0.0
City of Santa Fe	0.7	0.0	0.0
<i>Subtotal Class III</i>	<i>295.1</i>	<i>450.7</i>	<i>482.3</i>
Passenger Railroads			
New Mexico Rail Runner Express ^a	0.0	120.9	120.9
Amtrak	0.0	0.0	596.0
Cumbres & Toltec Scenic Railroad	32.0	32.0	32.0
<i>Subtotal Passenger Rail</i>	<i>32.0</i>	<i>152.9</i>	<i>748.9</i>
TOTAL	2,054.9	2,054.9	3,229.3

^a New Mexico Rail Runner Express is owned by NMDOT and is managed by Rio Metro Regional Transit District, which contracts for operations and maintenance. Trackage rights is an agreement between railroads in which the owner of the tracks grants another railroad (tenant) the right to operate its trains over the tracks. Trackage rights can be "full service," meaning that the tenant has the right to serve shippers on the joint facility directly, or "overhead," meaning that the tenant cannot carry freight to and from the owner's customers

^b Mileage operated via trackage rights does not include short distances granted for the interchange of freight traffic.



Figure 2.12 New Mexico State Rail System



Source: NMDOT State Rail Plan, 2014 (Refer to NMDOT State Rail Plan for additional information related to trackage rights on the system).

Institutional Relationships

The Rail Bureau within NMDOT's Transit and Rail Division is tasked with overseeing New Mexico's rail assets and managing all other rail-related responsibilities, including managing the 133 miles of NMDOT-owned right-of-way (e.g., overseeing regulatory, safety, and capital planning activities); administering the Federally-funded Section 130 program that funds safety improvements at highway-rail grade crossings; assisting cities, towns, and counties that request technical assistance with rail issues; and leading the State's rail planning activities, among other duties. The Rio Metro Regional Transit District (Rio Metro) is the managing agency for Rail Runner under a Memorandum of Agreement with NMDOT. Other entities involved in making rail decisions in the State include the Public Regulation Commission responsible for enforcing railroad safety; all of the private railroads in the State making investment decisions related to their business; and all of the Federal, State, and tribal land owners with whom the State must negotiate agreements in order to add any new rail lines or facilities.

The NMDOT State Rail Plan, completed in 2014, established a vision for the State's rail network:

...a fully integrated and safe multimodal passenger rail system that provides efficient passenger services to, from, and within the State; provides a competitive option for New Mexico shippers; is a vital component of the national transportation network; and supports sustainable, inclusive economic development statewide.

To help the NMDOT realize its rail vision, the State Rail Plan defines goals and objectives for rail in New Mexico, identifies potential rail improvement projects, and prioritizes future investments as part of a long-range service investment program. Several key factors affect the prioritization of potential rail projects in the State, including:

- The need to maintain the State's existing railroad infrastructure in a state of good repair;
- The need to comply with Federal safety mandates (i.e., implementation of Positive Train Control on the Rail Runner)
- Limited overall available public funding from Federal, state, and local sources;
- Restrictions on the types of projects on which Federal funding can be used; and
- The restrictions imposed by New Mexico's Anti-Donation Clause against state and local spending on private railroads.



Use of the System

Freight Rail

More than 127 million tons valued at \$8.5 billion were hauled on the New Mexico rail system in 2009.⁹ Through traffic – trains passing through New Mexico bound for long-distance markets – represents 88 percent of all rail traffic by weight and 95 percent of all rail traffic by value on New Mexico's rail network. The types and quantities of through rail traffic are indicative of national and even global economic activity, with New Mexico benefitting from jobs created to maintain the rail lines and to crew and service the trains.

While a large majority of the state's freight rail traffic is passing through, many of New Mexico's industries are dependent on freight rail transportation to some degree. Rail is particularly important for the state's mining and utilities sectors, with coal accounting for nearly 60 percent of all New Mexico rail tonnage. Rail also supports the state's oil and gas extraction and agriculture industries. For more detailed analysis of the state's freight rail usage, please refer to the 2014 NMDOT State Rail Plan.

Passenger Rail

While the predominant use of New Mexico's rail system is for the handling of freight, the State also hosts two long-distance intercity passenger rail routes and a commuter rail service in the Albuquerque and Santa Fe regions. Amtrak's Southwest Chief operates one train daily per direction linking Chicago, Kansas City, Albuquerque, and Los Angeles, a total distance of 2,256 miles that includes 431 miles in New Mexico. Boardings and alightings at the five New Mexico stations served by Amtrak's *Southwest Chief* accounted for approximately one-third of the long-distance route's 355,000 passengers in Fiscal Year (FY) 2013. The Sunset Limited operates three trains per direction weekly linking New Orleans, Houston, San Antonio, El Paso, Tucson, and Los Angeles, a distance of almost 2,000 miles that includes 167 miles in New Mexico. In FY2013, 2,100 passengers were served by the *Sunset Limited's* two New Mexico stations. Table 2.7 provides historic boarding and alighting data for the New Mexico stations on both Amtrak routes.

Table 2.7 Amtrak Boardings and Alightings by NM Station

Route/Station	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
Southwest Chief						
Raton	15,037	15,066	18,025	16,794	16,292	15,733
Las Vegas	4,280	4,456	4,491	4,952	5,653	5,376
Lamy	13,976	13,012	13,056	12,579	12,589	12,551
Albuquerque	72,434	67,751	71,848	75,779	78,324	78,126

⁹ 2009 Surface Transportation Board (STB) Carload Waybill Sample Data.

Route/Station	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
Gallup	12,517	12,340	13,431	14,433	16,446	15,647
<i>Southwest Chief Total</i>	<i>118,244</i>	<i>112,625</i>	<i>120,851</i>	<i>124,537</i>	<i>129,304</i>	<i>127,433</i>
Sunset Limited						
Deming	812	844	869	1,047	1,170	1,382
Lordsburg	393	404	472	510	483	736
<i>Sunset Limited Total</i>	<i>1,205</i>	<i>1,248</i>	<i>1,341</i>	<i>1,557</i>	<i>1,653</i>	<i>2,118</i>
TOTAL	119,449	113,873	122,192	126,094	130,957	129,551

Source: Amtrak Government Affairs

The 97-mile New Mexico Rail Runner Express (Rail Runner) commuter rail line provides service seven days a week to 14 stations serving Valencia, Bernalillo, Sandoval, and Santa Fe counties. Rail Runner operates 22 trains each weekday, 11 trains on Saturday, and seven trains on Sunday. Travel time from Albuquerque to Santa Fe is approximately 1.5 hours, while travel time between Albuquerque and Belen is approximately 40 minutes. Rail Runner carried more than 1.1 million riders in 2012, averaging approximately 3,800 passengers per weekday.

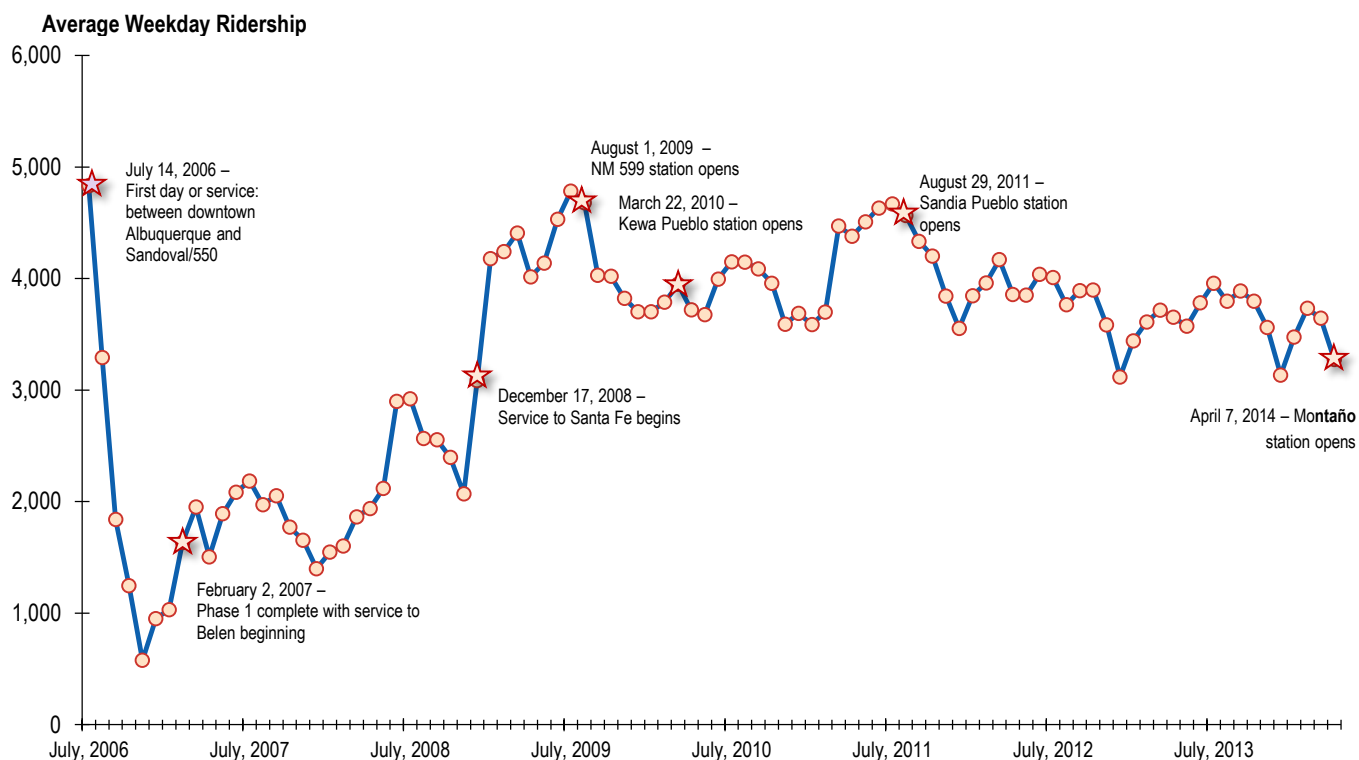
Rail Runner has seen its annual ridership decline each year since FY2010, the first full fiscal year of operations to Santa Fe (Figure 2.13 and Table 2.8). In FY2010, Rail Runner carried 1.24 million riders compared to 1.09 million riders in FY2013. Factors contributing to this decline include several reductions in service implemented as cost saving measures, modest fare increases implemented in 2012, increased travel time as new stations opened between Albuquerque and Santa Fe, and a decline after the first year of service to Santa Fe in passengers taking the train simply to experience the trip.

Table 2.8 Quarterly and Annual Rail Runner Ridership
FY2007 through FY2013

Quarter	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013
First	181,328	153,244	208,169	372,743	331,526	354,048	304,201
Second	73,496	117,381	197,699	301,396	268,793	268,984	256,430
Third	103,203	107,829	345,996	281,026	286,692	277,634	254,477
Fourth	127,123	163,093	329,855	284,640	332,450	290,988	274,250
TOTAL	485,150	541,547	1,081,719	1,239,805	1,219,461	1,191,654	1,089,358



Figure 2.13 Average Weekday Rail Runner Ridership
July 2006 through April 2014



Source: NMDOT

The narrow gauge Cumbres and Toltec Scenic Railroad (C&TS), jointly owned by the State of New Mexico and Colorado, operates scheduled, steam-powered passenger excursions seven days per week between Memorial Day weekend and mid-October. It also operates special excursions during other months of the year. C&TS often carries more than 40,000 passengers per year, but carried 30,000 passengers in 2012.

2.3 Public Transit

Public transportation services in New Mexico are delivered by a variety of public and private operators at the state, regional, and local levels. Services include local, regional, and inter-city bus routes, commuter trains, vanpools, and shuttles. Most of these operate on fixed routes and with fixed schedules, while others are more flexible and demand-responsive in nature. In general, there are higher levels of transit service and demand in urban areas and lower levels in rural areas.

Funding for Public Transit

Federal Grant Funding

All of the public transit agencies in New Mexico are at least partially funded by grants administered by the Federal Transit Administration (FTA) – either for capital expenditures only or for both capital and operations expenses (See Table 2.9). With the exception of funds provided to the City of Albuquerque, Rio Metro Regional Transit District (RTD), and El Paso Sun Metro, all grant funds are passed through NMDOT.¹⁰ Federal transportation law authorizes the FTA to administer the following programs, as specified in Title 49 of the United States Code:

- Section 5307 (Urbanized Area Formula Grants) allocates funding based on population to urban areas with populations over 200,000 (Albuquerque, Rio Metro RTD, and El Paso) and populations between 50,000 and 200,000 (Santa Fe, Las Cruces, Farmington, and Las Cruces).
- Section 5309 and 5339 (Bus and Bus Facility) provides capital funding to replace, rehabilitate and purchase buses (or related equipment), and to construct bus-related facilities.
- Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities) provides assistance to meet the special transportation needs of senior and disabled populations.
- Section 5311 (Rural Area Formula Grants) provides service for rural and small urban areas with a population less than 50,000.
- Section 5337 (State of Good Repair) provides funds for repairing and upgrading rail transit systems and high-intensity motor bus systems that use high-occupancy vehicle lanes, including bus rapid transit (BRT). Currently, the New Mexico Rail Runner Express, through Rio Metro RTD, is the only recipient of these funds in New Mexico.

For local agencies (e.g., the New Mexico Rail Runner Express, ABQ Ride, etc.), additional funding for capital and operational expenses derives from other sources such as gross receipts taxes.

Regional Transit District Funding

New Mexico's Regional Transit District Act of 2003 allows for the creation of Regional Transit Districts (RTD), which permits multiple political jurisdictions to collaborate in planning, managing, operating, and funding public transportation services. RTDs establish supporting policies, plans, and procedures; manage the capital, operation, and maintenance budgets; and operate the transit system. In addition to being eligible to receive Federal funds, the districts are able to levy a gross receipts tax to generate revenue if approved by local voters. RTDs are especially beneficial to rural communities, where residents are typically lower income and travel greater distances. Rural

¹⁰New Mexico Department of Transportation, "Statewide Public Transportation Plan", 2010, (accessed on April 14, 2014).



communities benefit from regional collaboration to pool financial resources and to create systems that benefit from increasing economies of scale.

To date, four RTDs have been established in New Mexico:

- The North Central RTD serves Rio Arriba, Taos, Los Alamos and Santa Fe counties, and Santa Clara, San Ildefonso, Pojoaque, Ohkay Owingeh, and Tesuque pueblos.
- The Rio-Metro RTD serves Bernalillo, Valencia, and Sandoval counties.
- The Southwest Regional Transit District serves Grant, Luna, and Hidalgo counties.
- The South Central RTD serves Dona Ana and Sierra counties.

New Mexico state law enables RTDs to assess and collect a gross receipt tax (GRT) to subsidize transit services and programs, if approved by voters in the counties represented by the RTD. To date, only the Rio Metro and North Central RTDs have voter approved authority to collect the GRT. In both instances, the tax rate is 0.125 percent (i.e., each RTD receives \$1.25 for every \$1,000 of taxable purchases made within its taxation district boundaries). Currently, the two RTDs dedicate half of the funds they collect in counties served by the Rail Runner to the train operation, while allocating the remaining half to bus transit. In Los Alamos, Rio Arriba, and Taos Counties, North Central RTD dedicates all of the GRT revenues it collects to bus services. Rio Metro's GRT is in effect in perpetuity, while North Central's will sunset on June 30, 2024 unless voters approve an extension. Each RTD has the authority to increase its GRT to support Rail Runner or other transit services, change the proportion of how GRT revenues are split among Rail Runner and other transit services, or a combination of both actions. The RTDs may also increase their current GRT rate in increments of at least one-sixteenth percent, subject to the 0.5 percent maximum, with the approval of the RTD electorate at a general or special election.¹¹

Public Transit Services and Ridership

Transit services in New Mexico include fixed route and on-demand, flexible transit systems. On-demand services include public para-transit for special needs riders such as the elderly and persons with disabilities. Statewide, there are 43 service providers (Table 2.9 and Figure 2.14), including:

- 1 commuter rail service
- 17 fixed route services
- 26 demand response services (available on-call)
- 17 paratransit providers

¹¹ New Mexico Regional Transit District Act (Chapter 73, Article 23, NMSA 1978)



- 12 modified fixed route services (routes that deviate from schedule with advanced notice).

Transit ridership in New Mexico has risen dramatically in recent years. Between 2008 and 2013, ridership statewide increased by 27 percent, from 14.6 million to 18.6 million. This trend is expected to continue as population in urban areas grows; transit services begin to attract more “choice” riders; and the number of transit-dependent citizens -- including elderly persons, young people without driver’s licenses, people with special transportation needs, and low income households – increases throughout the state. Additionally, rural areas of the state have mirrored this upward trend in transit ridership. Over the past 10 years, rural transit ridership has grown more than 150 percent to almost 2 million trips per year.

Table 2.9 shows transit ridership by provider and county in 2013. In that year, the City of Albuquerque’s system (ABQ Ride) accounted for 71 percent of all transit boardings in New Mexico. ABQ Ride had the highest ridership (13.23 million) of any in the state. Other systems with at least 100,000 boardings per year account for another 25 percent of the statewide total. These include the Rail Runner (1.09 million), Santa Fe Trails (1.12 million), Las Cruces Road Runner Transit (0.82 million), Los Alamos - Atomic City Transit (0.55 million), the NMDOT Park and Ride (0.31 million), North Central RTD (0.25 million), Roswell - Pecos Trails (0.22 million), Southwest RTD (0.12 million), and Farmington – Red Apple Transit (0.14 million). Finally, the systems that serve New Mexico’s rural communities, or those that serve special needs in both the rural and urban areas, accounted for the remaining 4 percent of boardings.



Table 2.9 Transit System Funding Sources & Ridership by County (2013)

County	Service	Service Type	Funding (State and Federal)	FY 2013 Ridership
Multiple	NMDOT Park and Ride	FR	State Funding, 5311(f)	312,320
Multiple	NM Rail Runner Express	CR	Sections 5307 & 5337 RTD	1,089,358
Bernalillo	Adelante Development Center	FR/DR	Sections 5310 & 5311	—
	ARCA		Section 5310	
	City of Albuquerque-ABQ Ride	FR/DR	Section 5307	13,229,316
	Go Fors, Inc. Too		Section 5310	
	Jewish Family Services		Section 5310	
	PB&J Family Services		Section 5310	
	Share Your Care, Inc.		Section 5310	
	Transitional Living		Section 5310	
Chaves	City of Roswell-Pecos Trails	FR/MFR/DR	Section 5311	215,847
Cibola	Village of Milan	DR/FR	Section 5311	39,309
	Pueblo of Laguna -Shaa'srk'a Transit	FR/MFR/DR	Section 5311	8,384
Curry	City of Clovis-Clovis Area Transit	FR/DR	Section 5311	65,180
Doña Ana	Ben Archer Health Center Program	DR/MFR	Section 5316	18,023
	Families and Youth, Inc.		Section 5310	
	Las Cruces-Road Runner Transit	FR/DR	Section 5307	816,662
	Tresco, Inc.		Section 5310	
Eddy	City of Carlsbad-Municipal Transit	DR	Section 5311	52,404
	Door of Opportunity/Lending Hands		Section 5310	
Grant	South West Regional Transit District ^	DR/MFR/FR	Section 5311	122,205
	Life Quest		Section 5310	
Lea	City of Hobbs-Hobbs Express	FR/DR	Section 5311	43,203
Lincoln	City of Ruidoso Downs-Lincoln County Transit	DR	Section 5311	29,873
Los Alamos	Los Alamos—Atomic City Transit	FR/MFR/DR	Section 5311	549,242
McKinley	Coyote Canyon Rehabilitation Ctr.		Section 5310	
	Na'nizhoozhi Center, Inc. (NCI)	MFR	Section 5311	—
	City of Gallup	MFR	Section 5311	66,527
	Navajo Transit System	FR	Section 5311	78,526
	Zuni Entrepreneurial Enterprises	DR	Sections 5310 & 5311	—
Otero	Zia Therapy Center, Inc.	DR/MFR	Sections 5310 & 5311	115,265
Rio Arriba	North Central Regional Transit District^	DR/FR/MFR	Section 5311	252,544



New Mexico 2040 Plan

Appendix A – Existing Conditions and Trends

County	Service	Service Type	Funding (State and Federal)	FY 2013 Ridership
	Las Cumbres Community Services		Section 5310	
	Ohkay Owingeh	DR	Section 5311	12,808
Roosevelt	City of Portales	DR	Section 5311	19,959
San Juan	City of Farmington-Red Apple Transit	FR/MFR/DR	Section 5307	141,612
San Miguel	City of Las Vegas-Meadow City Express	DR	Section 5311	16,552
Sandoval	Rio Metro Regional Transit District+	FR/DR	Sections 5310 & 5311	85,022
Santa Fe	City of Santa Fe-Santa Fe Trails	FR/DR	Section 5307	1,119,299
Socorro	City of Socorro	DR	Section 5311	15,864
Taos	Town of Red River-Miners Transit	DR	Sections 5310 & 5311	29,009
	Town of Taos-Chile Line	FR/MFR/DR	Section 5311	72,990
Union	Golden Spread Rural Frontier Coalition	MFR/DR	Section 5311	10,791
			TOTAL RIDERSHIP	18,628,094

FR- Fixed Route; MFR- Modified Fixed Route; DR- Demand Responsive; CR- Commuter Rail

**Section 5310 programs are for capital expenses and are typically not funded for consecutive years. Therefore, ridership numbers are not reported in this publication.

***Ridership is based on State Fiscal Year 2012 and 2013 (July 1 - June 30) for NM Rail Runner Express and NMDOT Park and Ride, and Federal Fiscal Year 2012 and 2013 (October 1 - September 30) for FTA Sections 5307 and 5311.

^NCRD serves Rio Arriba, Taos, Los Alamos, and Santa Fe counties and their tribal members include Santa Clara; San Ildefonso; Pojoaque; Ohkay Owingeh; and Tesuque.

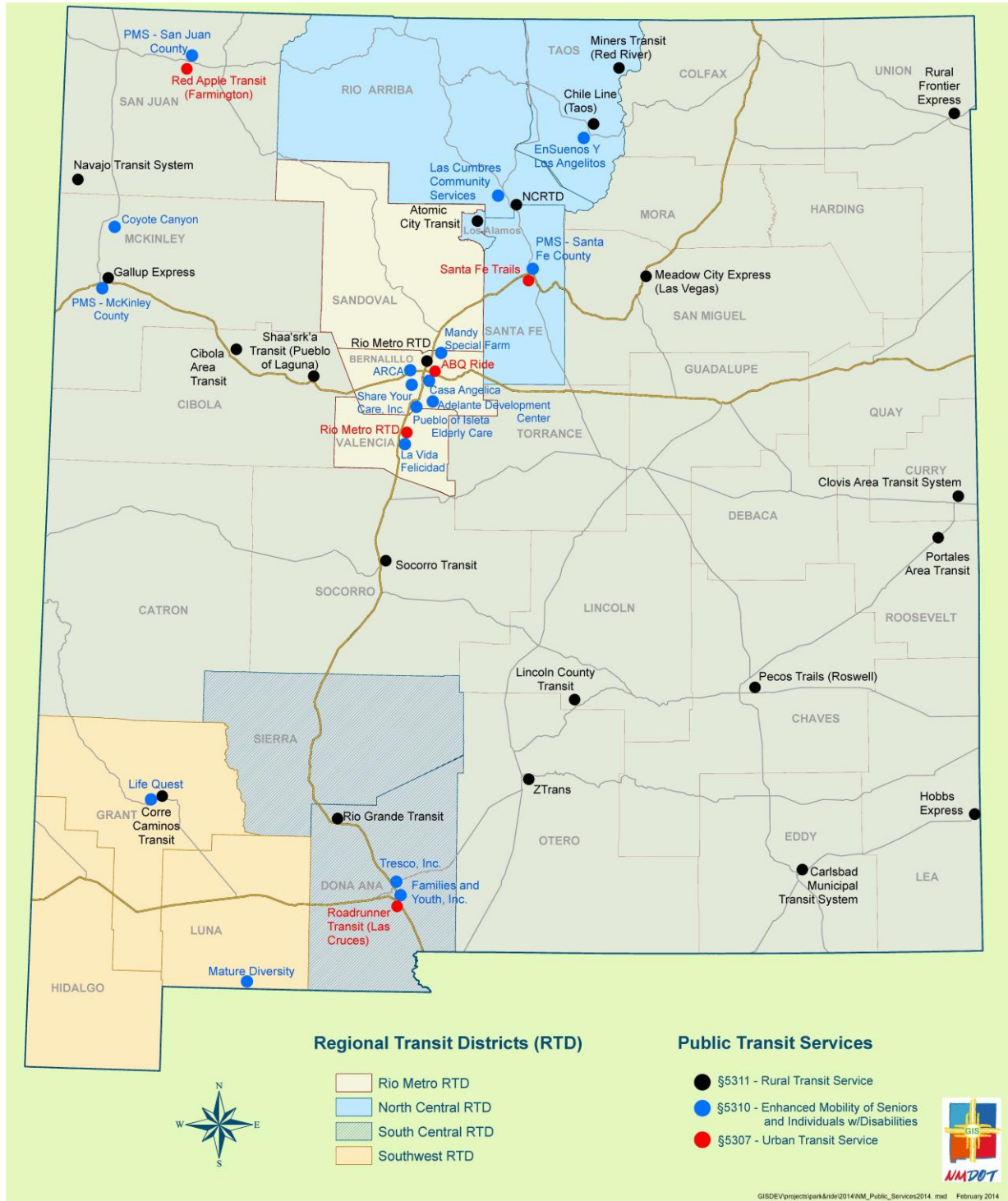
^^Southwest Regional Transit District (SWRTD) serves Grant, Luna, and Hidalgo Counties.

+Rio Metro Regional Transit District (RMRTD) provides rural transit services in Valencia and Sandoval Counties.

Source: NMDOT, Transit and Rail Division Fact Sheet Package, 2013



Figure 2.14 Statewide Public Transportation Providers (2014)



Commuter Rail

The New Mexico Rail Runner Express is the state’s only commuter rail system. Established in 2006 with service between Albuquerque and Bernalillo, the system now extends from Belen to Santa Fe. The Rail Runner operates seven days a week, serving 14 stations with over 100 miles of track. On weekdays, there are 11 scheduled train trips northbound and southbound. In 2013, there were over a million passenger boardings on the system. Table 2.10 shows Rail Runner boardings by station in 2012.

Table 2.10 Rail Runner Annual and Average Weekday Boardings by Station (2012)

Station	Boardings	Percent of Total	Average Weekday Boardings
Santa Fe Depot	158,581	14.0%	466
South Capitol	119,119	10.5%	426
Santa Fe County/ NM 599	80,003	7.1%	282
Kewa Pueblo	29,012	2.6%	103
Sandoval County/ US 550	119,463	10.6%	415
Bernalillo	15,085	1.3%	52
Sandia Pueblo	21,771	1.9%	73
Los Ranchos/ Journal Center	133,695	11.8%	450
Montaño Station	N/A	N/A	N/A
Downtown Albuquerque	248,698	22.0%	819
Bernalillo County/International Sunport	26,713	2.4%	93
Isleta Pueblo	14,659	1.3%	48
Los Lunas	79,895	7.1%	282
Belen	82,559	7.3%	280

*Montaño Station opened April 2014

Source: NMDOT

NMDOT Park and Ride – Regional Bus Service

The NMDOT “Park and Ride” regional bus service is supported by state funds and managed by NMDOT’s Transit & Rail Division. The service operates during the weekday morning and evening peak periods. It provides transportation between several city pairs across the state, as well as local shuttle service that connects major employment locations with the Rail Runner. Ridership in 2013 exceeded 312,000 (Table 2.11).



Table 2.11 Park and Ride Usage

Routes	Average Daily Riders	Trips Per Day (one-way)
Santa Fe to Las Vegas (Orange Route)	108	7
Santa Fe to Pojoaque and Española (Red Route)	83	12
Santa Fe to Pojoaque and Los Alamos (Blue Route)	278	23
Santa Fe / NM 599 Station to Los Alamos (Purple Route)	127	9
Santa Fe: South Capitol Station Shuttle	73	6
Santa Fe: NM 599 Station Shuttle	50	6
Española to Los Alamos (Green Route)	211	26
Albuquerque to Sedillo, Edgewood, and Moriarty (Turquoise Route)	24	2
Las Cruces to White Sands Missile Range (Silver Route)	51	4
Las Cruces to Anthony, Texas and El Paso, Texas (Gold Route)	245	20

Source: NMDOT Transit and Rail Division

Van Pools

Van pools are voluntary commuter ridesharing arrangements that use vans or small buses to provide transportation from a designated location to places of work. Drivers do not receive compensation but are reimbursed for costs associated with driving. With 35 van pools and over 400 regular daily riders, NM Vanpools (formerly, the Safe Economical Commuting Alternative or “SECA”) is the largest van pool service provider in the state, with service provided to Albuquerque and northern New Mexico.¹² Additional vanpool providers in the state include the Mesilla Park Vanpool, Vride Las Cruces, Socorro-Albuquerque Vanpool, Socorro-Los Lunas Vanpool Express, and the Shiprock Hospital Vanpool.¹³

Intercity Buses

Intercity bus service is provided by two private operators, Greyhound and El Paso-Los Angeles Limousine Express, Inc. (EPLA). Greyhound currently serves 16 stations in the State and provides regular inter-city and inter-state travel. EPLA serves Albuquerque, Las Cruces, and Deming and offers services to Texas, Colorado, Nevada, and California. Regional intercity bus services are provided by Navajo Transit, Pueblo of Laguna Shaa’srk’a Transit, Corre Caminos, North Central

¹² NM Vanpools. Nmvanpools.org

¹³ New Mexico Department of Transportation, “Statewide Public Transportation Plan”, 2010, (accessed on April 14, 2014)



Regional Transit District, Red Apple Transit, Socorro Public Transportation, Z-trans, as well as NMDOT Park and Ride (see Figure 2.15).

Intercity Passenger Rail

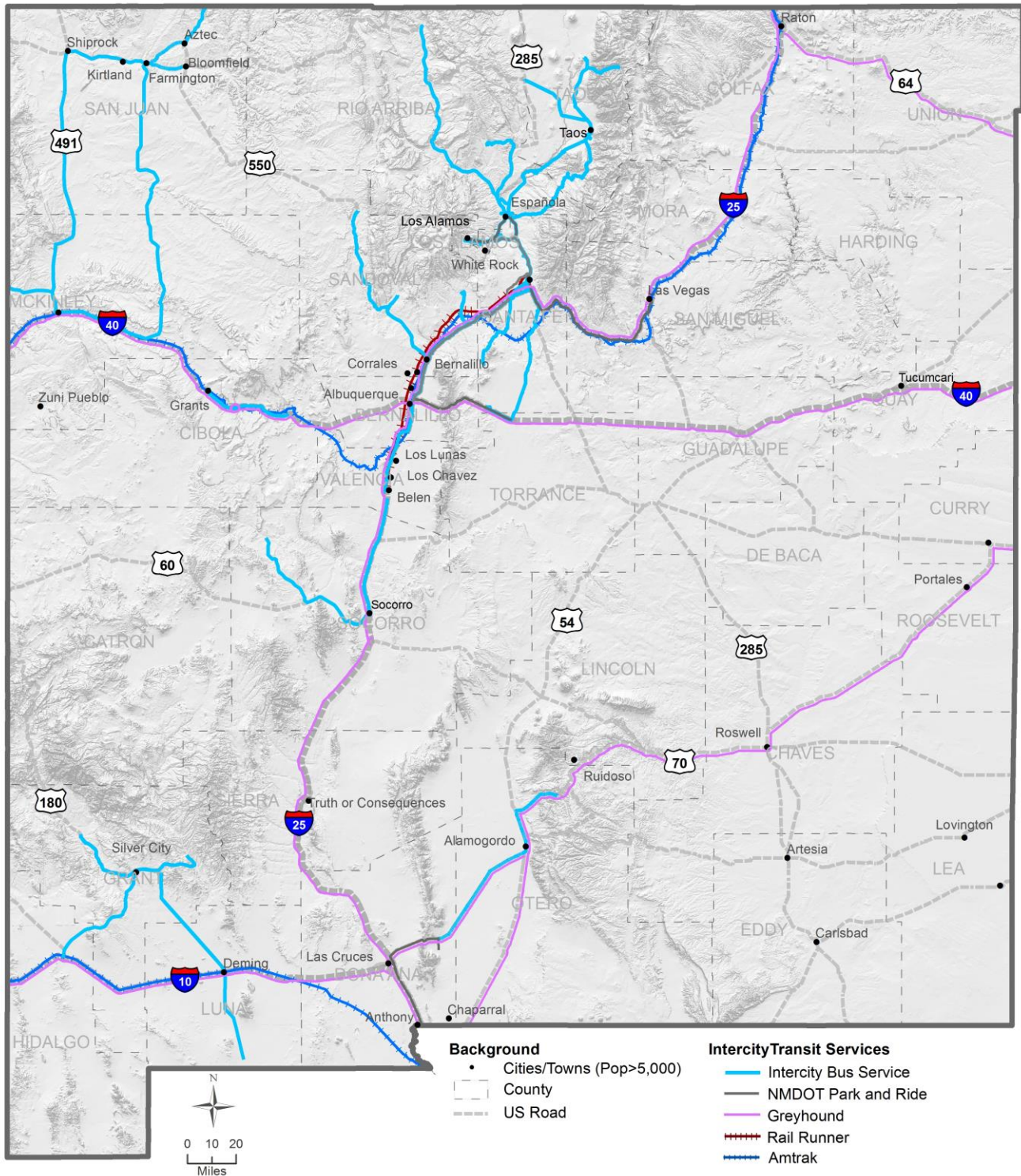
Intercity passenger rail is offered by Amtrak and the Rio Metro Rail Runner. Amtrak operates two services in New Mexico, the Southwest Chief and the Sunset Limited. The Southwest Chief offers one train daily per direction linking Chicago, Kansas City, Albuquerque, and Los Angeles, a total distance of 2,256 miles that includes 431 miles in New Mexico. The Sunset Limited operates three trains per direction weekly linking New Orleans, Houston, San Antonio, El Paso, Tucson, and Los Angeles, a distance of almost 2,000 miles that includes 167 miles in New Mexico.

The New Mexico Rail Runner commuter rail line provides service seven days a week to 14 stations serving Valencia, Bernalillo, Sandoval, and Santa Fe counties. Rail Runner operates 22 trains each weekday, 11 trains on Saturday, and seven trains on Sunday. Travel time from Albuquerque to Santa Fe is approximately 1.5 hours, while travel time between Albuquerque and Belen is approximately 40 minutes.

Intercity passenger rail ridership is provided in Section 2.2.



Figure 2.15 Intercity Bus and Passenger Rail Service in New Mexico



2.4 Non-Motorized – Bicycle, Pedestrian, and Equestrian

Non-motorized forms of transportation, including walking, bicycling, and horseback riding, reduce demand on resources and facilities dedicated to automobiles, and provide New Mexico's citizens and visitors with opportunities to improve their health and the environment while meeting their transportation needs. Along with transit, bicycling and walking are essential forms of transportation for residents who do not have reliable access to a private vehicle. The FHWA and NMDOT are committed to integrating bicycle, pedestrian, and equestrian accommodations as a routine part of planning, designing, and constructing New Mexico's transportation system. NMDOT has a Bicycle, Pedestrian, Equestrian Technical Committee (BPE-TC), which is comprised of NMDOT staff. The BPE-TC meets at least quarterly and works to address the integration of BPE considerations into NMDOT processes. The BPE-TC also serves as a vehicle to disseminate information around the department.

During the past 12 years, the department has allocated \$70 million to support improvements for non-motorized transportation, and similar levels of funding are anticipated for non-motorized transportation in future programming cycles.¹⁴ Under MAP-21, Federal funds are currently available for bicycle and pedestrian projects under the Transportation Alternatives Program, the Surface Transportation Program, the Highway Safety Improvement Program, and the Congestion Mitigation and Air Quality program.¹⁵ According to the Alliance for Biking and Walking, New Mexico ranks ninth among all U.S. states in per capita spending on bicycle and pedestrian projects.¹⁶

NMDOT is committed to creating facilities that are safe for all users. The NMDOT Planning and Safety Division (PSD) has staff members that routinely meet with various agencies and entities involved in pedestrian and bicyclist safety-related issues and programs. In New Mexico, there is growing demand for non-motorized modes of transportation such as bicycling and walking. While these activities provide health, economic, and environmental benefits, they increase the participant's exposure to motorized traffic and traffic crashes, even though bicyclists and pedestrians are legally allowed on the vast majority of roadways in the state. In 2011, there were 40 pedestrian and four bicyclist fatalities, comprising 9.2 percent of all fatalities.¹⁷ The NMDOT seeks to reduce the number of pedestrian and bicyclist injuries in New Mexico, and to encourage walking and bicycling as comfortable, accessible, safe, and efficient modes of transportation. To successfully reduce New Mexico's pedestrian and bicyclist injury and fatality rates, NMDOT and

¹⁴ New Mexico Department of Transportation (NMDOT), "NM 2030 Statewide Multimodal Transportation Plan", December 2009

¹⁵ Federal Highway Administration. <http://www.fhwa.dot.gov/map21/>

¹⁶ Bicycling and Walking in the United States – 2014 Benchmarking Report. Alliance for Biking and Walking. <http://www.bikewalkalliance.org/storage/documents/reports/2014BenchmarkingReport.pdf>

¹⁷ New Mexico Traffic Crash Annual Report 2011. <http://www.unm.edu/~dgrint/reports/annual/ar2011.pdf>



local governments need to ensure that existing and new facilities appropriately accommodate bicyclists, pedestrians, and other vulnerable road-users.

Safe Routes to School

The Safe Routes to School (SRTS) Program became a Federally-funded program in 2005 with the passage of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The SRTS program provided Federal-aid highway funds to State DOTs over five Federal fiscal years, with New Mexico receiving approximately \$1 million per year.¹⁸ With the passage of MAP-21, the SRTS no longer has dedicated Federal funding, but SRTS projects are still promoted and eligible under the Transportation Alternatives Program (TAP) and the Surface Transportation Program (STP).

SRTS projects are intended to benefit students grades K-8th and provide opportunities for eligible applicants to undertake educational and promotional activities that encourage walking and bicycling to school, as well as small-scale infrastructure projects that fill gaps in the existing bicycle and pedestrian system.

Goals of Safe Routes to School include:

- Enable and encourage children, of all abilities, to walk and bicycle to school;
- Make bicycling and walking to school a safer and more appealing transportation option, thereby encouraging a healthy and active lifestyle from an early age;
- Facilitate the planning, development, and implementation of projects and activities that improve safety while reducing congestion, fuel-consumption, and air pollution in the vicinity of schools.

Under the guidance of the National Center for Safe Routes to School, New Mexico has funded more than 50 local Safe Routes to School projects totaling \$6.3 million. Examples of successful partnerships include:

- **The Village of Corrales**, located in the Albuquerque Metro Area, identified a dire traffic and congestion problem surrounding drop-off and pickups at Corrales Elementary School (CES). As a result of the SRTS funded upgrades, the community received the 2012 James L. Oberstar Safe Routes to School Award, a prestigious national recognition of that community's efforts. By early 2013, 29 percent of CEC students were walking or bicycling to school on a regular basis.
- **Hillrise Elementary in Las Cruces** conducted a pilot project to document the potential environmental benefit of reducing car trips to its school by encouraging more children and their parents to walk and bicycle to school. The survey showed a 7.3 percentage point reduction in

¹⁸ National Center for Safe Routes to School, www.saferoutesinfo.org, (accessed April 2014)



trips to school made by parents, equivalent to 38 fewer cars arriving at school each morning to drop children off. Assuming an average trip length of three-quarters of a mile one-way, that is a reduction of 5,130 miles driven on trips to school throughout the school year, which equates to a reduction of 2 tons of carbon dioxide and 283 pounds of other harmful pollutants.

Existing Bike, Pedestrian, and Equestrian Facilities

Bicycle facilities include on-road bikeways, such as dedicated bike lanes and marked shared lanes, and off-road bikeways such as bike paths and multi-use trails. To accommodate on-street bike lanes, cities may undertake “road diets,” where, for example, one travel lane in each direction is removed and replaced by bike lanes and a center turn lane. Other new and innovative bike facilities include bicycle boulevards, which include traffic calming treatments and other bike prioritization, and cycle tracks, which are on-street protected bike lanes that are separated from traffic with a physical barrier.

In rural areas, a number of the above treatments are not necessary, and often not appropriate, to accommodate bicyclists. Outside of populated areas, a usable shoulder often is sufficient. Generally, when vehicular speeds exceed 50 mph and there are no tangent vertical faces, such as a guardrail, a minimum of five feet of usable width is desired.¹⁹ The exact mileage of usable shoulders in New Mexico is not currently known by NMDOT.

New Mexico has a State Bicycle Route system. While a number of the bicycle routes are clearly signed, there are gaps in signage along numerous routes. Further, the goals of the bicycle route system have not been clearly articulated in adopted planning documents. This system needs further analysis in order to establish clear goals, increase logical connectivity, and prioritize system facility improvements.

There is no clearinghouse for bikeway information in New Mexico, but Table 2.12 provides the latest estimate for three of the state’s largest cities.

¹⁹ American Association of State Highway and Transportation Officials, *Guide for the Development of Bicycle Facilities*, 4th Edition, 2012.



Table 2.12 Miles of Bikeways by City

	Albuquerque	Santa Fe	Las Cruces
Paths/Trails	177	18.8	15
Bike Lanes	203	Unknown	53*
Bike Routes	134	Unknown	
Bike Boulevards	6	-	-

*A combined number of bike routes and bike lanes

Source: City of Albuquerque Draft Bikeways and Trails Facility Plan; City Santa Fe Bicycle Master Plan, Las Cruces Metropolitan Planning Organization 2010 Metropolitan Transportation Plan

The League of American Bicyclists (League) ranks New Mexico 41st out of all 50 states for overall “bicycle friendliness.”²⁰ The State ranking is a relative number that considers many aspects of the “bicycle friendliness” of the states in terms of: 1) policies and programs, 2) legislation and enforcement, 3) infrastructure and funding, 4) education and encouragement, and 5) evaluation and planning. The City of Santa Fe has a “Silver” rating; the City of Las Cruces and City of Albuquerque both have “Bronze” ratings.²¹ The community ratings are assigned by the League based on a community’s actions in supporting bicycling through engineering, education, encouragement, enforcement, and evaluation/planning.

Cities, towns, and villages throughout New Mexico can continue to support pedestrian travel through new and improved sidewalks, crosswalks, and pedestrian signals, pedestrian plazas, flashing crossing beacons, median refuge islands, pedestrian-scale lighting, and other treatments. In compliance with the Federal Americans with Disabilities Act (ADA), ADA Transition Plans were revised for all NMDOT Districts in 2013. These plans include an internal review and self-evaluation of the ADA accessibility on each District’s roads and highways to identify issues of accessibility that need to be addressed. These plans also identify how best to upgrade the District’s programs for improvement of those facilities.

While NMDOT has no inventory of pedestrian facilities statewide, the independent website for Walk Score attempts to measure “walkability” for neighborhoods and cities worldwide.²² Communities are given a ranking from 0 to 100 based on the proximity and concentration of certain types of businesses and amenities through and around the community. New Mexico cities all ranked below the 50th percentile, with Farmington being the lowest (29) and Albuquerque the highest (40) of the four New Mexico cities evaluated (Table 2.13). Though flawed in many respects, Walk Score does provide a means of tracking progress toward the creation of neighborhoods with a greater mix of uses that provide more opportunities for walking trips.

²⁰ League of American Bicyclists. Bicycle Friendly State 2014 Report Card. http://bikeleague.org/sites/default/files/BFS2014_NewMexico.pdf

²¹ League of American Bicyclists (LAB), <http://bikeleague.org/>, (accessed April 2014)

²² Walkscore, www.walkscore.com, (accessed April 2014)



Table 2.13 Walk Scores for New Mexico Cities

City	Walk Score	Population
Farmington	29	45,877
Las Cruces	32	97,618
Santa Fe	36	67,947
Albuquerque	40	545,852

Source: Walkscore, www.walkscore.com

There is no comprehensive statewide assessment for bicycle and pedestrian activity in New Mexico. The U.S. Census Department's American Community Survey provides an estimate of commute mode share. However, this metric underestimates the actual mode share because work trips ignore other utilitarian trips, trips for exercise or fun, student trips, and linked trips (walking or bicycling to transit, for example). Furthermore, with such small mode shares for bicycle and pedestrian commute trips, the margins of error are often too great for the data to be considered reliable. Table 2.14 displays the bicycling and walking to work mode share in 2012 for the state's 18 Metropolitan Statistical Areas.

Table 2.14 Bike and Walk Commute Mode Share By Metropolitan Statistical Area

Geography	Population	Bike Commute Mode Share	Walk Commute Mode Share
Alamogordo, NM Micro Area; New Mexico	24,862	0.31%	2.38%
Albuquerque, NM Metro Area; New Mexico	398,187	0.94%	1.86%
Carlsbad-Artesia, NM Micro Area; New Mexico	23,939	0.00%	1.23%
Clovis, NM Micro Area; New Mexico	21,692	0.39%	2.56%
Deming, NM Micro Area; New Mexico	8,744	0.91%	3.03%
Espanola, NM Micro Area; New Mexico	15,610	0.09%	1.52%
Farmington, NM Metro Area; New Mexico	52,239	0.18%	1.72%
Gallup, NM Micro Area; New Mexico	22,913	0.18%	3.79%
Grants, NM Micro Area; New Mexico	8,836	0.00%	1.69%
Hobbs, NM Micro Area; New Mexico	26,085	0.04%	1.82%
Las Cruces, NM Metro Area; New Mexico	85,890	0.89%	2.88%
Las Vegas, NM Micro Area; New Mexico	10,747	0.30%	3.41%
Los Alamos, NM Micro Area; New Mexico	8,919	1.95%	5.02%
Portales, NM Micro Area; New Mexico	8,415	0.34%	6.18%
Roswell, NM Micro Area; New Mexico	26,232	0.22%	2.00%
Ruidoso, NM Micro Area; New Mexico	8,729	0.36%	4.44%
Santa Fe, NM Metro Area; New Mexico	69,055	0.85%	2.65%



Geography	Population	Bike Commute Mode Share	Walk Commute Mode Share
Silver City, NM Micro Area; New Mexico	11,357	0.26%	4.16%
Taos, NM Micro Area; New Mexico	13,691	0.98%	3.73%
Total	846,142	0.71%	2.28%

Source: American Community Survey, 5-year Estimate, 2012

While equestrian transportation makes up a very small percentage of all travel in New Mexico, it is still prioritized by NMDOT as a mode choice. A primary way in which transportation facilities can accommodate equestrian travel is by recognizing and providing appropriate treatments at trail crossings, such as signage or underpasses. Additionally, in areas where there is known equestrian traffic along roadways, the responsible party should install signage in order to alert other users to the equestrian presence. Currently, there is no statewide inventory of equestrian trail crossings and usage in roadway right-of-way, and the inclusion of these treatments is decided on an ad hoc basis. The equestrian trail network and other “hot spots” of equestrian activity should be identified by NMDOT for further analysis. Outside of NMDOT, the New Mexico Horse Council provides additional education, support, and awareness for the equestrian community.

Existing Community Non-motorized Plans

Albuquerque Area

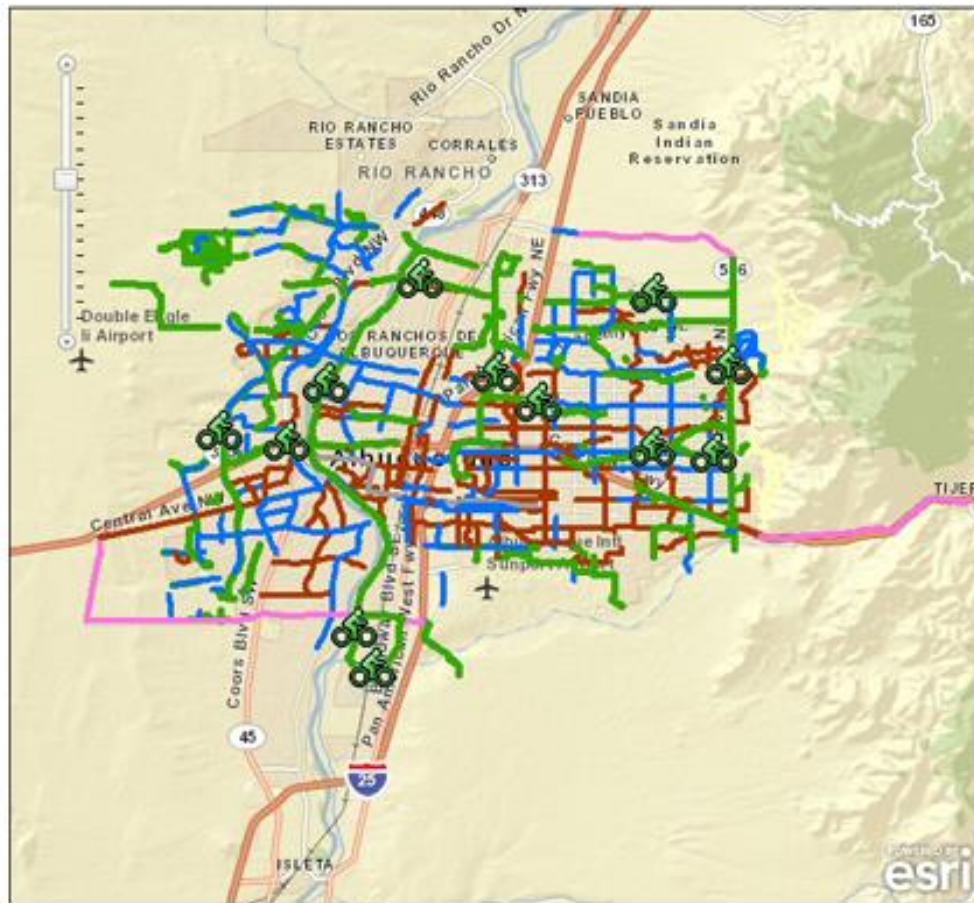
The City of Albuquerque is in the process of developing an updated *Bikeways and Trails Facility Plan*. This plan will update and replace two previously adopted plans: *The Trails and Bikeways Facility Plan* (1993) and the *Comprehensive On-Street Bicycle Plan* (2000).²³ The draft *Bikeways and Trails Facility Plan* estimates that there are 177 miles of bicycle and pedestrian trails, 203 miles of on-street bicycle lanes, 134 of signed bicycle routes, and approximately 6 miles of bicycle boulevards, roads that contain traffic calming and other approaches to prioritize bicycle travel. The City of Albuquerque maintains an interactive online bike map displaying the most up-to-date infrastructure (Figure 2.16). In 2004, the Mid-Region Council of Government published the most recent update of the *Future Albuquerque Area Bikeways and Streets* (FAABS) document. Also in process of being updated, FAABS covers the Albuquerque Metropolitan Area and contains maps of current and future bicycle facilities, including the Long-Range Bikeway System map.²⁴ In 2012, Bernalillo County created a *Pedestrian and Bicyclist Safety Action Plan*, which contains an assessment of the safety concerns and an inventory of existing facilities in unincorporated Bernalillo County.

²³ City of Albuquerque, Planning Department, <http://www.cabq.gov/planning/>

²⁴ City of Albuquerque, www.cabq.gov, (accessed April, 2014)



Figure 2.16 Albuquerque's Interactive Bike Map



Source: Bike ABQ, <http://www.cabq.gov/parksandrecreation/recreation/bike/bike-map>

Farmington

The Farmington MPO adopted an updated Bicycle and Pedestrian Plan in 2010 with the following goal: “to link communities, provide access to parks, schools, residences and businesses, encourage walking and bicycling for commuting, and to improve the health of the citizens and the communities within the Farmington MPO boundaries.”²⁵ The plan contains a list of existing bicycle facilities and a ranked list of proposed projects.

²⁵ City of Farmington, <http://www.fmtn.org/>, (accessed 2014)

Las Cruces

The Las Cruces Metropolitan Area includes a *Bicycle System Priorities Plan* as part of the 2010 Metropolitan Transportation Plan. The goal of the prioritized plan is to “identify current and future in-road bicycle facilities throughout the MPO area.”²⁶

Santa Fe

Santa Fe Metropolitan Area adopted their Bicycle Master Plan in 2012 with the vision for “Santa Feans and their guests enjoy safe and convenient bicycle and pedestrian access along a comprehensive network of multi-use trails and complete streets, connecting residential neighborhoods with employment centers, parks, open space, schools, retail centers, and other public and private services throughout the metropolitan area.” At the time of publication, a total of 35.7 miles of paved and unpaved bicycle trails existed.²⁷ There are also bike lanes and signed bike routes though the mileage was not indicated. A prioritized list of new projects is included that outlines proposed new bike lanes, paths, and road diets. Santa Fe is also in the process of creating a Pedestrian Master Plan as part of their Metropolitan Transportation Plan 2015-2040.

Taos

The Town of Taos also has a Bicycle Master Plan to provide “alternative transportation, creating opportunities for recreation, promoting economic development, enhancing public health, and protecting environmental resources.”²⁸

2.5 Aviation

The aviation and aerospace industries are vitally important for New Mexico’s economy. Air travel facilitates tourism, business travel, and goods movement, and the aircraft and aerospace manufacturing industries provide direct employment, tax revenues for local governments, and indirect impacts on related industries. In the past 75 years, air transportation in New Mexico has grown as an important regional, national, and international economic link for the state. The aviation component of New Mexico’s transportation infrastructure provides its citizens and businesses access to critical services, such as air ambulance services, firefighting, agricultural spraying, law enforcement, military training, business travel, air cargo services, pilot training, and tourism.

The aviation and aerospace industries have been a part of New Mexico’s economy since the 1940s, when the Holloman and Kirtland bases were established as flight training centers for WWII pilots. Since then, New Mexico has had a long history of testing, maintaining, and managing air and space

²⁶ City of Las Cruces, <http://www.las-cruces.org/>, (accessed 2014)

²⁷ Santa Fe MPO, <http://santafemppo.org/>, (accessed April 2014)

²⁸ Town of Taos, www.taosgov.com, (accessed April 2014)



systems, and is home to two Air Force research labs. Today, New Mexico is home to more than 100 aviation and aerospace companies that serve both military and civilian needs. Companies are attracted to New Mexico for many reasons: year-round flying weather, altitude, open airspace, business-friendly programs and attitudes, and an experienced workforce. New Mexico's aerospace infrastructure includes: the Albuquerque International Sunport airport, White Sands Missile Range, two Air Force bases and research labs, two national laboratories, many municipal and general aviation airports, and the new Spaceport America facility. Prominent aerospace companies with a significant presence in New Mexico include Honeywell Defense Avionics Systems, Boeing, and Goodrich Corporation's Space Flight Systems. With the highest per capita concentration of PhD's and global research centers in aerospace in the country, companies find the workforce they need in New Mexico to be successful. Companies in New Mexico benefit from a diverse array of incentives, university programs, training initiatives, infrastructure, low risk of natural disasters, and the most open flying areas in the country.²⁹

The New Mexico Airport System includes a total of 61 facilities (55 airports, 4 heliports, 1 seaplane base, and 1 proposed airport). These facilities are located in 30 of New Mexico's 33 counties (Figure 2.17). Fifty airports are identified within FAA's National Plan of Integrated Airport Systems (NPIAS). Table 2.15 below provides a summary of New Mexico's airports by airport classification.

Table 2.15 New Mexico Airports

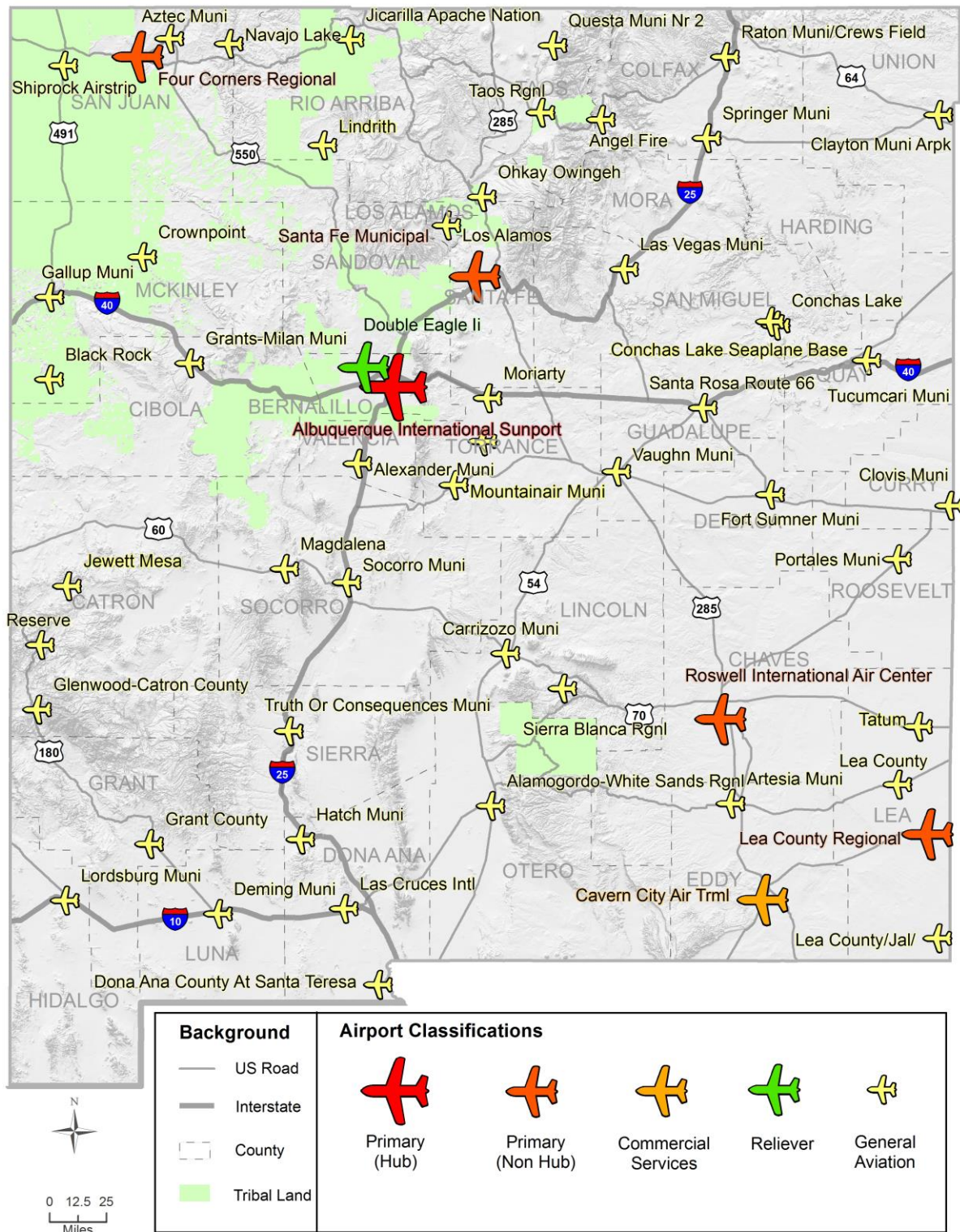
Airport Type	Quantity
Primary Commercial Service	5
Non-Primary Commercial Service	1
Reliever	1
General Aviation	43
Non-NPIAS	118
Total	168

Source: Aeronautical Information Services

²⁹ New Mexico Partnership (NMP), <http://nmpartnership.com/>, (accessed April 2014)



Figure 2.17 New Mexico Airport System



Primary Commercial Service airports have more than 10,000 annual passenger enplanements, and include the Albuquerque International Sunport, the Four Corners Regional, the Lea County Regional, the Roswell International Air Center, and the Santa Fe Municipal airports. Non-primary Commercial Service airports have between 2,500 and 10,000 annual enplanements, and while they have some scheduled air carrier service, they are used mainly for general aviation. Cavern City Air Terminal is an example of a non-primary commercial service airport in New Mexico. Reliever airports (Double Eagle II) are generally located in major metropolitan airports and provide non-commercial pilots with an alternative to a Primary airport. General aviation airports can be included in the National Plan of Integrated Airport Systems (NPIAS) if they have enough activity (generally at least 10 based aircraft) and are at least 20 miles from the nearest NPIAS airport.³⁰ There are other airports that are not designated by the NPIAS, including smaller airports, private airports, heliports, and air force bases.

The aviation and aerospace industries are important economic drivers in the State of New Mexico. It is estimated that general aviation in New Mexico brings in an average revenue stream of more than \$750 million (equaling more than \$375 per capita) to the state economy. In early 2014, the state legislature passed House Bills 14 and 24 granting additional tax benefits to the aerospace parts and aircraft manufacturers.³¹

The largest aviation facility in the state is the Albuquerque Airport System. This airport system is significant piece of New Mexico's economy, providing direct and indirect benefits by facilitating increased tourism and commerce. Direct benefits total over \$1 billion annually, resulting from employment, payroll, and spending by airport-dependent businesses, commercial airline visitor spending, general aviation visitor spending, and capital spending. Indirect benefits are derived from the jobs, payroll, and output created by businesses which provide goods and services essential to on-airport businesses and other airport-dependent enterprises. Off-site airport-dependent businesses include neighboring hotels, restaurants, transportation services, and retail establishments, as well as the manufacturers, wholesalers, and logistics companies that benefit from airport operations. In total, the Albuquerque Airport System contributes to the employment of 20,062 individuals, nearly \$701 million in labor income, almost \$2 billion in output, and \$82.4 million in tax revenue.³²

³⁰ Federal Aviation Administration. Report to Congress - National Plan of Integrated Airport Systems, 2013 - 2007

³¹ "New Mexico Aviation Tax Exemptions Headed to Governor". National Aviation Business Association. <http://www.nbaa.org/admin/taxes/state/nm/20140221-aviation-exemptions.php>

³² Bhandari, Doleswar, Ph.D.: Economic Impacts of Albuquerque Airport System on the New Mexico Economy; August 2013, Bureau of Business and Economic Research University of New Mexico, Albuquerque.



Use of Airports in New Mexico

The Albuquerque International Sunport Airport

The Albuquerque International Sunport (ABQ) is the largest aviation facility in the state. In 2012, there were over 2.6 million enplanements at ABQ (Table 2.16), accounting for over 95 percent the state's air passenger travel. Nationwide, ABQ ranked number 56 in terms of commercial passenger enplanements. ABQ is also New Mexico's largest airport for goods movement. With over 568 million pounds, ABQ ranks number 38 nationally in air cargo.

The Albuquerque International Sunport Master Plan considers the current facilities at practical capacity for the next century and "serviceable with a significant useful life".³³ The nearby Double Eagle II Airport currently serves as a general aviation reliever airport. Minimal improvements are planned for existing airfields, such as the addition of a secondary runway as well as navigational aids. In ABQ's 2002 Master Plan, it outlined a long-term planning horizon of 7.1 million annual enplanements, which will require an eventual terminal expansion or a second terminal.³⁴ If the second terminal option is selected, access to the terminal will be provided via the existing Sunport, Yale, and Girard corridors. A regional transit center is included in the plan which would interface with potential off-site light rail service and an automated people mover system to connect the transit center with the terminals.

The Santa Fe Municipal Airport

The Santa Fe Municipal Airport (SAF) is home to nearly 200 general aviation aircraft and 11 military fixed and rotor wing aircraft (NM Air National Guard). The majority of the 200 private aircraft are single engine, but there is a jet and multi-engine population as well. Currently, commercial flights are offered by American Eagle, ExpressJet, SkyWest, Great Lakes, and United Express Airlines. There were close to 48,000 commercial passenger enplanements at SAF in 2012.

The Roswell International Air Center

The Roswell International Air Center (ROW) is the third largest airport by passenger volume in the state. In 2012, there were over 36,000 enplanements at ROW. The airport is located five miles south of the central business district of the City of Roswell and is the core of southeastern New Mexico's flight activity. Prior to 1967, it was the home of Walker Air Force Base, one of the largest installations operated by the U.S. Air Force Strategic Air Command.³⁵

³³ City of Albuquerque, "Albuquerque International Sunport Master Plan", 2002, www.cabq.gov, (accessed April, 2014)

³⁴ Albuquerque International Sunport. Airport Master Plan. 2002.

³⁵ City of Roswell, www.roswell-nm.gov, (accessed April 2014)



Lea County Regional Airport

The Lea County Regional Airport (HOB) is located in Hobbs, serving the southwestern corner of the state. There were over 17,000 enplanements at HOB in 2012. The only commercial airline that services HOB is ExpressJet.

The Four Corners Regional Airport

Four Corners Regional Airport (FMN) is located in Farmington and serves a population of over 100,000 in the four corners region. In 2012, FMN had over 16,000 enplanements. Great Lakes Airlines, a code share partner for Frontier Airlines and United Airlines, offers flights to Denver, Alamosa, Colorado; Prescott, Arizona; and Los Angeles, California.³⁶

Table 2.16 2012 New Mexico Enplanements

Rank*	City	Airport Name	CY 12 Enplanements	CY 11 Enplanements	% Change
56	Albuquerque	Albuquerque International Sunport	2,630,574	2,768,435	-4.98%
273	Santa Fe	Santa Fe Municipal	47,847	43,329	10.43%
299	Roswell	Roswell International Air Center	34,652	37,262	-7.00%
347	Hobbs	Lea County Regional	17,111	7,346	132.93%
351	Farmington	Four Corners Regional	16,337	16,322	0.09%
553	Carlsbad	Cavern City Air Terminal	2,776	2,707	2.55%
613	Clovis	Clovis Municipal	1,694	2,033	-16.67%
636	Silver City	Grant County	1,363	1,609	-15.29%
708	Clovis	Cannon AFB	676	918	-26.36%
827	Alamogordo	Holloman AFB	232	158	46.84%
913	Alamogordo	Alamogordo-White Sands Regional	88	390	-77.44%
1065	Lovington	Lea County-Zip Franklin Memorial	25	0	0.00%
1197	Las Vegas	Las Vegas Municipal	13	0	0.00%
1287	Taos	Taos Regional	8	5	60.00%
1319	Moriarty	Moriarty	6	5	20.00%
1366	Gallup	Gallup Municipal	5	0	0.00%

³⁶ City of Farmington, www.fmtn.org, (accessed April 2014)



Rank*	City	Airport Name	CY 12 Enplanements	CY 11 Enplanements	% Change
1404	Angel Fire	Angel Fire	4	0	0.00%
1479	Ruidoso	Sierra Blanca Regional	3	0	0.00%
1497	Santa Teresa	Dona Ana County at Santa Teresa	2	0	0.00%
1546	Las Cruces	Las Cruces International	2	122	-98.36%

*National rank by calendar year 2012 enplanements
Source: Federal Aviation Administration

General Aviation and Small Community Air Service

While over 95 percent of New Mexico's passengers utilize ABQ, 82 percent of the airplanes in New Mexico are at other municipal and general aviation airports.³⁷ Additionally, there are two other airports that handle significant air cargo: Gallup Municipal Airport (4.7 million pounds) and Tucumcari Municipal Airport (1.4 million pounds).³⁸ An April 2013 publication by NMAD entitled *New Mexico Small Community Air Service Study* looks at air service for 13 small commercial service airports in rural New Mexico communities between 1998 and 2013. Figure 2.18 illustrates small community passenger boardings between 2000 and 2011. Table 2.13 illustrates 2012 enplanements by city. New Mexico's small communities experience limited scheduled air service and relatively high fares. Residents of the small communities with commercial airports generally do not fly from their local facilities. Rather, they choose to fly from either the state's largest airport, Albuquerque, or from airports in Texas, such as Midland or El Paso. Air service is important to New Mexico's small communities because of their remoteness and lack of other transportation options. However, most of the state's population live within 250 miles of a commercial airport with low-fare carriers, and residents living in these remote areas frequently must make long drives. It is therefore difficult for small airports to attract adequate demand for air service.

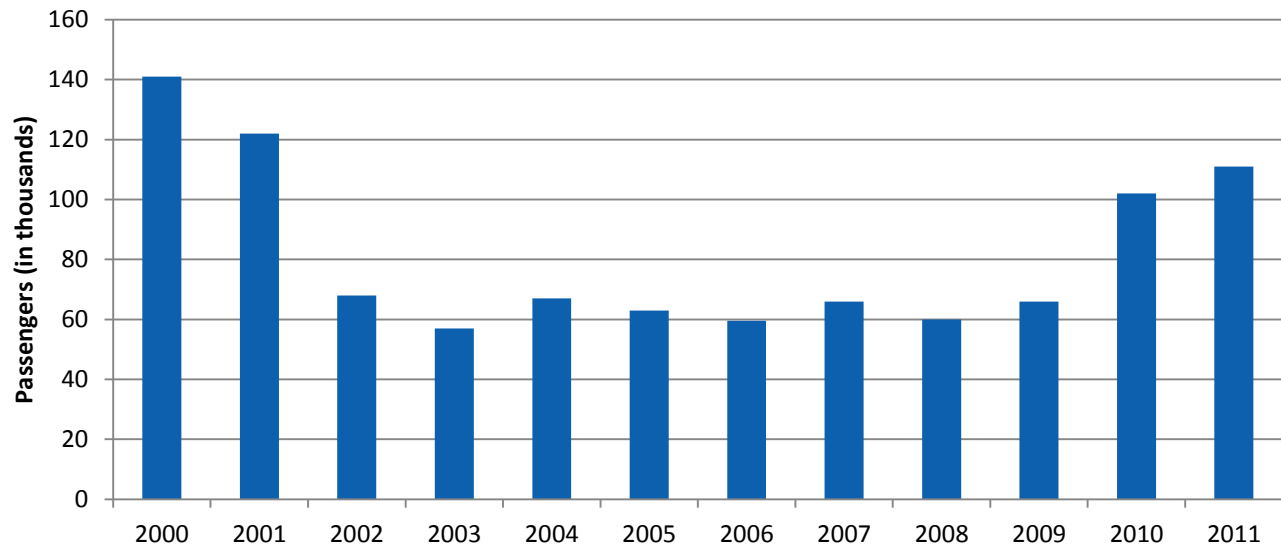
³⁷ New Mexico 2030 Statewide Multimodal Transportation Plan

³⁸ Federal Aviation Administration.

http://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/



Figure 2.18 Small Community Passenger Boardings in New Mexico



Note: Excludes Albuquerque

Source: NMDOT, New Mexico Small Community Air Service Study, April 2013

Federal and State Aviation Grants

Funding for airport capital and maintenance projects comes from a mix of Federal and state grants, as well as user fees. Per regulations of the FAA, airports are allowed to collect up to \$4.50 in Passenger Facility Charges (PFC) for every boarding passenger. Airports may receive additional revenue through Customer Facility Charges (CFC) administered through rental car companies. The FAA administers the Airport Improvement Program (AIP), a program which funds ground and air side capital improvements. In New Mexico, over \$26 million in Federal grants were awarded in FY2013 to address general maintenance of runways and airports including. Table 2.17 below details these projects.

Table 2.17 Federal Aviation Grants Awarded to New Mexico (FY2013)

Airport	Project	Grant Award
Alamogordo-White Sands Regional	Extend Runway (Phase 1 Design)	\$ 508,500
Albuquerque International Sunport	Rehabilitate Taxiway A (Phase 2)	\$ 9,077,735
Albuquerque International Sunport	VALE Infrastructure	\$ 483,584
Alexander Municipal	Improve Access Road	\$ 113,080
Carrizozo Municipal	Rehabilitate Taxiway	\$ 519,086
Cavern City Air Terminal	Update Airport Master Plan Study	\$ 310,024
Deming Municipal	Rehabilitate Taxiway	\$ 211,638



Airport	Project	Grant Award
Dona Ana County at Santa Teresa	Improve Runway Safety Area and Rehabilitate Runway	\$ 914,699
Double Eagle II	Rehabilitate Apron	\$ 120,880
Four Corners Regional	Install Perimeter Fencing, Rehabilitate Taxiway	\$ 1,916,265
Grant County	Rehabilitate Apron	\$ 439,038
Grants-Milan Municipal	Improve Runway Safety Area - 13/31	\$ 519,961
Hatch Municipal	Rehabilitate Runway	\$ 46,395
Las Vegas Municipal	Rehabilitate Runways (Apply Porous Friction Course)	\$ 1,375,586
Lea County Regional	Drainage Study	\$ 215,419
Los Alamos	Rehabilitate Taxiway	\$ 51,135
Moriarty	Rehabilitate Hangar Taxiway	\$ 201,831
Ohkay Owingeh	Rehabilitate Runway, Rehabilitate Runway Lighting 16/34	\$ 82,914
Portales Municipal	Rehabilitate Runway 01/19	\$ 140,684
Roswell International Air Center	Rehabilitate Runway 03/21 (Phase 1 - Design)	\$ 1,330,520
Santa Fe Municipal	Install Runway Lighting - 02/20	\$ 762,910
Santa Fe Municipal	Construct Taxiway "F"	\$ 1,557,510
Santa Rosa Route 66	Rehabilitate Runway 08/26	\$ 2,447,352
Socorro Municipal	Rehabilitate Runway 15/33	\$ 354,813
Taos Regional	Construct Runway 12/30 - Phase II Design-Only	\$ 752,452
Taos Regional	Environmental Mitigation	\$ 778,600
Taos Regional	Construct Snow Removal Equipment Building	\$ 320,713
Truth Or Consequences Municipal	Rehabilitate Taxiway "A"	\$ 168,764
Tucumcari Municipal	Construct Service Road, Rehabilitate Runway 03/21	\$ 295,952
Vaughn Municipal	Rehabilitate Runway 09/27	\$ 149,237

Source: NMDOT Aviation Division

Additionally, to date in FY 2014, the State of New Mexico has issued 16 project grants and 30 maintenance grants totaling over \$1.7 million in state funding. Project grants are for specific projects at airports whereas maintenance grants are annual grants given by the State for each airport to buy supplies and materials used at the airport to maintain the operational efficiency of the facility.



3.0 *Baseline Trend Analysis*



Understanding New Mexico's transportation system requires understanding the factors that influence the use of the transportation system today and in the future. This section examines the drivers of transportation demand and the key issues facing New Mexico today and in the future that may shape the future of travel on the transportation system, including which modes individuals choose and how much New Mexicans will use the transportation system overall.

3.1 *Demographics, Land Use, and Economic*

Trends in New Mexico's population, employment, personal income, and economic activity are key drivers influencing demand for transportation in the State. Analyzing these trends provides the context for understanding how travel demand has changed over time and how demand for all transportation modes may evolve in the future.

Demographics

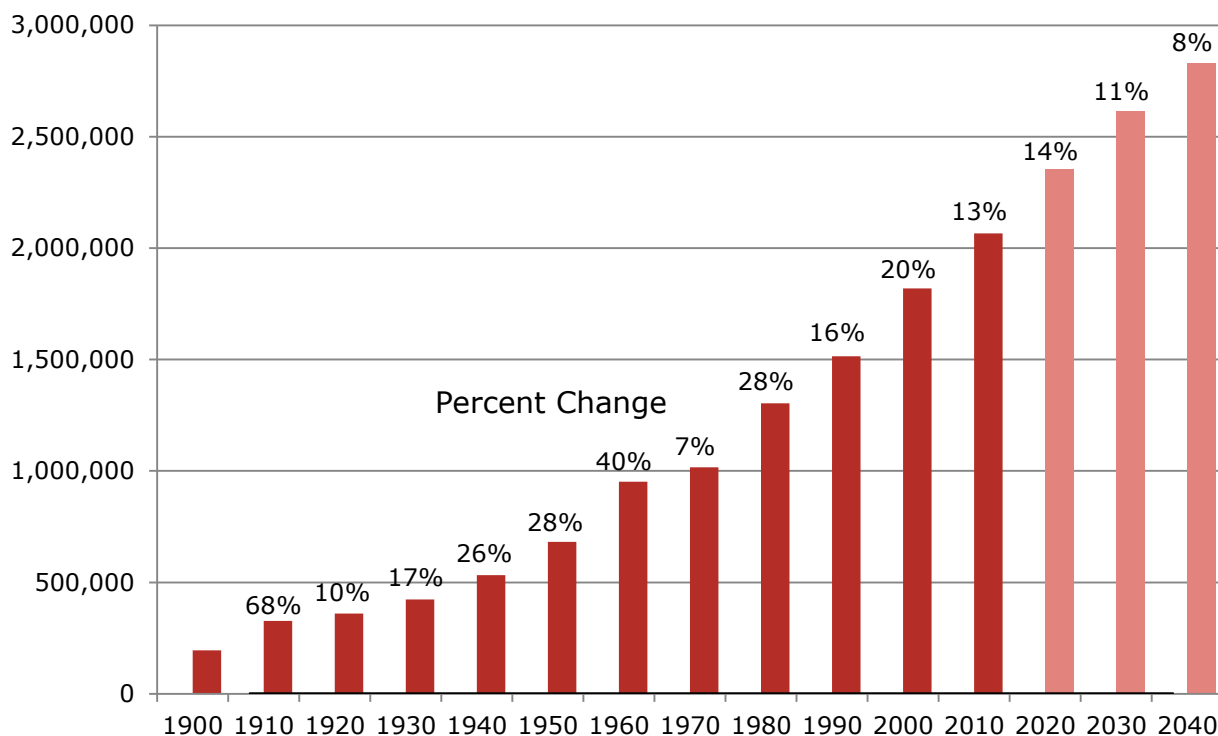
This section addresses one of the most significant drivers of transportation demand, including the overall number of residents, the distribution of those residents throughout the state, and the distribution of those residents by age.

While New Mexico is the fifth largest state in land area, it ranks 35th in population and 45th in population density. New Mexico's population has grown steadily since the State's inception with a large population jump during the "Baby Boomer" years due to the return of service men as well as an increase in defense spending for World War II and the Cold War. In the 1970's, the economy began to diversify which produced another round of population growth, slowing again during the deep recession starting in the 1990s.

New Mexico's population is expected to continue to grow, but at a declining rate, adding between 200,000 and 300,000 people a decade over the next 30 years. Figure 3.1 presents New Mexico's historic and future expected population growth. New Mexico is expected to reach nearly 3 million people in 2040.

Over the last century, population that was once relatively evenly distributed throughout the State has gradually shifted to concentrate in a few urban counties. Today, about two-thirds of the population lives in the State's six metropolitan counties (Bernalillo, Dona Ana, Santa Fe, Sandoval, San Juan, and Valencia). Today, the bulk of New Mexico's existing population resides in Bernalillo County and the Albuquerque metropolitan area. The next largest population concentrations are in Santa Fe and Sandoval Counties, and in the northwest corner of New Mexico in San Juan County. Existing population is also relatively high in the south central Dona Ana County surrounding the City of Las Cruces.

Figure 3.1 New Mexico Population and Growth Projection
1900 to 2040



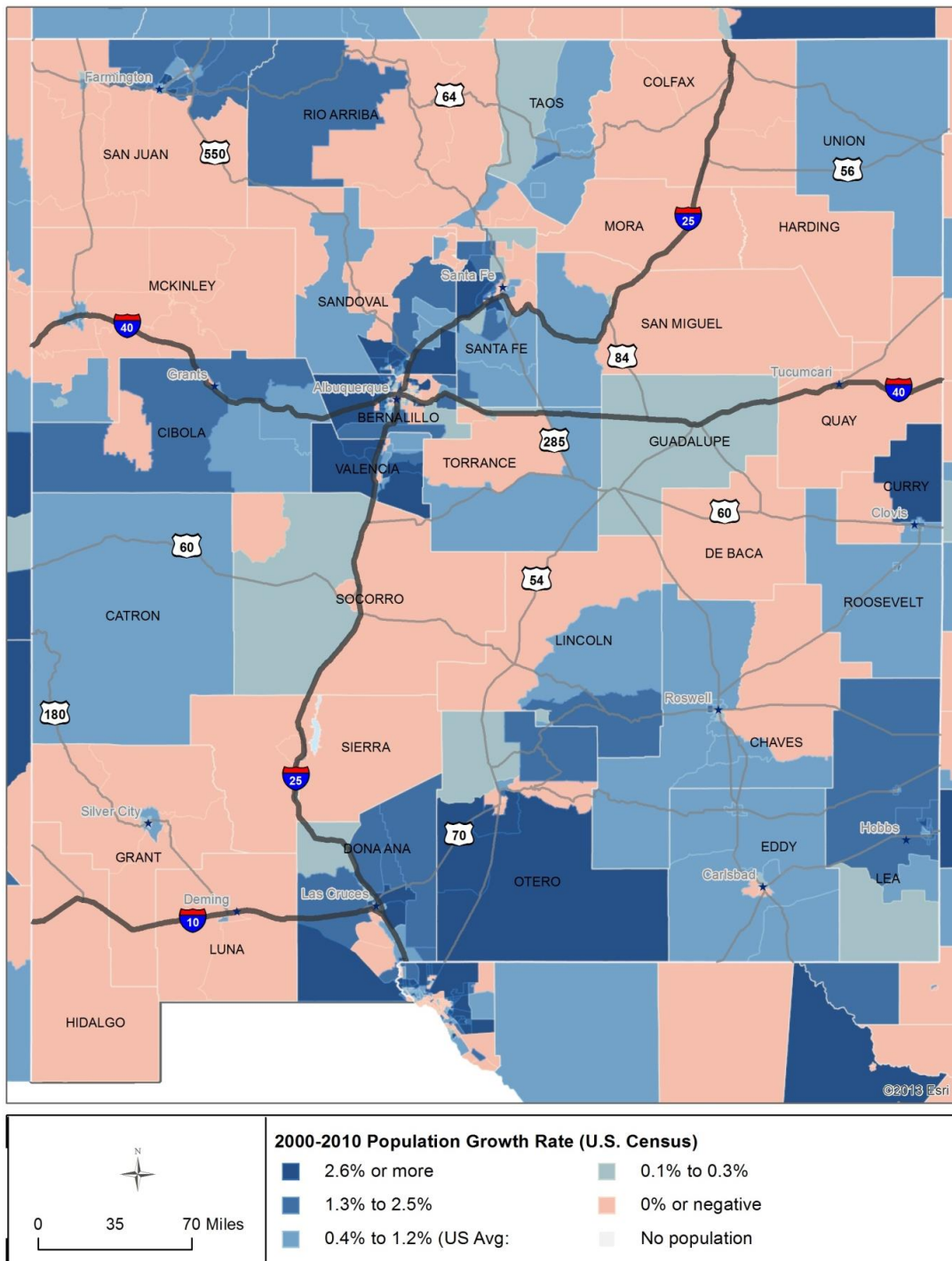
Source: U.S. Census Bureau, 1900-2010, University of New Mexico, 2012

Outside of the State's urbanized areas, the population of New Mexico is quite sparse. Severe terrain and lack of water make many areas unsuitable for development or even occupation. In addition, New Mexico's 22 tribes control development on their lands, and reserve much of their land base for purposes other than residential and commercial use. Tribal lands that are developed, especially traditional Pueblo villages, may have relatively high densities. National forests and National Park Service lands also limit private development, keeping population density low in these areas. Figure 3.2 presents recent growth rates (2000 to 2010) by county. Recent growth has shown significant concentration of people into the State's major metropolitan areas, mirroring a national trend. Overall, New Mexico's tribal lands saw a slight decrease in total population between 2000 and 2010 (see Table 3.4), with some communities increasing and others decreasing.

Expected future population growth rate is expected to continue the trend towards urban concentration. Some areas of the state are expected to grow at much faster rates than the statewide average, such as Bernalillo and Sandoval Counties in the Albuquerque metropolitan area, Dona Ana county in the south central area of the state, Santa Fe County in the Santa Fe metropolitan area, and Lea County in the far southeastern corner of New Mexico. At the same time, the Northeastern region – Harding, Colfax, Mora, DeBaca, and San Miguel counties – and Hidalgo County in the far Southwestern corner of the state are expected to see slight declines in population (Figure 3.3).

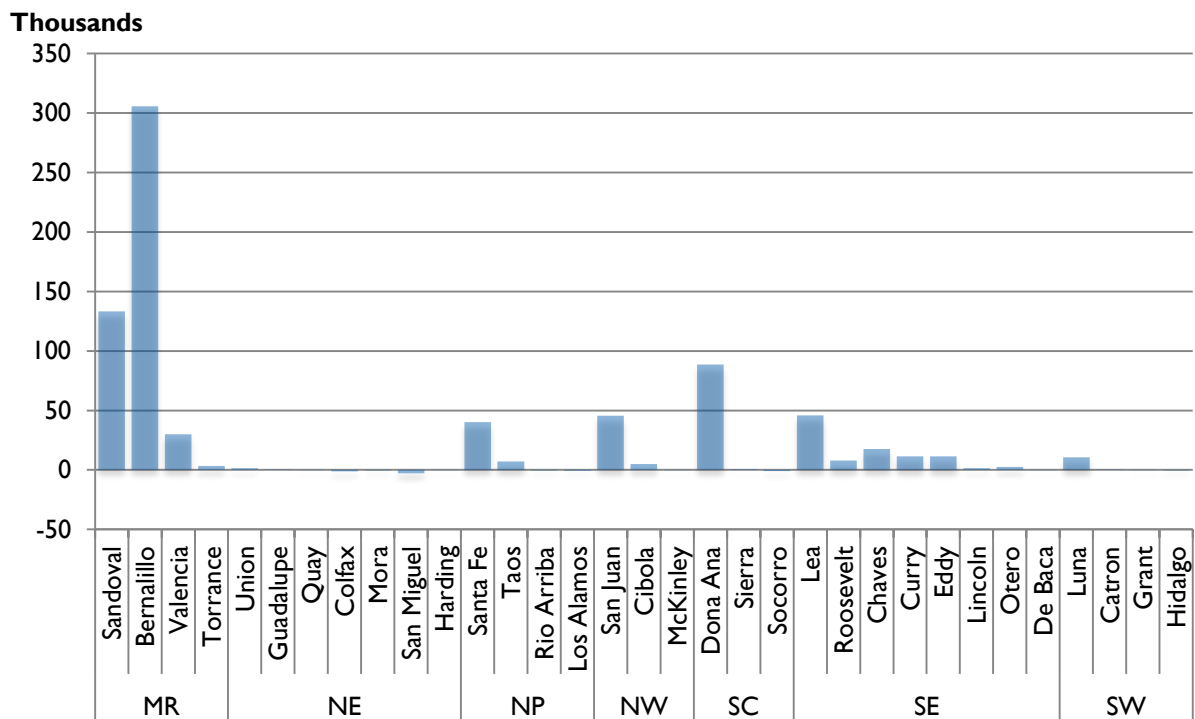


Figure 3.2 Population Growth Rates
2000 to 2010



Source: US Census Bureau, 2012

Figure 3.3 Projected Annual Population Growth by County
2010 to 2040



Source: Geospatial and Population Studies Group, University of New Mexico, 2012

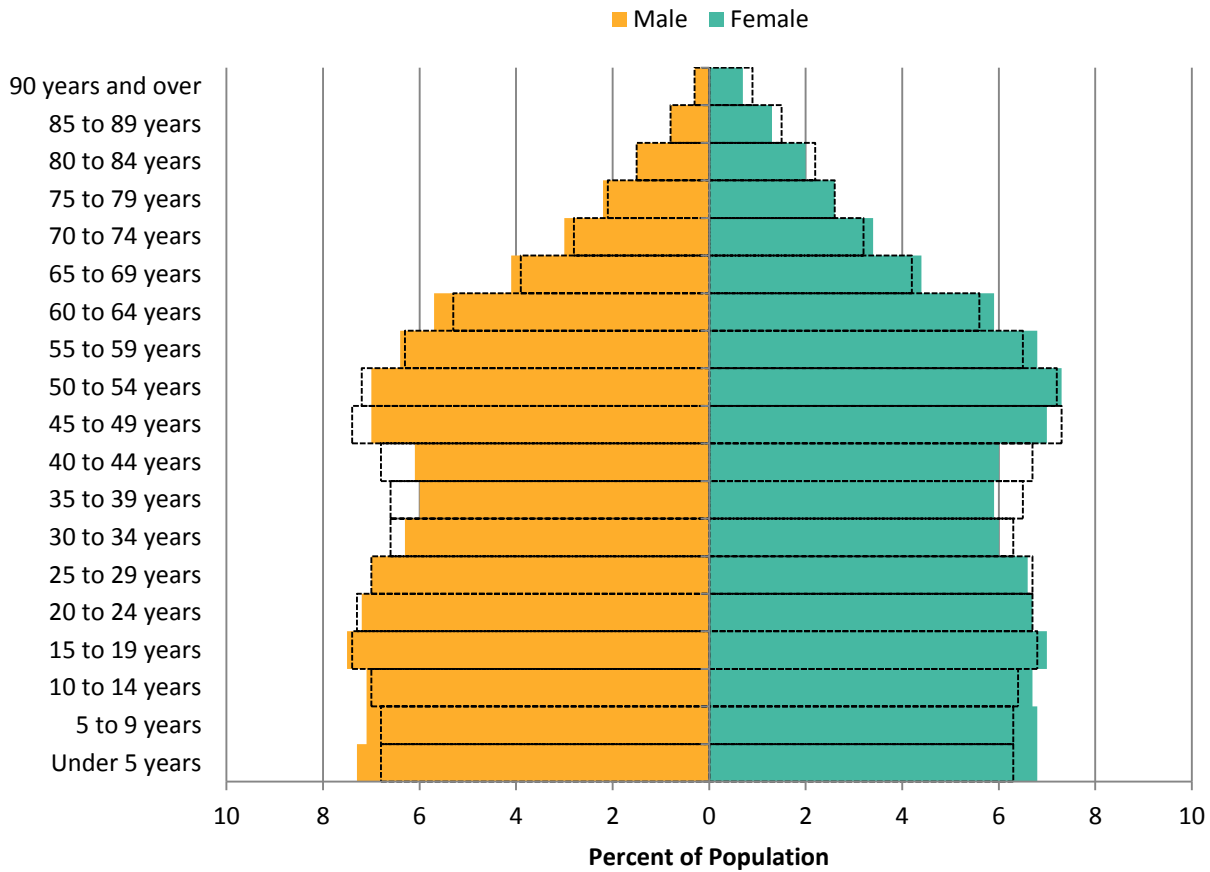
Note: MR – Mid-Region, NE – Northeast, NP – Northern Pueblos, NW – Northwest, SC – South Central, SE – Southeast, SW – Southwest

Population Age

Like the United States as a whole, New Mexico's population demographics are expected to change. Figure 3.4 presents population pyramids for both New Mexico (colored bars) and the United States (dotted lines). Population pyramids present the distribution of the population by both age and gender. The United States is currently somewhat older on average, with a noticeably larger percentage of both men and women in the 30 to 54 year old group. New Mexico, by contrast, has a greater percentage of very young (under 14 years of age).

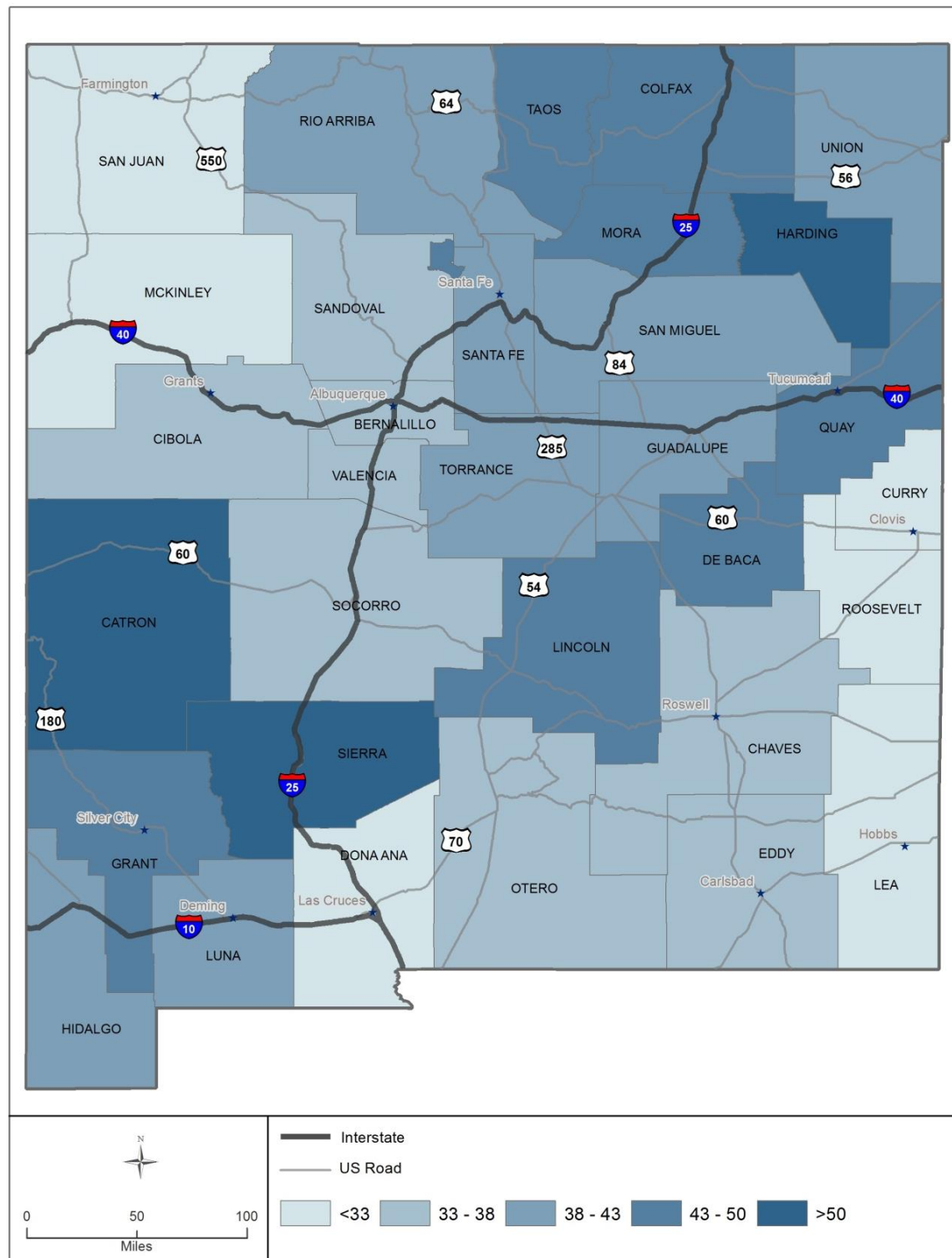
Figure 3.5 presents the median age by county. New Mexico's urban areas are relatively younger than the rural areas, though the Southeastern part of New Mexico is younger.

Figure 3.4 Population Pyramid for New Mexico and the United States



Source: U.S. Census, 2010, United States numbers are shown with dotted lines

Figure 3.5 New Mexico 2010 Population Median Age



From 2000 to 2030, the number of New Mexicans age 60 or older will more than double. By the year 2030, nearly one-third of New Mexicans will be over age 60, moving New Mexico from 39th to 4th in the nation in the percentage of population age 60 and older (Table 3.1). New Mexico's growing population of older adults reflects the aging of its Baby Boomers, as well as the continuing migration of retirees and others to western states. An aging population has increased demand for transportation services, as well as various health and in-home services.³⁹

Table 3.1 New Mexico Population Projection for Age 60 and Older

	2000	2005	2010	2015	2020	2025	2030
United States (#)	45,797,200	49,712,714	56,922,418	65,551,441	75,487,837	84,652,165	91,129,331
New Mexico (#)	283,837	329,715	401,973	486,868	575,267	647,186	682,036
United States (%)	16.3%	16.8%	18.4%	20.3%	22.5%	24.2%	25.1%
New Mexico (%)	15.6%	17.3%	20.3%	23.8%	27.6%	30.7%	32.5%

Source: NM Aging and Long-Term Services Department, 2013 based on US Census data

Race and Ethnicity

The racial and ethnic distribution of New Mexico is substantially different than that of the United States as a whole (Table 3.2). Based on US Census data, one in 10 New Mexican residents is Native American (American Indian or Alaska Native), considerably higher than the national average. Almost half of the population is of Hispanic or Latino ethnicity, close to three times higher than the U.S. as a whole. By contrast, the percentage of New Mexicans that are African American or Asian American are much smaller than the U.S. as a whole and the percentage that are White is somewhat higher.

³⁹New Mexico State Plan for Aging and Long-Term Services, NM Aging and Long-Term Services Department, 2013.



Table 3.2 New Mexico and United States Racial and Ethnic Makeup 2012

	New Mexico	United States
Race		
White alone	83.2%	77.9%
Black or African American alone	2.4%	13.1%
American Indian and Alaska Native alone	10.2%	1.2%
Asian alone	1.6%	5.1%
Native Hawaiian and Other Pacific Islander alone	0.2%	0.2%
Two or More Races	2.4%	2.4%
Ethnicity		
Hispanic or Latino	47.0%	16.9%
White alone, not Hispanic or Latino	39.8%	63.0%

Source: U.S. Census Bureau

Socioeconomic Trends

Personal Income

In addition to being one of the least densely population states, New Mexico is also one of the country's poorest. The State's per capita income ranks 43rd among the 50 states. The percentage of New Mexicans living below the poverty level is nearly 18 percent, compared to less than 13 percent for the United States as a whole. Only four of New Mexico's 33 counties (Los Alamos, Santa Fe, Curry, and Eddy) have average personal income rates above the national average, while six counties (Luna, McKinley, Socorro, Sierra, Guadalupe, and Cibola) have more than 25 percent of their population living below the poverty level.

Most of New Mexico's counties have lower average incomes than the national median income rate (Figure 3.6). The greatest concentration of high income residents occurs surrounding the City of Santa Fe. High income areas also occur in the older portions of the City of Albuquerque and near the City of Las Cruces. The lowest income counties occur in the west, an area with high concentrations of tribal lands, and southern part of the State (Figure 3.7). Estimated poverty rates of families living in Pueblos and Indian Nations exceeded 30% in 2013.⁴⁰

Overall, New Mexico's statewide per capita income is trending slightly upward even though the Mid Region remained relatively steady over the last 10 years. Los Alamos has the highest per capita

⁴⁰ US Census Bureau. American Community Survey, 2013 5-Year Estimates



income out of all of the counties, raising the average so that 24 out of New Mexico's 33 counties have per capita incomes lower than the state average.

Figure 3.6 Per Capita Income Trends by Region

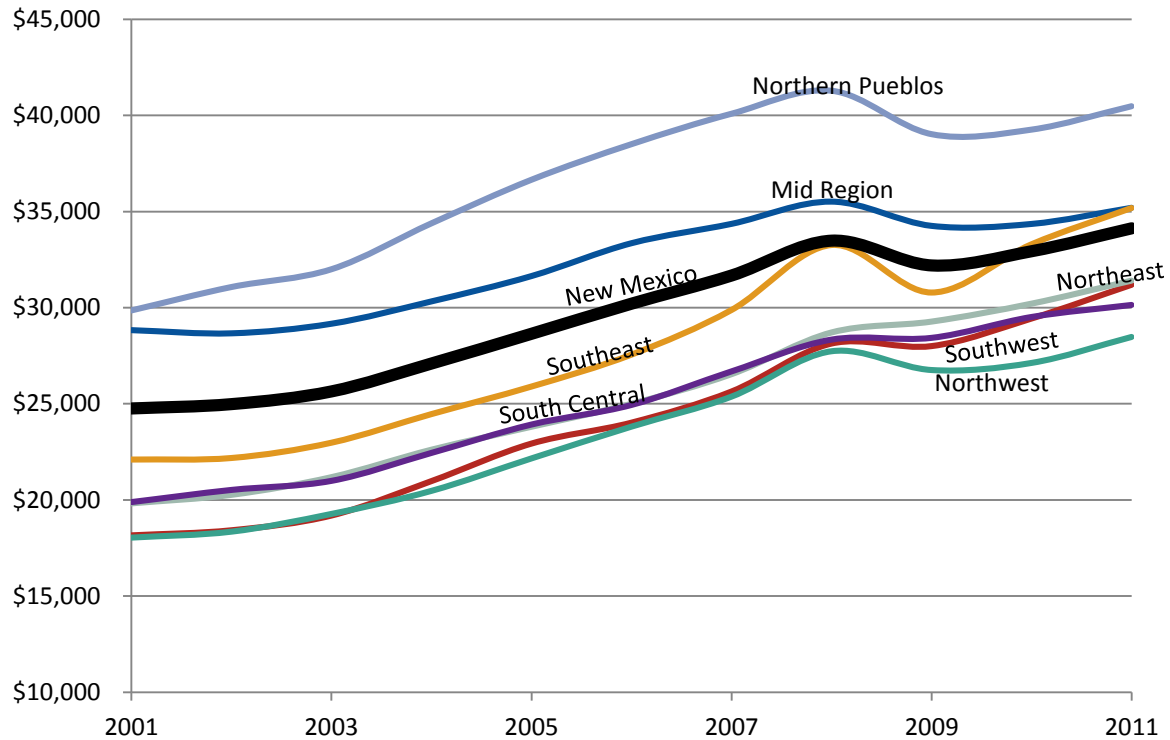
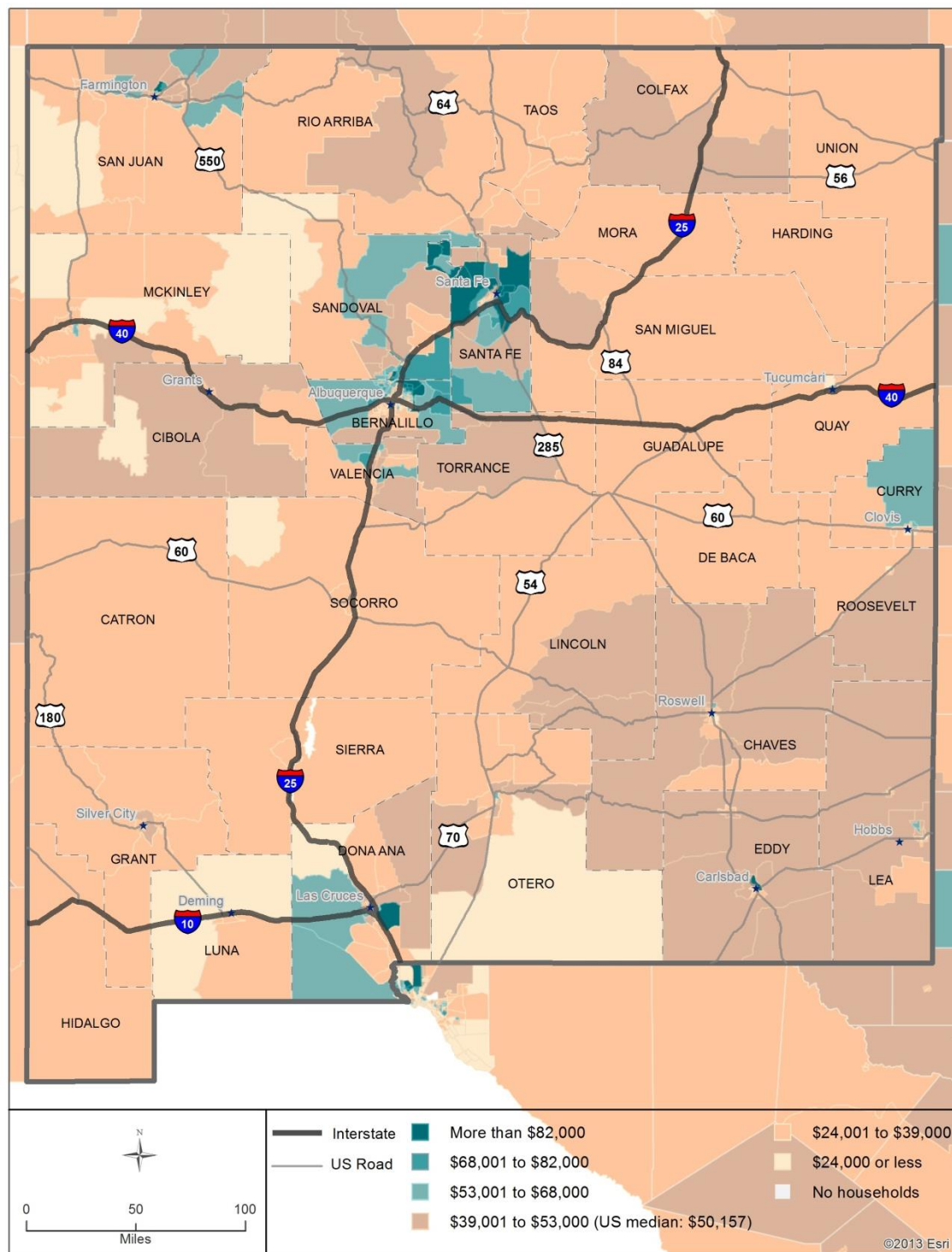


Figure 3.7 Median Household Income



Source: Esri, 2013.



While New Mexico has a small population, it has a comparatively high number of total vehicles. In 2009, there were 0.81 registered vehicles per capita in New Mexico. New Mexico has more vehicles registered per capita than Arizona (0.68) and Texas (0.73).

Employment and Industry trends

Outside of government, which represents the single largest employment sector (approximately 184,000 workers), education and healthcare, retail trade, professional and technical services, and tourism and hospitality are key economic clusters in the State (Figure 3.8). Total private sector employment reached 596,000 in 2011, though most major sectors remain below peak employment levels of 2008. Sectors that have recovered post-recession and are growing include education, healthcare, mining, and utilities. Table 3.3 presents the concentration of employment and gross state product by industry.

Figure 3.8 **New Mexico Employment by Economic Cluster**
2011



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Table 3.3 New Mexico Employment and Gross Domestic Product by Industry Sector
2012

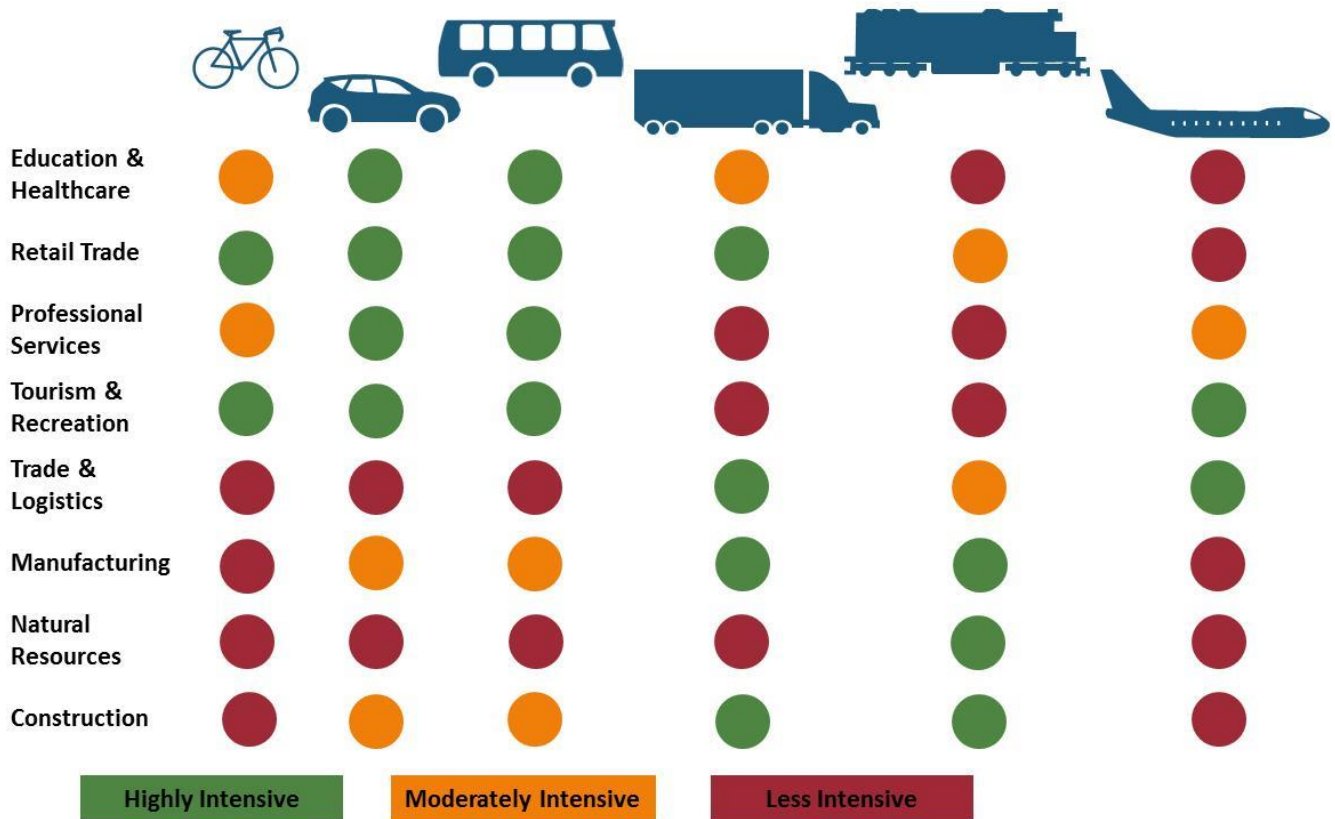
Industry	Employment	Gross State Product (\$Millions)
Agriculture, forestry, fishing, and hunting	10,902	\$1,488
Mining	23,988	\$6,027
Utilities	4,383	\$1,605
Construction	41,102	\$3,435
Manufacturing	29,652	\$5,805
Wholesale trade	21,416	\$2,720
Retail trade	90,983	\$5,190
Transportation and warehousing, excluding Postal Service	17,269	\$2,441
Information	13,513	\$2,306
Finance and insurance	20,894	\$2,808
Real estate, rental, leasing	6,178	\$10,046
Professional and technical services	52,422	\$6,475
Management of companies and enterprises	4,984	\$465
Administrative and waste services	40,500	\$2,248
Educational services	8,807	\$533
Healthcare and social assistance	105,410	\$6,161
Arts, entertainment, and recreation	8,838	\$477
Accommodation and food services	77,370	\$2,731
Other services, except government	21,003	\$2,053
Government	62,089	\$15,584

Source: Bureau of Labor Statistics “Quarterly Census of Employment and Wages”; U.S. Bureau of Economic Analysis, “Gross Domestic Product by State,” 2012

New Mexico’s employment sectors rely on different modes of transportation to varying degrees as exemplified in Figure 3.9. As such, transportation infrastructure and investments can help support the New Mexico economy and grow its economic clusters. Clusters employing large numbers of commuters, such as education and healthcare, retail trade, and professional services rely on efficient automobile, transit, and bicycle and pedestrian networks to move employees and consumers to and from major activity centers. Industries related to natural resources, trade and logistics, manufacturing, and construction rely most directly on freight networks to efficiently move goods in, through, and out of the State to destinations elsewhere. In addition, aviation plays an important role in business travel, tourism, and international trade.



Figure 3.9 Example Transportation Demand by Industry



Source: Cambridge Systematics, Inc.

3.2 Freight Movement

The New Mexico freight system was built to serve key freight-intensive industries, including oil and gas and other mining activities, agriculture and livestock, and manufacturing. As a large freight intensive state with a relatively small population, New Mexico has concentrated employment centers in proximity to major generators including mines, border crossings, rail yards, and distribution centers in order to take advantage of economies of scale and scope.

This section describes external trends that are influencing and will continue to impact the New Mexico freight transportation system and its role in global merchandise trade. The trends are subdivided into the following five categories:

- **Cross Border Trends** including issues related to New Mexico trade relationship with Mexico and internal developments within Mexico, particularly the state of Chihuahua, that impact current trade and traffic patterns.
- **Trucking Industry Trends** including issues related to truck drivers, trucking industry practices and emerging technologies that are impacting the trucking sector in New Mexico and throughout the United States.
- **Rail Industry Trends** including emerging trends in the railroad industry impacting New Mexico. It is taken largely from the recently completed New Mexico Rail Plan.
- **Supply Chain Trends** including New Mexico's trading relationships with the rest of the world and external factors that impact these relationships.
- **Warehousing and Distribution Center Trends** including shifts in warehousing and distribution practices that impact freight strategies.

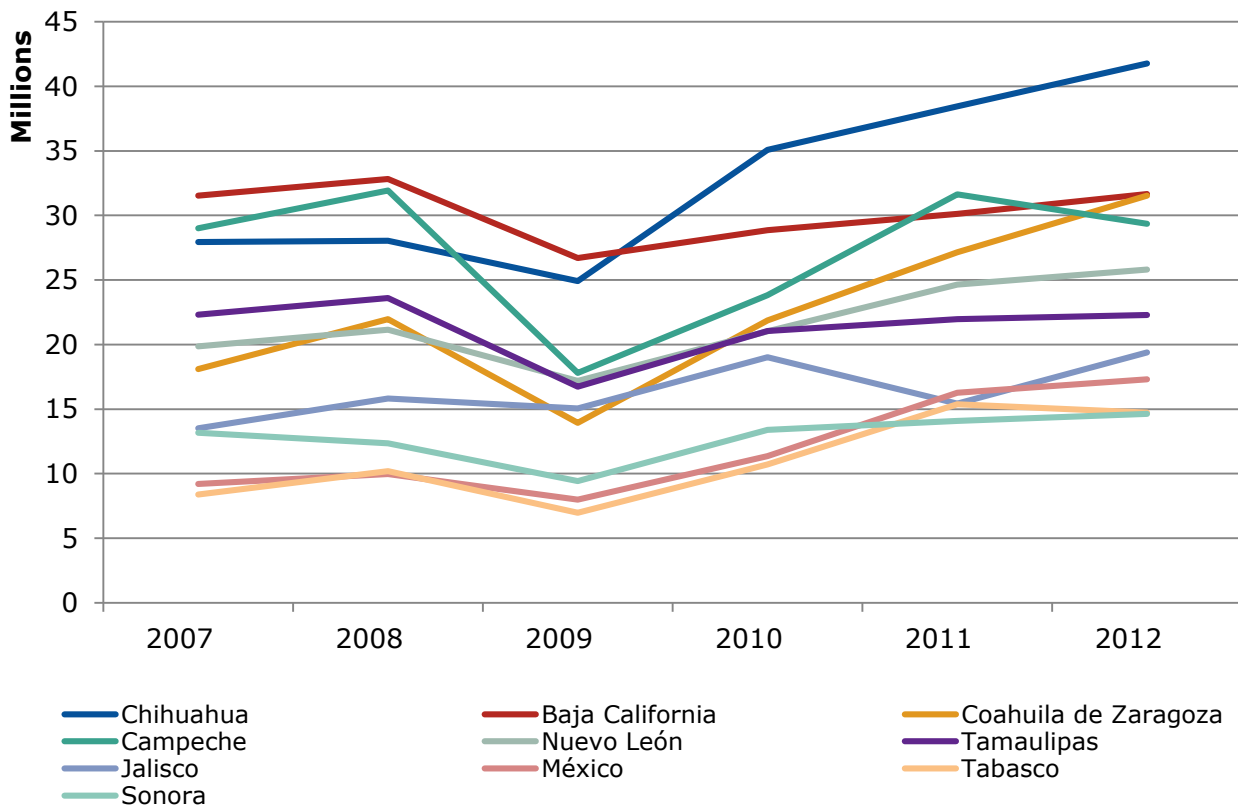
Cross Border Trends

The rapid growth of export-driven industrial production within the state of Chihuahua creates an substantial opportunity for New Mexico. The Mexican economy has shown remarkable resilience following the recession, and the resurgence of manufacturing within Mexico is being led by the Mexican states that border Texas and New Mexico, including Chihuahua. According to data released by INEGI, the Mexican Statistics Institute, in 2012 Chihuahua, with only 3 percent of the country's population, accounted for 13 percent of Mexico's total exports (excluding petroleum extraction). This makes Chihuahua Mexico's largest exporter.⁴¹ Since 2009, Chihuahua has shown a rate of growth that is far higher than any other Mexican state as shown in Figure 3.10.

⁴¹ "Chihuahua, Baja California y Coahuila, los estados más exportadores", February 17, 2014
<http://t21.com.mx/general/2014/02/17/chihuahua-baja-california-coahuila-estados-mas-exportadores>



Figure 3.10 Mexican Mining and Manufacturing Exports by State
Thousands of Dollars; 2007 to 2012



Source INEGI http://www.inegi.org.mx/est/contenidos/proyectos/registros/economicas/exporta_ef/default.aspx

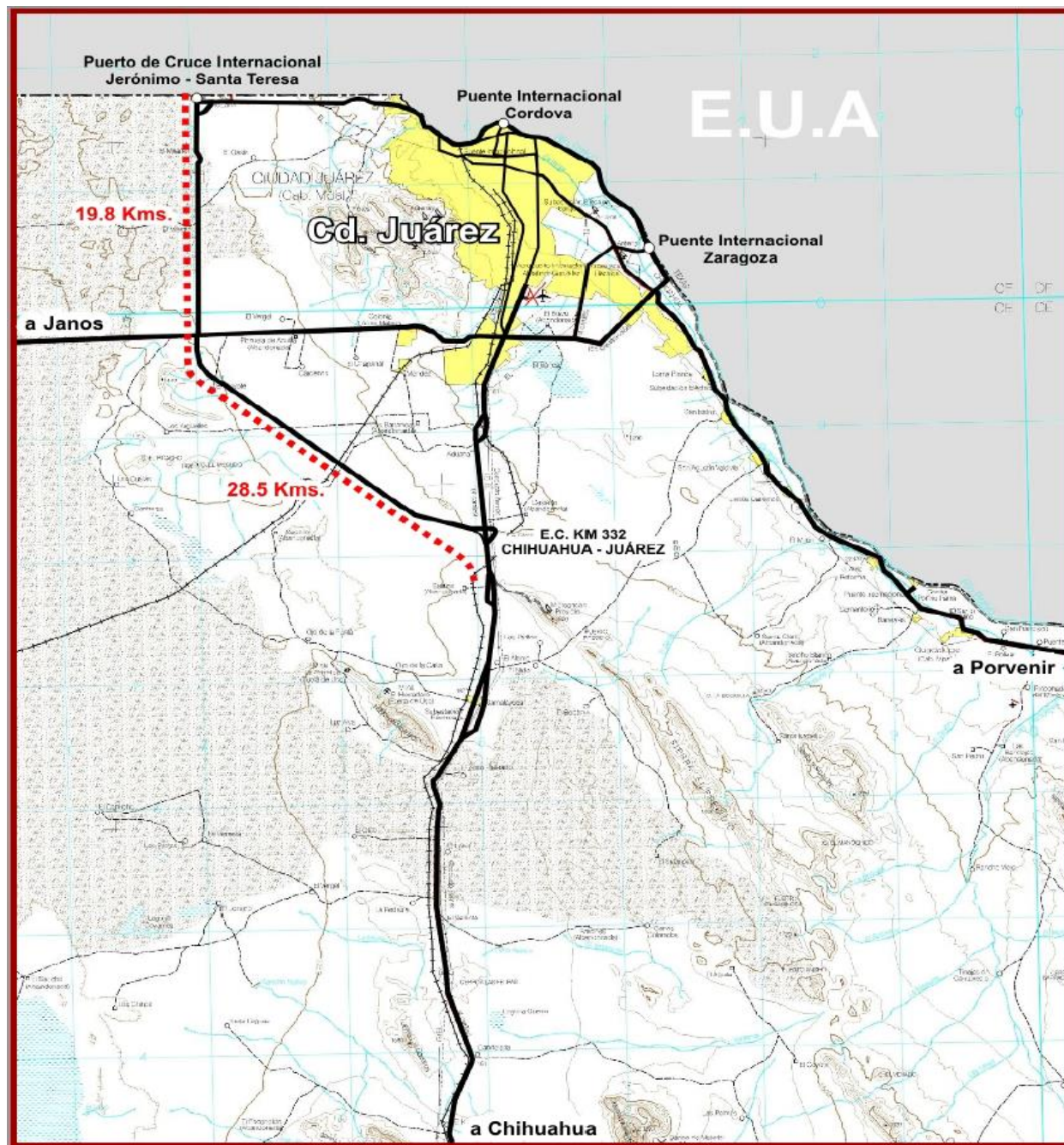
While exports from Mexico have traditionally been led from Maquiladora-based manufacturing facilities located near the border and delivered by truck, the Mexican port and rail network has seen substantial improvement in recent years – opening opportunities for new trading relationships. The Port of Manzanillo, which has a direct Ferromex rail connection to El Paso/Santa Teresa, has shown consistent container growth and handled 2.1 million 20-foot equivalent units (TEU) in 2013.

The Mexican government has recently sought to open the rail system to greater competition including the open publication of prices charged to customers for interconnections of routes owned by other companies. These reforms could broaden the range of commodities that can be viably handled by rail. When combined with the Mexican government’s efforts to open energy production, including shale gas reserves, to outside investment these changes could substantially expand rail freight within Mexico and the potential for new export traffic to New Mexico.

Also internationally, Mexico and the United States are looking to open a new rail port of entry near Santa Teresa (Figure 3.11). The proposed rail connection would increase capacity for rail and heavy freight movement, add to the industrial development of the region, increase commercial traffic in the border corridor, and eliminate movement of hazardous material in urban areas.

Following completion of a feasibility study, the New Mexico Border Authority will initiate the process to obtain Presidential Permit for the rail crossing.

Figure 3.11 Samaluyuca
Jeronimo/Santa Teresa Rail Bypass



Source: NMDOT



On the U.S. side of the border, there have also been significant developments that have strengthened New Mexico's industrial base and capacity to actively trade with Mexico. In particular, the development of the Foxconn electronics manufacturing hub opening just across the border in San Jeronimo has produced significant opportunities for suppliers of components and services in New Mexico. The factory has a output capacity of 55 thousand computers per day. So far, only one quarter of the land on which the production facility is sited has been developed.⁴²

In 2014, Union Pacific opened its new \$400 million Strauss Rail Yard just outside of Santa Teresa that will relieve stress on both its El Paso and Southern California yards. The new facility is 11.5 miles long and one mile wide with 200 miles of track. It includes fueling facilities to service locomotives, an intermodal block swap/switching yard, an intermodal ramp to serve local customers, and capacity to handle 225,000 container lifts annually. Once fully operational in 2015, the Strauss Rail Yard is forecasted to have a \$48.5 million annual impact growing to \$77.8 million in 2025.

The growth in trade and recent border development initiatives points to increased traffic and congestion at the border and connecting facilities as well as congestion in proximity to distribution centers that handle cross border trade.

Trucking Industry Trends

For several years the United States has experienced an acute shortage of licensed truck drivers. Employment in trucking sharply declined during the recession echoing a temporary fall off in freight demand led a number of qualified drivers to exit the industry. The industry has been attempting to recover ever since but continues to suffer from a high turnover rate for large truckload (TL) carriers (97 percent in 3Q2013).⁴³ In addition, drivers have seen their real wages drop since the recession ended.⁴⁴ The most recent state of logistics report estimates a 30,000 driver shortage nationwide.

An additional challenge to allocating trucker labor resources is the changing hours of service restrictions that have been enacted by the Federal Motor Carrier Administration (FMCSA). The regulations were intended to reduce incidence of fatigue-based crashes. Recent research completed by Washington State University supports the thesis that the FMCSA's new restart rule promulgated as part of the Hours of Service of Drivers Final Rule has measureable fatigue reduction benefits.⁴⁵

⁴² "Foxconn plant may boost Santa Teresa", 08/01/2012 *El Paso Times*

http://www.elpasotimes.com/ci_21203328/foxconn-plant-may-boost-santa-teresa

⁴³ <https://www.joc.com/sites/default/files/u64286/Truck%20Driver%20Turnover%203Q2013.jpg>

⁴⁴ <http://www.truckinginfo.com/blog/on-the-road/story/2013/09/why-drivers-do-not-believe-there-s-a-driver-shortage.aspx> and <http://www.truckinginfo.com/news/story/2013/09/atri-releases-updated-operation-costs-of-trucking-report.aspx>

⁴⁵ "Field Study on the Efficacy of the New Restart Provision for Hours of Service", January 2014, *Federal Motor Carrier Safety Administration*



For New Mexico, the nationwide trucking shortage has significant implications. Truckers are by nature a mobile workforce, so a national shortage is likely to have impacts on every state. Truckers will fill more lucrative positions; however, more utilitarian or lower margin trucking jobs will become difficult to fill.

Rail Industry Trends

New Mexico's position as a crossroads within the national freight rail network presents both opportunities and challenges for the State. On one hand, these rail lines generate significant revenues for the railroads, which means that the lines will attract capital spending for maintenance and expansion. On the other hand, the trains themselves are moving fast and bound for long-distance markets. This means that rail shippers in New Mexico will have to struggle harder to attract industrial development or initiate new or expanded service within the State. Several current industry trends impact the development of freight rail in New Mexico.

Truck Size and Weight

Truck size and weight limits on Federal highways have been largely static since 1991, when ISTEA prohibited states from increasing the size and weight of trucks beyond what they already allowed.

If truck size and weight limits were increased, it could potentially lead to significant mode shift from rail to truck for certain commodity types and could impact rail industry financial performance, particularly short line and regional railroads.

286K Rail

A critical concern is the need to upgrade track to handle the 286,000-pound railcars that have become the industry standard. This makes it increasingly difficult for shortline railroads to competitively handle certain types of traffic, as much of the shortline system is inadequate to handle the new standard. While most Class I tracks and bridges are capable of carrying 286,000-pound railcars (some are even designed to 315,000-pound standards), about half of shortline and regional railroad tracks are designed only for the old industry standard of 263,000-pound cars. In New Mexico, lack of 286,000-pound-capable track limits access to the transcontinental rail network for shippers located in areas not served by a Class I railroad, forcing them to use trucks to access markets. Only a fraction of shortline track in New Mexico is 286,000-pound capable, including the SWRR's Clovis Line and TNMR track between Monahans, Texas and Hobbs, New Mexico. SFS track is limited to 200,000 pounds and both Arizona Eastern Railroad (AZER) track and the portion of Texas-New Mexico Railroad (TNMR) track between Hobbs and Lovington have a maximum weight restriction of 263,000 pounds. In the longer term, some shortlines may not remain viable without upgrading to 286,000-pound capacity, further limiting options for the State's rail shippers.

Viability of Small Rail Shippers

Smaller rail shipments, what the railroads refer to as "carload" business, in the aggregate can represent significant revenue for the railroads, but are more time consuming and expensive to handle, and can result in inconsistent rail service to shippers.



Additionally, many New Mexico shippers are located on major long-distance freight routes and serving these local shippers may create conflicts with long-distance freight trains. Economies of scale have driven an increased prioritization of unit trains in the rail industry that is making it harder for single carload shippers to access the system. This occurs for a number of commodities including crude oil. If carload shippers are pushed aside by more profitable unit trains, this may mean that shippers have little choice but to ship by truck. In New Mexico, this would raise shipping costs for shortline shippers and could divert natural rail cargo to truck. It would also adversely impact shortline financial performance.

Trade and Supply Chain Trends

International trade is playing a growing role in New Mexico's economy. With direct connections to Mexico as well as the Ports of Los Angeles and Long Beach, Port of Oakland and Port of Houston, New Mexico is well positioned to capitalize on its position. Over \$2.7 billion in international exports were made in the state in 2013, and over \$8.7 billion in international exports were shipped through the state's trade gateways (Figure 3.12). Merchandise exports, or goods shipped via New Mexico, grew from just \$400 million in 2003 to over \$8 billion in 2013.

Figure 3.12 Value of International Exports, Merchandise, and Origin Exports



Recent trends in New Mexico show that exports of computer and electronic products have grown sharply since 2009 (Figure 3.13). With the exception of this commodity class, New Mexico's other leading export commodities by value are heavy duty materials that are conducive to movement by rail or truck. It is also notable that petroleum and coal products played almost no role in the New

Mexico export profile in 2009 but by 2013 represented the state's fifth largest commodity export by value.

The trade and logistics industry is integral to supporting goods produced and shipped from New Mexico and those being shipped through the state. Over 22,000 workers are employed in trade and logistics and there are 1,800 businesses operating in the industry in New Mexico. Workers in trade and logistics jobs earn more than the statewide average (\$43,000 to \$50,000 compared to \$40,000). Truck drivers and stock handlers are the fastest growing occupations, with growth rates of over 25 percent through 2020.

Figure 3.13 Value of International Exports Produced in New Mexico By Major Industry (2013)



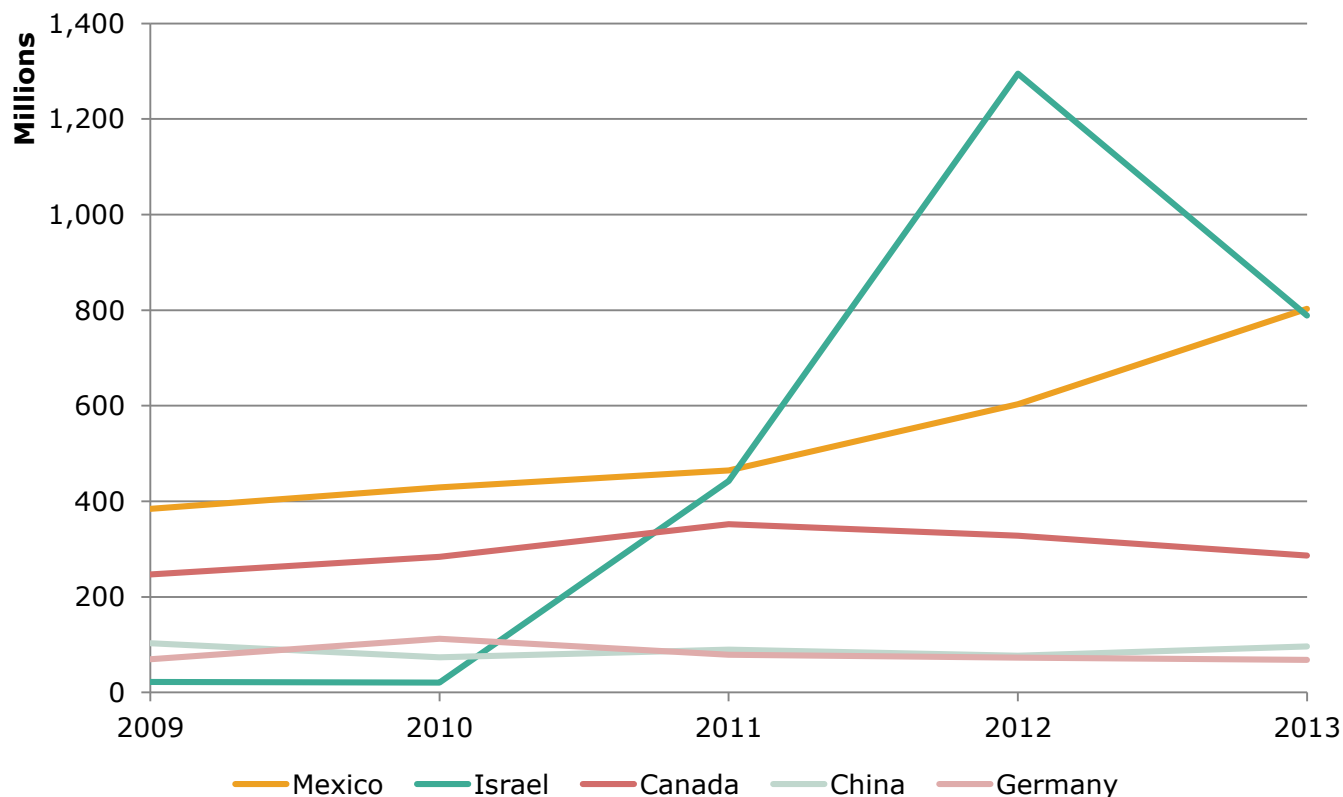
Source: US Census Foreign Trade Statistics

The benefits of the trade and logistics industry accrue to the state in terms of jobs, businesses, and economic activity – but transportation infrastructure must be efficient to attract and retain these industries. For example, 99 percent of New Mexico foreign merchandise trade departs from the Santa Teresa POE. The Columbus POE and Albuquerque International Sunport (ABQ) have additional capacity as foreign exports flown out of ABQ have declined over the past decade, from \$70 million in 2003 to \$12 million in 2013. As a result, additional cargo capacity exists to handle more high-value, time-sensitive goods that may be produced in the state.

New Mexico Exports by Trading Partner

Mexico has historically been New Mexico's largest trading partner (Figure 3.14). Since 2011, New Mexico exports to Israel have risen sharply. Israel was briefly New Mexico's top trading partner in 2012 before being eclipsed by Mexico in 2013. Almost all exports to Israel are computer and electronic products, specifically semiconductors and other electronic components. This recent trend underscores the importance of air freight for New Mexico as virtually all of New Mexico's exports to Israel are by air.

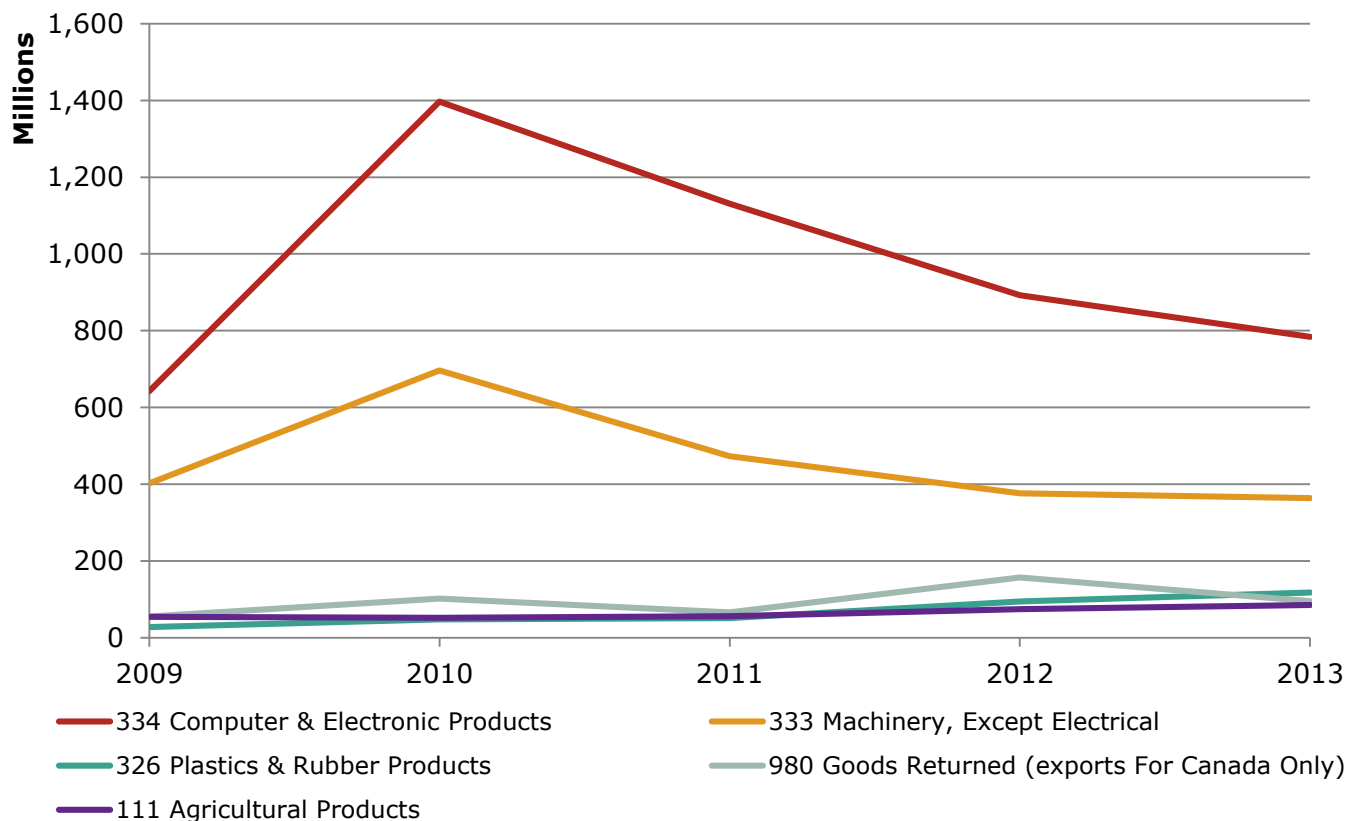
Figure 3.14 New Mexico State Exports by Trading Partner



Source: US Census Foreign Trade Statistics

New Mexico's top two imports categories are the same as its top two export categories (NAICS code 334 and 333), indicating mature intra-industry trade (Figure 3.15). New Mexico also processes imports that are re-exported to Canada (NAICS code 980).

Figure 3.15 State Imports by NAICS Commodity Class
Total Dollars

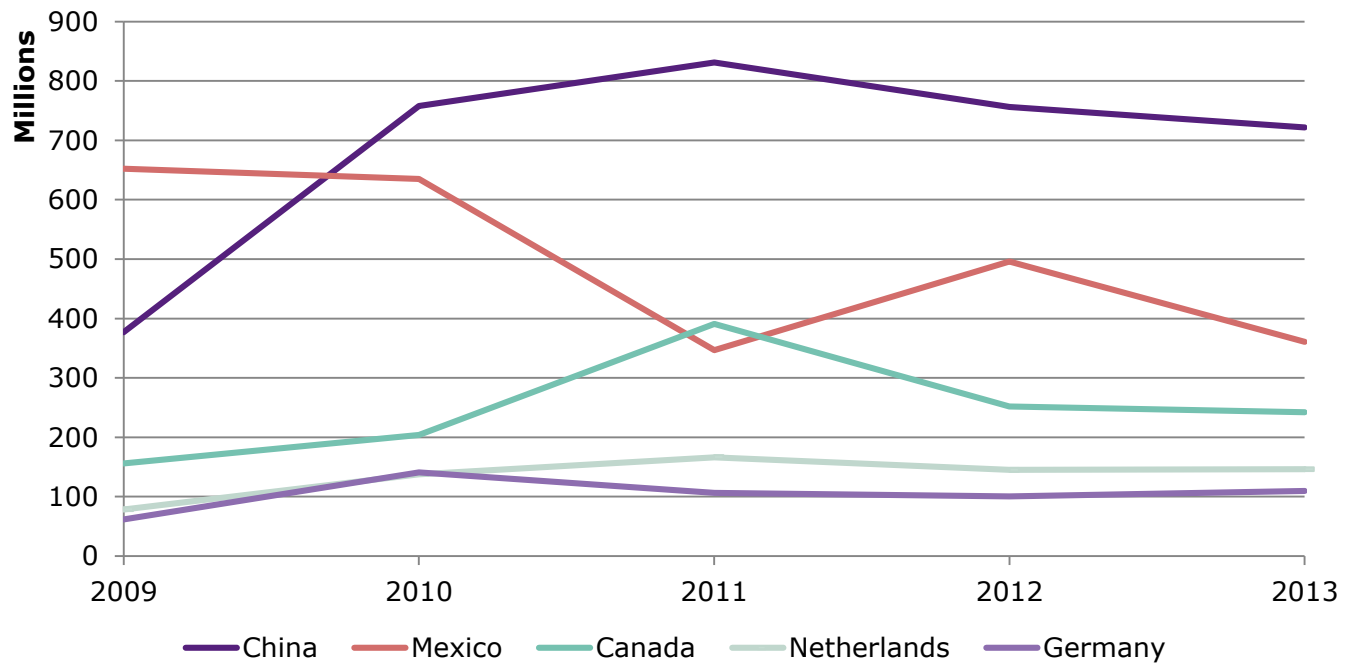


Source: US Census Foreign Trade Statistics

China is New Mexico's leading import partner (Figure 3.16). In 2013, New Mexico's imports from China were almost exactly double those from Mexico. Of the \$722 million in imports from China, \$414 million (57 percent) was in marine containerized form while \$290 million (40 percent) was air cargo.



Figure 3.16 New Mexico Imports by Trading Partner



Source: US Census Foreign Trade Statistics

Examining the role of modes in New Mexico imports and exports, it is clear that containerized trade plays a much more significant role in New Mexico for imports compared to exports (Figure 3.17 and 3.18). Containerized vessel imports constitutes the majority of import trade with Asia and Europe while accounting for less than 20 percent of exports to these regions.

Figure 3.17 New Mexico Imports by Mode by World Region
2013

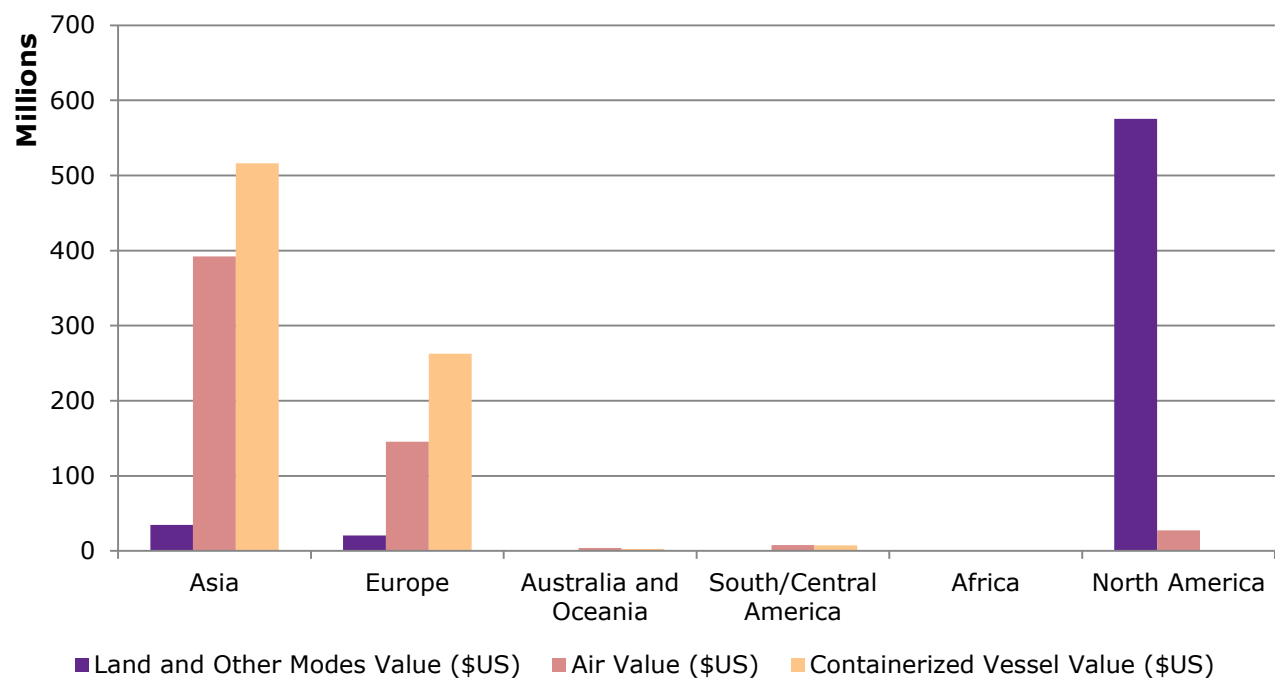
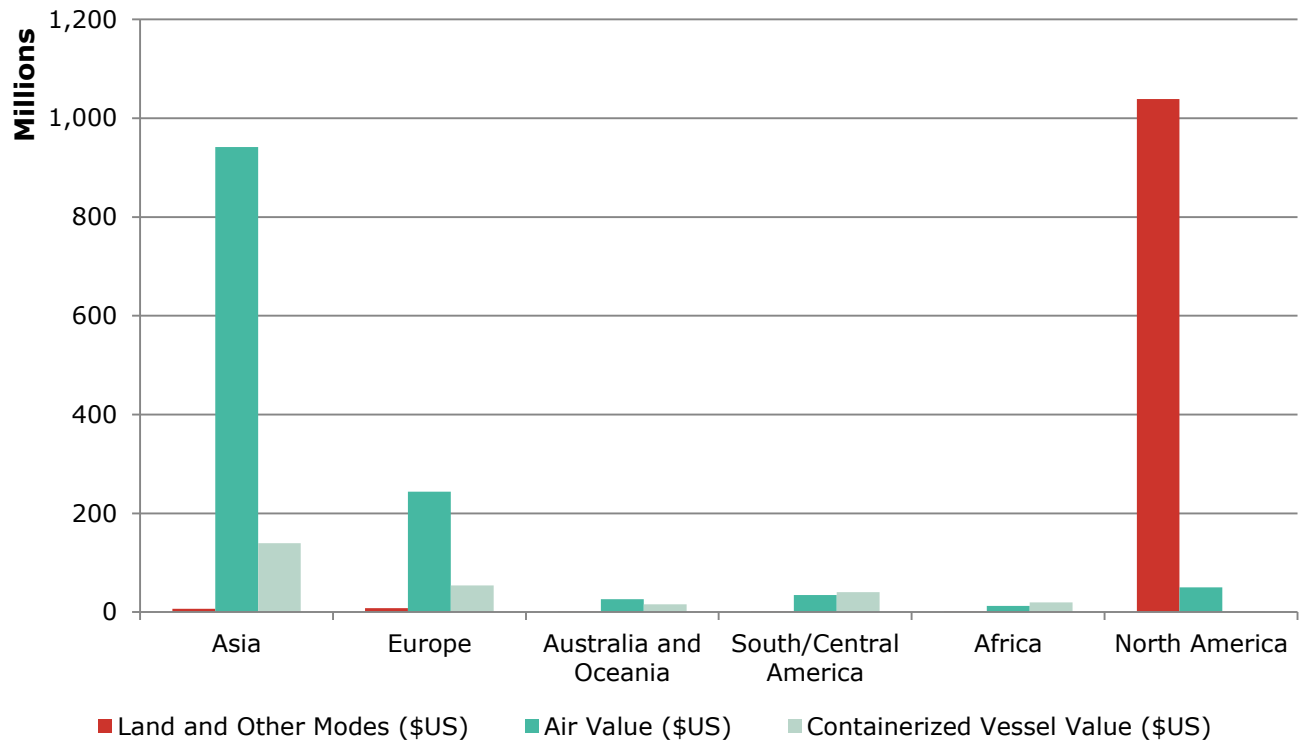


Figure 3.18 New Mexico Exports by Mode by World Region



Infrastructure Factors

Several major infrastructure mega-projects underway around the world are changing the dynamics of global trade and will potentially impact trade between New Mexico and its trading partners. The most well known infrastructure megaproject is the expansion of the Panama Canal to accommodate larger vessels. If, as predicted, the expansion of the Canal causes some rerouting of traffic from the West Coast to the East Coast, it could potentially relieve pressure on the East-West rail network running through New Mexico and open up greater opportunity for local carload shippers. The pattern of trade following canal expansion also depends on expansions of East Coast ports. The extent of diversion could also be impacted by expansions planned or underway at the major Mexican ports of Lazaro Cadenas, Manzanillo as well as smaller ports such as Mazatlan, Topolobambo and Guaymas.

Infrastructure will also be impacted by the privatization of Pemex (the Mexican state-owned petroleum company), which will allow outside investment to develop resources that have been out of the technological range of Mexico's state controlled energy monopoly. The privatization of Pemex will support offshore development in the Gulf Coast but also development of non-traditional

oil and gas such as shale gas.⁴⁶ The majority of Mexico's shale gas reserves are south of the Texas border; therefore, the impacts on New Mexico are likely to be indirect.

Warehousing and Distribution Center Trends

Growth of e-commerce

Through the growth of e-commerce, New Mexico consumers are playing a more direct role in steering freight logistics planning in real time. Integrators such as – UPS and FedEx – by expedited airfreight or ground, coordinate deliveries depending upon the delivery timeframe desired by the consumer and level of shipping costs the consumer is willing to pay. E-commerce orders through company-owned distribution centers, or through resellers like Amazon.com. This results in a decrease in package size and an increase in the volume of small packages moving through the integrator network.

Omnichannel commerce refers to retailers' efforts to seamlessly integrate their store and e-commerce selling channels.⁴⁷ It represents a strategy utilized by online retailers. It often requires same day delivery. The extent to which broader numbers of retailers can move into omnichannel commerce is still uncertain. If current trends towards e-commerce grow, it will likely result in an excess of retail space, which could potentially be rededicated as industrial distribution space.

Transloading

Over the past decade, big box retailers and large importers of fast moving consumer goods, in particular, have adopted an alternative supply chain and distribution strategy known as transloading. Transloading refers to the process in which a logistics service provider transfers the contents of an import container directly into a 53-foot domestic truck or rail container in a warehouse near a gateway port for onward movement to an U.S. inland point. Transloading delivers a lower per unit product cost for inland transportation. The majority of transload locations have been in close proximity to major maritime ports. For this reason, New Mexico is unlikely to become a major transload center.

⁴⁶ "Shale Boom Forces Pemex to Find New Buyers Mexico's Oil Firm Seeks Sales in Europe, Elsewhere", <http://online.wsj.com/news/articles/SB10001424052702304856504579338512815579366>

⁴⁷ Omnichannel navigator, James A. Cooke, Editor, Supply Chain Quarterly from the Quarter 1 2014



3.3 Visitor and Recreational Travel

Visitor and recreational travel is an important component of travel in New Mexico, and tourism is a significant driver of the State's economy. Tourism accounted for approximately 86,000 jobs in 2013 and is projected to add 3,000 jobs over the next year.⁴⁸ Tourism spans several industries, with top sectors including food and beverage, lodging, and recreation and entertainment. In total, tourism represents a labor-intensive collection of industries, contributing to household earning of approximately \$2.1 billion and \$1.2 billion in taxes in 2011.⁴⁹ The New Mexico Tourism Department's (NMTD) 2013 annual report indicates that 2012 set an all-time high for total domestic visitation and tourism related spending, with 32 million domestic overnight and day visitors spending \$5.9 billion.⁵⁰ In addition to tourism, outdoor recreation in New Mexico generates 68,000 jobs and \$6.1 billion in consumer spending.⁵¹ This section explores both the drivers of demand from visitors and the impact of tourism and recreational travel on New Mexico's transportation system and economy.

Drivers of Visitor Travel Demand

Visitors have unique transportation needs and travel behavior that differ from commuter and commercial travelers. For example, strategies to address visitor transportation demand might include signage, traveler information, mobile applications, alternative modes of access, and others. Overall, given the role that tourism plays in the state economy, strategies to attract and grow visitors will have implications for transportation more broadly in the state.

There are a number of characteristics related to tourist travel that are important when considering demand on the state's transportation system. Most visitors to New Mexico are domestic (97 percent) and the top origins are New Mexico and surrounding states (Figure 3.19). However, international visitors, which represent only 3.3 percent of visitors, comprise 11 percent of total visitor spending. The vast majority of visitors to New Mexico come by car (Figure 3.20), but air travelers spend significantly more than auto travelers. Overnight visitors to New Mexico spent an average of \$215 per person in 2012 and day-trip visitors spent \$70 per person. Air visitors, however, spend almost double that of drive visitors.⁵² A long-term goal of NMTD is to increase visitors that travel by airplane to New Mexico.

⁴⁸ New Mexico Tourism Department Data Highlights, July 29, 2013

⁴⁹ Tourism Economics, "The Economic Impact of Tourism in New Mexico", 2011 Analysis.

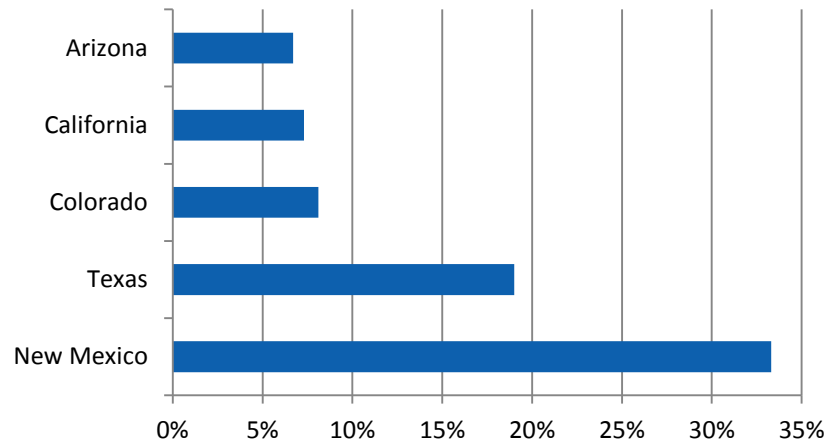
⁵⁰ New Mexico Tourism Department, <http://nmtourism.org/>, (accessed April, 2014)

⁵¹ Outdoor Industry Association, *The Outdoor Recreation Economy*.

⁵² James Orr, "New Mexico True", New Mexico Tourism Department 2013 Annual Report, September 2013

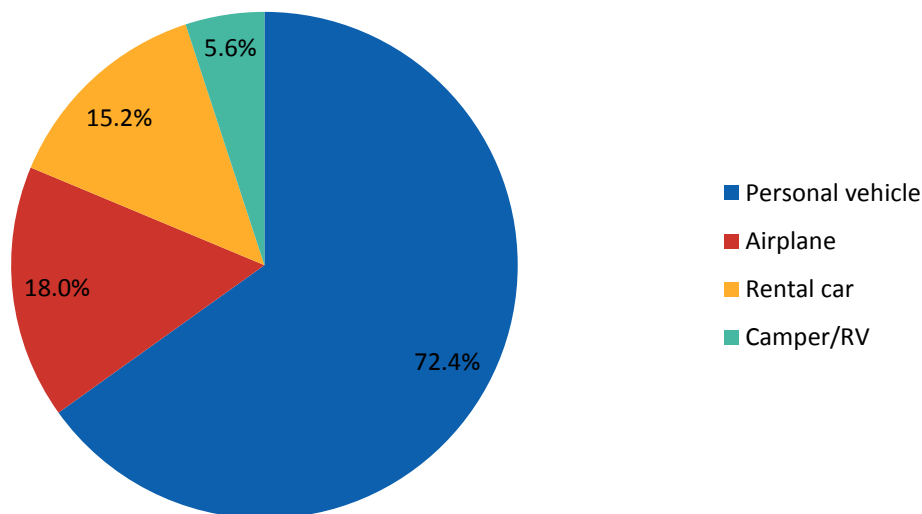


Figure 3.19 Top Origins of Visitors to New Mexico



Source: New Mexico Tourism Department, New Mexico Visitor Profile, July 2013.

Figure 3.20 Visitor Travel Modes



Source: New Mexico Tourism Department, New Mexico Visitor Profile, July 2013.

In 2012, travel to New Mexico was fairly consistent throughout the seasons with summer somewhat more popular than the other three seasons (Figure 3.21). Primary travel purposes included visiting relatives or friends and business trips, but other reasons include touring, outdoor trips (i.e., hiking, etc.), and special events (Figure 3.22). About five percent of visitors come to visit casinos.

Figure 3.21 Visitation to New Mexico by Season

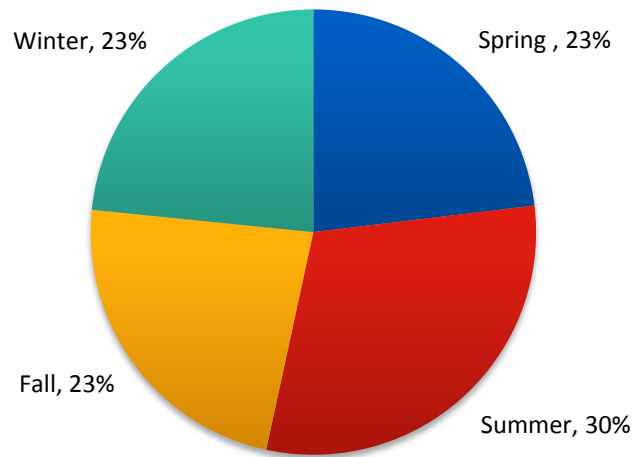
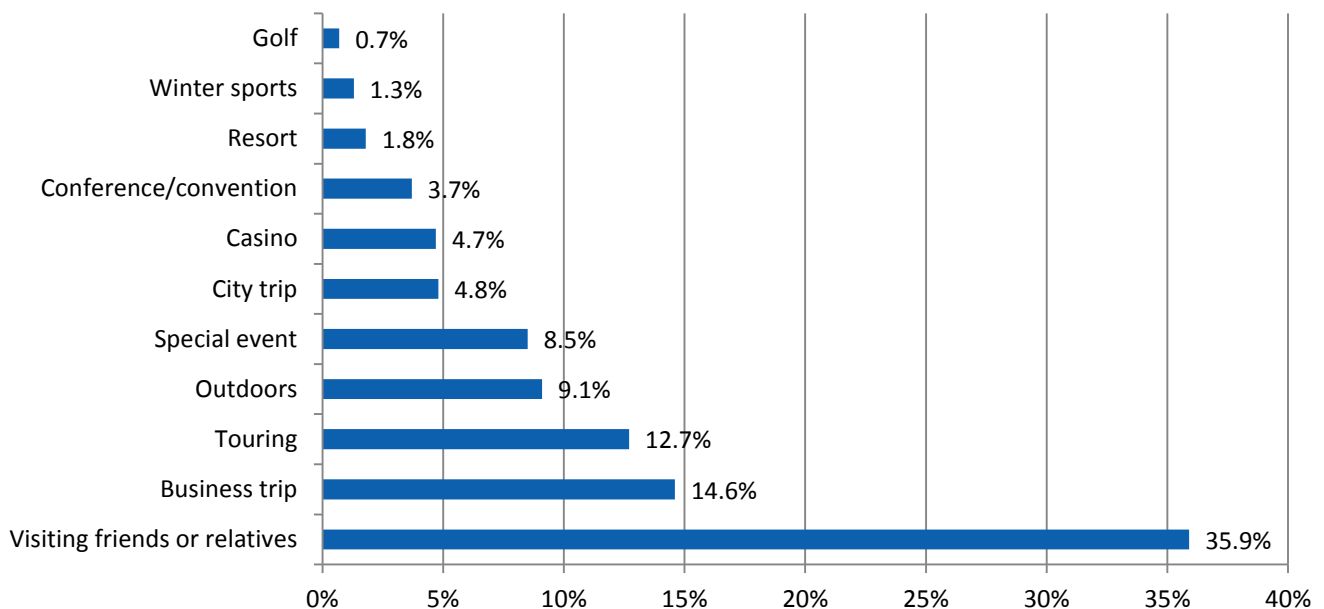


Figure 3.22 Top Reasons for Visitation to New Mexico



Source: New Mexico Tourism Department

New Mexico 2040 Plan

Appendix A – Existing Conditions and Trends

Future visitor demand for travel to New Mexico by visitors will depend on a variety of interrelated factors. Issues to be considered in the development of the 2040 Plan include:

- Recently, the border visitation zone (where no permits are required for travelers from Mexico) was expanded from 25 to 55 miles. This expansion is expected to increase travelers between 50,000 and 100,000 and spending between \$28 and \$46 million.
- Some of New Mexico's tourist attractions are dependent on climate conditions. From 2012-2013, National Parks saw a 4 percent decrease in visitation while New Mexico State Parks saw a decrease of almost 13 percent. State park visitation is particularly sensitive to drought conditions, and consistently low due to low water levels at parks where water-related recreation is critical.⁵³
- From 2012-2013, passenger volume through the Albuquerque International Airport was down 5.5 percent and air transportation employment is expected to shrink by over 12 percent between 2010 and 2020. Albuquerque International may be impacted by the phasing out of the Wright Amendment in October 2014, which currently restricts travel from Dallas Love Field to locations within and adjacent to Texas. These flights must first stop for a layover in airports like Albuquerque, bringing economic stimulation and jobs that may be at risk.
- New endeavors, like Spaceport America, may provide both an attraction to space travelers and to tourists. Manned suborbital flight (i.e., flights that reach space but do not make a full orbit around earth) are planned for 2014, and early expectations are for 200,000 visitors to Spaceport American and Truth or Consequences where the facility is located,⁵⁴ though limited research has been conducted to verify these expectations.
- Potential rerouting of the Amtrak Southwest Chief passenger rail service due to maintenance needs on the BNSF tracks that host this route has raised concerns about access for rail service and tourists to destinations in Northern New Mexico. Amtrak estimates that \$200 million is needed over 20 years to keep the route in service through New Mexico, Colorado, and Kansas and each state has been asked to provide \$40 million to support the route.⁵⁵ The current route makes five stops in New Mexico, including Gallup, Albuquerque, Lamy, Las Vegas, and, Raton. The NMDOT is currently studying the expected economic impact of the route on New Mexico.

⁵³ James Orr, "New Mexico True", New Mexico Tourism Department 2013 Annual Report, September 2013

⁵⁴ <http://www.citylab.com/tech/2014/05/how-influx-space-travelers-could-transform-one-new-mexico-town/9063/> (accessed May 21, 2014)

⁵⁵ http://www.nytimes.com/2014/02/18/us/small-towns-in-southwest-fear-loss-of-cherished-train-line.html?_r=1



Historic, Cultural, and Natural Resources

New Mexico's cultural heritage, natural environment, and landscapes are key attractions for visitors to the state. Cultural heritage tourism is based on the mosaic of places, traditions, art forms, celebrations and experiences that portray the land and its people, reflecting the diversity and character of New Mexico. New Mexico is an international travel destination for its rich mix of three major cultural traditions: Native American, Hispanic/Latino and Anglo-American. New Mexico's rich ethnic tapestry is reflected in its architecture, artwork, cultural centers, and cuisine.

Over 80 museums and numerous cultural sites, monuments and historic parks are located in New Mexico (Figure 3.23). Key historic, cultural, and natural sites for visitors include Chaco Canyon National Historic Park, Bandelier National Monument, Fort Union National Monument, Petroglyph National Monument, El Malpais National Monument, Rio Grande Del Norte National Monument, Three Rivers Petroglyph National Recreation Site, New Mexico State Parks, Route 66, and the Camino Real de Tierra Adentro. Some of the New Mexico's most unique cultural events include Santa Fe's Indian and Spanish Markets, Native American dances at the pueblos, and the many fiestas held on town plazas throughout the state. One of the most picturesque events, the Albuquerque International Balloon Fiesta, fills the sky each October.

New Mexico's cultural attractions also include historic trails and ghost towns. Most of the estimated 400 ghost towns in New Mexico were related to the mining of gold, silver, turquoise, copper, lead and coal. However, a few were farming communities (Figure 3.24).

These attractions drive demand for transportation access to the state by automobile, rail, and airplane. Transportation connections to these sites support the New Mexico economy by facilitating visitor access. The dispersion of sites the state means that automobile travel is an important component of state tourism, though access using other modes will also be important. It also is valuable for the State's transportation facilities to complement their physical settings so as not to detract from the state's landscapes and natural resources that support the economy.

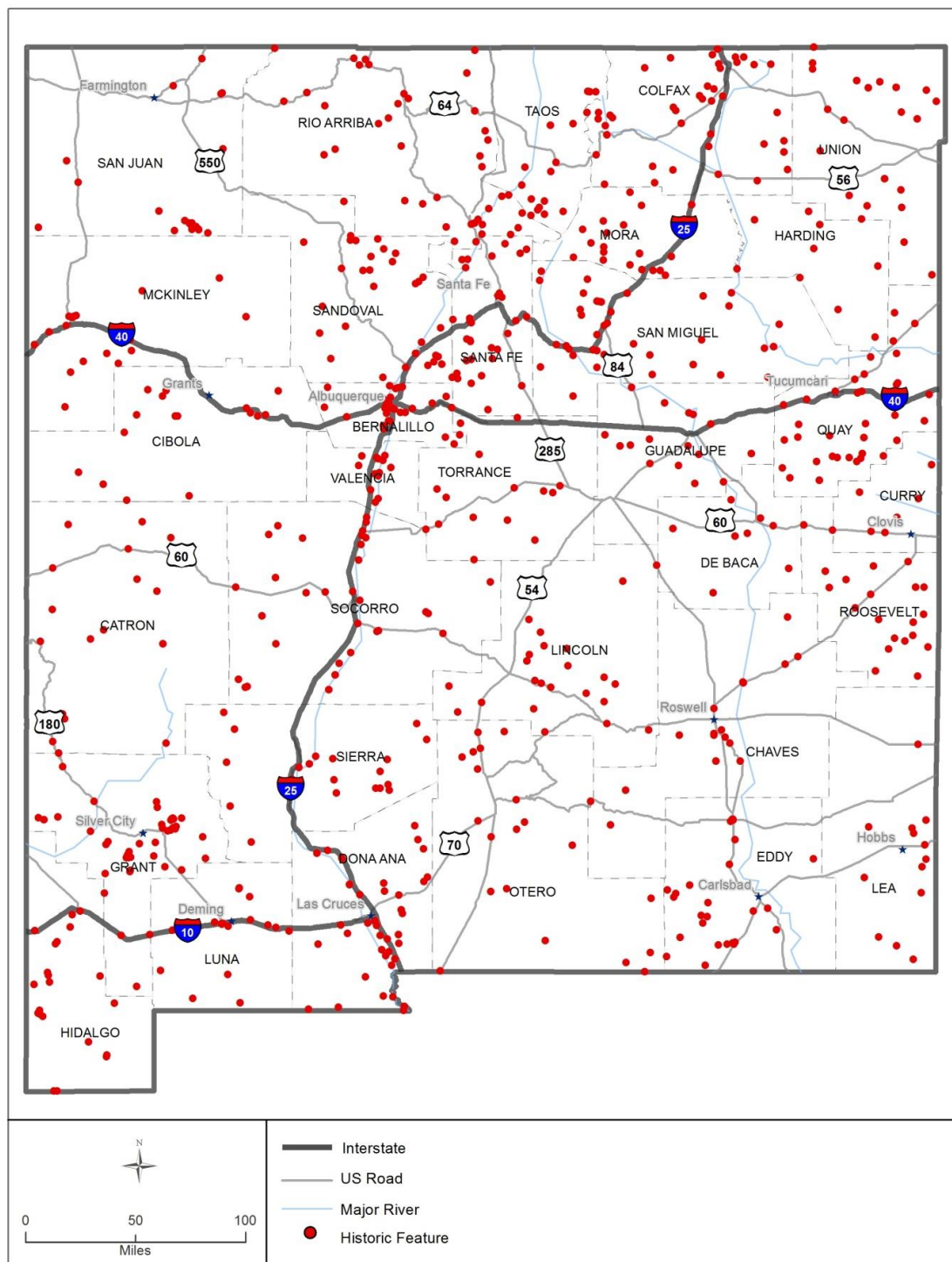
Top New Mexico Natural Attractions (over 100,000 annual visits)

- Santa Fe National Forest (1,496,000 annual visits)
- Cibola National Forest (1,290,000 annual visits)
- Albuquerque BioPark (1,200,000 annual visits)
- Elephant Butte Lake State Park (1,009,488 annual visits)
- Carson National Forest (960,000 annual visits)

Source: New Mexico Tourism Department

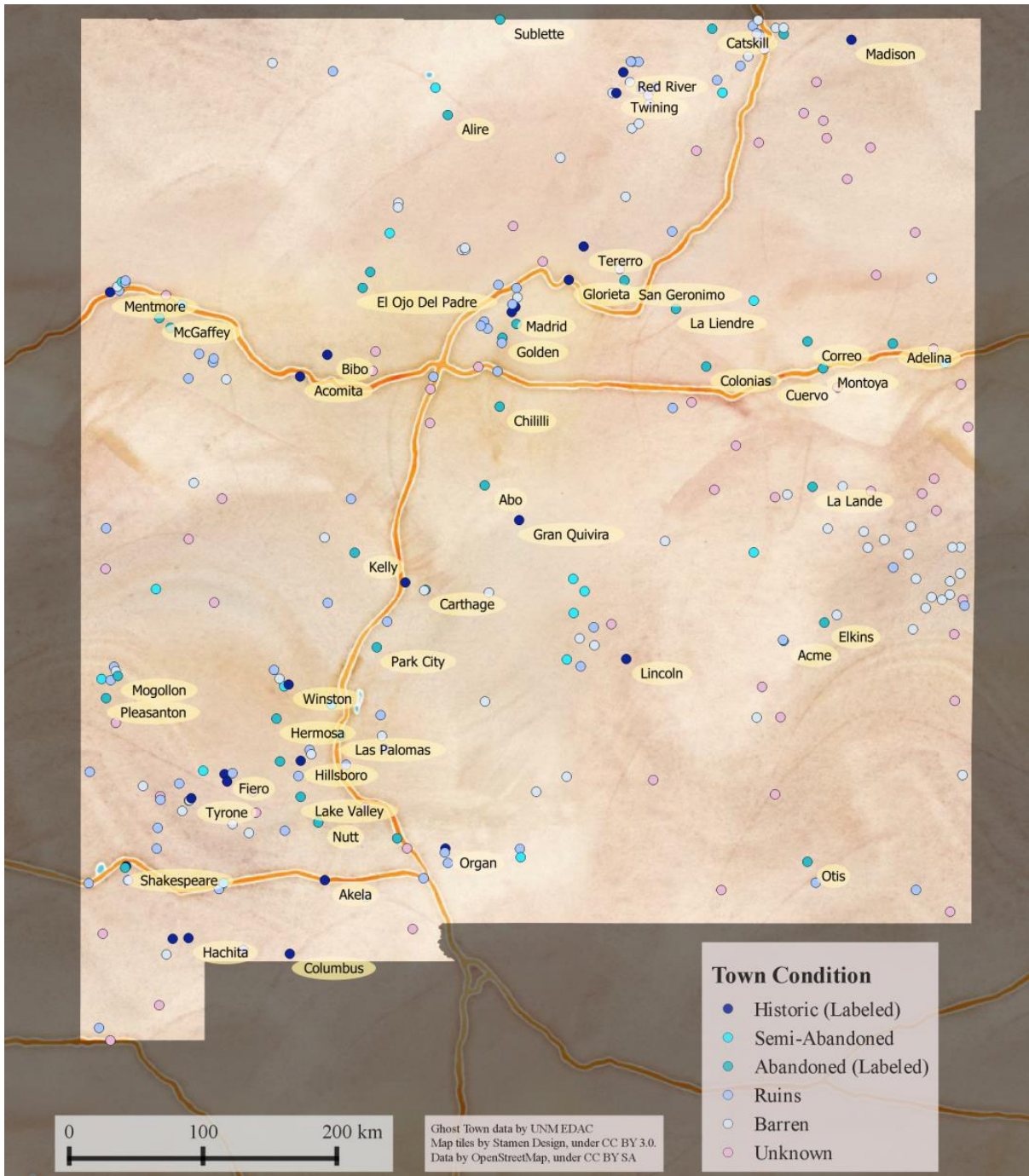


Figure 3.23 New Mexico Historic Features
2013



Source: New Mexico Resource Geographic Information System Program, <http://rgis.unm.edu/>

Figure 3.24 New Mexico Ghost Towns
2013



Source: RGIS New Mexico Resource Geographic Information System Program, <http://rgis.unm.edu/>

Scenic Byways and Railways

New Mexico's transportation system plays an important role in supporting tourism through scenic byways and railways and other similar programs. The Scenic Byways program was established by ISTEA to recognize roads having outstanding scenic, historic, cultural, natural, recreational, and/or archaeological qualities. New Mexico has participated in the program since its inception. New Mexico now has 26 Scenic Byways (Figure 3.25), six of which are designated as National Scenic Byways. The program has brought in an excess of \$10 million in Federal funds to projects in New Mexico, mostly in rural areas. Designation as a scenic byway serves both to protect the intangible assets of New Mexico's roadways, but also to promote activities that have direct financial impact on the State and its special regions and communities. Scenic Byways are logical locations for planning and construction of pedestrian, bicycle and equestrian facilities.

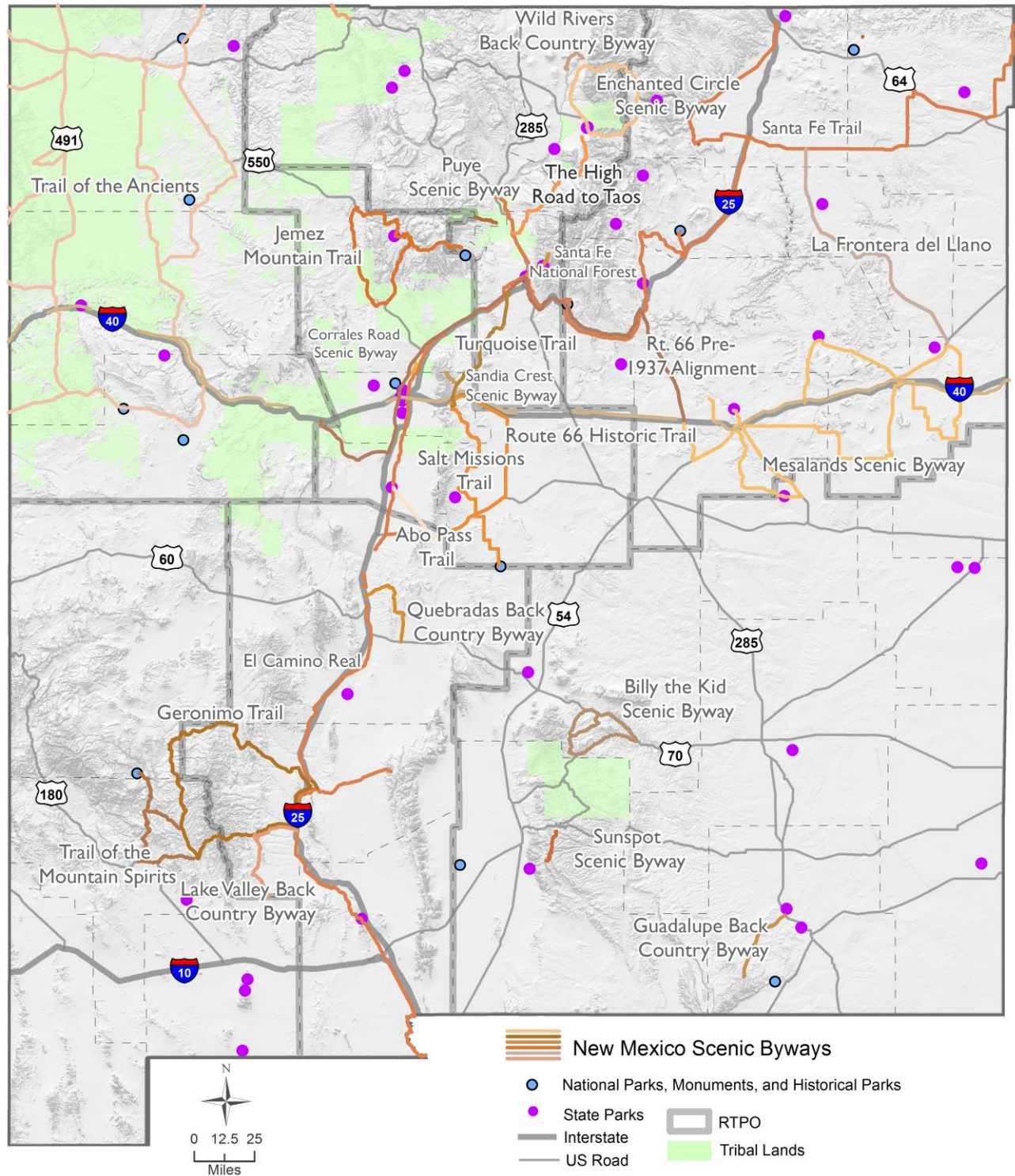
The Northern Rio Grande National Heritage Area (NRGNHA) is a prime example of the inter-relationship between economic development, environmental and cultural preservation, tourism and transportation. The NRGNHA was established by the U.S. Congress in October 2006 to honor the heritage, culture and traditions of Santa Fe, Rio Arriba and Taos Counties. The acronym NRGNHA also refers to the non-profit established to act as a planning partner with the National Heritage Area and serve as a liaison with Federal, State, and local governments, non-profits, and other Heritage Area partners to help communities develop projects pertaining to historical and cultural programs, interpretive programs and activities and celebrations. Goals include: strengthening communities and creating job opportunities; community development; sustainable agriculture, arts, crafts and traditional practices; sustainable tourism; and respect for traditional values. The NRGNHA encompasses a number of scenic drives, including: the Enchanted Circle Scenic Byway, Puyé Scenic Byway, El Camino Real National Scenic Byway, Route 66 National Scenic Byway, Santa Fe National Forest Scenic Byway, Santa Fe Trail National Scenic Byway, Wild Rivers Backcountry Byway, and the High Road to Taos. The NRGNHA is just one example of the potential for multi-disciplinary partnerships to expand between State, Federal, local and tribal entities and non-governmental organizations (NGOs) concerned with environmental and cultural resource protection, recreation, education, tourism, economic development and transportation in New Mexico, where so many of these resources are located within lands owned and managed by public agencies or non-profits.

The Cumbres & Toltec Scenic Railroad (C&TS), jointly owned by the states of New Mexico and Colorado, is a narrow gauge excursion steam railroad and a Registered National Historic Site. Constructed in 1880 as the San Juan Extension by the Denver and Rio Grande Railroad, it served area mining camps as a means to finance the railroad's original intention of building to Mexico City and a Mexican ocean port—they managed to get as far south as Santa Fe. C&TS today carries no freight.

The New Mexico Tourism Department is actively promoting Green Tourism, also known as Ecotourism, through the creation of a new division. Scenic Byways, cycling tours, mountain bike, equestrian and hiking access points are among the transportation-related infrastructure required to make the program effective. Public transit services could also play a significant role in facilitating Green Tourism and ameliorating potential impacts to sensitive cultural and ecological areas.



Figure 3.25 New Mexico Scenic Byways



3.4 Land Ownership and Development

One of the major determinants of the use of the transportation system is the location and characteristics of land development. Choices about transportation mode (auto, transit, bicycling or walking) depend greatly on the density of development and the location of different land uses (commercial, residential, industrial, recreation) relative to one other. Land ownership patterns also shape the potential for development and growth, and the resulting transportation system needs. In New Mexico, these issues are particularly significant, given the large land holdings of Federal, State, and tribal governments. This section provides an overview of land ownership and development patterns in New Mexico.

Land Ownership

Over half of New Mexico land is either owned by the Federal government, State government, or by one of the state's 22 Native American pueblos, tribes, or nations (Figure 3.26 and Figure 3.27). Federal and State lands, collectively about four times the area of tribal reservation lands in New Mexico, include military bases, national forests, and national parks in addition to lands administered by the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM). The State of New Mexico does not have sovereignty over Federal and tribal lands and must negotiate agreements with the land owners in order to implement any transportation projects or improvements.

Figure 3.26 Distribution of Land Ownership in New Mexico

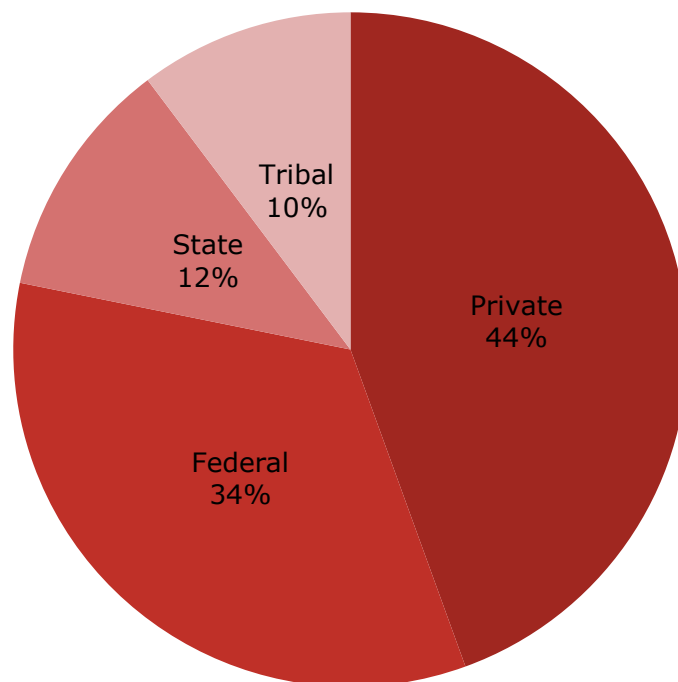
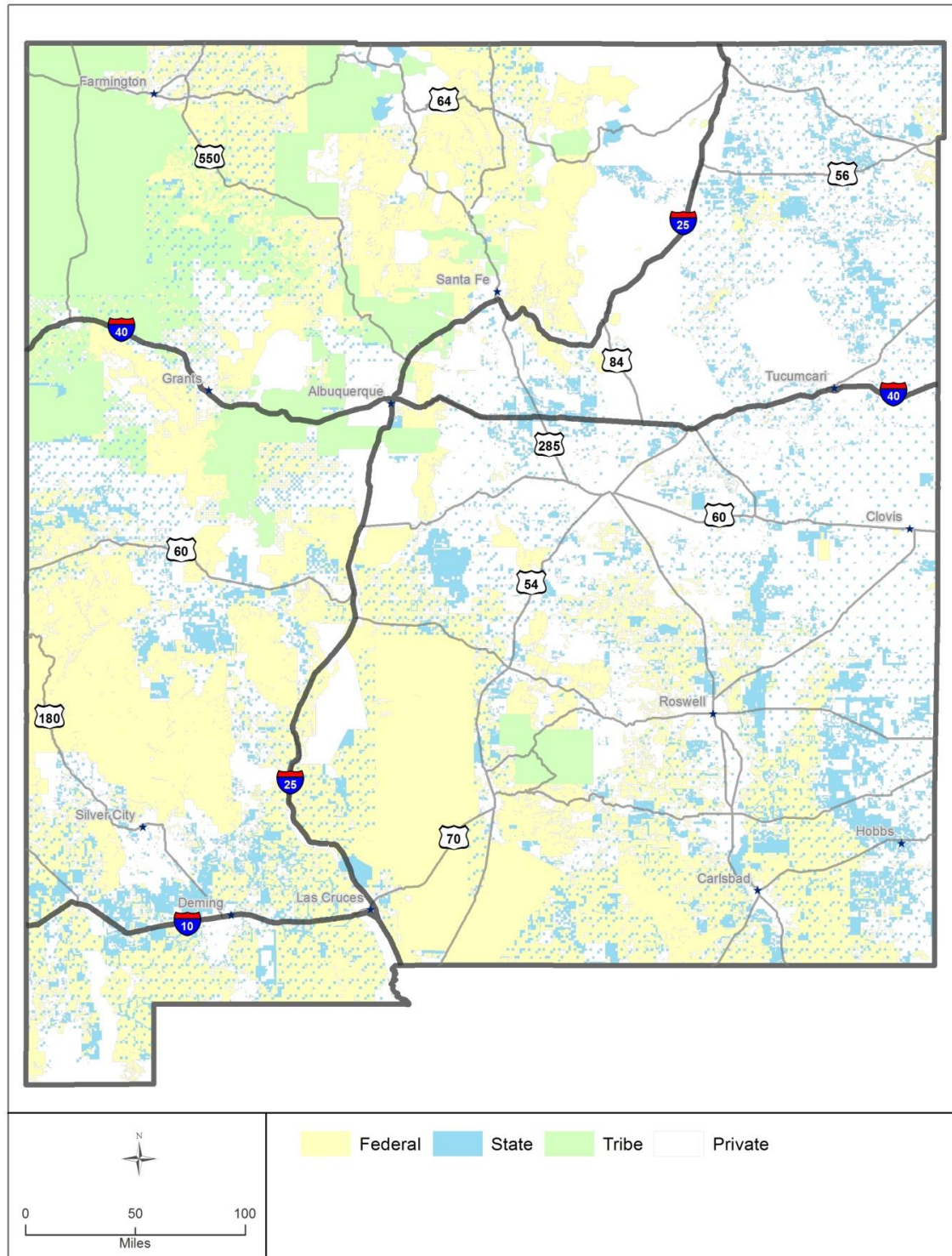


Figure 3.26 Land Ownership in New Mexico



Source: ArcGIS online data, USA Federal Lands (accessed April, 2014)

Federal and State Land Management

Under MAP-21, the Federal Lands and Tribal Transportation Programs (FLTP) provides funding for program administration, transportation planning, research, preventative maintenance, engineering, rehabilitation, restoration, construction and reconstruction for federal lands.⁵⁶ Through the FLTP, all Federal land management agencies receive funding to develop long-range transportation plans. Transportation planning procedures for these programs must be consistent with state Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs), and regionally significant projects must be developed in cooperation with these organizations.⁵⁷

Central Federal Lands Highway Division (CFLHD) operates as part of the Federal Lands Highway Program and services the needs of New Mexico. CFLHD roads serve recreational travel and tourism, protect and enhance natural resources as well as provide sustained economic development in rural areas and provide needed transportation access for Native Americans.⁵⁸ Central Federal Lands works collaboratively with all agencies and its state and local partners and receives FLTP and Federal Lands Access Program (FLAP) funding.

The United States Fish and Wildlife Service (USFWS) Region 2 Long-Range Transportation Plan is in process of finalizing the baseline conditions report and project identification. Goals and objectives of the plan include provide safe and secure system, ensure appropriate level of access, sustainable program, work with partners and leverage partnerships, develop and maintain the system, and conserve and protect resources. A draft of the plan will be available in April 2015 for public review. In addition, the USFWS manages the Valle de Oro Wildlife Refuge, the first urban refuge in the southwest, located in Bernalillo County, which is included in the Region 2 Long-Range Transportation Plan. Transportation is an integral part of the planning of the refuge and is focused on access to existing public transit and building on multimodal networks.

The National Park Service (NPS) Long-Range Transportation Plan has a 2035 horizon, and the final draft will be issued by the end of April 2014. The NPS is responsible for 3, 227 miles of roadway as well as associated parking areas. Goals and objectives include providing access to parks, asset management, mobility access, resource protection, and sustainable operations. Key challenges for the park service are budget constraints and backlog as well as changing demographics, climate change, a shrinking transportation fund, and visitation decreases in the smaller parks. The preferred transportation alternative is to continue to focus on high priority access areas, refrain from building new transit systems, and improve partnerships, strategic planning, and seek funding for transportation.

⁵⁶ Federal Highway Administration (FHWA), "MAP-21 – Moving Ahead for Progress in the 21st Century"/"Home"/"MAP-21"/"Summary"
<http://www.fhwa.dot.gov/map21/summaryinfo.cfm>; <https://www.fhwa.dot.gov/map21/guidance/guidefltp.cfm>, (accessed April, 2014).

⁵⁷ Federal Highway Administration (FHWA), "MAP-21 – Moving Ahead for Progress in the 21st Century"/"Home"/"MAP-21"/"Fact Sheets"/"Federal Lands Access Program",
<http://www.fhwa.dot.gov/map21/factsheets/flap.cfm>, (accessed April, 2014)

⁵⁸ Central Federal Lands Highway Division (CFLHD), <http://www.cflhd.gov/>



Within the State of New Mexico, there are five national forests that are managed by the U.S. Forest Service with a little over 24,000 miles of forest service roads, nearly 14,000 of which are high clearance roads (for 4-wheel driving). The system has approximately 4,000 miles of closed roadways and 6,000 miles of passenger car roads. The primary usage of U.S. Forest Service roads is recreational activities such as pleasure driving, hunting and fishing, and hiking and camping. The service's Travel Management Rule prohibits cross country motorized travel across National Forest lands. The reduction in revenue generated from extraction of timber, previously the basis for the forest transportation system, has led to reduced funding for the maintenance of the existing system. The travel management goal of the service is to devise a minimum road system to handle the usage. Primarily, the focus of the transportation network is to provide access to visitors, landowners, and for those working National Forest lands. Secondly, the service is focusing on roadway maintenance to reduce sedimentation and erosion impacts in the watersheds.

The Bureau of Land Management (BLM) has seven district and seven field offices in the state. BLM's Long-Range Transportation Plan process will begin in summer of 2014, to be completed in 2016. The BLM prepares comprehensive land use plans called Resource Management Plans (RMPs) to manage their lands. Transportation plans are based on RMPs. The Rio Puerco Office has funded pilot project, the Rio Puerco Transportation Pilot Project, that will include a statewide transportation planning map and a summary report on potential funding sources.

While the New Mexico Department of Game and Fish (NMDGF) is not a large land owner in the State, they are responsible for one million acres of land and access. The transportation system on NMDGF lands is limited to access roads only. As a result, they do not prepare a transportation plan. Part of the 2006 Comprehensive Wildlife Conservation Strategy Plan, to be completed in October 2015, is to purchase additional lands and riparian areas to reduce habitat fragmentation. Under state and senate memorials, the department works closely with NMDOT to mitigate and implement strategies to reduce wildlife collisions to increase the safety of high priority corridors. The department recognizes that wildlife crossings offer potential for recreational trails as well.

The New Mexico State Land Office (SLO) is responsible for administering nine million acres of subsurface estate for the many beneficiaries of the state land trust which includes public schools, universities, hospitals and other public institutions. The objective of the agency is to serve the economic development of the state, and revenue can be generated through land sales, oil and gas extraction, mining, grazing, and other commercial activities.⁵⁹ The SLO partners with other agencies and donates land uses. The SLO does not own roadways, so they do not have a transportation plan. However, they do have a vested interest in access to SLO lands.⁶⁰

⁵⁹ New Mexico State Land Office (SLO), <http://www.nmstatelands.org/>, (accessed April, 2014)

⁶⁰ Discussions during the Statewide Long Range Plan (SLRP) Coordination Meeting with Federal and State Land Managers, on April 15, 2014.



Tribal Lands

New Mexico has the second highest proportion of Native Americans (American Indian or Alaska Native) in the country and is home to 22 federally-recognized Pueblos and Indian Nations, or Tribal entities. These include the 19 Puebloan cultural groups, two Apache tribes, and the Navajo Nation (Figure 3.28 and Table 3.4).⁶¹ Approximately 10 percent of the State's land base is tribal land.

The Federal government has a 'government-to-government' relationship with Native American Tribal governments per the Constitution of the United States, treaties, statutes, and court decisions. Federal agencies are required to consult with Native American Tribal Governments regarding policy and regulatory matters. The NMDOT coordinates with tribal staff in the development of the 2040 Plan and STIP, and the state's MPOs and RTPOs encourage tribal participation in their transportation planning processes as well.⁶²

The FHWA Tribal Liaison Program was created to facilitate communication and coordination with the Native American community. The NMDOT has a full-time Tribal Liaison position responsible for coordinating with Tribal representatives to discuss issues and concerns and relay the information to the department, as well as assist in the arrangement of government-to-government meetings. The liaison also encourages the tribal involvement in the MPO and RTPO planning processes. The State-Tribal Collaboration Act, Senate Bill 196 requires the development and implementation of State policies that foster positive collaboration and government-to-government relations between the state and Indian nations, tribes or pueblos.⁶³

Tribal entities are responsible for their own transportation planning, construction, operations, and maintenance of tribal roadway systems on tribal lands. The Tribal Infrastructure Act, signed into state law in 2005, created an infrastructure trust fund as well as a board that is administratively attached to the New Mexico Indian Affairs Department (IAD). While tribal entities manage tribal roads, state and federal roadway systems traverse tribal lands and connect tribal and non-tribal jurisdictions. For this reason, tribal governments also participate in the state and MPO/RTPO planning processes because though state and federal agencies have the obligation to maintain these systems.

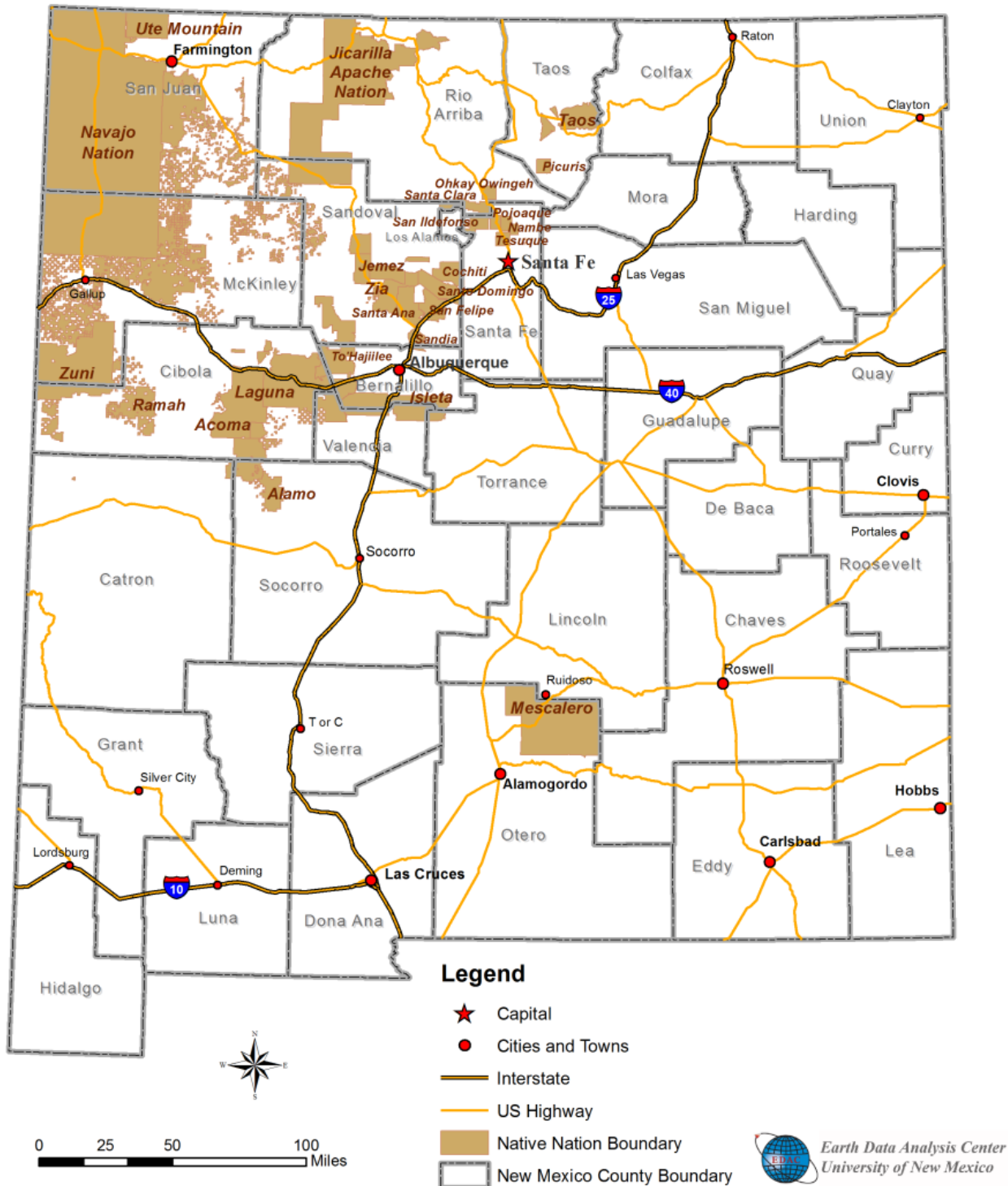
⁶¹ New Mexico Indian Affairs Department, "New Mexico's 22 Tribes and the Indian Affairs Department", <http://www.iad.state.nm.us/history.html>, (accessed September 2015)

⁶² Federal Highway Administration, "Planning Processes"/"Tribal Transportation Planning", www.fhwa.dot.gov/planning/processes/tribal, (accessed April, 2014)

⁶³ Federal Highway Administration, "Environmental Review Toolkit"/"Historic Preservation"/"Tribal Liaison Program", http://environment.fhwa.dot.gov/histpres/nm_shpo.asp, (accessed April, 2014)



Figure 3.28 Tribal Lands in New Mexico



Source: Earth Data Analysis Center, UNM 2013

New Mexico 2040 Plan

Appendix A – Existing Conditions and Trends

The Tribal Transportation Program (TTP), which replaced the Indian Reservation Road program, is jointly administered by the FHWA Federal Lands Highway Office and the BIA Division of Transportation. The TTP, which administers \$450 million annually for transportation projects on tribal lands, keeps an inventory of public roads which provide access to and within Indian reservations, Indian trust land, and restricted Indian lands.⁶⁴

Table 3.4 New Mexico Native American Communities

Group	Reservation Size (square miles)	2000 Population Estimate*	2010 Population Estimate*
Jicarilla Apache Nation	1,364	2,755	3,254
Mescalero Apache Tribe	719	3,156	3,613
Navajo Nation	27,425	180,462	173,667
Ohkay Owingeh (formerly the Pueblo of San Juan)	26.7	6,748	6,309
Pueblo of Acoma	595	2,802	3,011
Pueblo of Cochiti	84	1,502	1,727
Pueblo of Jemez	139	1,958	1,815
Pueblo of Isleta	329	3,166	3,400
Pueblo of Laguna	777	3,815	4,043
Pueblo of Nambe	21.2	1,764	1,611
Pueblo of Picuris	2.3	1,801	1,886
Pueblo of Pojoaque	21	2,712	3,316
Pueblo of San Felipe	12.2	3,185	3,563
Pueblo of San Ildefonso	4.2	1,524	1,752
Pueblo of Sandia	39	4,414	4,965
Pueblo of Santa Ana	114	487	621
Pueblo of Santa Clara	77	10,658	11,021
Pueblo of Santo Domingo (Formerly Pueblo of Kewa)	116.8	3,166	3,255
Pueblo of Taos	148.4	4,492	4,384
Pueblo of Tesuque	7	806	841

⁶⁴ U.S. Department of The Interior Indian Affairs, "Indian Reservation Roads Inventory (IRR)", <http://bia.gov/WhoWeAre/BIA/OIS/Transportation/IRR/index.htm>, (accessed April, 2014)



Group	Reservation Size (square miles)	2000 Population Estimate*	2010 Population Estimate*
Pueblo of Zia	27.3	646	737
Zuni Tribe of the Zuni Reservation	723	7,758	7,891

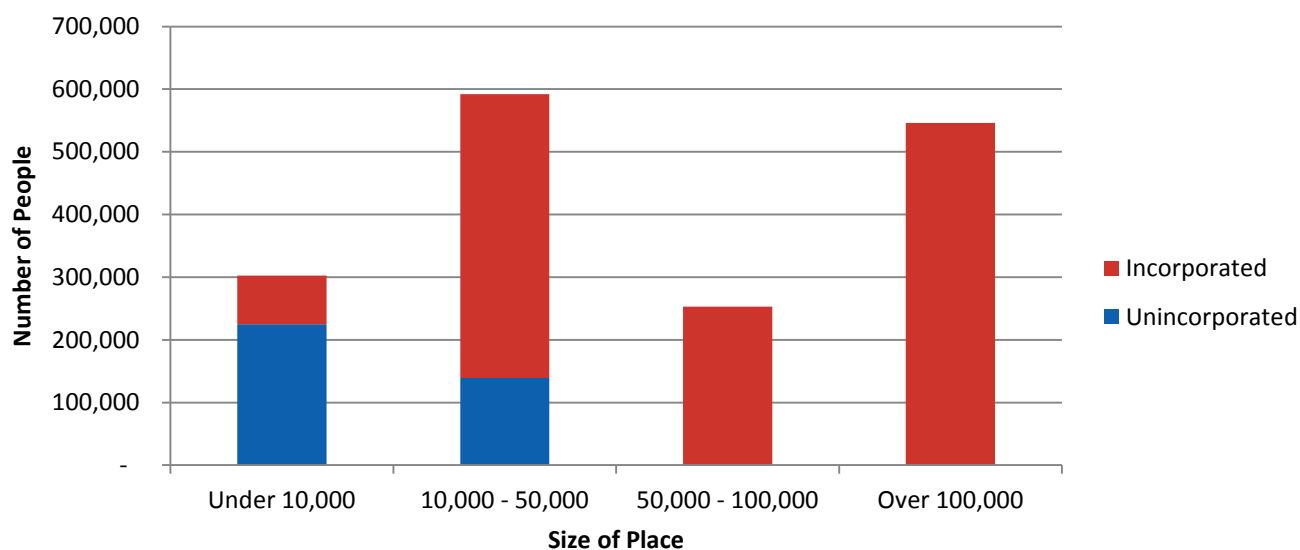
*US Census Bureau. 2000 and 2010 Decennial Census – Full Sample

Local Jurisdictions

The state transportation system plays a critical role in linking New Mexico's metropolitan areas together and linking the many small towns and places to each other and to those metropolitan areas. These towns and villages have an important role to play in shaping economic development and land development patterns.

There are over 100 incorporated local jurisdictions in New Mexico that range in size from large urban areas (Albuquerque, 550,000 residents) to small towns. About two thirds of New Mexican's live in incorporated jurisdictions with the remaining living in unincorporated towns, rural areas, and on tribal lands. Figure 3.29 presents the distribution of the New Mexico population by size of place and incorporation status, excluding tribal lands and institutionalized populations.

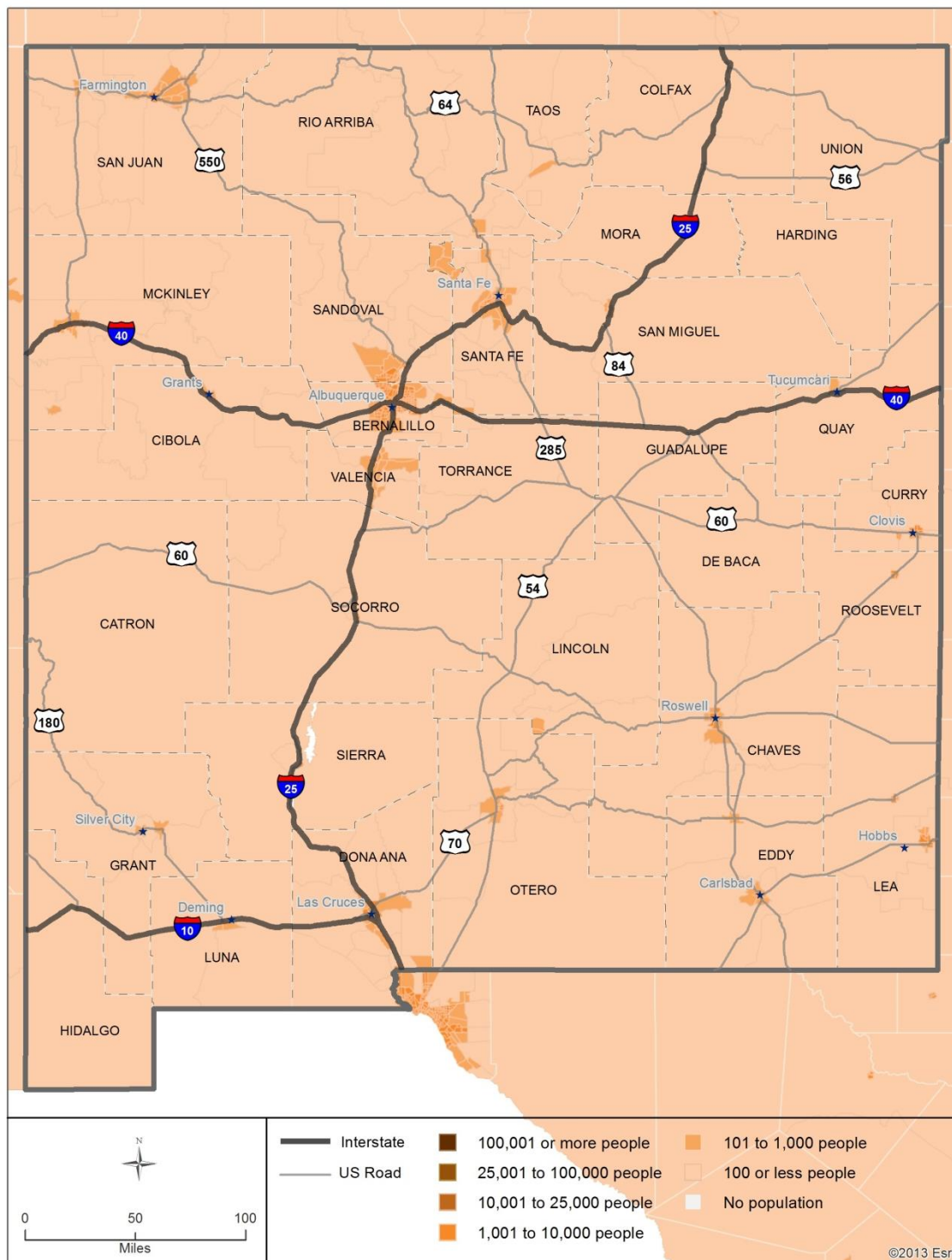
Figure 3.29 Distribution of New Mexico Population by Community Size



Population Density

New Mexico has the fifth lowest density of all states in the nation. Small pockets of higher density occur at the urban centers such as in the Cities of Albuquerque, Rio Rancho, and Los Lunas in the central region; Santa Fe and Española in the north central region; Farmington in the northwestern region; and Las Cruces spreading toward El Paso in the southern region (Figure 3.30).

Figure 3.30 Population Density



Importantly, the state transportation system plays multiple roles in local jurisdictions, including both through movement/statewide connectivity and local circulation. In many communities throughout New Mexico, elements of the state transportation system act as the local main street. The New Mexico MainStreet Program is a grassroots economic development program that assists communities in revitalizing these traditional commercial districts. A program of the New Mexico Economic Development Department, MainStreet works throughout New Mexico to help affiliated local organizations create an economically viable business environment while preserving cultural and historic resources. The MainStreet program provides resources, education, training, and technical services that stimulate the economic vitality of each participating community while celebrating local heritage and culture. MainStreet is a consensus-building program that fosters community pride and encourages the growth of small businesses, consequently enhancing local employment opportunities, tax revenues, property values and quality of life (Table 3.5).

Table 3.5 New Mexico MainStreet Statistics
June 2013

	FY 2013	Cumulative Totals
Number of Net New Businesses	102	1,784
Number of Business Expansions	28	302
Number of Building Rehabilitations	111	1,543
Dollars of Private Reinvestment	\$22,712,662	\$174,585,486
Number of Net New Jobs	529	5,846
Volunteer Hours*	28,241	169,046*

Note: Volunteer hours have only been tracked since July 2006

Supporting New Mexico's communities since 1985, the MainStreet program currently serves 27 affiliated MainStreet Districts, six state-authorized Arts and Cultural Districts, and seven Frontier Community projects (Table 3.6). It is a State-Coordinating Program of the National Main Street Center, Inc., a subsidiary of the National Trust for Historic Preservation.⁶⁵

⁶⁵ New Mexico Main Street, <http://nmmainstreet.org/>, (accessed April, 2014)



Table 3.6 New Mexico Main Street Communities as of 2013

Community	Type
Albuquerque Downtown Action Team – A MainStreet Project	State-Certified
Artesia MainStreet	State-Certified
Barelas (Albuquerque) MainStreet	Emerging
Belen MainStreet Partnership	Start-Up
Carlsbad MainStreet	State-Certified
Clayton MainStreet	State-Certified
Clovis MainStreet	State-Certified
Corrales MainStreet, Inc.	State-Certified
Deming MainStreet	Start-Up
Farmington Downtown Association – A MainStreet Project	State-Certified
Gallup MainStreet	Emerging
Grants MainStreet Project	State-Certified
Harding County MainStreet	Emerging
Downtown Las Cruces Partnership – A MainStreet Project	State-Certified
MainStreet de Las Vegas	State-Certified
Los Alamos MainStreet	State-Certified
Lovington MainStreet Corporation	State-Certified
Nob Hill (Albuquerque) MainStreet	State-Certified
Portales MainStreet	State-Certified
Raton MainStreet	State-Certified
MainStreet Roswell	State-Certified
Silver City MainStreet Project	State-Certified
South Valley (Albuquerque) MainStreet	Emerging
Taos MainStreet	Start-Up
MainStreet Truth or Consequences	State-Certified
Tucumcari MainStreet	State-Certified
Zuni MainStreet Project	Emerging



Border Development in New Mexico

The three POEs between New Mexico and the Mexican State of Chihuahua have shown increased use due to the sharp growth of manufacturing in Mexico and trade with the United States (see Section 2.2). These POEs help sustain trade and tourism between New Mexico and Mexico that is important for the economic vitality of the state. As development occurs in New Mexico, there are potential opportunities in New Mexico for new development as well.

Border Master Plans (BMP), which take into account the infrastructure needs on both sides of the U.S.-Mexico border, aim to create comprehensive and prioritized assessments of transportation needs along border regions. BMPs are overseen by the U.S./Mexico Joint Working Committee (JWC) on Transportation Planning, a group comprised of members from the Federal Highway Administration, the U.S. Department of Justice, and the Mexican Secretariat of Communication and Transportation and Secretariat of Foreign Relations.⁶⁶ The NMDOT participated in the development of Texas' third and final BMP, the El Paso/Santa Teresa/Chihuahua Border Master Plan (2013).⁶⁷ The El Paso BMP encompasses parts of New Mexico that are included in the El Paso MPO, including Sunland Park and Santa Teresa. New Mexico is initiating the development of the New Mexico-Chihuahua Border Master Plan that will incorporate and build on the findings of the El Paso/Santa Teresa/Chihuahua to coordinate planning for all three of New Mexico's POEs.

New and Planned Projects

The Santa Teresa POE and surrounding area is expected to see significant increased economic activity. The UP Railroad recently opened an intermodal yard and distribution center north of the POE.⁶⁸ The facility is comprised of a fueling facilities for locomotives, an intermodal ramp to service local customers, and a block swap yard. This facility has already attracted private investment in the industrial and logistics industry and more development is anticipated. Announced in 2013 by officials from New Mexico and Chihuahua, a "Bi-National Community" is proposed for the two cross-border communities of Santa Teresa and San Jeronimo.⁶⁹ The goal is to increase regional economic activity by creating free trade zones and promoting the synergy between the industrial activity locating on the Mexican side of the border and the inland distribution center north of Santa Teresa. The Bi-National Community, or "campus," will provide residential housing and offer cross-border health care and educational programs. The San Jeronimo Industrial Development Master Plan supports these efforts.

Other recent improvements to the Santa Teresa POE include the addition of two lanes for private vehicles, doubling private vehicle capacity. Additionally, one new commercial vehicle lane was added bringing the total to three lanes. A commercial export lane, isolated from the POE, is

⁶⁶ Joint Working Committee on Transportation Planning. <http://www.borderplanning.fhwa.dot.gov/mexico.asp>

⁶⁷ Texas Border Master Plans: <http://texasbmps.com/>

⁶⁸ Union Pacific Railroad: http://www.uprr.com/customers/intermodal/intmap/santa_teresa.shtml

⁶⁹ New Mexico Economic Development Department. <http://www.gonm.biz/bi-national-community.aspx>



proposed as part of a pilot project that would allow for U.S. Customs to inspect vehicles prior to entry into New Mexico.

For moving additional freight between Chihuahua and New Mexico, a rail bypass is proposed that will allow rail cargo to avoid Ciudad Juarez and El Paso and enter the U.S. at Santa Teresa. A feasibility study has been completed for the development of the project and Mexican officials have indicated that work is progressing rapidly on this project. To move freight from the inland port, preliminary studies are underway to evaluate the West Mesa Corridor, a route that would connect the NM-136 and Santa Teresa to I-10 west of Las Cruces. Finally, the City of Sunland Park, east of the Santa Teresa crossing and adjacent to El Paso, has requested a Presidential Permit for a new border crossing.

The Columbus POE has a planned rehabilitation and commercial bypass project. The project, under a bi-national agreement, aims to divert commercial trucks off main streets, to enhance pedestrian facilities, to rehabilitate primary streets, and improve drainage control.

The Antelope Wells POE will experience increased volumes of traffic when construction is completed on a road that connects Highway 2 in Mexico to El Berrendo, across the border from Antelope Wells. Highway 2 in Mexico is the primary east-west roadway in northern Mexico, connecting Ciudad Juarez and Tijuana. Scheduled for completion in 2014, the State of Chihuahua expects this road to make it easier for Mexican citizens to cross the border and access Interstate 10 in New Mexico.



3.5 Environmental Trends and Constraints

While New Mexico's natural and cultural resources are a major attraction to visitors and residents in the State (see Section 3.3), they are also an important constraint to consider in the transportation planning and project development processes. New Mexico's natural and cultural resources limit where land and transportation development can take place. Further, significant limits on water availability are one of the most significant constraints on overall development. This section summarizes information about water resources, wildlife protection, cultural and historic resources, and superfund sites.

Water Resources

New Mexico is a semi-arid region with an average annual precipitation of 15 inches and drier areas receiving 8 to 10 inches per year. The state ranks 49th in the nation in water area; water is a scarce and valuable resource in New Mexico.

Key sources of water include surface flows and aquifers. Surface flows move through 12 river basins and 18 sub-basins in the state. Basins generally follow contours where surface waters flow toward a main stream or river or toward a central playa lake in areas without streams or rivers.⁷⁰ The major river basins include San Juan, Little Colorado, Gila-San Francisco, Southwest Closed, Upper Rio Grande, Middle Rio Grande, Lower Rio Grande, Canadian and Dry Cimarron, Upper Pecos, Lower Pecos, Central Closed, and Southern High Plains (Figure 3.31).

Shallow and stream-connected water table aquifers are the most commonly developed groundwater sources. Important aquifers in the state are thin alluvial-fan and river-laid deposit or basin fill in deep down-faulted basins.⁷¹ Major aquifers in the state include Gallup and Westwater Canyon, High Plains, Rio Grande, Estancia Valley fill, Basin and Range, Roswell Artesian, Pecos River Basin, Salt Basin alluvial, Tularosa Basin, Capitan Reef. There are 39 underground water basins, some of which are isolated basins and some are hydrologically connected to surface waters (Figure 3.32)⁷²

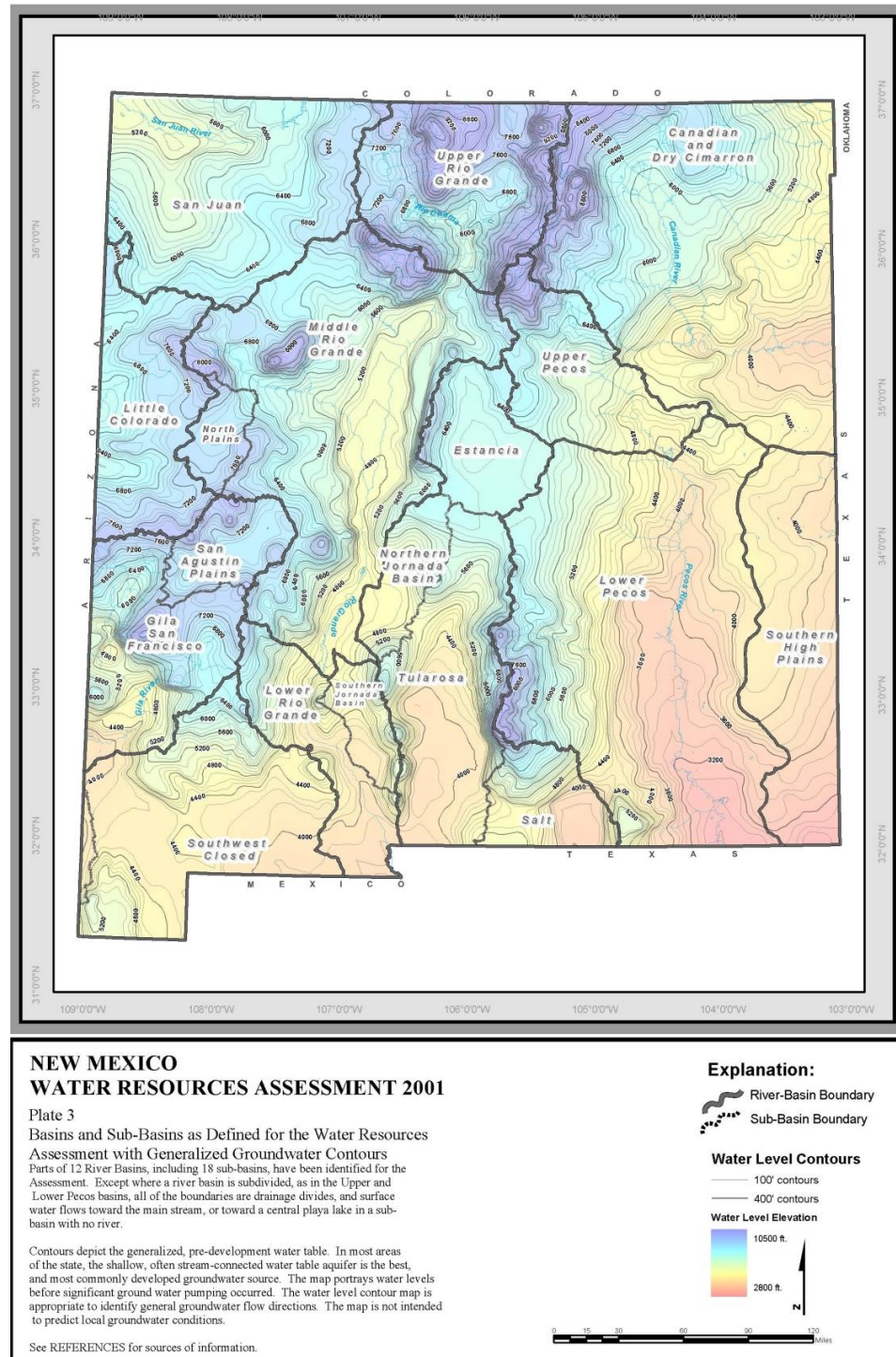
⁷⁰ New Mexico Office of the State Engineer (NMOSE), *NM Water Resource Atlas*, 2002

⁷¹ New Mexico Office of the State Engineer (NMOSE), *NM Water Resource Atlas*, 2002

⁷² Utton Transboundary Resources Center, *Water Matters!*, (University of New Mexico (UNM) School of Law, 2013)

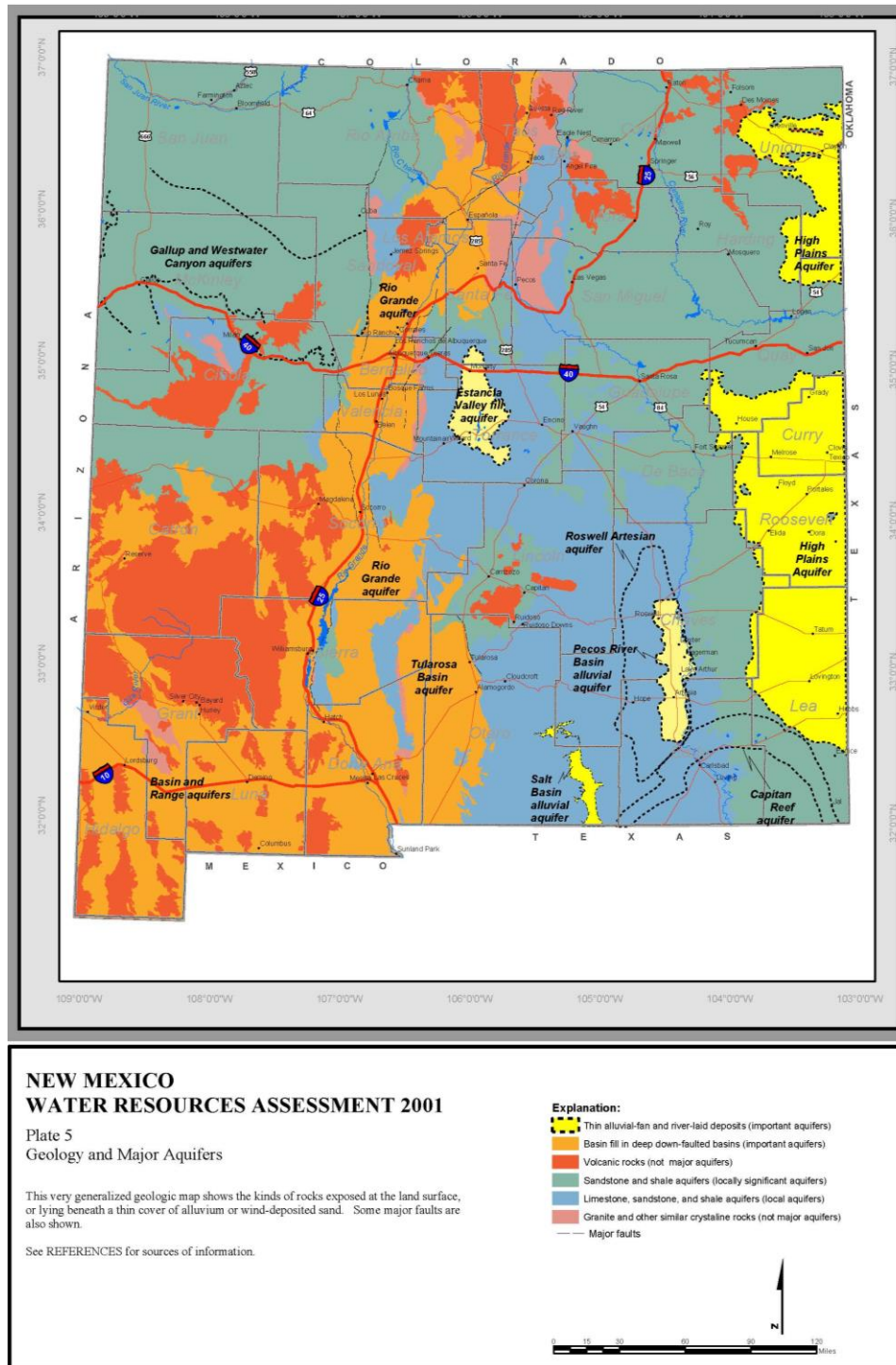


Figure 3.31 New Mexico River Basins and Sub-Basins



Source: New Mexico Office of the State Engineer, *New Mexico Water Resource Atlas*, 2002

Figure 3.32 New Mexico Major Aquifers



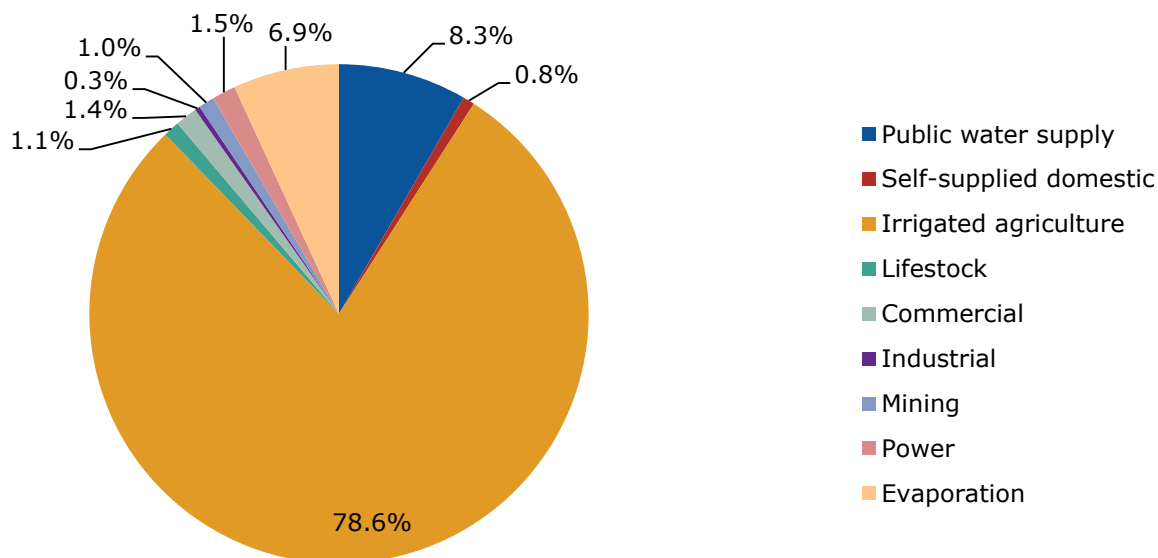
Source: New Mexico Office of the State Engineer, *New Mexico Water Resource Atlas*, 2002

By New Mexico statute, the Office of the State Engineer (NMOSE) and the New Mexico Interstate Stream Commission are charged with the responsibility of management, distribution, investigation, protection, conservation, and the development of the State's waters while meeting existing water rights, including water rights of tribal governments, and interstate river compact obligations.⁷³ Several other agencies, including New Mexico Environment Department (NMEDD), the Water Quality Control Commission (WCC), the New Mexico Acequia Commission, and the Water Trust Board (WTB) have authority and responsibilities over specific water matters related to water quality, management, and regional water planning.⁷⁴

Water Use

According to the NMOSE, withdrawals for all water use categories totaled 3,815,945 acre-feet in 2010, 53.5 percent from surface water and 46.5 percent from groundwater.⁷⁵ Irrigated agriculture is the largest consumer of water supplies in the state, with public water supply use second, and evaporation third (Figure 3.33).

Figure 3.33 2010 Withdrawals for All Water Use Categories



Source: New Mexico Office of the State Engineer (NMOSE), Water Use by Categories, 2010

⁷³ New Mexico Office of the State Engineer (NMOSE), *NM Water Resource Atlas*, 2002

⁷⁴ New Mexico Office of the State Engineer (NMOSE), *NM Water Resource Atlas*, 2002

⁷⁵ 2010 New Mexico Water Use by Categories report, New Mexico Office of the State Engineer

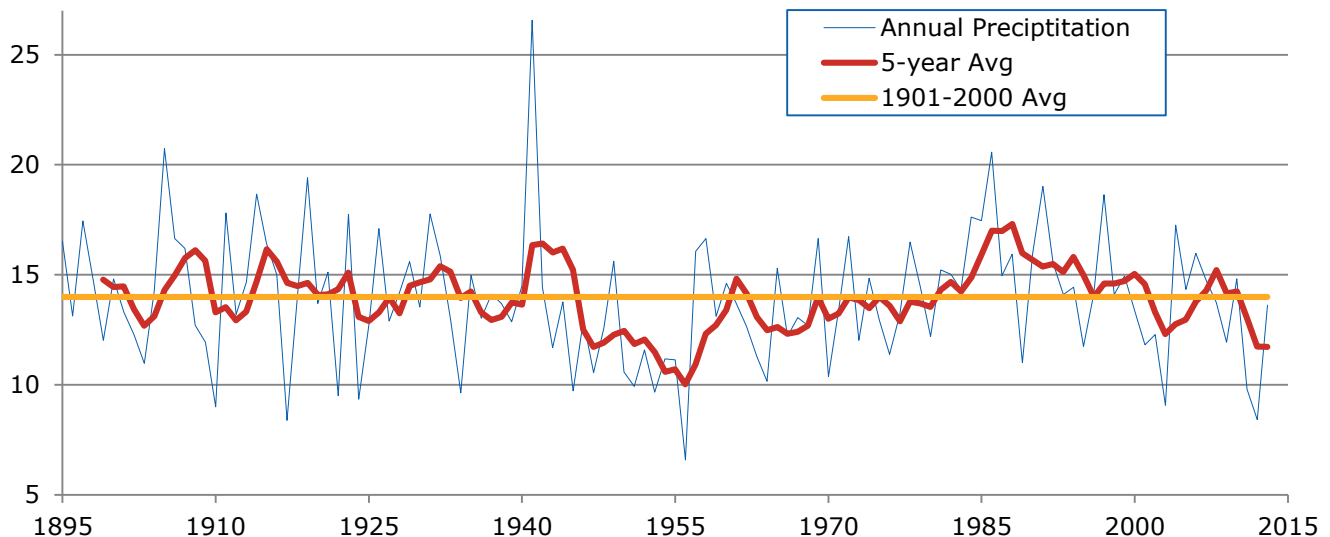


Reservoirs provide municipal domestic and industrial supplies as well as irrigation waters. New Mexico has a total of 15 reservoirs located on several of the state's major rivers and branches including the San Juan River, Canadian River, Rio Grande and the Pecos River. The reservoirs provide flood control, storage, power production, sediment control, and fish and wildlife benefits as well as recreation.⁷⁶ There are approximately 700 acequias, or community irrigation systems, located in the valleys of most rivers and creeks in the state. In addition to providing essential water resources, the acequia system is an important cultural tradition in many New Mexican communities.

Water Availability

Across the state, ground and surface water resources are being depleted by growing populations, overconsumption, and a decline in recharge and replenishment of resources due to drought conditions. A historical view of precipitation in New Mexico between 1895 and 2014 shows significant variability in annual values (Figure 3.34). After a long-term drought in the 1940s and 1950s, New Mexico experienced a period of relatively wetter years, with a recent decline in precipitation since 2000, and much of the State has been in drought since 2011 (Figure 3.35).

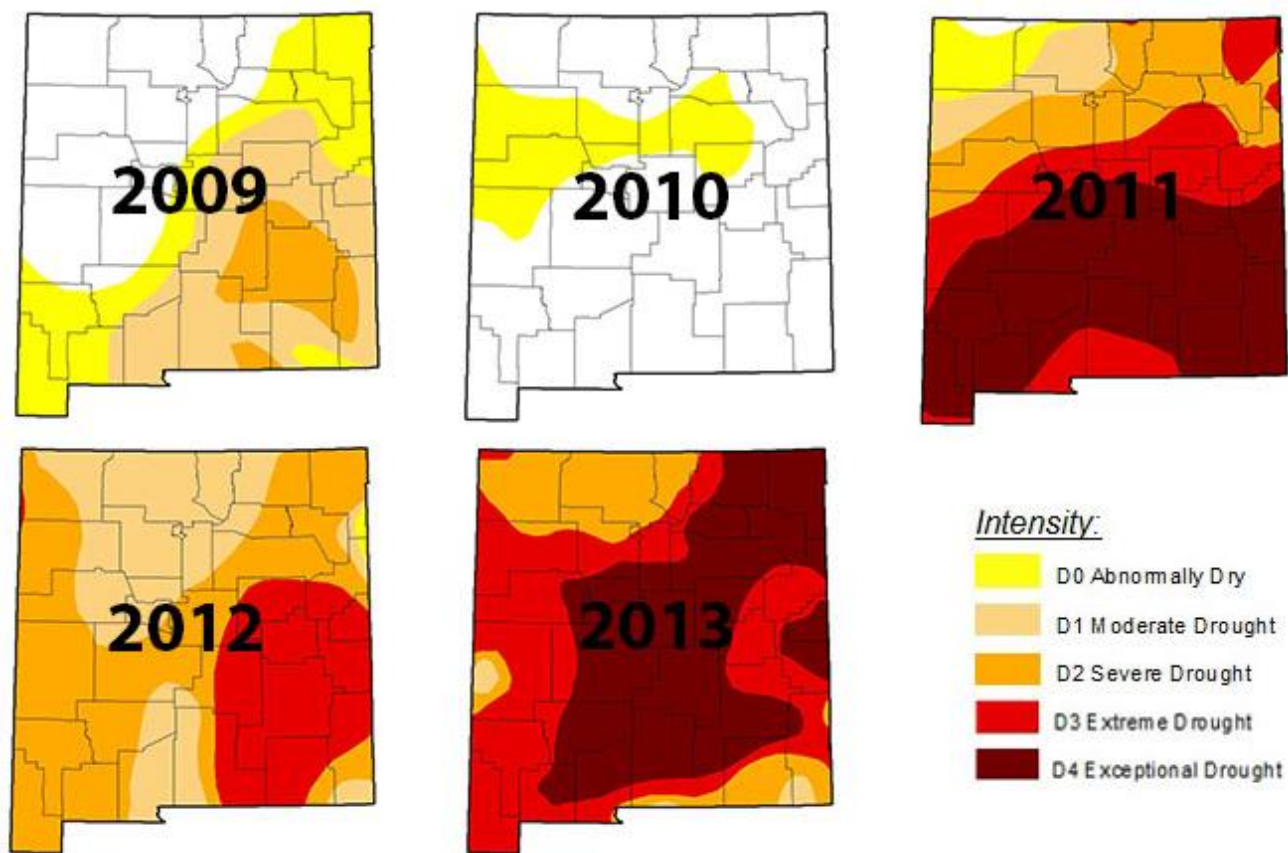
Figure 3.34 New Mexico Annual Precipitation
1895 to 2014



Source: NOAA, National Climatic Data Center, <https://www.ncdc.noaa.gov/sotc/drought/2014/1>

⁷⁶ Utton Transboundary Resources Center, *Water Matters!*, (University of New Mexico (UNM) School of Law, 2013)

Figure 3.35 New Mexico Drought Monitor
2009 to 2013



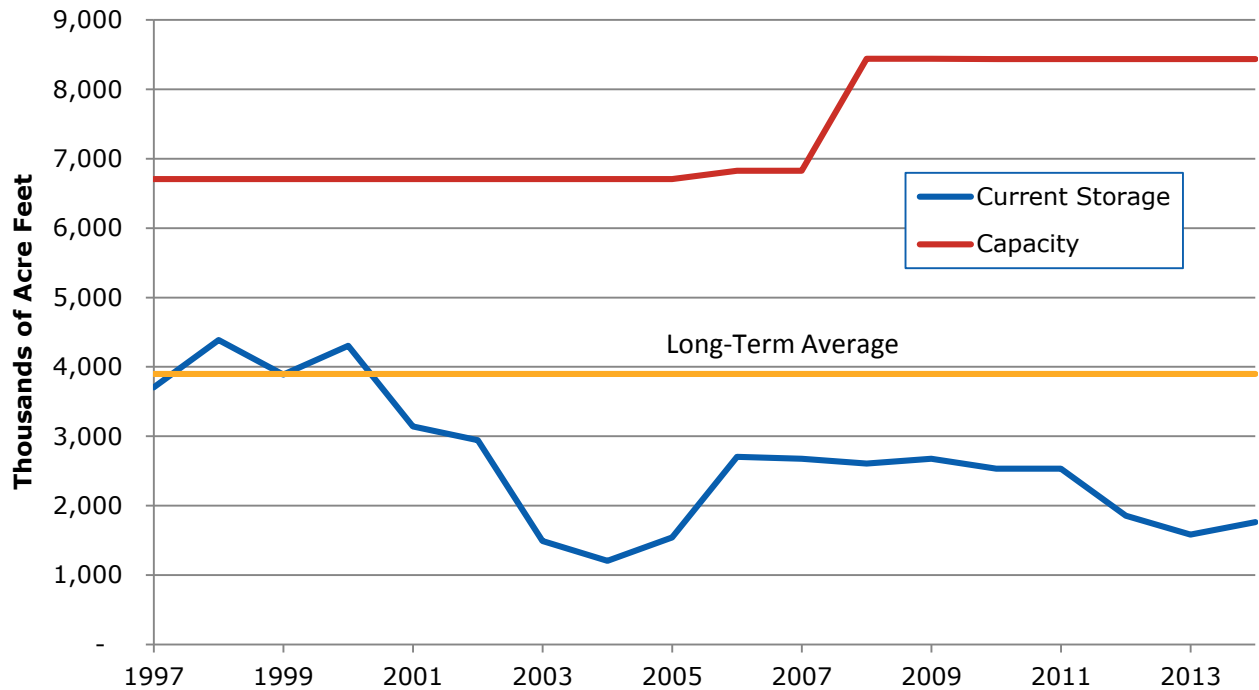
Source: The National Drought Mitigation Center, <http://droughtmonitor.unl.edu/>

Total reservoir levels in the state have remained below the long-term average of just under 4,000 thousand acre-feet since 2001 and continue to decline due to intensifying drought conditions (Figure 3.36). Total water storage at the end of 2012 was reported to be only 44 percent of the long term average.⁷⁷ In the High Plains and Desert Southwest aquifers, water use has caused sharp declines in aquifer water-levels. Since predevelopment, the High Plains water levels have declined more than

⁷⁷ The University of Arizona, Climate Assessment for the Southwest (CLIMAS), SW Climate Outlook, <http://www.climas.arizona.edu/swco/jan2013/new-mexico-reservoir-volumes>, (accessed April, 2014).

100 feet in some areas, and the Desert Southwest has declined between 300 and 500 feet in much of the area due to ground water pumping to support population growth and irrigation.⁷⁸

Figure 3.36 New Mexico Reservoir Supply and Capacity



Source: US Department of Agriculture, Natural Resources Conservation Service

Note: Data are from October of each water year

Demands for water resources continue to increase in New Mexico despite diminishing water supplies. Limited water supplies will impact population growth, industry, economic development, and natural resources. As urban centers continue to grow, municipal surface and groundwater supplies are diminishing. The agriculture industry, part of a \$6.4 billion industry, is the largest consumer of water supplies in the state. The long-term growth of this and other industries such as mining will be constrained by limited water supplies. Additionally, reduced flows in the major river basin systems as well as shallow groundwater tables will impact fish and wildlife habitat including Endangered Species Act (ESA) listed species and Critical Habitat.

The Governor's Drought Task Force, chaired by the State Engineer, meets regularly to discuss drought impacts and to modify strategies described in the State Water Plan. Long-term strategies

⁷⁸ United States Geological Survey (USGS), Ground-Water Depletion Across the Nation, November, 2003, <http://pubs.usgs.gov/fs/fs-103-03/>



identified in the State Water Plan as well as by public stakeholders include regional and state planning improvements, drought planning, restoration of watersheds and aquifer storage and recovery, developing water resources, water conservation and re-use, funding water infrastructure investments, improving the adjudication process, and protecting, maintaining and enhancing the quality of the State's waters.

Wildlife

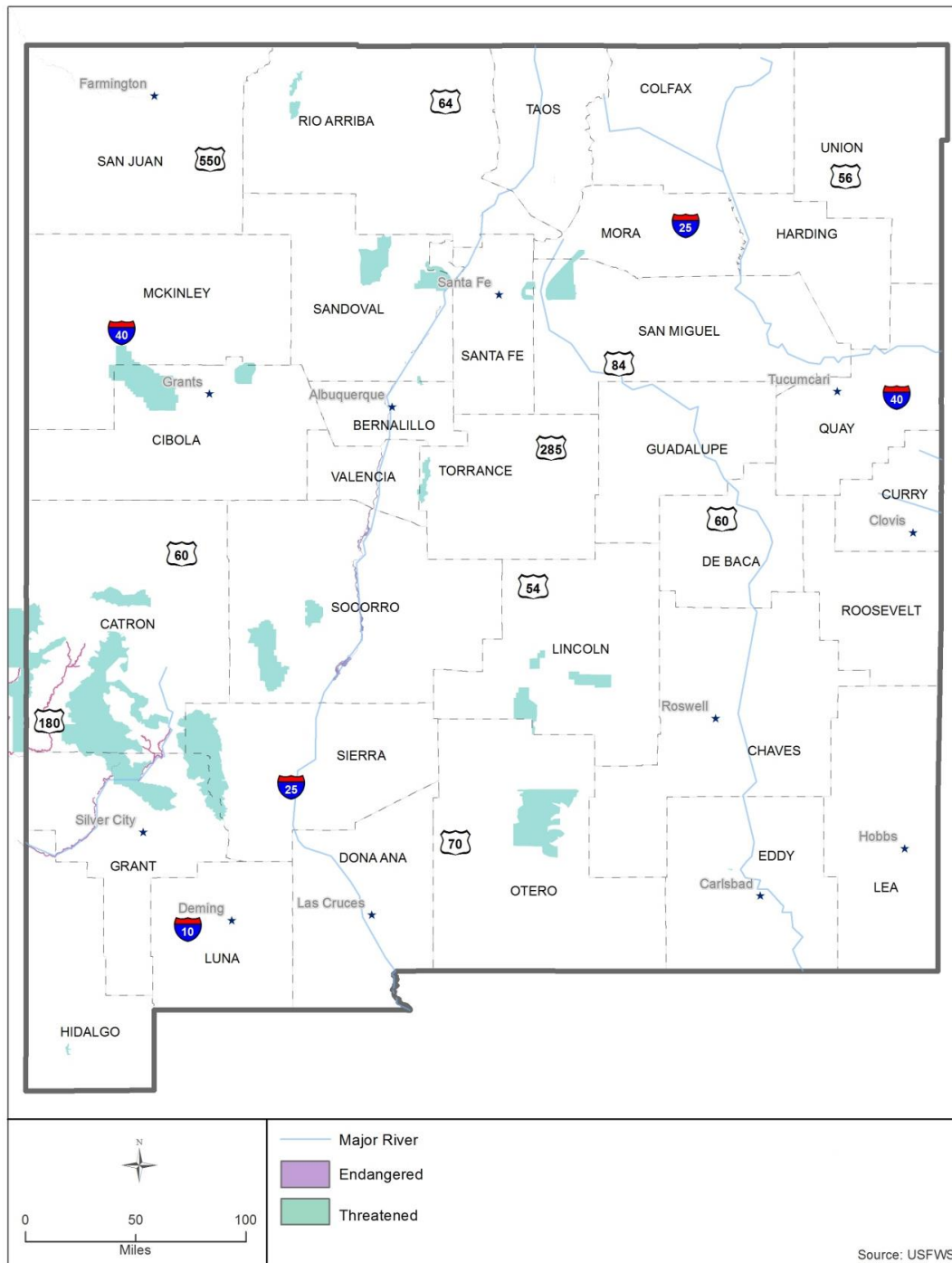
Transportation planning and wildlife mitigation efforts require coordination with several agencies. Wildlife and wildlife habitat is managed and protected by the U.S. Fish and Wildlife Service (USFWS), New Mexico Department of Game and Fish (NMDGF), the Bureau of Land Management (BLM), and tribal governments. Under the Endangered Species Act (ESA), these agencies are responsible for special species status designations at the Federal and/or state level and manage the habitat and protection of these species with endangered, threatened, proposed threatened, candidate and species of special concern designations. Transportation planning requires coordination with NMDGF, USFWS, etc. and habitat mitigation efforts.⁷⁹

The USFWS designates critical habitat that is deemed essential to the conservation of a threatened or endangered species included in the ESA. There are 45 ESA-listed animal and plant species and 17 critical habitat designations in New Mexico many of which include riparian or riverine habitats in the state (Figure 3.37). Designated habitat areas include the endangered Southwestern willow flycatcher (*Empidonax traillii extimus*), endangered Rio Grande Silvery Minnow (*Hybognathus amarus*), threatened Mexican Spotted Owl (*Strix occidentalis lucida*), and threatened Chiricahua leopard frog (*Rana chiricahuensis*).

⁷⁹ U.S. Fish & Wildlife Service, "Critical Habitat Portal", <http://ecos.fws.gov/crithab/>, (accessed April, 2014). Critical habitat mapping information accessed from the USFWS website does not represent the entire critical habitat designated by the USFWS, only the digitized data that has been submitted as of March 2014.



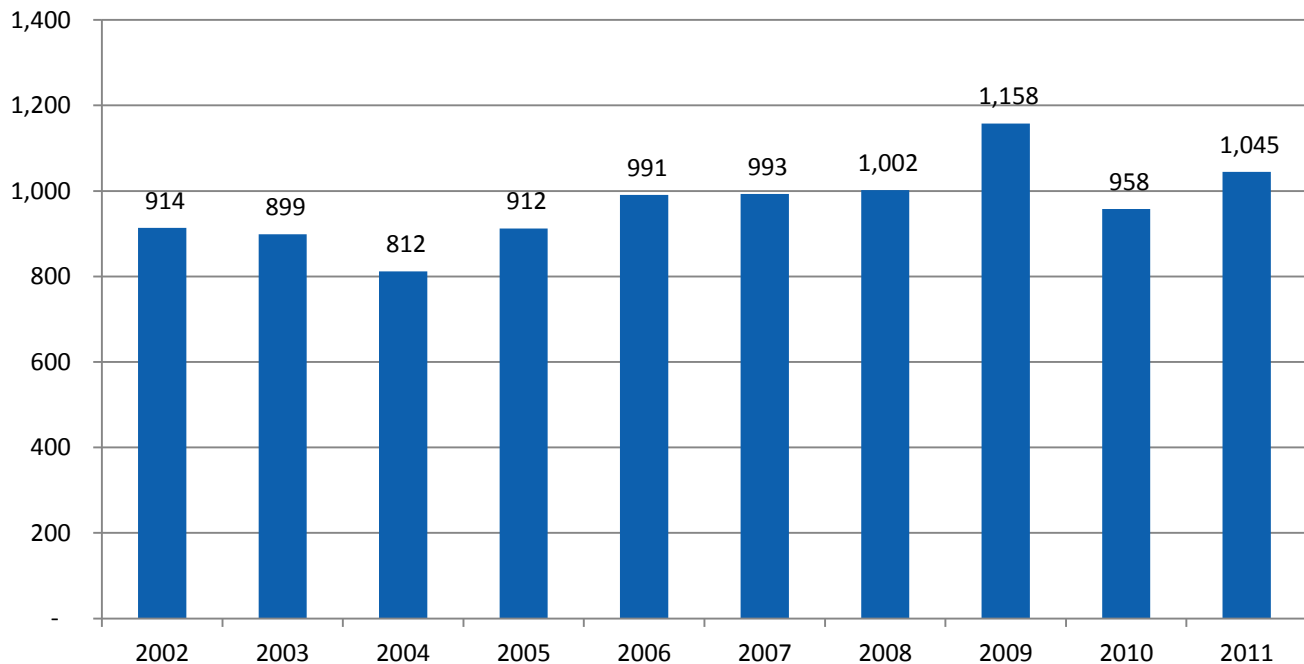
Figure 3.37 USFWS Designated Critical Habitat
2013



Source: USFWS, Critical Habitat Portal <http://ecos.fws.gov/crithab/>

In addition to ESA protected wildlife and habitat, the New Mexico State Legislature passed House Joint Memorial (HJM) 3, 2003 and House Joint Memorial 10, 2011, both conceived and written by the Wild Friends Program, to direct the New Mexico Department of Game and Fish (NMDGF) and the NMDOT to work together to reduce the potential for wildlife/vehicle collisions on highways in New Mexico. HJM 10 encouraged NMDOT, NMDGF, and NM State Police to create a pilot safety project to reduce collisions between large animals and vehicles. Approximately 10,000 large game collisions were reported between 2002 and 2011, including 376 visible injuries and 10 fatalities (Figure 3.38).

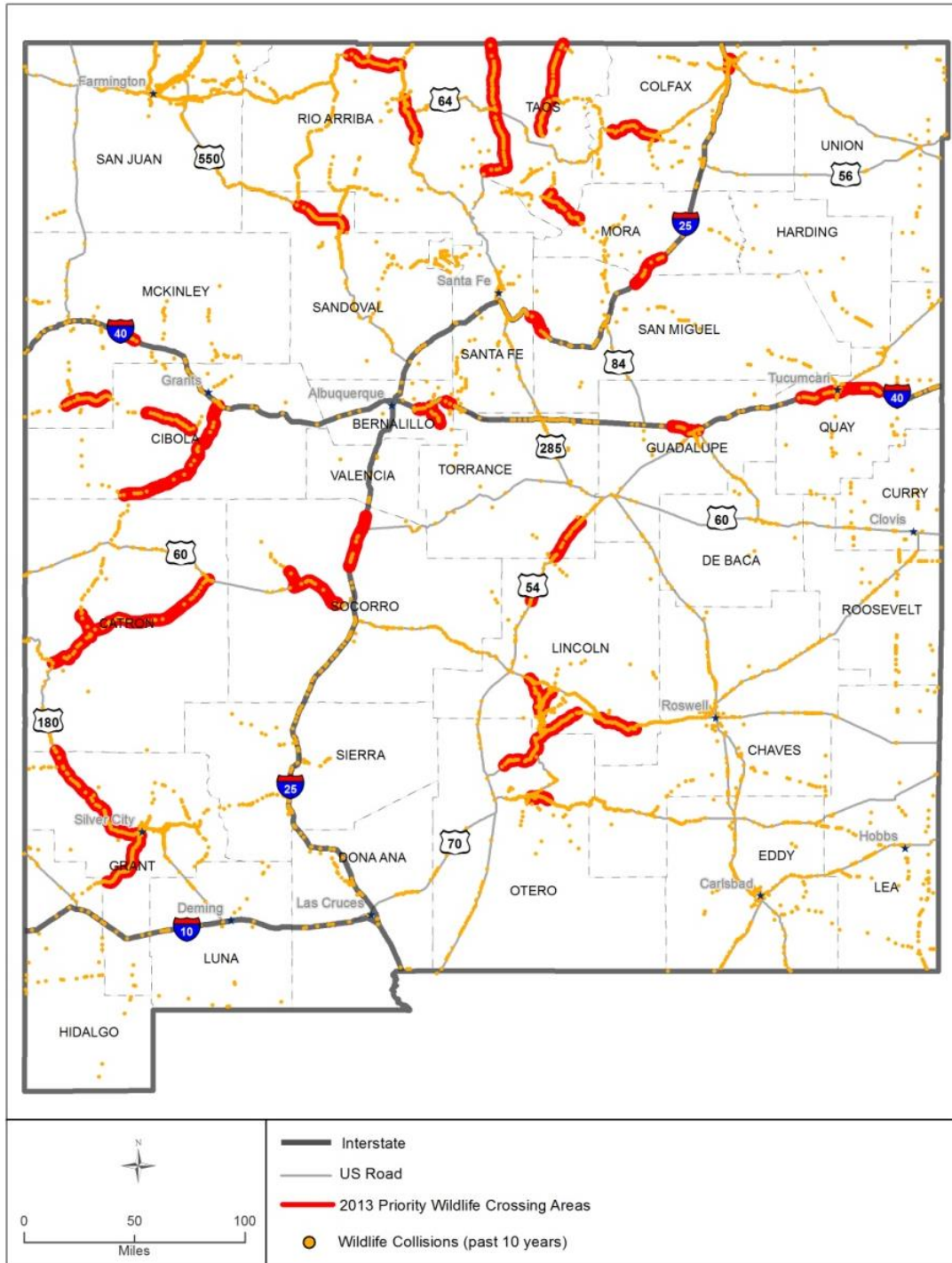
Figure 3.38 Wildlife Collisions on New Mexico Roads



Source: New Mexico DOT Environmental Development Section

More recently, Senate Memorial 11, 2013 (SM11) requested that the NMDOT and NMDGF hold a workshop to identify these future projects and that the governor of the state declare a Wildlife Safety Awareness Day. The workshop was held in May 2013 and included participants from NMDOT, NMDGF, and the Wild Friends Program. The workshop identified priority areas for each NMDOT district and provided next steps action items for the collection of GIS data, site visits, and complete project reporting for both house and senate memorials (Figure 3.39). Highway Safety Improvement Program funding may be an available funding source for these projects.

Figure 3.39 Priority Wildlife Crossings and Wildlife Collisions
2013



Source: Statewide Wildlife Collision Mitigation Workshop, May 2013

Cultural and Historic Resources

Cultural resources are protected under the National Historic Preservation Act (NHPA) as well as several State statutes. Only those resources determined to be listed in or eligible for listing in the National Register of Historic Places (NRHP) or New Mexico State Register of Cultural Properties (SRCP) are afforded protection under Federal and State law. To qualify for listing in the NRHP, a property must have historic significance and integrity and generally be at least 50 years old.

A total of 178,840 documented archaeological and historic sites and 1,950 listed National and State Registered Properties, including Historic Districts, are located in New Mexico.⁸⁰ New Mexico is world renowned for its archaeological and historic heritage. It is home to three United Nations Educational, Scientific and Cultural Organization World Heritage sites, the most of any state. These include Taos Pueblo, Chaco Culture National Historic Park, and Carlsbad Caverns National Park.

Superfund Sites

Under the Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA), or Superfund Act, “hazardous substances” are materials designated for special consideration under the Clean Air Act, the Clean Water Act, the Toxic Substances Control Act, or the Resource Conservation and Recovery Act (RCRA) as well as those designated under CERCLA section 102(a). CERCLA covers hundreds of additional hazardous substances including chlorinated benzenes, ethanes, naphthalene, and phenols, and PCBs.

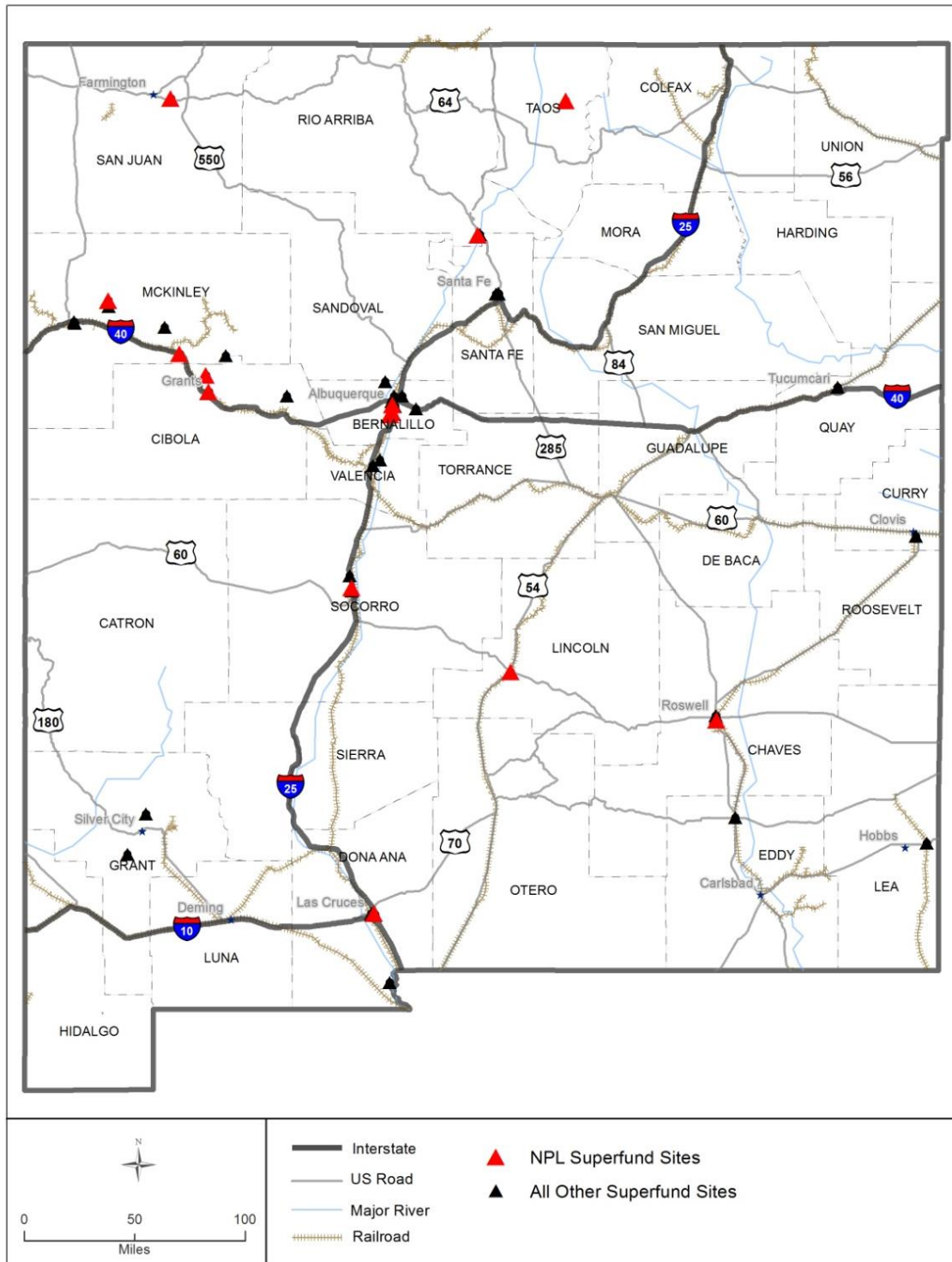
There are currently 48 Superfund sites in New Mexico (Figure 3.40), 14 of which are on the EPA’s National Priority List (NPL) for cleanup. Groundwater and soil contamination is generally from mining, milling, manufacturing, landfill, refinery, and dry cleaning operations. Due to the risk to human health, the New Mexico Division of FHWA requires an Environmental Impact Statement (EIS) for NEPA documentation when transportation projects involve a superfund site, requiring additional time and planning.⁸¹

⁸⁰ New Mexico Historic Preservation, New Mexico Cultural Resources Information System (NMCRIS), Archaeological Records Management Section (ARMS) <http://www.nmhistoricpreservation.org/arms.html>, (accessed April, 2014).

⁸¹ United States Environmental Protection Agency Comprehensive Environmental Response, Compensation, and Liability Information System, <http://www.epa.gov/enviro/facts/cerclis/search.html>, (accessed April, 2014).



Figure 3.40 Superfund Sites in New Mexico



Source: USEPA, Superfund Sites (CERCLIS), <http://www.epa.gov/enviro/facts/cerclis/search.html>

3.6 Transportation Safety, Public Health, and Air Quality

The built environment and the transportation network in particular - roadways, sidewalks, bicycle paths/lanes, and public transportation - can enable healthy environments or act as barriers to quality of life and active living. While transportation safety has been at the forefront of Federal, state, and local transportation planning decision-making for decades, research and interest has expanded in recent years to include the concept of incorporating healthy principles, such as physical activity, accessibility, air quality, social equity, and mental health into transportation decision-making as well. This section considers recent trends related to transportation safety, public health, and air quality that contribute to New Mexico's overall quality of life.

Transportation Safety Trends

Overall, there has been a significant reduction in traffic crashes and fatalities in New Mexico over the past decade, even after factoring in changes in population, traffic volume, licensed drivers or registered vehicles. In 2011, there were 43,227 traffic crashes reported on public roadways in New Mexico, accounting for 18,673 injuries and 351 fatalities. Since 2002, however, crash-related fatalities in New Mexico have decreased 22 percent, alcohol-involved crashes have decreased 35 percent, and teen drivers (ages 15-19) involved in crashes have decreased 34 percent.⁸² While New Mexico has seen a number of traffic safety improvements over the last 10 years, NMDOT has identified a number of areas of concern related to the safety of the traveling public:

- The fatality rate in New Mexico continues to remain higher than the national average (Figure 3.41);
- Crashes on rural roads account for only 17.6 percent of all crashes statewide, but 68.7 percent of crash-related fatalities (Figure 3.42);
- Alcohol-involved crashes account for just under half (43.3 percent) of all crash-related fatalities;
- The rate of teen drivers (15-19) involved in crashes is almost three times higher than the statewide average of all drivers, and the motor vehicle-related death rate among teen drivers remains higher than the national average;⁸³
- Animal-involved crashes increased in Colfax, McKinley, and Sandoval County from 2010 to 2011 (although animal-involved crashes decreased by 10 percent or more in San Juan, Otero, and Taos Counties during the same period);

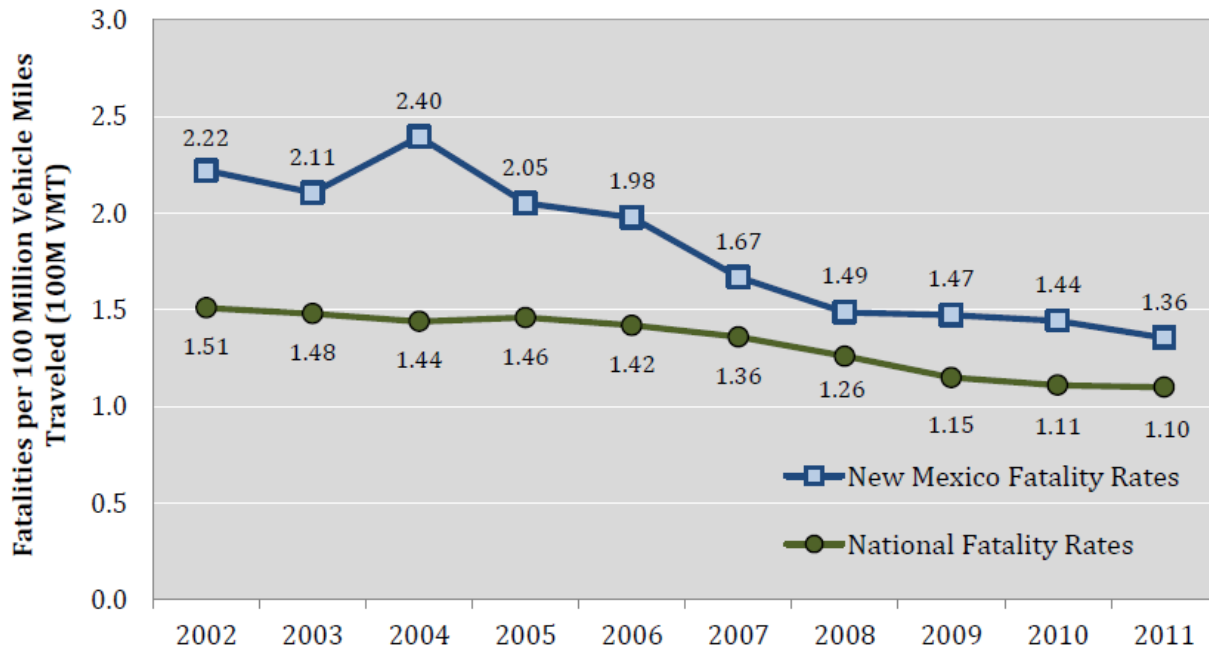
⁸² New Mexico Department of Transportation, *New Mexico Traffic Crash Annual Report 2011*, December 2013.

⁸³ Centers for Disease Control and Prevention, *Prevention Status Reports 2013: Motor Vehicle Injuries - New Mexico*, 2014.



- In the last three years, there has been a large increase in the number of reported crashes involving hazardous materials (although less than one percent of all crashes involve hazardous materials);
- On average every 24 hours in New Mexico, a bicyclist and a pedestrian are hit by a vehicle and a person is killed in a crash.⁸⁴

Figure 3.41 Fatality Trends in New Mexico and the United States

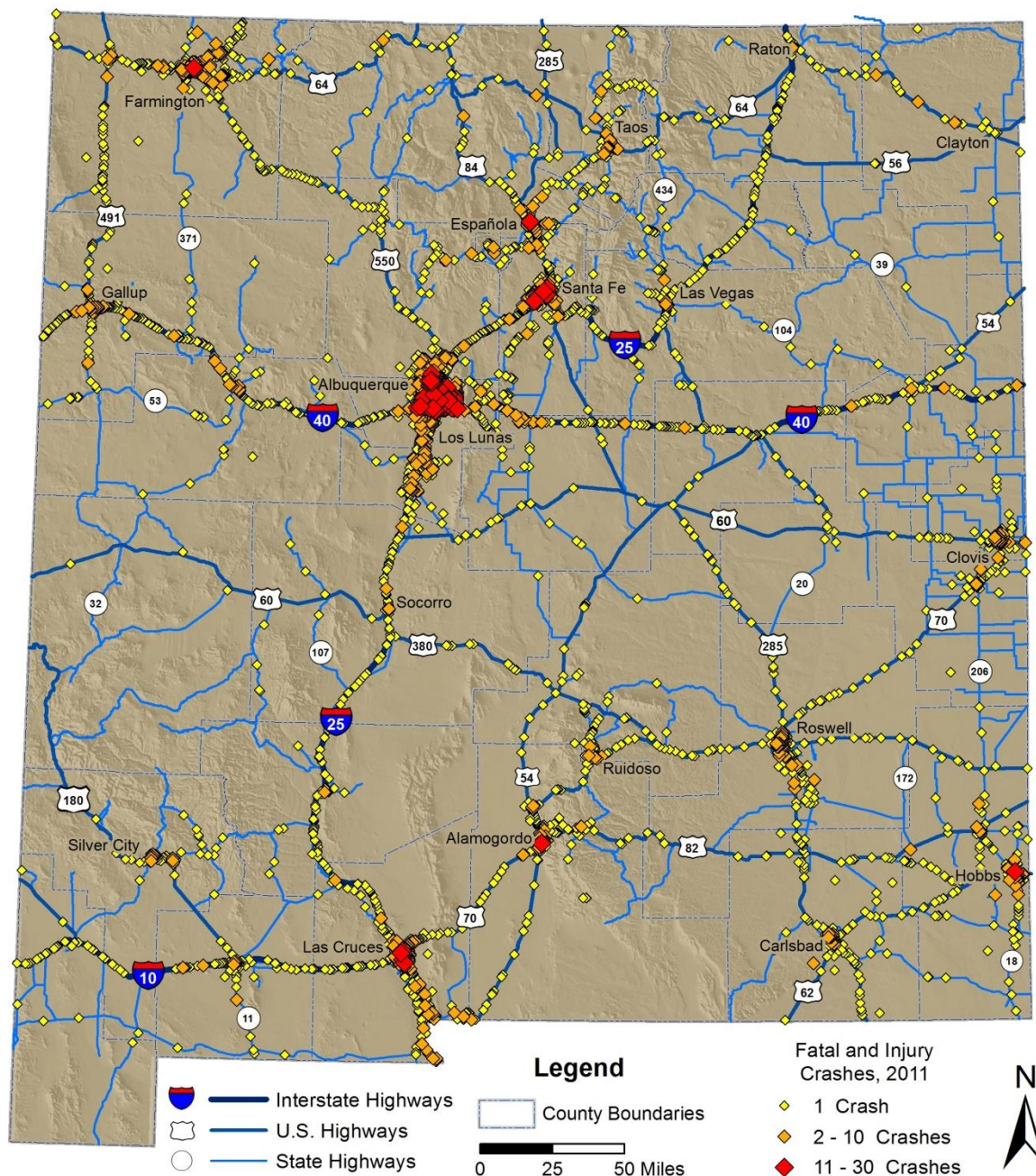


Source: NMDOT, *New Mexico Traffic Crash Annual Report 2011*, December 2013

⁸⁴ New Mexico Department of Transportation, *New Mexico Traffic Crash Annual Report 2011*, December 2013.



Figure 3.42 Fatality and Injury Crashes, 2011



Source: Prepared for the NMDOT by the University of New Mexico, July 2013.

While multiple factors may play a role in any given crash, NMDOT has identified the top three factors contributing to crashes as driver inattention (23.5 percent), failure to yield (13.6 percent), and following too closely (11.3 percent). Top factors contributing to crash-related fatalities include

alcohol or drugs (44.2 percent), driver inattention (12.5 percent), and excessive speed (9.4 percent).⁸⁵

Public Health

According to one national study, New Mexico ranks 32nd in the United States for overall health based on 30 different determinant and outcome measures.⁸⁶ While New Mexico has comparatively low levels of air pollution (ranks 5th nationally), high per capita public health funding (ranks 7th), and a low rate of cancer deaths (ranks 4th), the state's overall health rating is impacted by a low high school graduation rate (ranks 48th), high percentage of children in poverty (ranks 49th), a high percentage of uninsured population (ranks 48th), and high incidence of violent crime (ranks 47th).⁸⁷ There is a large disparity in reported health among adults with and without a high school education. In New Mexico, almost half of adults aged 25 years and older with at least a high school education report that their health is very good or excellent. In comparison, only 16.6 percent of adults with less than a high school education reported the same, resulting in a gap of 33.3 percent.⁸⁸

Poor diet and physical inactivity contribute to many serious and costly health conditions. While physical inactivity among New Mexico adults decreased from 25.3 percent to 21.8 percent in the past year, more than 330,000 adults are still physically inactive.⁸⁹ According to the Centers for Disease Control and Prevention, 27.1 percent of adults, 13 percent of high school students, and 12 percent of low income children (ages 2-5) in New Mexico deal with obesity issues.⁹⁰ While New Mexico's percentages are generally consistent with national averages, the number of adults who are obese has doubled since 1990 in both New Mexico and nationwide (Figure 3.43).

⁸⁵ New Mexico Department of Transportation, *New Mexico Traffic Crash Annual Report 2011*, December 2013.

⁸⁶ America's Health Rankings, <http://www.americashealthrankings.org/NM>, accessed June 6, 2014.

⁸⁷ Ibid.

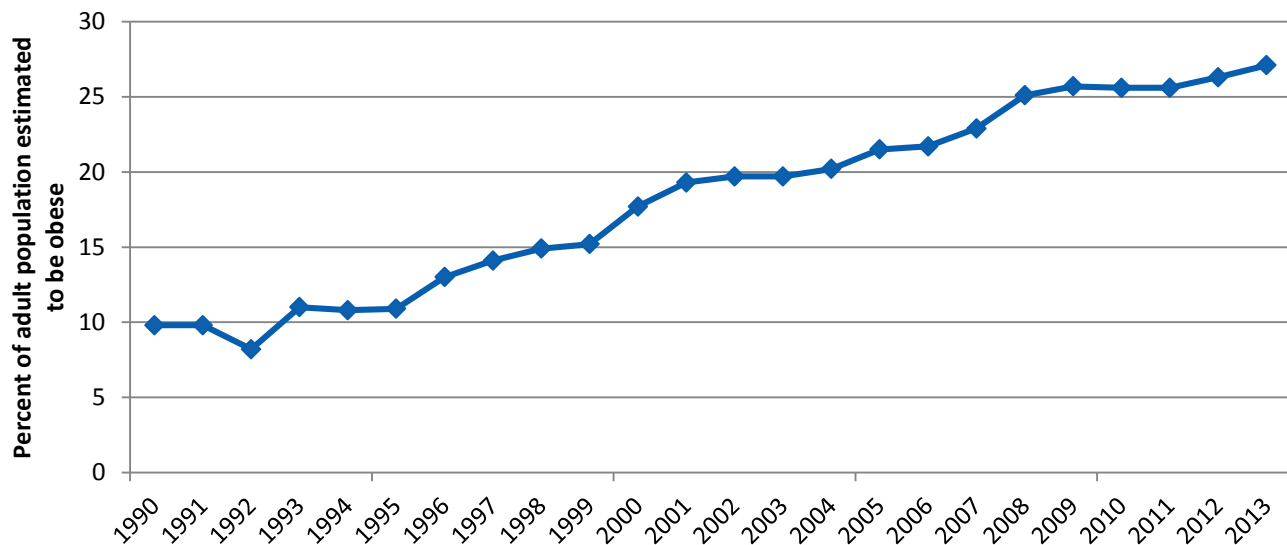
⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Centers for Disease Control and Prevention, *Prevention Status Reports 2013: Nutritional, Physical Activity, and Obesity - New Mexico*, 2014.



Figure 3.43 New Mexico Obesity Trends, 1990-2013



Source: America's Health Rankings, 2014

For years, New Mexico, like most states across the country, has focused its transportation investments on automobile travel. This, coupled with development patterns that contribute to increased travel distances, has resulted in a transportation network designed primarily for travel by motorized vehicle. While there are many factors contributing to the obesity challenge in New Mexico, transportation improvements that increase physical activity and encourage walking, bicycling, or taking transit can help prevent weight gain and lower the risks of obesity, diabetes, and heart disease. Building infrastructure to support active transportation can help lower the health care expenditures related to death and diseases that result from a physically inactive lifestyle.

For example, a health impact assessment (HIA) was conducted in Cuba, New Mexico to evaluate the impact of U.S. 550 highway design on the health and safety of community residents. Cuba is a rural community with most of the population living below the poverty line. Sidewalks are not available or are not well maintained throughout the community, so access to primary destinations on U.S. 550 are generally limited to automobile travel. The HIA focused on providing residents with multimodal options to reach their primary destinations with the goal of improving health, safety, and reducing obesity. The assessment identified several recommendations to improve overall public health of the community:

- Create infrastructure that provides a safe and accessible environment for pedestrians and those individuals in wheel chairs by adding or upgrading sidewalks where they are missing or in disrepair and upgrading all driveway and road crossing ramps to achieve ADA guideline standards;
- Provide a buffer (4.5 to 6.5 ft) between vehicular traffic and sidewalk to increase safety and provide a more desirable walking environment;



- Provide pedestrian scale amenities to encourage safe walking such as: pedestrian scale lighting, shade, and benches for comfort and resting;
- Create safe, convenient pedestrian crossings utilizing median islands or “pedestrian refuges” that are adequately spaced to accommodate pedestrian destinations along U.S. 550;
- Explore possibilities for signage (such as speed feedback signs) that would have the greatest impact to promote a safe pedestrian environment;
- Explore additional potential for traffic calming in areas most used by pedestrians along US 550.

Air Quality

Air pollution has been linked to a number of health problems, including asthma, heart disease, and breathing problems. In addition, particulate matter (particles in the air such as dust, dirt, soot, smoke, and drops of liquid) can cause driver visibility issues, leading to an increased risk of traffic incidents and other consequences. While human activities, such as emissions from cars, trucks, industries, and manufacturing activities, are a large contributing factor to air pollution, many of New Mexico’s air quality challenges are attributed to natural causes, such as dust storms from high winds and wildfires.

The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to develop National Ambient Air Quality Standards (NAAQS) for seven major air pollutants. These pollutants, known as criteria pollutants, are carbon monoxide, nitrogen dioxide (usually referred to as oxides of nitrogen), ozone, particulate matter (PM 10 and PM 2.5), sulfur dioxide, and lead. Areas where air pollution levels persistently exceed the NAAQS may be designated by the EPA as “nonattainment areas.” Transportation projects in these areas require additional coordination with the USEPA and the NMED Air Quality Bureau. There are five nonattainment or maintenance areas located in New Mexico⁹¹:

- **Ozone Maintenance Area in Sunland Park** – Sunland Park was designated as a marginal nonattainment area for ozone in July 1995, but redesignated to maintenance status under the 8-hour ozone standard in 2004. The nearby urban areas of El Paso, Texas and Ciudad Juarez, Mexico contribute to much of the air pollution in this area.
- **PM₁₀ Nonattainment Area in Anthony** – Anthony was designated a PM₁₀ nonattainment area in 1991. Doña Ana County submitted a Natural Events Action Plan for PM₁₀ exceedances to the US EPA in December 2000. Given the PM₁₀ exceedances in this area are caused by uncontrollable natural events, the EPA has not redesignated Anthony’s PM₁₀ nonattainment status at this time, provided adequate dust control plans are in place.

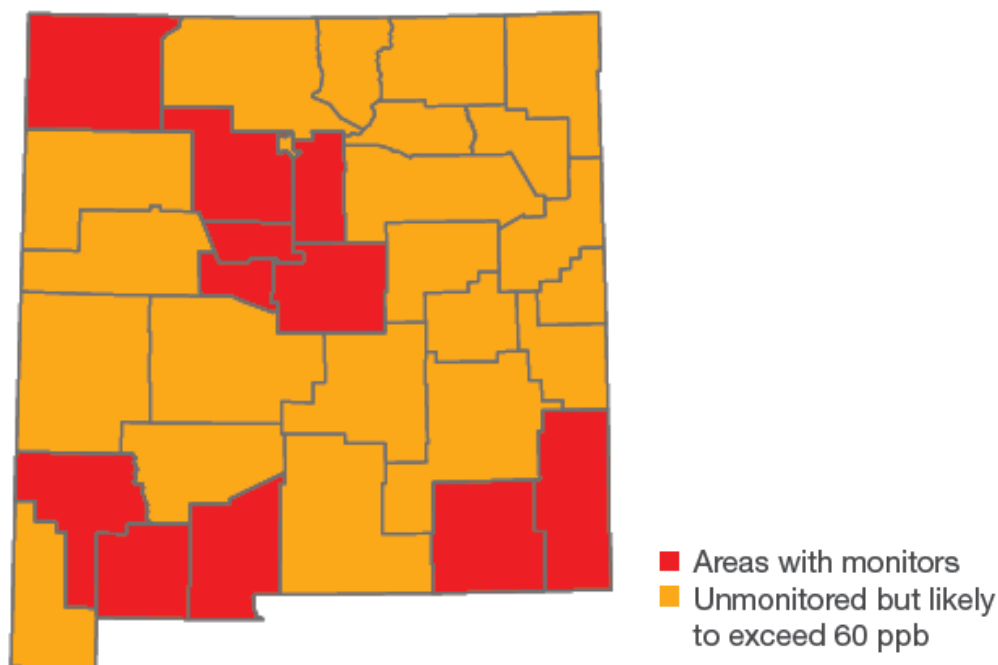
⁹¹ New Mexico Environment Department Air Quality Bureau, *Nonattainment Areas in New Mexico*, http://www.nmenv.state.nm.us/aqb/modeling/na_map.html, accessed June 8, 2014.



- **SO₂ Maintenance Area in Grant County** - Located at the Phelps Dodge Chino Copper Smelter in Grant County, the maintenance area is defined as a 3.5-mile radius around the smelter as well as high elevation areas within an eight-mile radius. New Mexico submitted a State Implementation Plan (SIP) to EPA in 1978, and a redesignation plan was approved in September 2003.
- **Luna County Natural Events Action Plan for PM₁₀** - The Air Quality Bureau submitted a Natural Events Action Plan for Luna County in 2004. The EPA will excuse PM₁₀ exceedances caused by uncontrollable natural events if adequate dust control plans are in place, keeping Luna County from being designated nonattainment.
- **CO Maintenance Area in Albuquerque/Bernalillo County** - This area has been designated a carbon monoxide (CO) limited maintenance area since 1995. A revised Limited Maintenance Plan for Carbon Monoxide (CO) was approved by the EPA in 2004 and took effect in 2006.

The U.S. EPA is in the process of establishing more stringent air quality standards that could impact the nonattainment status of several areas throughout New Mexico. For example, the current NAAQS for ground-level ozone is 75 parts per billion (ppb). Figure 3.44 provides a map of the projected nonattainment areas in New Mexico if the standard was lowered to 60 ppb. Such a change could impact manufacturing growth in the state as well as the process by which transportation projects are planned and implemented.

Figure 3.44 **Projected Nonattainment in New Mexico Based on Potential Revised Ozone Standard (60 parts per billion)**



Source: Based on 2009-2011 data accessed from <http://www.epa.gov/airtrends/values.html> on February 25, 2013 by URS Corporation



4.0 New Mexican Perspective

Several opportunities were used to gather input from the public and stakeholders to help define the critical transportation issues to be addressed by the plan, including:

- **A statewide survey** – An online public survey of New Mexican’s attitudes and perceptions regarding the State’s transportation network was created and implemented in early 2014. This survey gathered input from 625 New Mexico residents representing a statistically valid sample of State residents, balanced based on age and gender. Responses were weighted by a number of demographic categories, including age, race, gender, education, and income, to produce Census-representative results. The survey was available in both English and Spanish. Detailed information about the statewide survey is provided in Appendix A.
- **Regional working group and tribal surveys** – In addition to the broad statewide survey, all participants of the first round of regional working group meetings completed a short survey that asked many of the same questions as the online survey instrument. The regional surveys, distributed to a targeted audience of “informed stakeholders,” provide insight into regional transportation needs and priorities. NMDOT also distributed the same survey to the state’s tribal leadership as a supplement to the statewide and regional surveys to better understand the perspectives of tribal communities regarding transportation issues in New Mexico.
- **Statewide and Regional Working Group meetings** – The first round of meetings with the statewide and regional working groups focused on developing a 2040 vision for the future of transportation in New Mexico; identifying needs, challenges, and opportunities to achieve that vision; and identifying data that could be helpful in assessing existing and future transportation needs. Synthesized and consolidated notes from the statewide and regional working group meetings identify some cross-cutting themes that should be addressed in the 2040 Plan.

This section summarizes the key findings from the combination of these methods. It identifies cross-cutting, statewide themes; themes that were uniquely raised by one or a small number of regions of the State; and themes that were uniquely raised by a select set of demographic groups.

4.1 Statewide Survey

The statewide survey gathered information on New Mexicans’ viewpoints and attitudes about the state’s transportation network, including overall performance, modes used, accessibility, features in need of improvement, and top priorities for future investments. Some key findings are outlined below.

New Mexico residents overall appear to feel the state transportation system is performing relatively well. In response to the question “How well does the transportation system meet your needs?”, 61 percent of the respondents said the existing transportation system is meeting their needs well or very well. By comparison, only 16 percent thought it was meeting their needs poorly or very poorly. A clear majority of New Mexicans appear to feel the system is working fine. Moreover, there are no significant differences between urban and rural respondents on this question. In fact, the proportion of respondents who feel the system is meeting their needs well or very well is the

same (61 percent), regardless of urban or rural residence. However, there are some differences of opinion between age groups. As shown in Table 4.1, 70 percent of seniors (age 65+) say the transportation system is meeting their needs well or very well, compared to 62 percent of younger respondents (ages 18-24) and 57 percent of the middle age bracket (ages 25-64). Younger respondents and those aged 35-64 were more likely to rate it as neutral (26 percent and 24 percent respectively, compared to 16 percent for the older age group) – this is close to the statewide average of 23 percent. This divergence may be because seniors that are retired are generally free to travel whenever they wish, thereby avoiding rush hour traffic. Respondents in the middle age bracket were more likely to rate the system poorly than either of the other age groups; 16 percent of them said the system meets their travel needs poorly, compared to nine percent for the younger group and 11 percent for seniors.

Table 4.1 **System Performance**
By Age

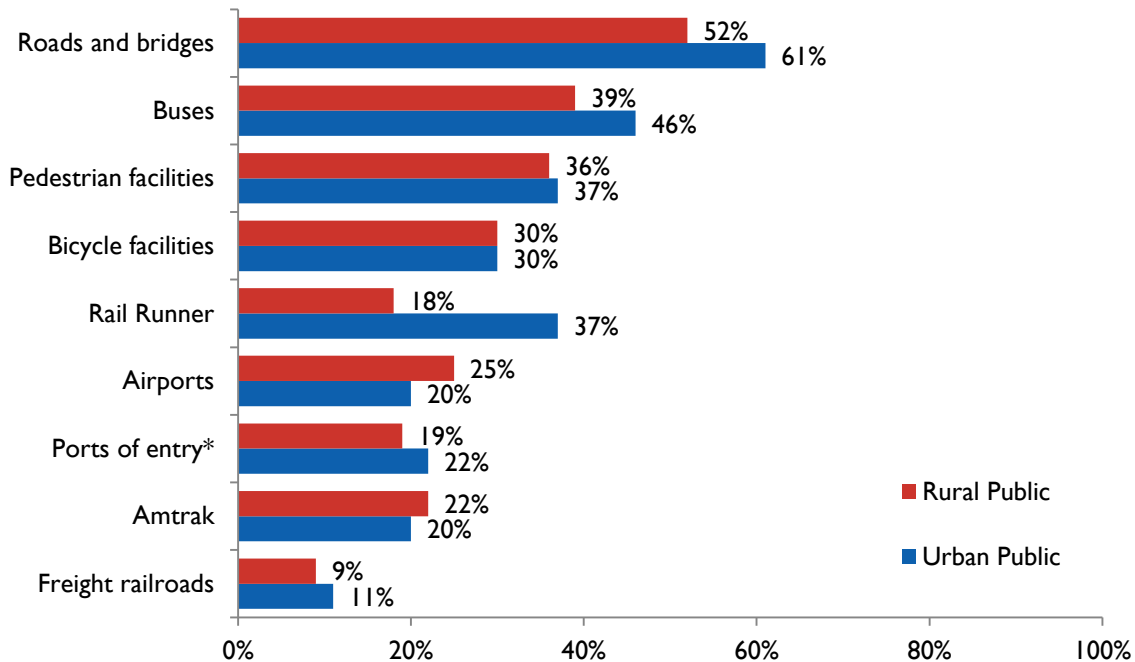
	Age 18-34	Age 35-64	Age 65+
Very well	24%	14%	24%
Well	38%	43%	46%
Neutral	26%	24%	16%
Poorly	9%	16%	11%
Very poorly	2%	3%	3%
Total	100%	100%	100%

Source: CS analysis of online survey data.

While a majority of the public indicated that the system is meeting their needs, respondents identified elements of the transportation system that could benefit from improvement. When asked “Which parts of New Mexico’s transportation system do you think need improvement?”, 58 percent of respondents statewide selected roads and bridges. The top four features cited in need of improvement (roads and bridges, buses, pedestrian facilities, and bicycle facilities) are the same for both urban and rural respondents. However, urban respondents were more than twice as likely to identify needed improvements to Rail Runner, which is not surprising given that rural residents have limited access to use Rail Runner (see Figure 4.1). Overall, rural respondents were more likely to list airports as a need. This could indicate an access issue. Although there are numerous general aviation airports around the state, five cities are served by primary commercial service airports: Albuquerque, Santa Fe, Roswell, Hobbs, and Farmington (Las Cruces area residents use El Paso International Airport).



Figure 4.1 Features in Need of Improvement
Urban and Rural Respondents



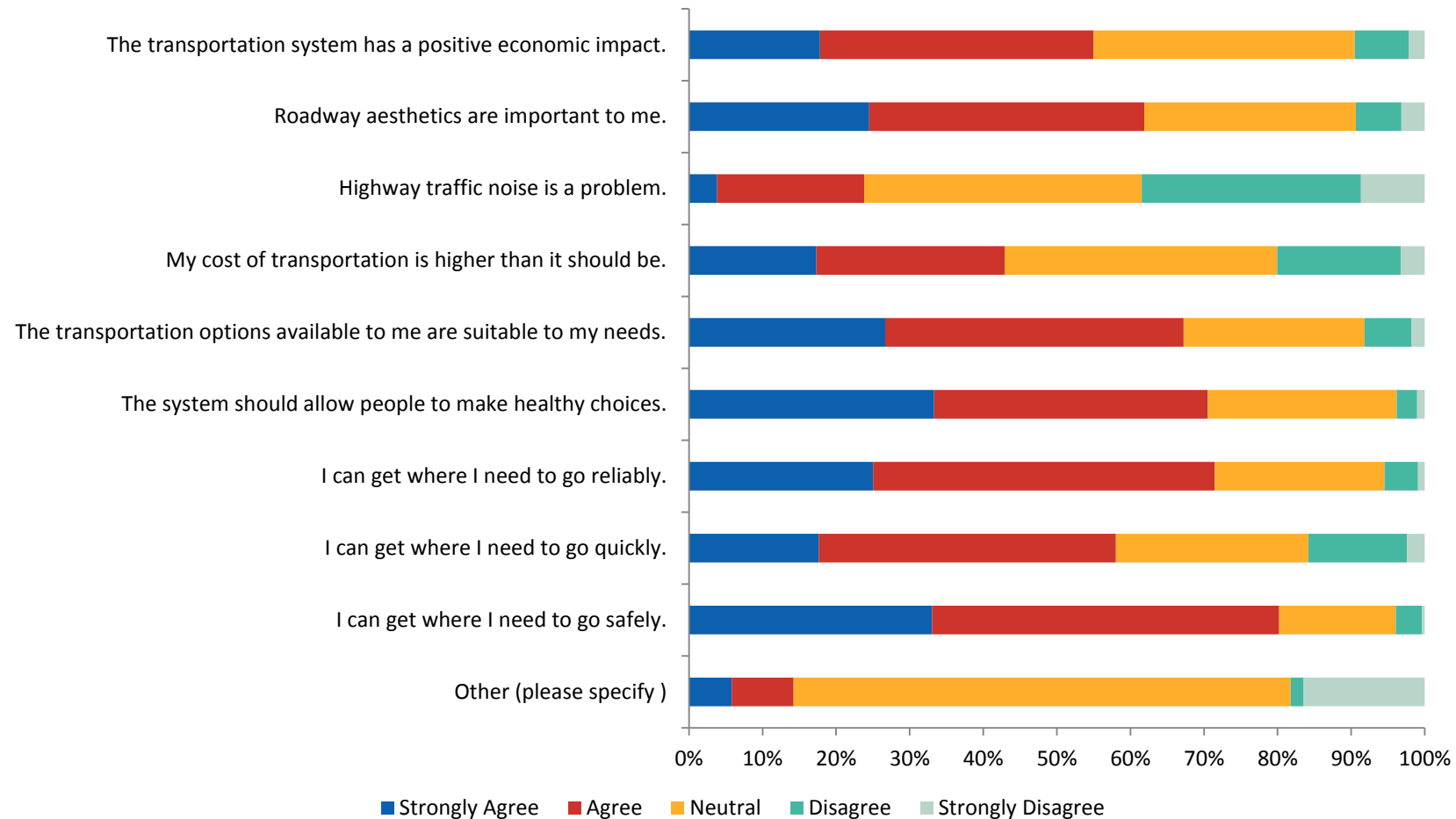
Source: CS analysis of online survey data.

One question asked participants whether they agreed, were neutral, or disagreed with a series of statements about the New Mexico transportation system. Figure 4.2 summarizes the results. Key points include:

- There is broad agreement that the system is safe. Eighty percent of respondents either strongly agreed or agreed they can get to their destinations safely most of the time.
- There is also general agreement that the system is reliable in terms of being able to arrive on time (71 percent strongly agreed or agreed with that statement).
- New Mexicans appear to prefer a transportation system that offers the opportunity to make healthy lifestyle choices like walking or bicycling; 70 percent of respondents felt that the state transportation system should allow people to make these choices.
- Sixty-one percent of all respondents felt that roadway aesthetics are important.
- The cost of transportation is an issue for some – 41 percent of those responding agreed or strongly agreed their household’s cost of transportation was too high – but 37 percent were also neutral on this subject.
- In general, most people feel that the transportation options (modes) available to them suit their needs.



Figure 4.2 How Much do you Agree or Disagree About the Following Statements?
Online Surveys



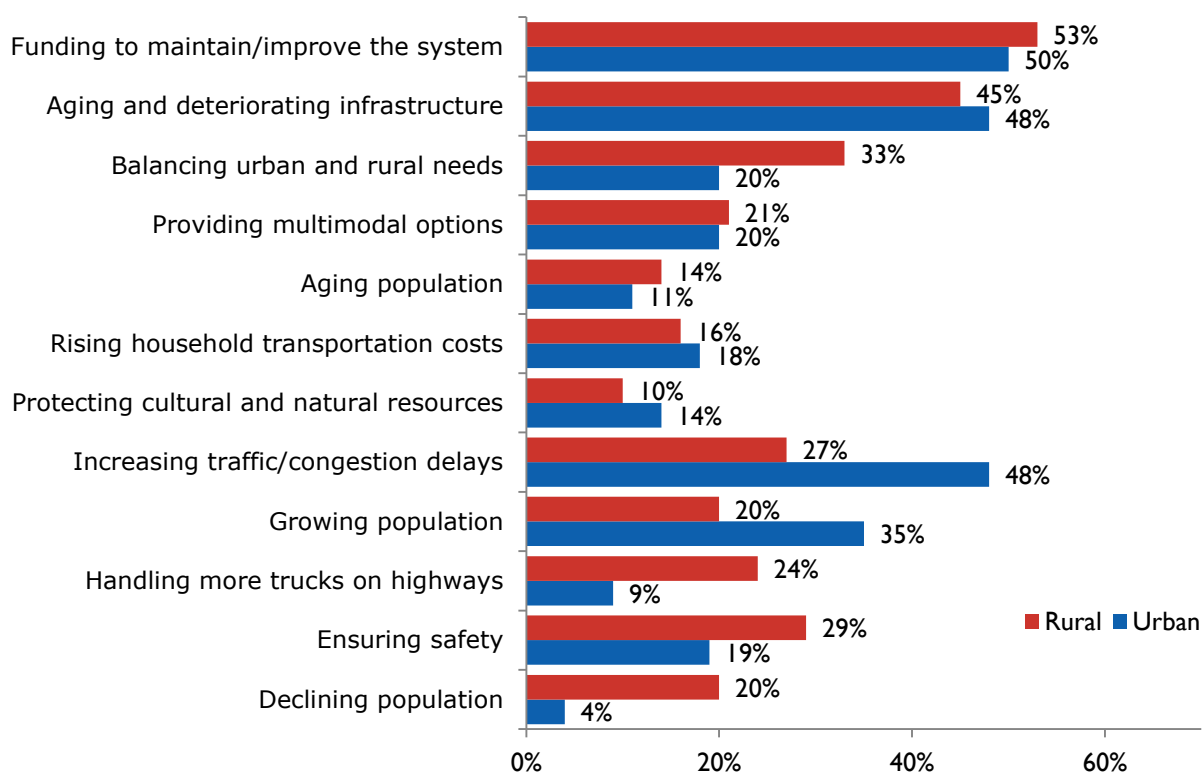
Source: CS analysis of online survey data.



Overall, New Mexicans perceive funding to maintain and improve the transport network as a key challenge. Fifty one percent of respondents said that finding adequate funding for system maintenance and improvements is a pressing challenge, followed closely by aging and deteriorating infrastructure (48 percent) and increasing traffic congestion (43 percent). But as shown in Figure 4.3, there were some differences between urban and rural respondents for this question. Although funding and deteriorating infrastructure are the top concerns for both groups, balancing urban and rural needs was a much bigger concern for rural participants, as was population decline, ensuring safety, and handling more trucks on the state’s highways. By contrast, urban dwellers appear to be more concerned with population growth and increasing congestion.

When looking at the data by age group, the top concern for seniors was aging and deteriorating infrastructure (cited by 65 percent of respondents age 65 or older), but for 18-34 year olds this challenge was ranked fifth (25 percent of the total). Younger respondents were more concerned with growing traffic congestion (43 percent vs. 31 percent for seniors) and population growth (37 percent vs. 24 percent). Ensuring safety also seems to be an important challenge for younger New Mexicans, as are rising household transportation costs.

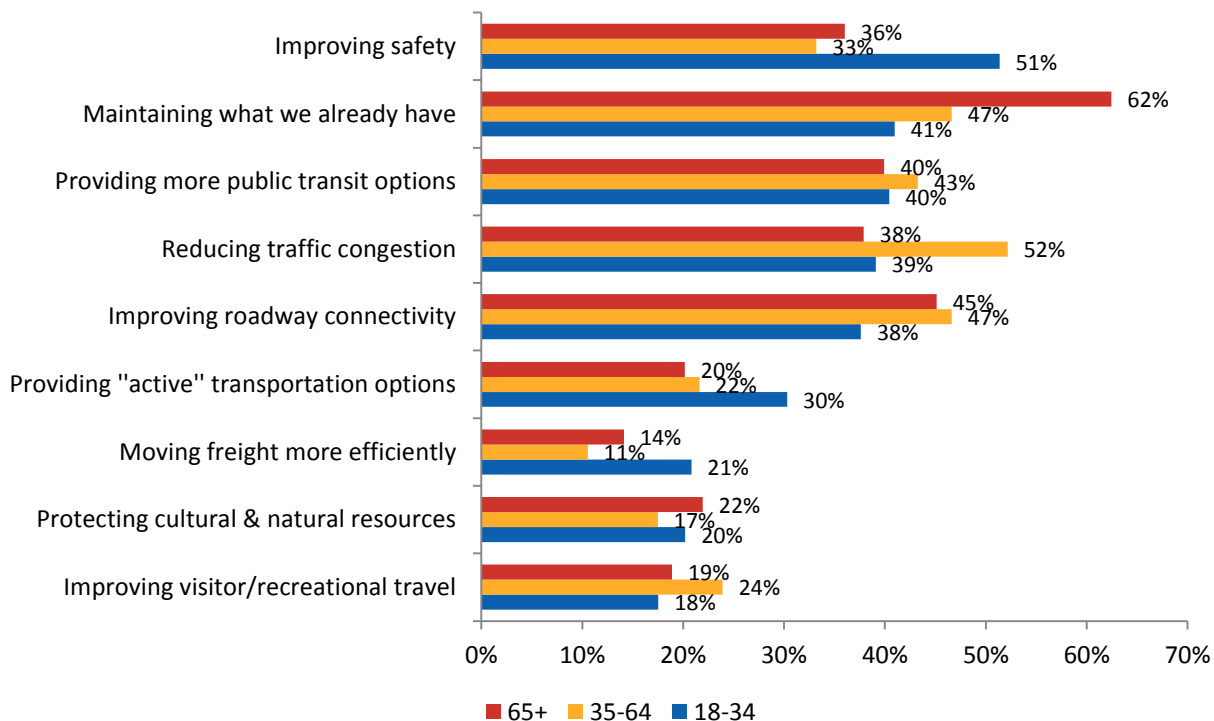
Figure 4.3 New Mexico’s Most Significant Transportation Challenges
Urban and Rural Respondents



Source: CS analysis of online survey data.

The online survey asked respondents to choose what they feel should be the top three priorities for future investments in the state's transportation system. The findings suggest that responses vary by both urban/rural residency and age. Although maintaining the existing system was identified as a top three priority by 48 percent of respondents statewide, there was considerable variation between urban and rural respondents and by age group. For example, reducing traffic congestion ranked as the top priority among the urban group (52 percent, compared to just 26 percent for the rural respondents), while nearly two-thirds of rural respondents ranked maintaining what the state already has as the top priority. Similarly, as shown in Figure 4.4, improving safety is the top concern for 18-34 year olds but is much less important for those age 65 and up and those aged 35-64. Maintaining the state's existing system was the most important priority for 62 percent of seniors but only 41 percent of 18-34 year olds and 47 percent of respondents in the middle age bracket.

Figure 4.4 **Priorities for Future Transportation Investments**
By Age



Source: CS analysis of online survey data.

4.2 Regional Working Group and Tribal Surveys

A series of Regional Working Group (RWG) meetings were held in each of the seven Regional Transportation Planning Organization (RTPO) regions (Mid-Region, Northeast, Northern Pueblos, Northwest, South Central, Southeast, and Southwest) in early 2014. Participants at these



meetings represent individuals who are actively involved in transportation issues and decision making in their communities. At each meeting, attendees were asked to complete a paper survey which asked many of the same questions as the online instrument. A total of 114 responses were gathered in this way.

In addition, the project team distributed the same questionnaire via a web-based link to the members of the Tribal Coordinating Committee to redistribute to their respective tribal leaders. The tribal population, which makes up approximately 10 percent of New Mexico’s population, was under-represented in the statewide survey. Therefore, the targeted survey of tribal leaders was intended to gain a better understanding of tribal views on the State’s transportation needs, challenges, and priorities. A total of 36 responses were collected from 10 different tribes.

Although Working Group meeting attendees and tribal survey responses do not represent a statistically valid random sample, it is informative to compare their answers to the survey questions to those received from the statewide online survey. This section also compares responses to the Regional Working Group surveys by region, comparing and contrasting the views of this “informed stakeholder” group to those of the state’s residents as a whole. It also summarizes the tribal survey findings in comparison to the statewide and Regional Working Group findings. A detailed analysis of the findings from the regional and tribal surveys is included in Attachment B.

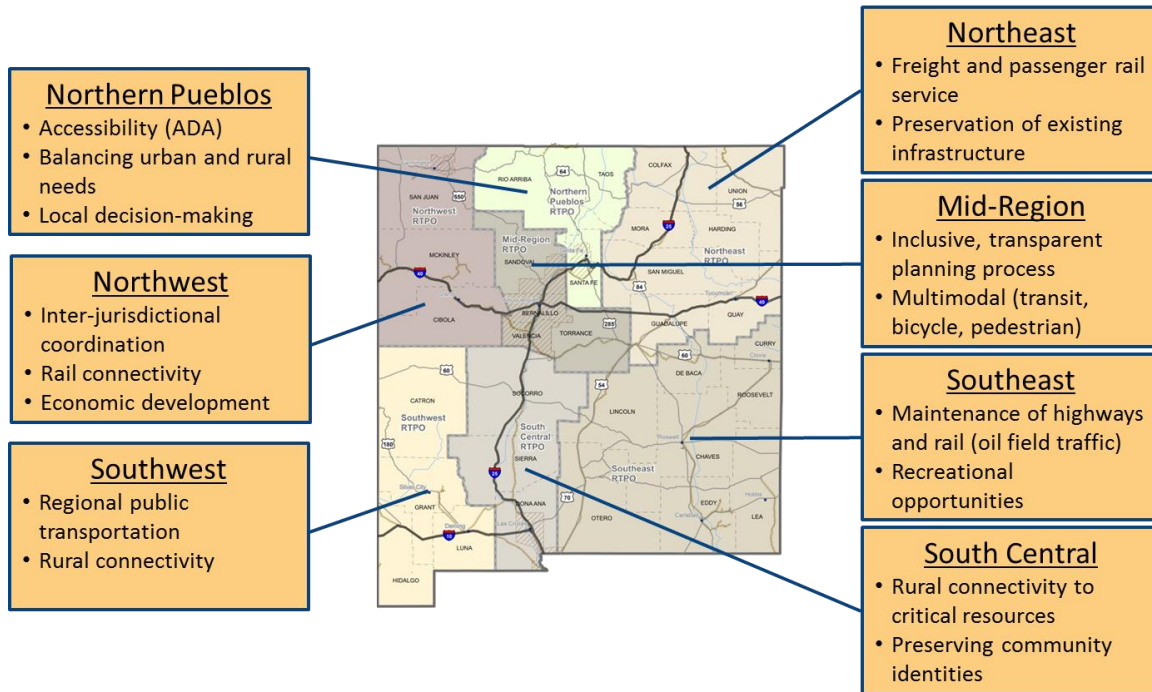
Regional Comparison

While the regional working groups identified many consistent transportation challenges and priorities, the discussions within the groups and the survey results highlighted some regional variations in transportation priorities across the state (Figure 4.5):

- Freight and passenger rail service is a key concern in the Northeast – this may be related to the cessation of BNSF freight rail service in the area and concerns about the possible future rerouting of Amtrak’s Southwest Chief intercity passenger rail service.
- Providing multimodal options (including transit and bicycle/pedestrian modes) is important to stakeholders from the Mid-Region.
- In the Southeast, increased volumes of heavy trucks serving the oil fields has raised concerns about the maintenance needs of the region’s highways and rail.
- Improving rural connectivity were key priorities for the South Central and Southwest regions.
- With many tribes located in the Northwest region, inter-jurisdictional coordination was highlighted as a key challenge.
- Balancing urban and rural needs and enabling local decision-making were key priorities for those from the Northern Pueblos region.



Figure 4.5 Regional Variations in Transportation Priorities



Tribal Survey Response Summary

With respect to the state's top transportation challenges, the tribal surveys echoed some of the findings from the statewide and regional surveys, including the need to find money to maintain and improve the system as well as was the prevalence of aging and deteriorating infrastructure (Table 4.2). However, the tribal survey revealed a few key differences in perspective as well. Just under half (47 percent) of the tribal respondents identified rising household transportation costs as a top three challenge. The tribal respondents also placed greater emphasis on the challenge of protecting cultural, historic, and natural resources than the collective statewide and regional surveys. In addition, the tribal respondents were more likely than the participants from the Regional Working Groups to identify safety as one of the state's top three challenges.

With respect to the New Mexico's top transportation priorities, tribal respondents emphasized focusing on improving safety; protecting cultural, historic, and natural resources; and providing more public transit options (Table 4.3).

Table 4.2 Top Transportation Challenges

	Urban Public	Rural Public	Tribes	Rural Working Groups
1st	Finding money to maintain and improve the system	Finding money to maintain and improve the system	Finding money to maintain and improve the system	Finding money to maintain and improve the system
2nd	Aging and deteriorating infrastructure	Aging and deteriorating infrastructure	Rising household transportation costs	Aging and deteriorating infrastructure
3rd	Increasing traffic / congestion delays	Balancing urban and rural needs	Aging and deteriorating infrastructure	Balancing urban and rural needs
4th	Growing population	Ensuring safety	Protecting cultural, historic, and natural resources	Providing multimodal transportation options

Table 4.3 Top Four Transportation Priorities

	Urban Public	Rural Public	Tribes	Rural Working Groups
1st	Reduce traffic congestion	Maintain what we already have	Improve safety	Maintain what we already have
2nd	Improve roadway connectivity	Improve roadway connectivity	Protect cultural, historic, and natural resources	Provide more public transit options
3rd	Maintain what we already have	Improve safety	Provide more public transit options	Improve roadway connectivity
4th	Provide more public transit options	Provide more public transit options	Maintain what we already have	Provide more “active” transportation options (walking and bicycling)

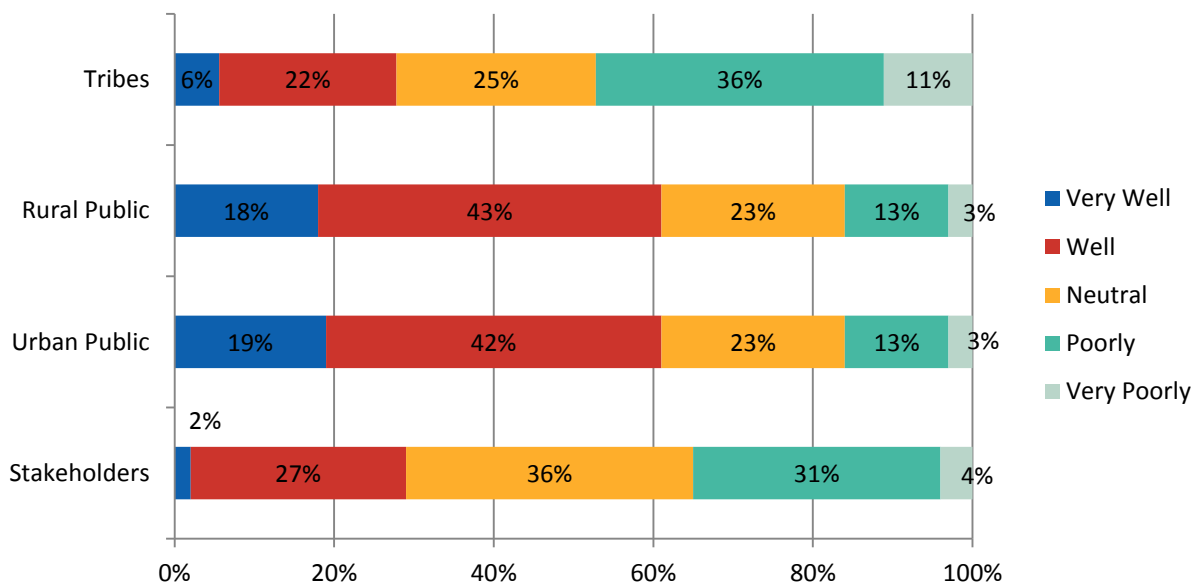
Comparison to Online Survey Results

In comparing responses of the RWG meeting attendees (referred to as “informed stakeholders”) and tribal respondents to those from the statewide online survey, some key differences are apparent. As shown in Figure 4.6, 61 percent of the public (regardless of urban or rural) says the existing transportation system is meeting their needs well or very well, compared to only 29 percent of informed stakeholders and 28 percent of the tribal respondents. The tribal respondents and informed stakeholders were more likely to view the system poorly. Just under half (47 percent) of the tribal respondents and 34 percent of the informed stakeholders indicated the



system was functioning poorly or very poorly, compared to only 16 percent of the public statewide. Moreover, these differences carried over to perceptions about which parts of the system need improvement. For instance, although there was general agreement between all three groups about the need to improve the state’s roads and bridges, the informed stakeholder group was much more likely to perceive significant needs across all modes. Taken together, these findings suggest that the general public does not share the same sense of urgency and extent of transportation needs that is perceived by informed stakeholders across the state. This could have implications when trying to gain public support for increases in gas taxes, registration fees, or other options to increase funding for transportation investments because it suggests the public may value other social needs more than transportation.

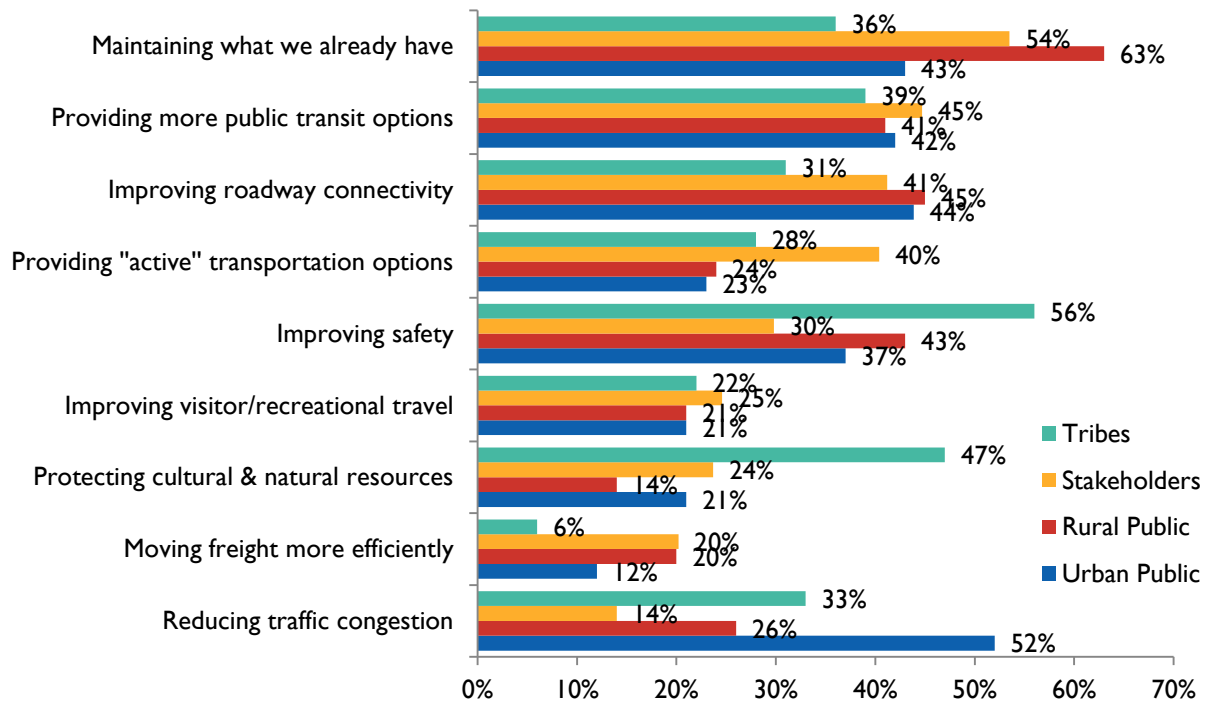
Figure 4.6 System Performance Views
Public versus “Informed Stakeholders”



Source: CS analysis of online and RWG meeting survey data.

Notwithstanding the differences between informed stakeholders, tribes, and the public on how the system is performing, there are some areas of agreement on what the key challenges are and what should be done to address them. For example, finding adequate funding to maintain and improve the transportation network and aging/deteriorating infrastructure were perceived as two of the most important challenges by all three groups. Likewise, as shown in Figure 4.7 maintaining existing assets in a state of good repair was one of the top three priorities for future transportation investment in all four groups. However, measures to reduce congestion appear to be the top priority for urban residents, although they are the least important priority for the informed stakeholder group. Similarly, the informed stakeholder group appears to value providing active transportation options (e.g., walking and bicycling) more than the public. The tribal respondents value protecting cultural, historic, and natural resources and improving safety more than the other groups.

Figure 4.7 Top Priorities for Future Transportation Investment
Public versus “Informed Stakeholders”



Source: CS analysis of online, RWG meeting, and tribal survey data.

4.3 Statewide and Regional Working Group Summaries

All of the statewide and regional working groups were asked to discuss how well the transportation system is performing today and what vision and performance goals should be considered for the future. Several key themes emerged from among the groups related to a 2040 transportation vision:

- **Provide multimodal options** – A common theme among the working groups was the importance of providing multimodal transportation options, including public transportation, freight and passenger rail, bicycle and pedestrian facilities, and air cargo and passenger service. The transportation network should be seamless, connected, safe, and efficient for all modes.
- **Support the needs of all system users** – The needs of all users (regardless of age, ability, background, income, etc.) and communities (regardless of urban, rural, size, culture, etc.) should be recognized and supported in transportation planning. Transportation, land use, and the needs of the community factor into design considerations.
- **Improve coordination and leverage partnerships** – Sustained and effective inter-jurisdictional coordination is needed to support data sharing, planning, and plan implementation

(across local, state, federal, and tribal agencies and among service providers). The need for improved coordination extends beyond interactions with traditional transportation planning partners, however. Working group participants identified the need for improved partnerships with economic development agencies, Department of Health, Federal and state land managers, among others.

- **Maintain the existing system** – The working groups recognize the significant investments that the State has made in its multimodal transportation network over time and the need to maintain these assets in a state of good repair. The 2040 Plan should seek immediate, short-term, and long-term strategies to minimize the total lifecycle costs of existing assets.
- **Identify sustainable, equitable transportation funding options** – The State’s current transportation revenues are losing purchasing power to inflation, losing ground to growing transportation demands, and losing capacity to maintain existing infrastructure.

The statewide and regional working groups identified the following cross-cutting themes related to the State’s key transportation challenges:

- **Funding limitations** – New Mexico’s funding constraints make it challenging to preserve the existing system, much less expand where needed. Current funding sources are losing purchasing power due to inflation, increased fuel efficiency, lower VMT, etc. A significant portion of New Mexico’s resources are tied up in debt service, limiting the investments that can be made today. Also, the New Mexico constitution’s Anti-donation clause limits the State’s ability to invest in certain projects. At the same time, the Federal contribution to transportation is declining (in real terms) and short-term (two-year) transportation bills make it more difficult for states to plan for long-term needs.
- **Balancing competing priorities** – New Mexico is confronted with a range of competing priorities: urban versus rural transportation needs, maintaining existing infrastructure versus tackling new and emerging transportation challenges, designing highways for speed and capacity versus safety and community preferences.
- **Responding to changing demographics** – Anticipating and responding to the needs of aging populations, millennial preferences, impacts of water availability of growth, and shifts in population from rural to urban.
- **Improving rural accessibility** – The rural character of much of the state presents unique challenges. Transportation access in rural areas is becoming increasingly important, increasingly complex, and increasingly challenging. Access implies much more than distance between communities, but also access to employment, education, and healthcare facilities. It also implies improved connectivity between modes and service providers.
- **Combating “business as usual”** – The working groups discussed several challenges related to changing the way transportation is planned and viewed within the State. These include moving toward a multi-modal transportation system; improving the public perception of public transit; working to improve the level of collaboration, coordination, and resource sharing between agencies; and addressing transportation and land use together.



5.0 Transportation Policy Constraints



5.1 Policy Issues and Constraints

Federal Policy and Legislation

The passage of MAP-21 in 2012 marked perhaps the most significant change in Federal transportation legislation since ISTEA of 1991. MAP-21 introduced several significant changes, including:

- Consolidation of the Federal program from 98 programs of various sizes into six major program areas – the Highway Improvement Program (HSIP), Infrastructure Condition, National Highway Performance Program (NHPP), Congestion Mitigation and Air Quality (CMAQ), and the Transportation Alternatives Program (TAP). The major effect of this change is that previously separate programs (e.g., safe routes to schools) become acceptable uses of funds under a broader program mandate (e.g., HSIP), giving state DOTs more flexibility to program funds to meet their specific needs.
- Introduction of national goals and a performance-based approach to the Federal highway and transit programs that are tied directly to the program areas described above. Alongside the program consolidation effort, MAP-21 introduced national performance measures with attendant reporting and target setting requirements for both state DOTs and MPOs. MAP-21 also requires states and MPOs to develop performance-based long range transportation plans and program documents that demonstrate the relationship between investment and performance. The final form of the performance measures, target setting approaches, and planning and programming requirements will require
- Expansion of the National Highway System (NHS) to include all principal arterials. MAP-21 significantly simplified the definition of an NHS route – all major arterials now are on the NHS. For many states, including New Mexico, this increased data collection costs, as NHS routes require additional detailed information on pavement condition and other data items for a state's Highway Performance Monitoring System (HPMS) submittal.
- Focus of the Federal program on the National Highway System. Alongside the expansion of the NHS, most of the Federal performance measures and funding programs are anticipated to be focused more explicitly on this system. While the entire Federal-aid system remains eligible for some program areas, most of the measures in particular are focused on the NHS or the interstate system. The major exception is for the Highway Safety Improvement Program (HSIP) program and measure, which are focused on all roads, appropriately reflecting the significant numbers of fatalities and serious injuries that occur on lower functional class roads.

This new policy framework of a simplified program structure alongside requirements to measure performance represents a new direction. And while implementation of this approach through

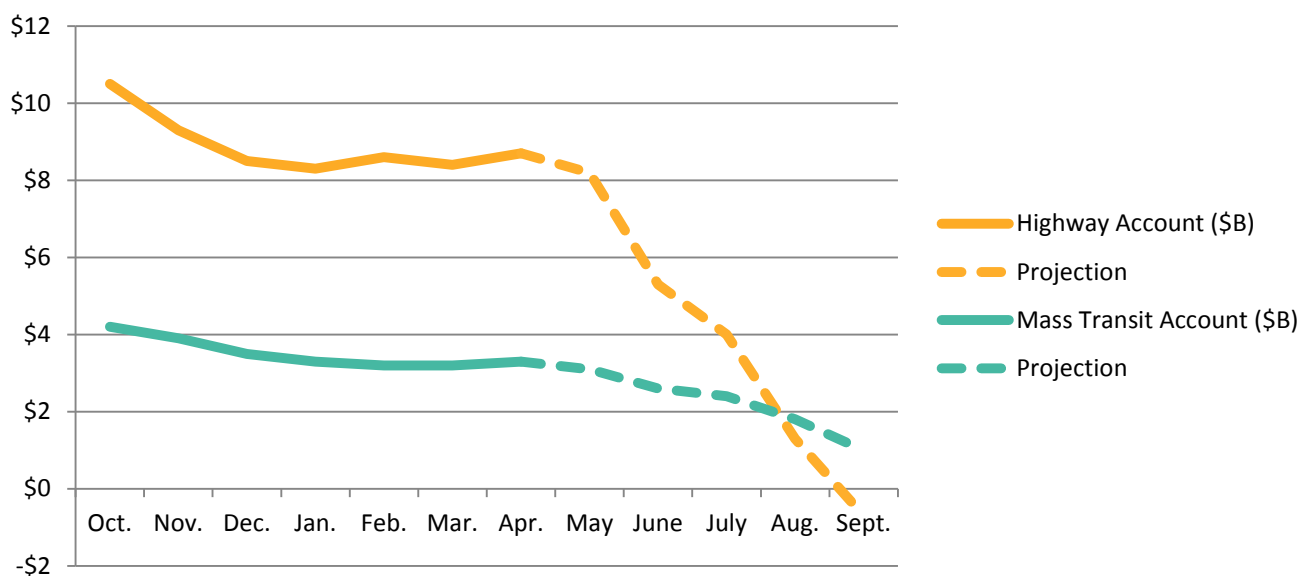
Federal rulemaking leaves some uncertainty in the final direction, the concept represents a growing movement among transportation agencies to adopt performance management as a best practice. The New Mexico Transportation Plan must respond to these Federal mandates, but more importantly adopts the basic approach of a performance-based plan, relating future investment choices to New Mexico's goals and objectives.

Federal Trust Fund Challenges

While MAP-21 made significant policy changes, the one major issue it did not resolve was the crisis in Federal funding. The Federal Highway Trust Fund and the Mass Transit Account are precariously close to running negative balances at current levels of funding. Declining revenues from Federal gas tax receipts have made it impossible for these funding sources to keep up with the expenditures provided in MAP-21 and other Federal legislation. Over the past decade, Congress has provided general funds to support transportation. State DOTs and their partners are at risk of having payments reduced as soon as Fall 2014 without the infusion of new resources.

Figure 5.1 presents the Federal trust fund balances for both the highway and mass transit accounts. Note that a negative balance does not indicate an end to Federal funding. Federal funding is provided as a reimbursement to the States; a negative balance means that certain projects may face delays in reimbursement. More importantly, uncertainty about the Federal trust funds makes it challenging for state DOTs and their partners to plan for future investments, given potential uncertainty about reimbursement of incurred expenses.

Figure 5.1 Federal Trust Fund Balances (FY 2014)



Source: USDOT, 2014, <http://www.dot.gov/highway-trust-fund-ticker>



New Mexico Multimodal Focus

Over the last 20 years, New Mexico has changed from a highway department to a department of transportation. In the early 2000s, the agency's name was officially changed from Highway Department to Department of Transportation with greater emphasis on multi-modal transportation with the slogan "Mobility for Everyone." Alongside this change came investment in certain types of multimodal infrastructure, including the State's Park-and-Ride system and the Rail Runner commuter train from Belen to Santa Fe.

This multimodal focus for New Mexico is an important touchstone for the 2040 Plan. The entire planning effort is focused on ensuring that the NMDOT can provide multimodal transportation solutions that meet the needs of New Mexico's residents, businesses, and visitors, regardless of what mode they utilize.

New Mexico Anti-Donation Clause

The New Mexico State Constitution includes an Anti-Donation Clause that limits the ability of the State or any of its counties, municipalities, or other subdivisions of the State to make contributions to private entities. It explicitly prohibits public investments that would benefit privately-owned railroads. The law dates back to the 1800s when many public entities made investments to build railroads only to be left responsible for the bonds when the railroads went bankrupt or, worse, when the railroads were never built. In response to these railroad subsidy abuses, New Mexico and many other states incorporated anti-subsidy provisions into the State's constitution to protect public investments. While many states have since amended or repealed their Anti-Donation Clauses to allow for greater leniency in how the law is applied, New Mexico's clause remains in place limiting NMDOT's ability to invest in railroad improvements or pursue public-private partnerships. However, the potential exists for the State to provide funding for land, buildings, or infrastructure to support new or existing businesses in order to create new job opportunities pursuant to the Local Economic Development Act (LEDA) or the Statewide Economic Development Act.

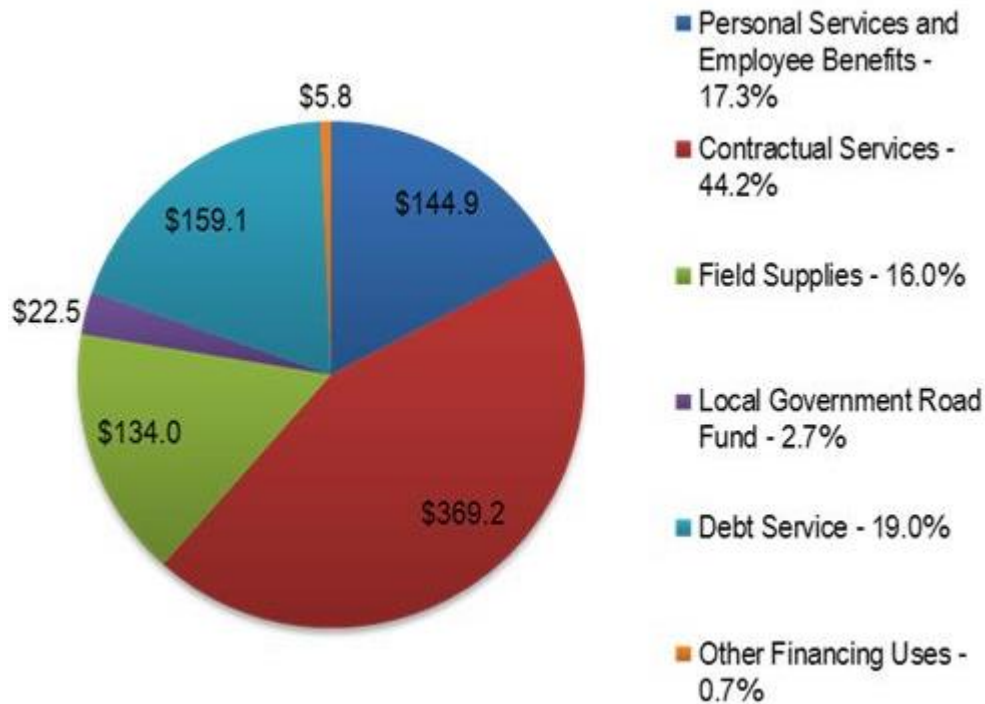
5.2 Transportation Costs

This section includes the available cost information for the state's roadways, bridges, aviation facilities, and administration. According to the NMDOT Annual Report, a total of \$835.5 million was spent in FY 2013 (Figure 5.2). These expenditures were funded by both state and Federal sources. Over 40 percent of the total expenditures in FY 2013 were for contractual services, including \$180-220 million for new construction.⁹² Additionally, 19 percent was paid toward debt service. The debt service schedule extends through 2027 and is an on-going expenditure that ranges from \$136 million to \$177 million per year. Below is a summary of available maintenance, and construction costs from recent years.

⁹² NMDOT Chief Engineer personal communication, June, 2014



Figure 5.2 Expenditures by Category (\$ Millions)



Source: NMDOT, 2013 Annual Report

Maintenance Costs

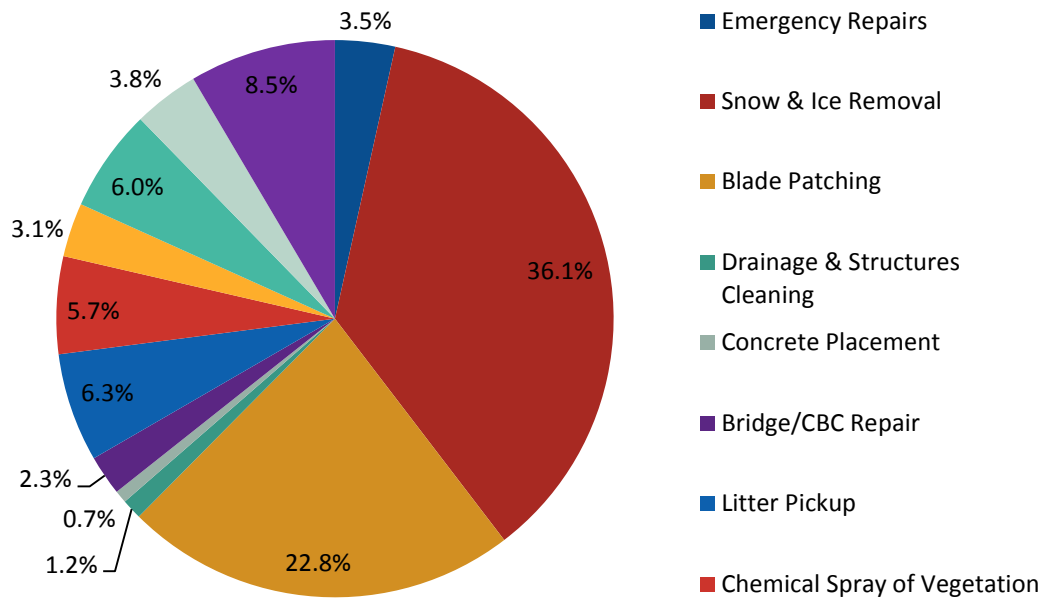
Maintenance costs include bridge and pavement preservation, signing, pavement markings, rest area maintenance, field supplies, and special appropriations. In recent years, there has been greater emphasis on roadway maintenance and the state of good repair for the New Mexico transportation system. This is seen in the fact that approximately 25 percent of the Statewide Transportation Improvement Program (STIP) was devoted to pavement preservation in 2013, and \$70 million was spent for maintenance activities including labor, equipment and materials.⁹³

According to the NMDOT Annual Report, maintenance expenses totaled \$24.6 million for FY 2013. The report indicates snow and ice removal activities and blade patching accounting for the greatest percentages of expenditures, approximately 36 and 23 percent respectively (Figure 5.3).

⁹³ New Mexico Department of Transportation, 2013 Annual Report.



Figure 5.3 Maintenance Activity Expenditures, 2013

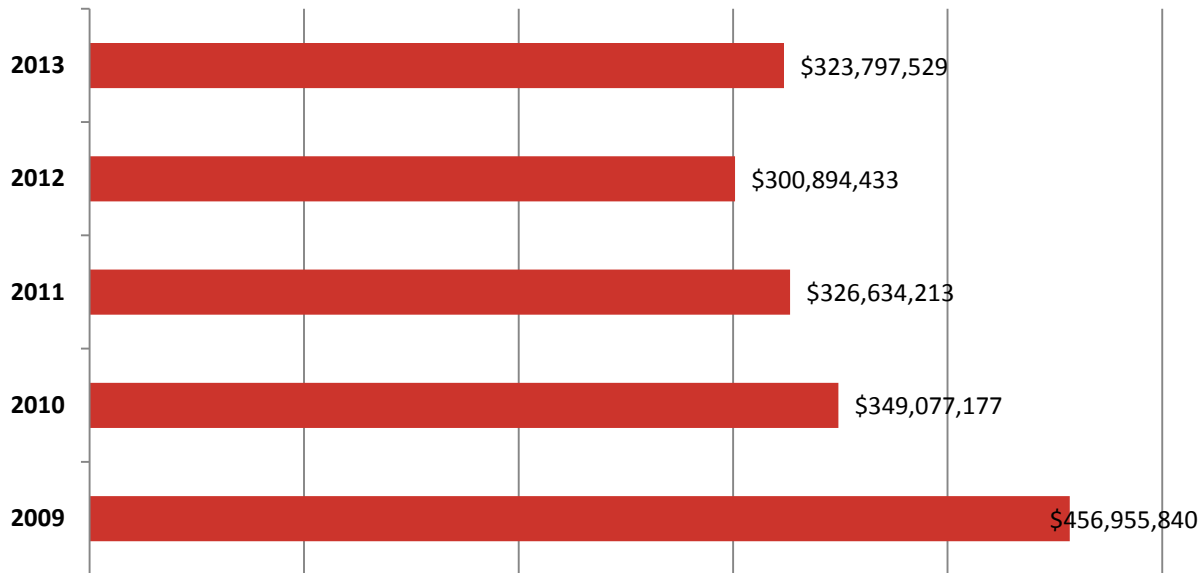


Source: NMDOT, 2013 Annual Report

Construction Costs

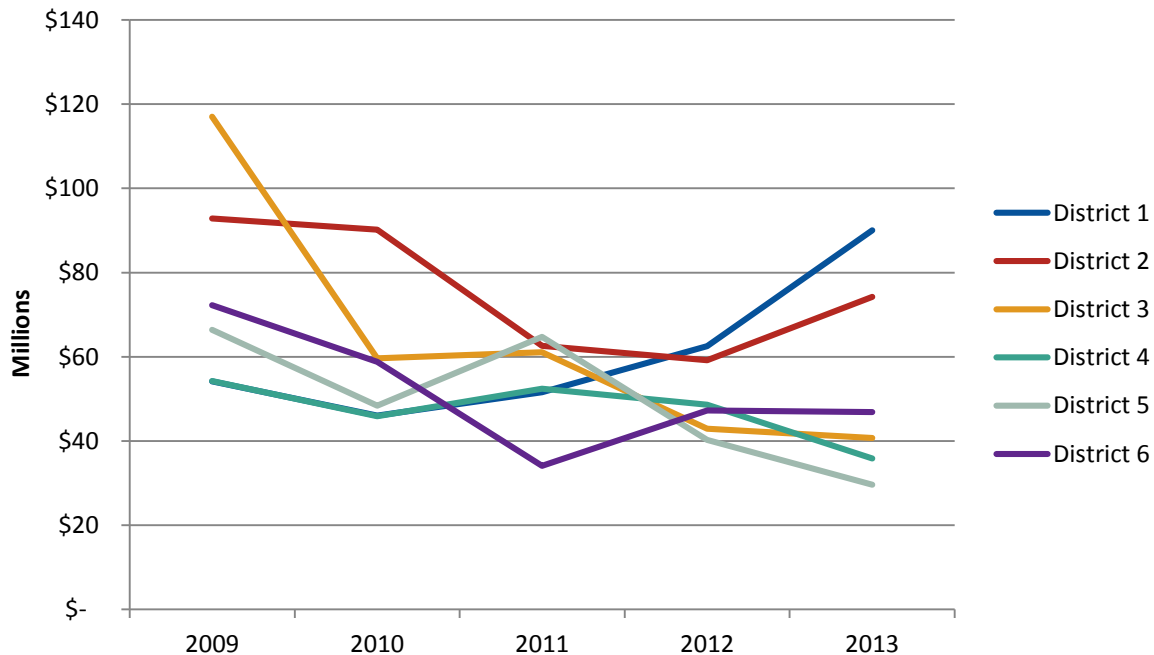
Construction costs vary among districts and from year to year. Roadway construction cost data from 2009 to 2013, provided by the NMDOT Construction Bureau, indicate approximately 40 percent of the total budget was spent on construction in FY 2013, a slight increase over 2012. The data indicate an overall decrease of 29 percent in construction monies paid from FY 2009 to 2013. Districts 1 and 2 incurred the majority of these costs in 2013 (Figures 5.4 and 5.5).

Figure 5.4 NMDOT Construction Monies Paid by Fiscal Year



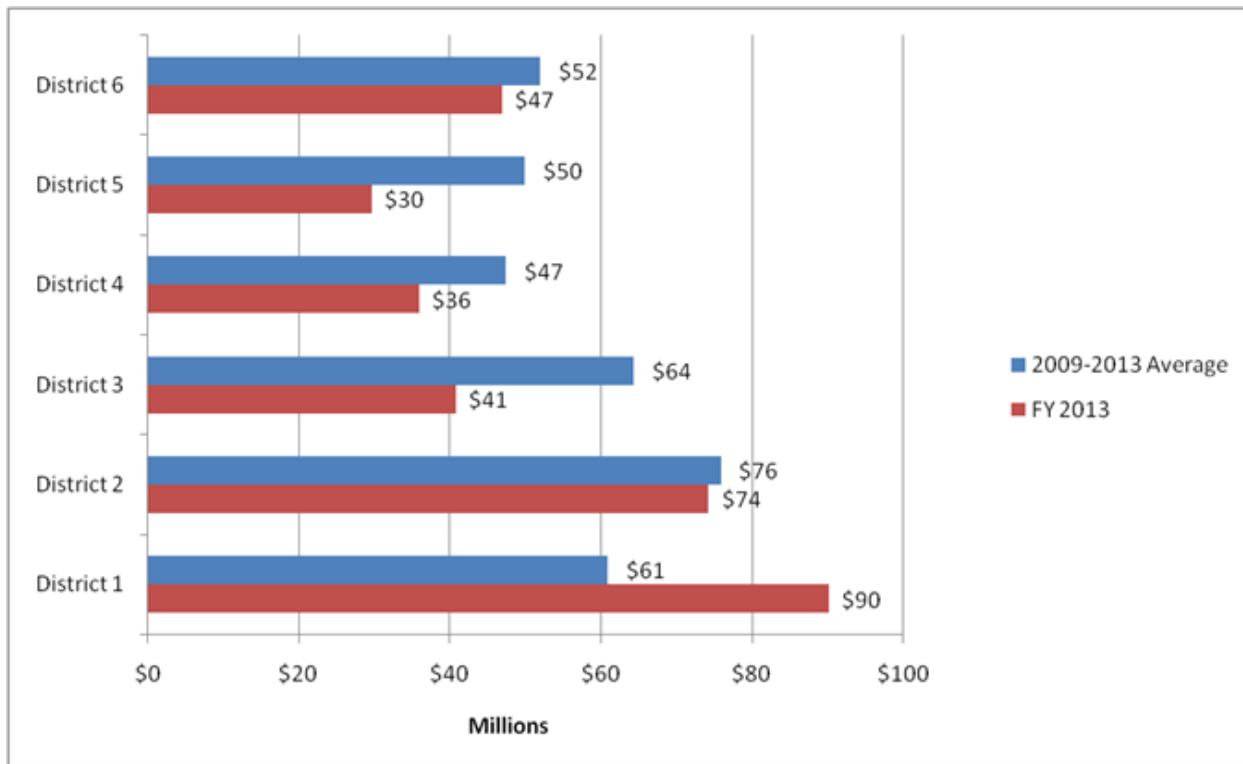
Source: NMDOT, Construction Bureau, Construction Monies Paid 2009, 2010, 2011 and 2013.

Figure 5.5 NMDOT Construction Monies Paid by Fiscal Year and by District



Construction Bureau data also indicate an overall decline in spending from 2009 for all districts with the exception of District 1 (Figure 5.6). District 1 construction monies paid in 2009 totaled \$54.1 million and increased to \$90.1 million in 2013, which includes one project with construction costs over \$18 million and three projects with costs over \$7 million. District 3 shows the most significant decrease from \$117 million in 2009 to \$40.7 million in 2013.⁹⁴

Figure 5.6 Average NMDOT Construction Monies Paid between FY 2009-2013 Compared to FY 2013 by District



Source: NMDOT, Construction Bureau, Construction Monies Paid 2009, 2010, 2011 and 2013.

5.3 Transportation Revenue

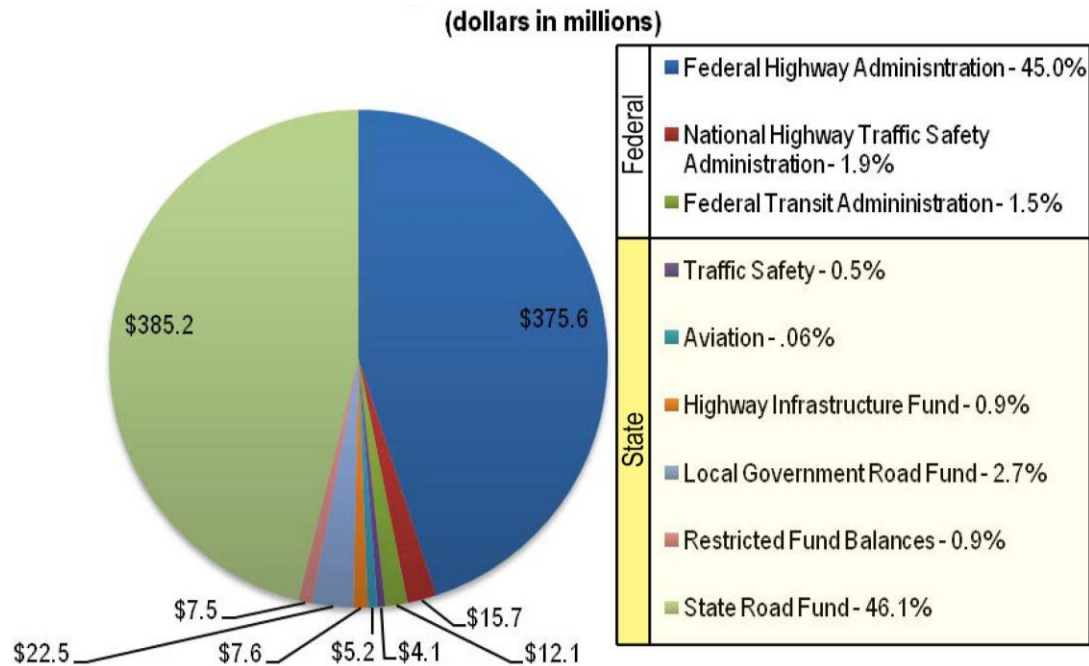
Transportation in New Mexico is primarily funded from Federal funds and state revenues collected from taxes and fees related to the transportation sector. Federal funds account for approximately 48 percent of New Mexico's annual transportation funding. The remaining 52 percent of state funding comes from state sources and is deposited principally into the following funds: State Road,

⁹⁴ New Mexico Department of Transportation, Construction Bureau, Construction Monies Paid 2009, 2010, 2011 and 2013.



Local Government Road, Highway Infrastructure, Traffic Safety, and Aviation as shown in Figure 5.7.

Figure 5.7 Funding Sources for NMDOT Projects (2013)



Source: New Mexico Department of Transportation, *2013 Annual Report*.

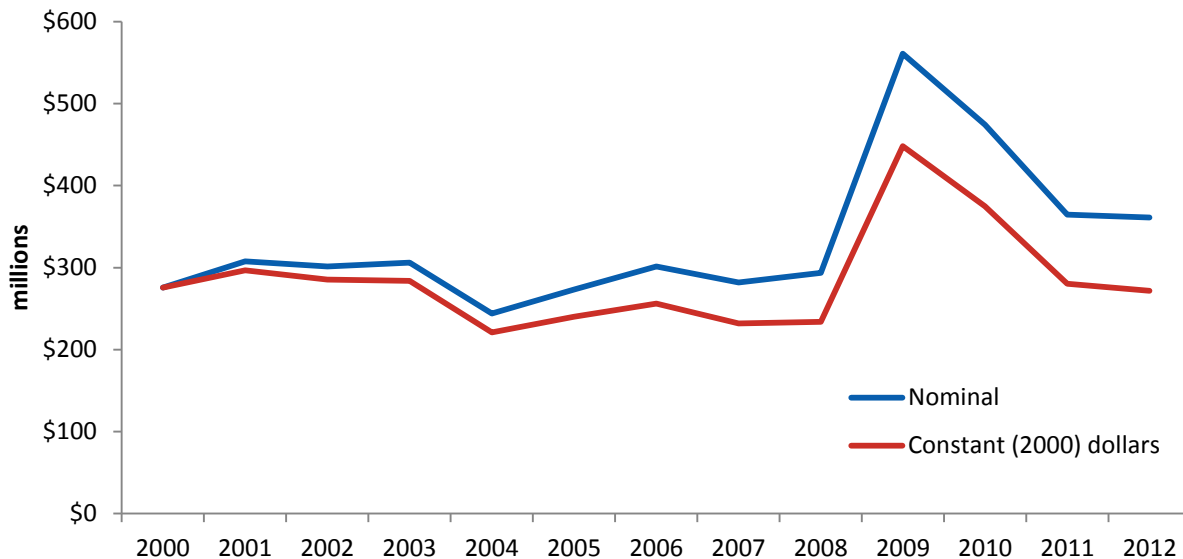
Federal Funding

Federal funds account for approximately 48 percent of New Mexico's annual transportation funding. Federal funds mainly come from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

The FHWA provides annual disbursements defined by statutory formulas to grant funding for various surface transportation programs. Funds received from FHWA increased from \$276 million in 2000 to \$361 million in 2012, an average annual increase of 2.3 percent (Figure 5.8). However, this growth has been lower than the inflation rate. In constant dollars, funds from FHWA have declined at an average annual rate of 0.1 percent. The substantial increase in funds in 2009 and 2010 is attributed to the disbursement of American Recovery and Reinvestment Act of 2009 (ARRA) funds.



Figure 5.8 FHWA Obligations to New Mexico (2000 to 2012)



The FHWA distributes Federal funds to the NMDOT by Federal-Aid Account Categories. Table 5.2 shows funding amounts by category while Table 5.1 shows FHWA-obligated funds by roadway functional classification. The vast majority of Federal funds, approximately 77 percent amounting to nearly \$300 million, is allocated to three categories: National Highway System, Surface Transportation Program, and Interstate Maintenance. As shown in Table 5.2, Federal spending for rural roadways is slightly over 2.5 times that of urban highways.

The FTA provides financial and technical assistance to support the local public transit systems. FTA funds also increased in nominal dollars from \$29 million in 2000 to \$35 million in 2012, an average increase of 1.5 percent per year (Figure 5.9). However, this translates to an average annual decrease of 0.9 percent in constant dollars over the same period. Despite a sharp decrease in FTA funds from 2000 to 2003, funding has steadily increased, averaging 7.5 percent in annual growth (constant dollars) between 2003 and 2012.

**Table 5.1 Disbursements of Federal Funds from FHWA in 2012
by Federal-Aid Account**
In Thousands of Dollars

Federal-Aid Account	Amount
National Highway System	\$109,239
Surface Transportation Program	\$86,302
Interstate Maintenance	\$93,924
Bridge Replacement	\$18,963
Metropolitan Planning	\$1,597
Planning and Research	\$4,505
Congestion Mitigation and Air Quality Improvement	\$4,881
Emergency Relief	(\$1,612)
Minimum Guarantee	\$1,646
High Priority Projects	\$19,118
Equity Bonus	\$30,880
Other Programs	\$5,374
TOTAL	\$374,831

Source: <http://www.fhwa.dot.gov/policyinformation/statistics/2012/>

Table 5.2 Federal Funds Obligated in Fiscal Year 2012
In Thousands of Dollars

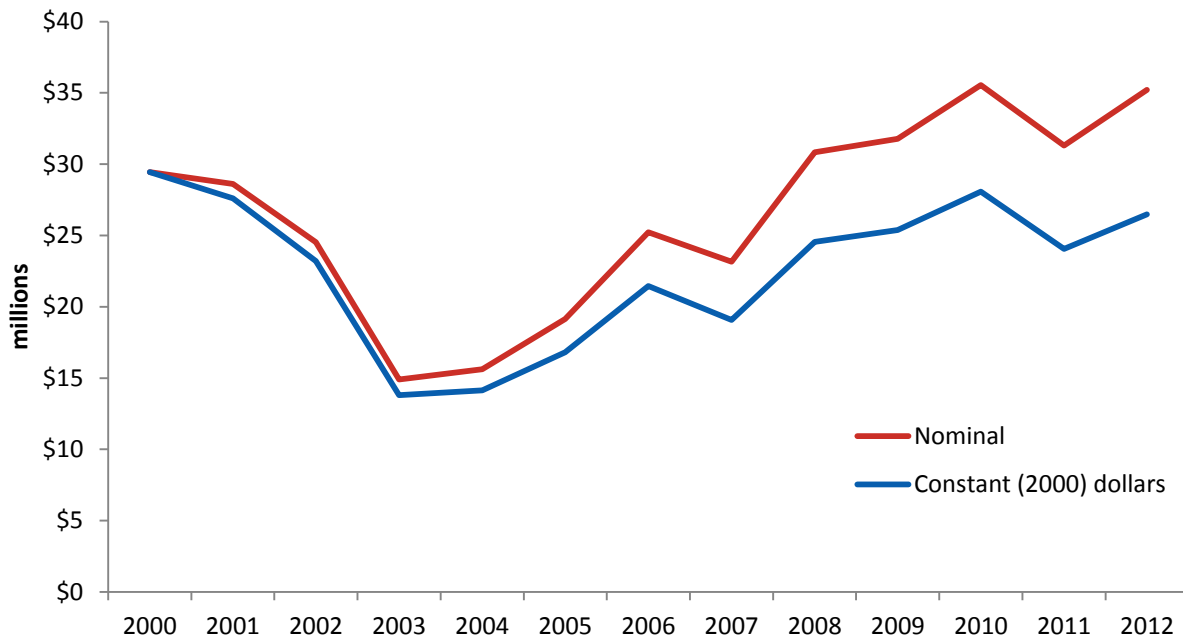
Functional Classification	Rural	Urban	Total
Interstates	\$84,634	\$38,832	\$123,466
Other Freeways & Expressways	\$0	\$1,384	\$1,384
Other Principal Arterials	\$83,648	\$30,514	\$114,162
Minor Arterials	\$50,080	\$1,900	\$51,980
Rural Major Collectors	\$9,201	\$0	\$9,201
Rural Minor Collectors	\$3,836	\$0	\$3,836
Functionally Local Roadways	\$6,339	\$4,673	\$11,012
Urban Collectors	\$0	\$5,732	\$5,732
Other Rural	\$16,400		\$16,400
Other Urban	\$0	\$13,222	\$13,222
NM Total Public Roadways	\$254,138	\$96,257	\$350,395*

*Project adjustments that could not be classified as urban or rural resulted in a -\$3,441 budget adjustment.

Source: fhwa.dot.gov/policyinformation/statistics/2011/pdf/fa4c.pdf



Figure 5.9 **FTA Allocations to NMDOT**
2000 to 2012



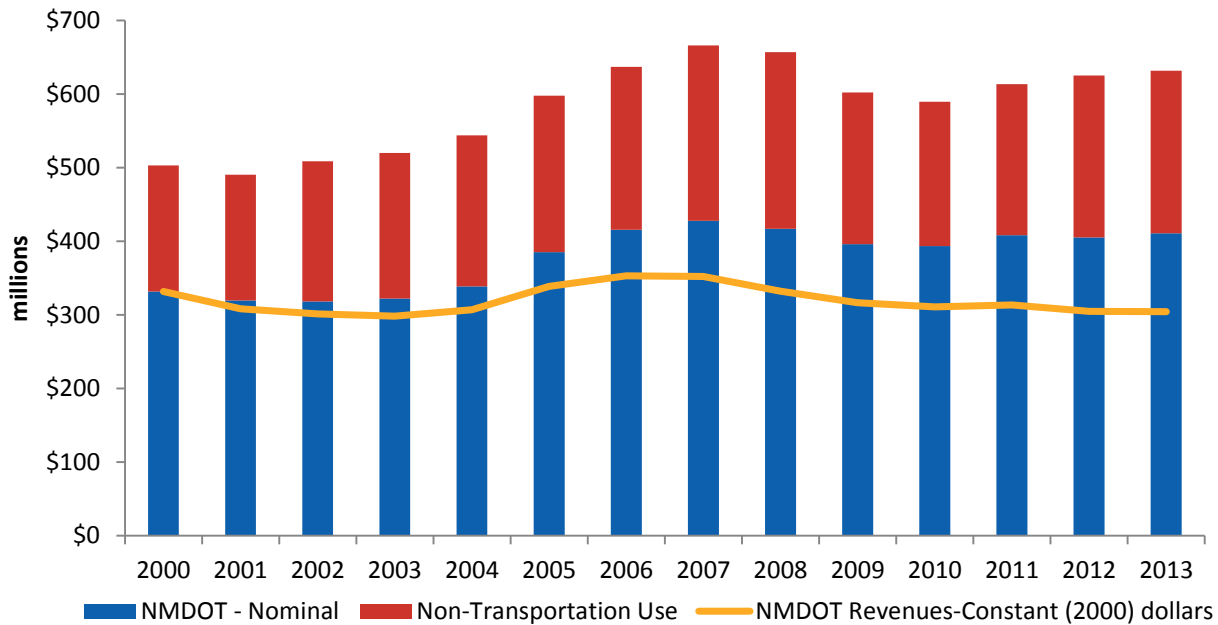
State Funding

Approximately 52 percent of New Mexico’s annual transportation funding comes from state sources. New Mexico does not dedicate 100 percent of the transportation revenues to transportation funding. On average, NMDOT receives 65 percent of the total annual transportation sector revenues (Figure 5.10). In nominal dollars, total transportation funding increased from \$332 million in year 2000 to \$411 million in 2013; however, when weighted for inflation, revenues have declined at an average annual rate of 0.7 percent. NMDOT revenues peaked in 2007, but have remained relatively flat throughout the economic recession and recovery, averaging \$402 million for the past five years (\$310 million in 2000 dollars).

Funds for transportation are mainly deposited into four funds: the State Road Fund, the Highway Infrastructure Fund, the Local Government Road Fund, and the Transportation Fund. The revenue sources directed to these funds are shown in Table 5.3. The State Road Fund is the main operating fund of the department and accounts for 90 percent of the total NMDOT annual budget. The state road fund is used for maintenance, construction and improvement of state transportation projects and to meet federal allotments under the federal-aid road laws. It is also used to pay the principal and interest due each year on state transportation revenue bonds issued to anticipate the collection

of this revenue.⁹⁵ The remaining 10 percent of the transportation funding is deposited into the Highway Fund, the Transportation Fund, the Local Government Funds, and other minor funds.

Figure 5.10 Transportation Sector Revenues versus NMDOT Funding
2000 to 2013



⁹⁵ Sections 7-1-6.10, 66-6-23 and 66-6-23.1 NMSA 1978



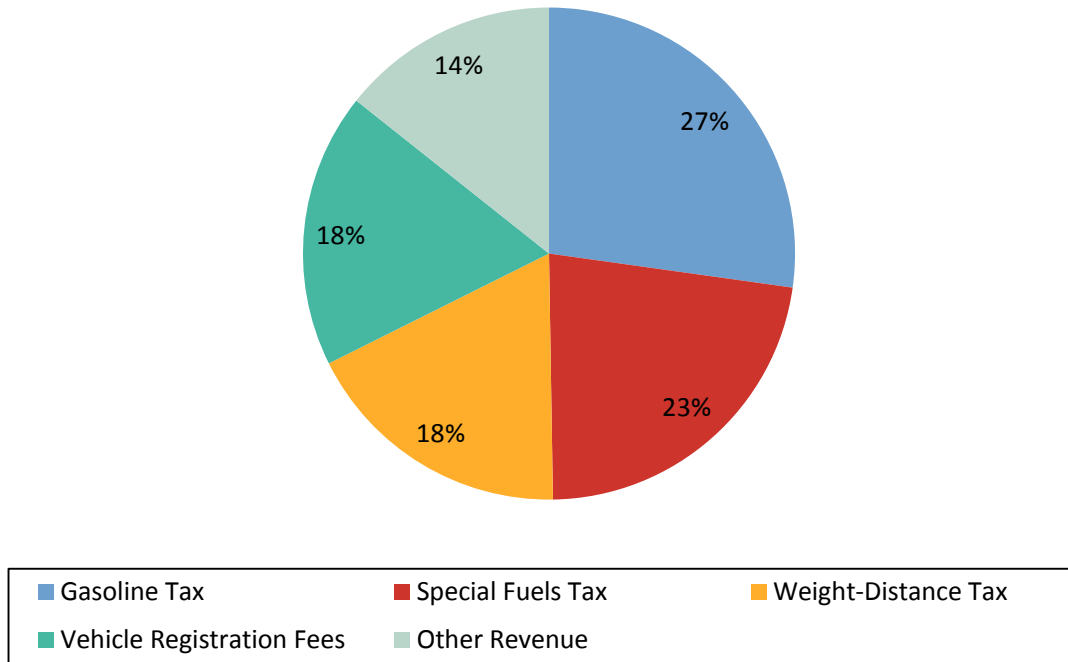
Table 5.3 NMDOT Revenue Sources

Transportation Revenue Sources	Road Fund	Highway Infrastructure Fund	Transportation Fund	Local Road Fund
Motor Fuels Excise Tax	●			●
Weight-Distance Tax	●			
Vehicle Registration Fees	●			
Trip Tax	●			
Vehicle Transaction Fees	●			●
Driver's License Fees	●		●	●
Public Regulatory Commission Fees	●			
Penalty/Reinstatement Fees	●			
Overweight/Oversize permits	●			
Motor Vehicle Excise Tax	●			●
MVD Miscellaneous	●			
Leased Vehicle Gross Receipts Tax		●		●
Tire Recycling Fee		●		
CDWI Fees			●	
Interest earned on cash balances	●	●	●	●

The major revenue sources to NMDOT are motor fuel taxes, which account for nearly 50 percent; the weight-distance tax (18 percent); and vehicle registration fees (18 percent). The remaining 14 percent comes from other sources such as the trip tax, driver's license fees, oversize/overweight fees, and vehicle transaction fees (Figure 5.11).

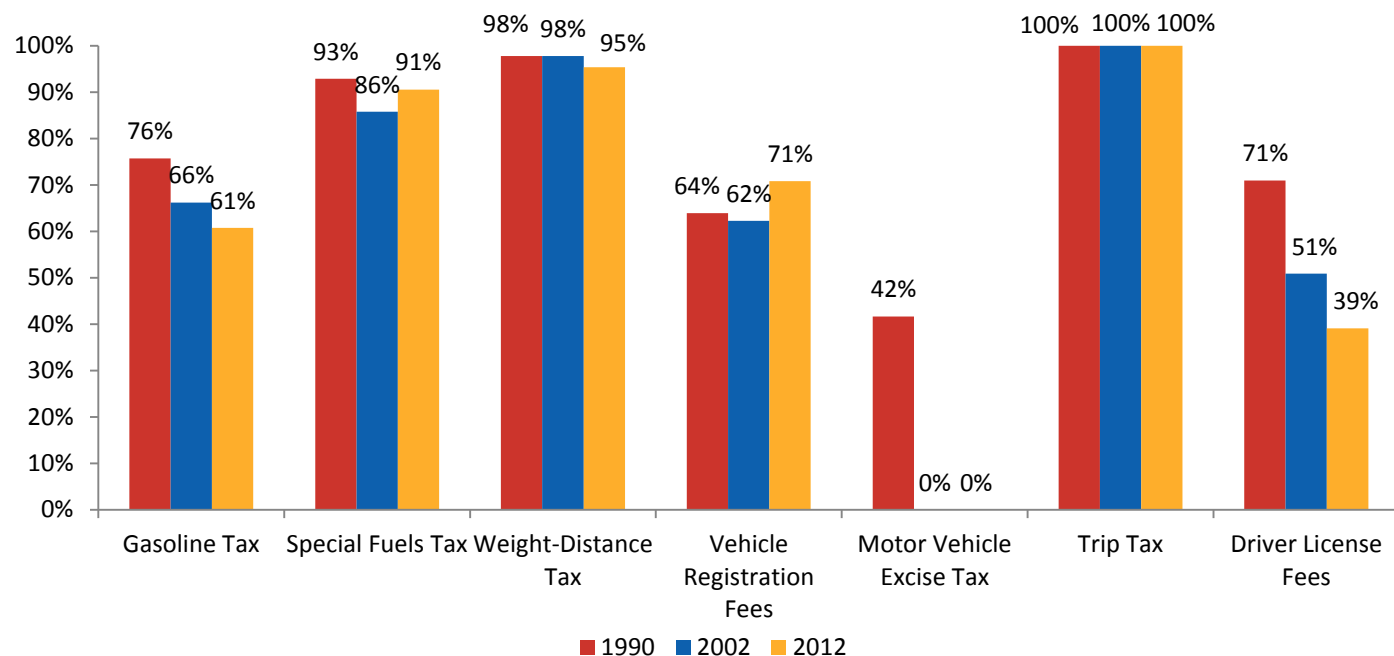


Figure 5.11 Share of Transportation Funding Available to NMDOT by Source
FY 2013; Total Funding Available in FY 2013; \$410 Million



Funding distribution to NMDOT has changed over the years. The share of the gasoline tax distributed to NMDOT has declined from 76 percent in 1990 to 61 percent in 2012, a drop of 15 percent (Figure 5.12). The share of driver's license fees have declined from 71 percent in 1990 to 39 percent in 2012. However, the share of vehicle registration fees have increased from 64 percent to 71 over the same period. Motor vehicle excise tax revenues are no longer distributed to NMDOT for transportation purposes. The following sections discuss in detail the major state revenue sources used for transportation and their historical yield for the past 12 years.

Figure 5.12 Share of Transportation Sector Revenues Distributed to NMDOT

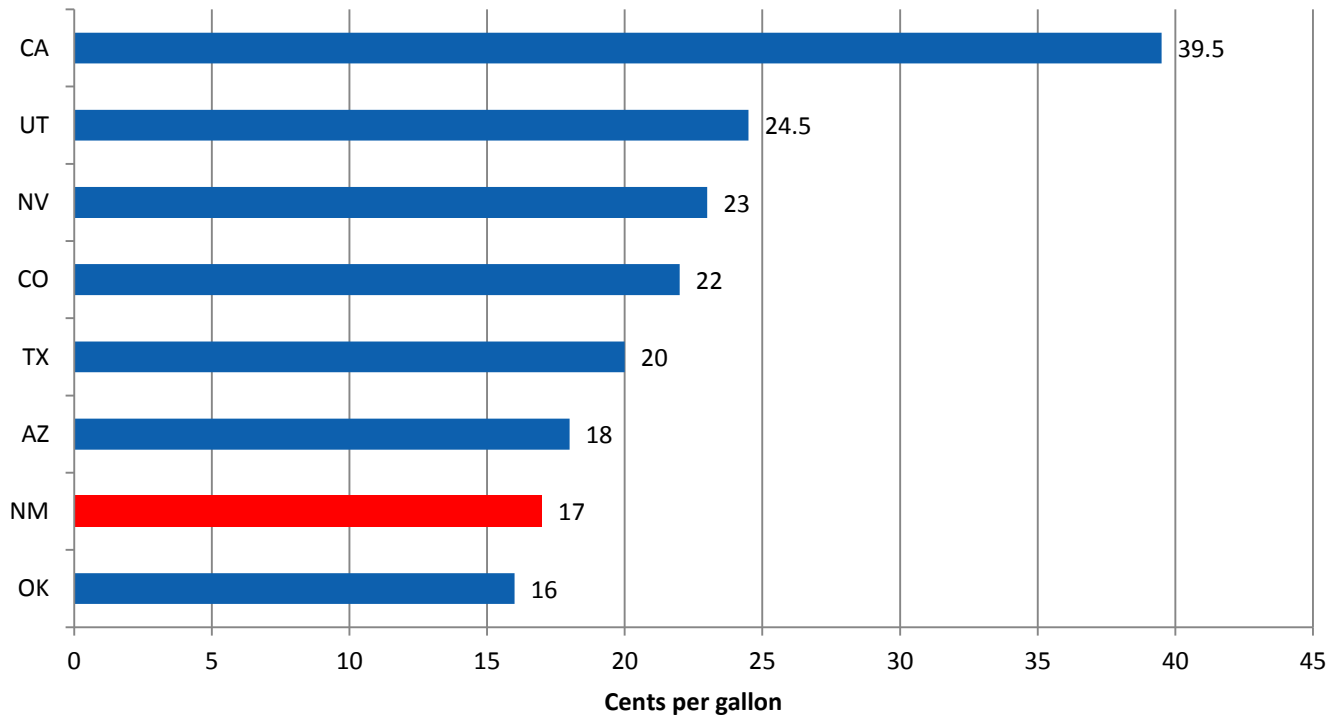


Motor Fuel Tax Revenue

Similar to the Federal motor fuel tax and most states, New Mexico collects motor fuel tax on a fixed rate (per gallon), and revenues are therefore dependent on consumption and not changes in price. As a result, inflationary effects have significantly eroded and will continue to erode the purchasing power of this funding source. The introduction of more fuel efficient vehicles also affects the revenue yield, as consumption declines on a per-mile-traveled basis.

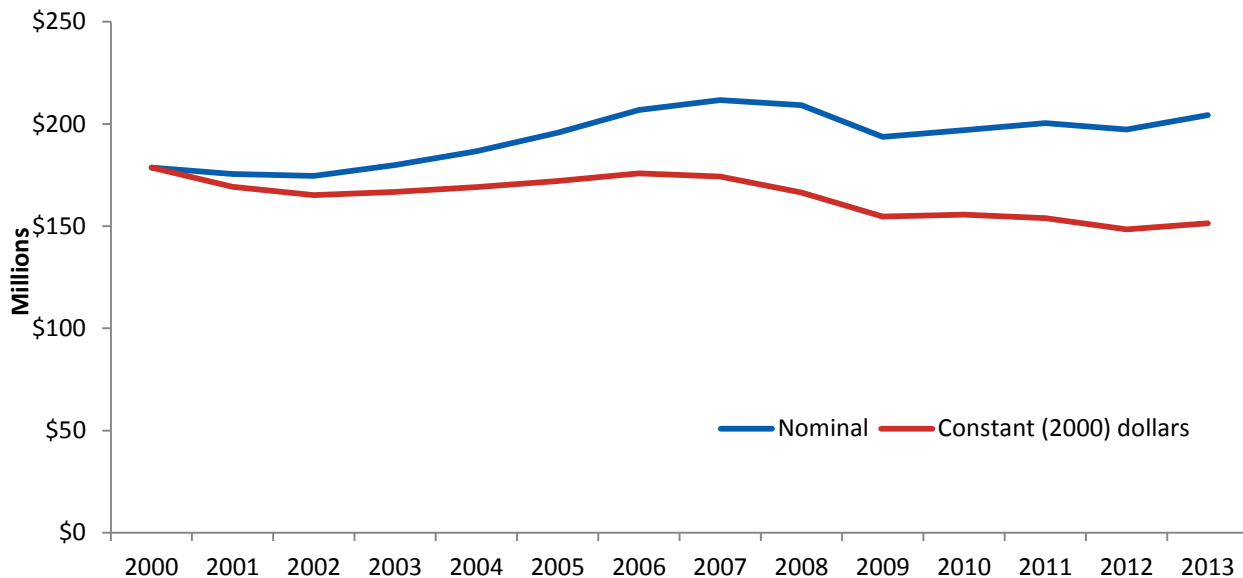
Currently, the motor fuel tax rate in New Mexico is 17 cents per gallon (cpg) for gasoline and 21 cpg for diesel fuel. Nationally, 39 states have a higher gasoline tax than New Mexico. Compared to neighboring states in the southwest, all but one have higher gasoline tax rates than New Mexico (Figure 5.13).

Figure 5.13 Gasoline Tax Rates for New Mexico and Neighboring States



Motor fuel tax revenues comprise about 50 percent of the total annual funding available to NMDOT. Receipts have increased from \$179 million in 2000 to \$204 million in 2013; however, revenues declined after 2007 due in part to the economic downturn (Figure 5.14). Revenues have remained relatively stable since 2010, growing at an average annual rate of 1.2 percent. Weighted for inflation, receipts have declined at an average annual rate of 1.3 percent since 2000. Motor fuel tax revenues are also susceptible to fuel efficiency improvements and higher penetration of alternative fuels into the market, leading to lower revenue yields.

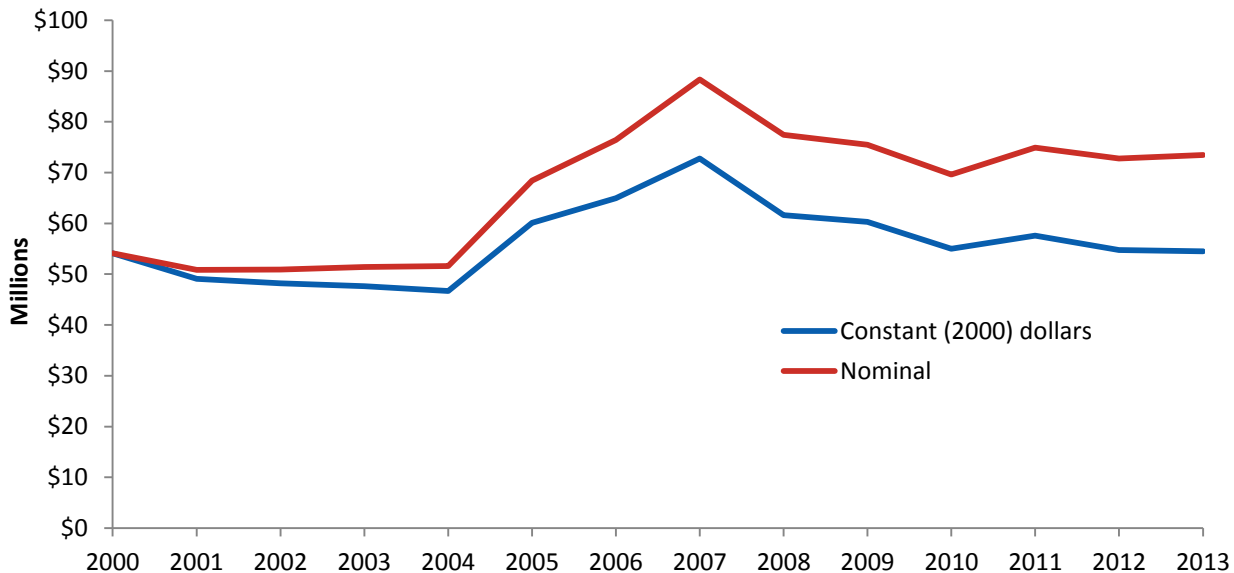
Figure 5.14 NMDOT Motor Fuel Tax Revenues



Weight-Distance Tax

New Mexico imposes a weight-distance tax on owners, operators, and registrants of intra- and interstate commercial vehicles with a declared gross vehicle weight in excess of 26,000 pounds. The tax is computed based on mileage traveled on New Mexico highways at a rate determined by the weight of the vehicle. The weight-distance tax revenues comprise about 18 percent of the total annual funding available of NMDOT. Weighted for inflation, weight-distance tax collections have remained stagnant, growing at an average annual rate of 0.1 percent from 2000 to 2013 (Figure 5.15).

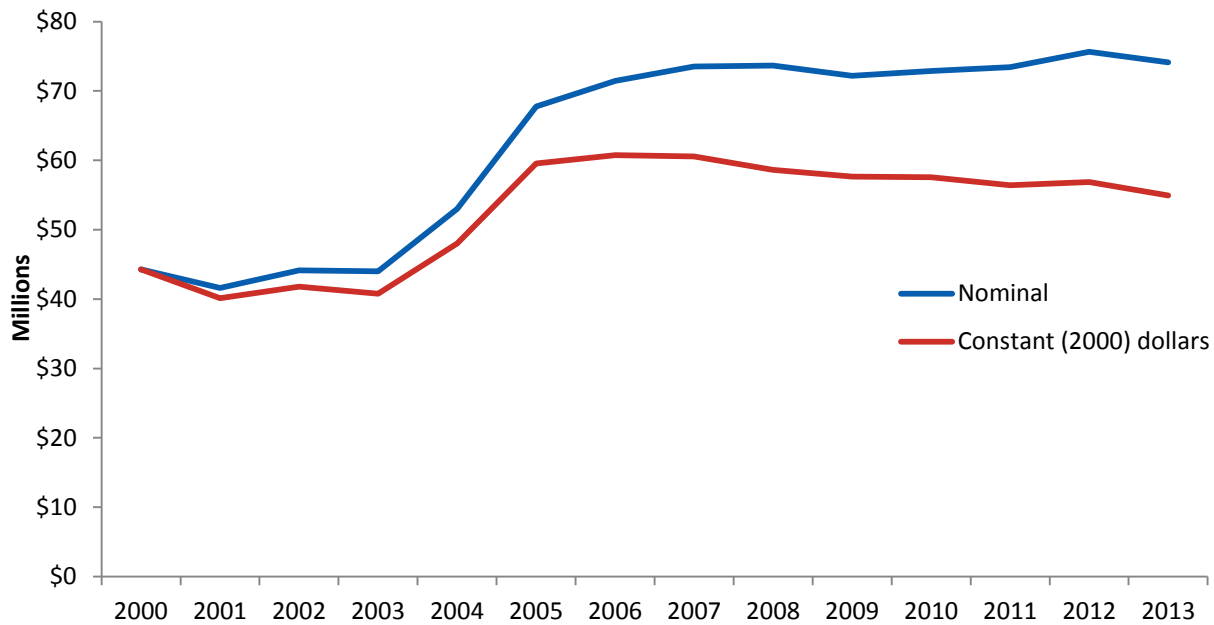
Figure 5.15 Weight-Distance Tax Revenues
2000 to 2013



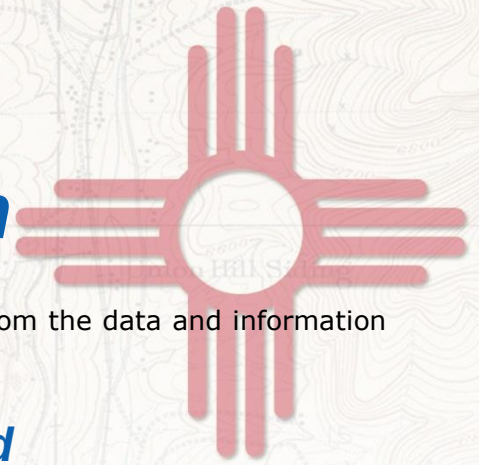
Vehicle Registration Fees

Vehicle registration fees are generally the third largest transportation funding source after motor fuel taxes and weight-distance taxes. Fees vary by vehicle type, weight, and model year of the vehicle. For passenger vehicles, registration fees range from \$27 to \$62 for a one-year registration or \$54 to \$124 for a two-year registration. For trucks with a declared gross vehicle weight (DGVW) of 26,000 pounds or less, fees range from \$38 to \$207 for a one-year registration or \$76 to \$414 for a two-year registration. In nominal dollars, receipts from this source have increased from \$44 million in 2000 to \$74 million, an average increase of 4.0 percent per year, an increase of 1.7 percent per year in constant dollars (Figure 5.16).

Figure 5.16 Vehicle Registration Fee Revenues
2000 to 2013



A. Data and Information



This attachment describes the process for incorporating information from the data and information needs assessment (DINA).

A.1 Studies and Data Sources Reviewed

Existing data were collected via two primary methods: (1) Search of online archives available from agency and organization webpages and (2) Coordination with agencies and organizations through the Regional Working Group (RWG) and Statewide Working Group (SWG) workshops and other coordination efforts.

The objective was to obtain existing multimodal transportation, land use, and economic development plans; general transportation system facility inventories; demographic and socioeconomic data; environmental conditions data, transportation-related health data; tourism and visitor data; as well as transit planning and ridership, aviation, and freight data. The comprehensive search targeted the webpages of the New Mexico Department of Transportation (NMDOT), Metropolitan Planning Organizations (MPO), Regional Transportation Planning Organizations (RTPO), federally-recognized tribes, as well as county and municipal sites. Additional online sources included the Bureau of Business and Economic Research (BBER), New Mexico Tourism Department, New Mexico Department of Health (DOH), New Mexico Environment Department (NMED), as well as transit, aviation, and passenger rail providers. RWG and SWG participants also provided input and cited sources and contacts. A list of sources that were collected and reviewed is provided at the end of this appendix.

A.2 Data and Information Gaps and Needs

Once the accessible data and information was collected and logged, all data were reviewed for existing condition information related to the topics to be addressed in the existing conditions and trends analysis. The assessment includes identification of critical data deficiencies and gaps and the approach (or method) for handling these data shortfalls.

- A few planning documents such as transportation and land use plans were available from the Navajo Nation and Navajo Chapters; however, formal plan documents for many Pueblos were not available online. For most tribal entities, a complete inventory of tribal roadways and conditions was unavailable. This issue was addressed by utilizing available data from statewide and local sources that covered all of the New Mexico transportation system.
- Public transit service plans, annual reports, and/or ridership data for rural providers were generally unavailable. The NMDOT Transit and Rail Division has some ridership data available for the rural providers. Available data from NMDOT and local jurisdictions, such as cities and transit districts, was utilized to describe the network and indicate ridership.
- Non-motorized modes such as bicycle, pedestrian and equestrian conditions, were the least documented mode of transportation. Several of the larger communities have developed

alternative transportation plans for bicycle and pedestrian trails. These data were used to describe current conditions and use of non-motorized facilities.

- Statewide aviation data and information was available while regionally-specific information was more difficult to obtain. The inventory of all aviation facilities does not include detailed information on the use or condition of small regional airports.
- While there is information on the number of visitors to the state, primary tourist attractions and modes of travel, it is unclear how visitors are currently using public transit to reach tourist or recreation destinations.

A.3 Comprehensive Matrix of Plans and Data Sources



Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
Multimodal Transportation Plans						
Statewide						
FHWA	Statewide	All	FHWA Census Transportation Planning Products (CTPP)	Transportation profiles by state, county, traffic analysis zones (TAZ), changes in transportation modes, etc. http://www.fhwa.dot.gov/planning/census/issues/ctpp/data/products/ascdataprod.cfm	Database	
New Mexico Section, American Society of Civil Engineers	Statewide	All	The State of New Mexico Infrastructure Report Card 2005	2005 report card for aviation, rail, roads, transit (state and national grade)		
NM Association of Regional Councils	Statewide	All	New Mexico Association of Regional Councils (NewMar) 2011	State planning and development districts, programs, district socioeconomic profiles, councils of government, opportunities and recommendations, regional homeland security planning, capital outlay, NM Finance Authority, census facts	Report	
NM Department of Aging and Long-term Services	Statewide	All	NM State Plan for Aging & Long-term Services 2013-2017	Planning and service areas, demographics trends and impacts, data collection, performance measures, serving Native American elders, elder justice	Report	
NMMDOT	Statewide	All	NM Statewide Public Transportation Plan 2010	Statewide public transportation systems, demographic and growth projections 2010-2035	Report	
NMMDOT	Statewide	All	NM 2030 Statewide Multimodal Transportation Plan	Statewide multimodal transportation systems, demographic and growth projections 2010-2030	Report	
NMMDOT	Statewide	All	NM 2025 Statewide Multimodal Transportation Plan	Long range objectives and strategies for multimodal transportation, tribal and local governmental partnerships, environmental responsibilities, safety and security, efficient use of public resources, economic vitality.	Report	
NMMDOT	Statewide	All	NMMDOT Statewide Transportation Improvement Plan, FFY 2014-2017 Amendment 2	STIP Project list	Report	
NMMDOT	Statewide	All	NM TAP Guide FY 2014- 2015	TAP program, requirements, application, selection process	Report	
NMMDOT	Statewide	All	NM State Rail Plan Draft 2013	Rail system inventory, issues, analysis and need, long-range service	Report	
NMMDOT	Statewide	All	New Mexico Statewide Multimodal Freight Study 2008	Freight trends, issues, industry, trends, flow patterns, existing and emerging system issues, recommendations	Report	
NMMDOT	Statewide	All	HM-5 Sustainable Transportation Funding Strategies (March 2010)	House memorial- continuation of 2007 review of state's current and future transportation needs to identify appropriate funding	Memo	
NMMDOT	Statewide	All	HM-9 New Mexico Transportation Issues (September 2010)	House memorial- continuation of 2009 review of state's current and future transportation needs to identify appropriate funding	Memo	
NMMDOT	Statewide	All	NMMDOT Public Involvement Plan (2013 Update)	Guidelines for development of bicycle, pedestrian, equestrian facilities- in design and implementation (including policy and funding)	Report	
NMMDOT	Statewide	All	NMMDOT Bicycle-Pedestrian-Equestrian Advisory Plan January 2009		Report	
NMMDOT	Statewide	All	NMMDOT Tolling Feasibility Study May 2008		Report	
NMMDOT	Statewide	All	New Mexico Comprehensive Transportation Safety Plan 2010 Update	Safety issues, emphasis areas, performance goals, strategies	Report	
NMMDOT	Statewide	All	New Mexico Statewide ITS Architecture	ITS inventory, by stakeholder, equipment, architecture flow http://www.consyssec.com/nm/web/regionhome.htm	Database	
NMMDOT & NMGF	Statewide	All	House Memorial 1 and State Memorial 11, Report to the Water and Natural Resources Interim Legislative Committee (October 24, 2013).	Submittal of Wildlife Collision Mitigation Planning	Report and maps	PDF
NMGF	Statewide	All	Letter submittal: September 10, 2004 Regarding NMMDOT long Range Plan	NM Priority list of important Wildlife travel corridors; Priority Highway Segments (2003)	Letter, Lists	
MTPO						
El Paso MPO	El Paso	1	Horizon 2040 Metropolitan Transportation Plan		Report	
El Paso MPO	El Paso	1	Southern New Mexico-El Paso, Texas Joint Land Use Study		Report	
Farmington MPO	Farmington	5	Metropolitan Transportation Plan 2035		Report	

Data Owner	Region or Location	NIMDOT District	Document or Data	Data Details	Data Format	Map Format
Mesilla Valley MPO	Las Cruces	1	Las Cruces Metropolitan Planning Organization Transport 2040		Report	
Mesilla Valley MPO	Las Cruces	1	Las Cruces Metropolitan Planning Organization Access Management Guidelines		Report	
Mesilla Valley MPO	Las Cruces	1	Las Cruces Metropolitan Planning Organization Coordinated Mobility Action Plan 2011 -2016		Report	
Mesilla Valley MPO	Las Cruces	1	Las Cruces Regional ITS Architecture (database inventory)	http://www.consysrec.com/lascruces/web/regionhome.htm	Database	
Mid-Region MPO	Albuquerque	3	2035 MTP		Report	
Mid-Region MPO	Albuquerque	3	Futures 2040, Metropolitan Transportation Plan (MTP)- draft	Draft goals and objectives	Report	
Mid-Region MPO	Albuquerque	3	Future Albuquerque Area Bikeways and Streets (FABS) 2004		Report	
Mid-Region MPO	Albuquerque	3	Future Albuquerque Area Bikeways and Streets (FABS) Update 2011		Report	
Mid-Region MPO	Albuquerque	3	Rio Metro Travel Demand Management Program Update 2013		Report	
Mid-Region MPO	Albuquerque	3	Rio Metro Regional Transit District Short Range Plan FY2013-FY2017		Report	
Mid-Region MPO	Albuquerque	3	ABQRide Long Range Plan		Report	
Mid-Region MPO	Albuquerque	3	AMPA TIP Summary 2014 -2019		Report	
Mid-Region MPO	Albuquerque	3	2012-2015 Coordinated Transportation Plan		Report	
Mid-Region MPO	Albuquerque	3	Mid-Region Travel Survey- Keep New Mexico Moving (In process January 2014)			
Mid-Region MPO	Albuquerque	3	Mid-Region Travel Survey Progress Report January 8, 2014	Memorandum- Public participation profile	Report	
Mid-Region MPO	Albuquerque	3	2030 MTP ITS corridors map (PDF)		Map	PDF
Mid-Region MPO	Albuquerque	3	A Profile in Congestion (2012)- 30 Most Congested Corridors in the AMPA		Report	
Mid-Region MPO	Albuquerque	3	AMPA 2012 CMP Strategies Matrix		Matrix	PDF
Mid-Region MPO	Albuquerque	3	Santa Fe Metropolitan Transportation Plan 2010-2035		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe Metropolitan Transportation Improvement Program 2014-2017 Amendment 2		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe Metropolitan Bicycle Master Plan April 2012		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe Metropolitan Bicycle Master Plan Appendices		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe Metropolitan Pedestrian Master Plan - IN PROCESS		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe City and County Regional Planning Authority Regional		Report	
Santa Fe MPO	Santa Fe	5	RTD Serving North Central NM November 2013 Ridership Report		Report	
Santa Fe MPO	Santa Fe	5	Santa Fe Regional ITS Architecture (database inventory)	http://www.consysrec.com/santafe/web/	Database	
RTPO						
Mid-Region Rural RTPO	Mid-Region	3	Rural Transportation Planning Org Long-Range Transportation Plan 2007			
Mid-Region Rural RTPO	Mid-Region	3	Station Area Planning and Development (Rail Runner Stations)	TOD Station Plans for Station Areas in Belen, Bernalillo, Los Lunas, BernCo/Sunport, as well as Market evaluation	Report	
Mid-Region Rural RTPO	Mid-Region	3	Jemez Valley Corridor Assessment 2006		Report	
Northern Pueblos RTPO	North Central Region	3, 4, 5, 6	NRPPO Long Range Plan 2007		Report	
Northwest RTPO	NE Region	4	Northeast Regional Transportation Plan 2007		Report	
Northwest RTPO	NW Region	5, 6	Regional Transportation Improvement Program Recommendations 2014-2019		Report	
Northwest RTPO	NW Region	5, 6	NWNMCOG Long Range Transportation Plan 2007 (2002-2022 Planning Horizon)		Report	
South Central RTPO	South Central Region	1, 2	South Central RTPO Long-range Plan		Report	
Southwest RTPO	SW Region	1, 6	SWRTPO Long Range Transportation Plan 2007		Report	
Southwest RTPO	SW Region	1, 6	SWRTPO TIPR 2012		Report	



Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
Southwest RTPD	SW Region	1, 6	SWRTPD Combined T1PR Dist 1		Report	
Southwest RTPD	SW Region	1, 6	SWRTPD Combined T1PR Dist 6		Report	
County/Municipal						
Bernalillo County	Bernalillo Co	3	BernCo SunportDevPlan 2009		Report	
City of Albuquerque	Albuquerque	3	City of Albuquerque ComprehensiveOnStBicyclePlan, 2000		Report	
City of Las Cruces	Las Cruces	11	CityOfLasCruces MultimodalTransportPaths&Trails2040		Report	
City of Las Cruces	Las Cruces	1	CityOfLasCruces InRoadBicyclesystemPlan 2012		Report	
City of Las Cruces	Las Cruces	1	CityOfLasCruces MPO Region Transit Plan		Report	
City of Rio Rancho	Rio Rancho	3	CityOfRioRancho BicyclePedTransportMstrPlan 2011		Report	
City of Rio Rancho	Rio Rancho	3	CityOfRioRancho BicyclePlanMap		Report	
Torrance County	Torrance Co	5	TorranceCo EastMnTrails&BikeMP 2005		Report	
Valencia County	Valencia Co	3	ValenciaCo MobilityPlanUpdate 2008		Report	
Tribal Nations						
Bureau of Indian Affairs	Statewide	All	Tribal Transportation Program TIP, 2014		PDF Table	
Navajo Nation	Navajo Nation	NA	2009 Navajo Nation Long Range Transportation Plan		Report	
Pueblo of Cochiti	Pueblo of Cochiti	3	Cochiti Long Range Transportation Plan and Road Inventory		Report	
Pueblo of Jemez	Pueblo of Jemez	3	Jemez Pueblo Walk and Roll to School Day 2011		Article	
Pueblo of Laguna	Laguna	NA	Pueblo of Laguna Transportation Improvement Plan		Report	
Public Transit						
APTA	Statewide	All	National Transit Database, 2014	Export data	Excel Table	
City of Las Cruces	Las Cruces	1	Las Cruces Long Range Transit Plan 2011	Land use info, existing transit, ridership, plans, needs, next steps	Report	
Farmingington MPO	Farmingington	5	Farmingington MPO- Red Apple Transit Study 2011	Types and levels of transit services needed in MPO by 2020	Report	
Los Alamos County, Atomic City Transit	Los Alamos Co	5	Atomic City Transit January 2014 Ridership Report		Report	
NMDOT	Statewide	All	NMDOT List of Urban Transit providers 2014	4 urban bus systems	List	
NMDOT	Statewide	All	NMDOT List of Rural Transit providers 2014	21 rural transit systems	List	
NMDOT	Statewide	All	NM enhanced mobility of seniors and individuals with disabilities 2014	Listing of these transit services/providers	List	
NMDOT	Statewide	All	NMDOT Transit and Rail Division Fact Sheet Packet 2014 (to date)	Transit facts for region	Report	
NMDOT	Statewide	All	NMDOT New Mexico Statewide Public Transportation Plan, 2010	Existing public transportation services	Report	
NMDOT, Transit and Rail Division	Statewide	All	NMDOT 2011 Transit Guide	Transit services, breakdown of each by DOT district, description of vehicle types and costs	Report	
North Central RTD	North Central RTD	5	North Central Regional Transit District (RTD) Annual Report 2013		Report	
North Central RTD	North Central RTD	5	North Central Regional Transit District (RTD) Service Plan Update 2008		Report	
Rio Metro, Mid-Region MPO	Mid-Region	3	Rio Metro Travel Demand Management Program Update 2013	TDM data	Report	
Rio Metro, Mid-Region MPO	Mid-Region	3	Rio Metro Regional Transit District Short Range Plan FY2013-FY2017	RTD service, ridership (2012 fiscal year), financials, expansion	Report	
Rio Metro, Mid-Region MPO	Mid-Region	3	Rio Metro RTD Park and Ride Users Survey: Summary Report 2012	transit use for all transit centers in the district	Report	
Santa Fe City and County	Santa Fe City and County	5	Santa Fe City and County Regional Planning Authority Regional Transit Service Plan- October 2009	existing and proposed services, evaluation of urban and rural service, market, and costs	Report	
Zia Therapy, Inc., Z-Trans	Otero Co	1, 2	ZTrans Pilot Project: Transportation Alamogordo to Las Cruces 2013		Memo	

Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
Aviation						
City of Albuquerque	Statewide	NA	Albuquerque International Sunport Master Plan 2002, Executive Summary Report	Aviation forecasts	Report	
Airport Data.com	Statewide	All	Airport.com Search	Airports in NM (168 total), all airports, FAA code, location, owner/manager, operations and facilities, runway information, radio navigation aids	Database	
Amttrak	Statewide	All	Amttrak Fact Sheet Fiscal Year 2013 State of New Mexico	Service, ridership, station, routes	Report	
City of Albuquerque	Albuquerque Metro Area	NA	Double Eagle II Airport Master Plan (Chapter 5 Forecasts of Aviation Demand)	Aviation activities for Albuquerque International, Double Eagle II, Coronado, includes forecasts through 2021	Report	
NMDOT Aviation Division	Statewide	All	New Mexico Small Community Air Service Study	Federal air service funding initiatives, NM air service assistance program, small community air service performance.	Report	
NMDOT NM Airports	Statewide	All	New Mexico Airport Information	General airport info: location, service, runway feet, etc.	Database	
USDOT	Statewide	All	USDOT Railroad 10Yr Accident/Incident Overview- NM 2013	http://nmdot.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=d49c907c8004e63bc2e0db36763fb1c	Report	
	Statewide	All	2012 New Mexico Emplanements	Data range 2004-2013- all accidents/incident types and causes	Excel Table	
	Statewide	All	2012 Cargo Airports	Emplanement data for NM airports	Excel Table	
		All	All cargo landed weight, all US airports		Excel Table	
Economic, Comprehensive, and Land Use Plans						
RTPO						
Northwest RTPO	NW Region	5, 6	NWNNMCOG Comprehensive Economic Development Strategy 2009-2014	CED	Report	
North Central Economic Development District	North Central	1,3	North Central NM Economic Development District Comprehensive Economic Development Strategy, 2002	CED	Report	
Northeast RTPO	NE Region	4	Northeastern Plains Council of Governments, Comprehensive Economic Development Strategy 2012	CED	Report	
Southeast RTPO	SE Region	2	Southeastern NM Comprehensive Economic Development Strategy 2007-2010	CED	Report	
Southeast RTPO	SE Region	2	Southeastern NM Comprehensive Economic Development Strategy 2011-2015	CED	Report	
Southwest RTPO	SW Region	1, 6	SouthwestNMCOG CompEconDevStrat 2010-2015	CED	Report	
Southwest RTPO	SW Region	1, 6	SouthwestNMCOG Statistical/Abstract 2012	people, natural resources, economic development, health, international borders, transportation	Report	
Southwest RTPO	SW Region	1, 7	SouthwestNMCOG Statistical/Abstract 2013	people, natural resources, economic development, health, international borders, transportation	Report	
County/Municipal						
Bernalillo County	Bernalillo Co	3	Bernalillo County and City of Albuquerque Comprehensive Plan 2013		Report	
Bernalillo County	Bernalillo Co	3	<i>Approx 12 more obtained - Area and Sector Plans</i>	http://www.bermco.gov/Planning/Adopted Documents/	Report	
Catron County	Catron Co	6	Catron County Comprehensive Plan 2007		Report	
Chaves County	Chavez Co	2	Chaves County Comprehensive Plan 2004		Report	
City of Albuquerque	Albuquerque	3	City of Albuquerque Planned Growth Strategy		Report	
City of Albuquerque	Albuquerque	3	<i>Approx 8 more obtained - Sector Development Plans</i>	http://www.cabq.gov/planning/publications		
City of Belen	Belen	3	City of Belen Comprehensive Plan 2003			
City of Belen	Belen	3	City of Belen Strategic Growth Plan			
City of Clovis	Clovis and Portales	2	City of Clovis & Portales Regional Growth Mgmt Plan 2009		Report	
City of Deming	Deming	1	City of Deming Comprehensive Plan 2010		Report	
City of Deming	Deming	1	Comprehensive Transportation Study for City of Deming/Luna County		Report	
City of Las Cruces	Las Cruces	1	City of Las Cruces Comprehensive Plan 2040 2013		Report	
City of Las Vegas	Las Vegas	4	City of Las Vegas Comprehensive Plan 2011		Report	
City of Las Vegas	Las Vegas	4	City of Las Vegas Downtown Plan 2010		Report	
City of Moriarty	Moriarty	5	City of Moriarty Comprehensive Plan 2012		Report	



Data Owner	Region or Location	NIMDOT District	Document or Data	Data Details	Data Format	Map Format
City of Rio Rancho	Rio Rancho	6	City of Rio Rancho-ComprehensivePlan-2010		Report	
City of Santa Fe	Santa Fe	5	City of Santa Fe SW Santa Fe Master Plan		Report	
Colfax County	Colfax Co	4	Colfax County Comprehensive Plan 2004		Report	
Curry County	Curry Co	2	Curry County & Clovis Comprehensive Plan 2007		Report	
Dona Ana County	Dona Ana Co	1	DonaAna County ComprehensivePlan 1995-2015		Report	
Dona Ana County	Dona Ana Co	1	DonaAna County RegionalPlan 2040		Report	
Eddy County	Eddy Co	2	Eddy County ComprehensivePlan 2008		Report	
Grant County	Grant Co	1	Grant County Bayard ComprehensivePlan 2012		Report	
Hidalgo County	Hidalgo Co	1	Hidalgo County ComprehensivePlan 2011		Report	
Hidalgo County	Hidalgo Co	1	Hidalgo County City of Lordsburg Complan 2011		Report	
Hidalgo County	Hidalgo Co	1	Hidalgo County Village Of Virden Complan 2009		Report	
Lea County	Lea Co	2	Lea County ComprehensivePlan 2005		Report	
Lincoln County	Lincoln Co	2	Lincoln County ComprehensivePlan 2007		Report	
Los Alamos County	Los Alamos Co	5	Currently updating Comprehensive Plan (previously 2005)			
Luna County	Luna Co	1	Luna County ComprehensivePlan 2012		Report	
McKinley County	McKinley Co	6	McKinley County CommunityBusinessPlan		Report	
McKinley County	McKinley Co	6	McKinley County High Plateau Vision21WP		Report	
Mora County	Mora Co	4	Mora County Comprehensive Land Use Plan 2009		Report	
Otero County	Otero Co	2	Otero County ComprehensivePlan 2005		Report	
Quay County	Quay Co	4	Quay County ComprehensivePlan 2010		Report	
Rio Arriba County	Rio Arriba Co	5	Rio Arriba County ComprehensivePlan 2009		Report	
San Juan County	San Juan Co	5	San Juan Co Final Strategic Plan 2012-2013		Report	
San Miguel County	San Miguel Co	4	San Miguel County Comprehensive Plan 2003		Report	
Sandoval County	Sandoval Co	6	Sandoval County ComprehensivePlan		Report	
Sandoval County	Placitas	6	Placitas Area Plan		Report	
Santa Fe County	Santa Fe Co	5	Santa Fe County Sustainable Growth Mngmt Plan 2010		Report	
Sierra County	Sierra Co	1	Sierra County ComprehensivePlan Jan 2006		Report	
Sierra County	Sierra Co	1	Sierra County Economic Development Strategic Plan 2008		Report	
Socorro County	Socorro Co	1	Socorro County Strategic Economic Plan		Report	
Taos County	Taos Co	5	Taos County ComprehensivePlan		Report	
Taos County	Taos Co	5	Taos County Growth Mngmt Plan Future Land Use		Report	
Torrance County	Torrance Co	5	Torrance County Comprehensive Land Use Plan 2003		Report	
Town of Mountainair	Mountainair	5	Town of Mountainair Comprehensive Plan 2004			
Town of Peralta	Peralta	3	Town of Peralta Comprehensive Plan 2013			
Valencia County	Valencia Co	3	Valencia County Comprehensive Plan 2005		Report	
Village of Bosque Farms	Bosque Farms	3	Village of Bosque Farms Comprehensive Plan 2006			
Village of Encino	Encino	5	Village of Encino Comprehensive Plan 2009			
Tribal Nations						
Navajo Nation	Alamo Navajo Chapter	NA	Alamo Navajo Chapter Land Use Plan 2002			
Navajo Nation	Ramah Navajo Chapter	NA	Ramah Navajo Chapter Land Use Plan			
Other Plans						
New Mexico Office of the State Engineer	Statewide	All	New Mexico State Water Plan, December 2003	Priorities, vision and policy, Inventory, water budgets, conservation and mitigation, drought management	Report	
Bernalillo County	Bernalillo County	3	Bernalillo County Pedestrian Safety Action Plan 2012	Pedestrian Safety	Report	
City of Santa Fe	Santa Fe		City of Santa Fe Trends 2013	Growth trends, housing, water, transportation, air quality, economy, etc.	Report	
City of Santa Fe	Santa Fe	5	City of Santa Fe Rail Corridor Study	Transit oriented development for Santa Fe Rail corridor neighborhoods	Report	
New Mexico Office of the State Engineer	Statewide	All	Progress Report: New Mexico State Water Plan, 2006		Report	
New Mexico Office of the State Engineer	Statewide	All	Review and Update New Mexico State Water Plan, 2008		Report	

Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
NMDOT	District 1	1	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
NMDOT	District 2	2	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
NMDOT	District 3	3	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
NMDOT	District 4	4	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
NMDOT	District 5	5	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
NMDOT	District 6	6	Americans with Disabilities Act (ADA) Transition Plan 2013	ADA program, plan, strategy, and funding; inventory of existing facilities	Report	
San Juan County	San Juan County	5	San Juan County Hazard Mitigation Plan		Report	
Santa Fe National Forest	Cuba	6	Step Into Cuba Continental Divide National Scenic Trail 2012		Report	
Scenic Byways	Salt Missions Trail	3	Salt Missions Trail Scenic Byway Corridor Management Plan Update March 2012		Report	
UNM, School of Law	Statewide	All	Water Matters! The Upton Transboundary Resources Center 2014	Water articles written for members of the New Mexico State legislature and the public	Report	
Demographic, Economic, Safety and Health Data						
Demographic and Economic						
BBER	Statewide	All	NM Counties Population Estimates and Change 2010-2012		Excel	
BBER	Statewide	All	NM Counties Population by Age, Race, Sex 2012		Excel	
BBER	Statewide	All	NM Counties Population Estimates 1900-2010		Excel	
BBER	Statewide	All	NM Counties Population Estimates 1980-1990		Excel	
BBER	Statewide	All	NM Counties Population 5 year Age by Sex 2000-2010		Excel	
BBER	Statewide	All	Projected Population, New Mexico Counties 2010-2040		Excel	
BBER	Statewide	All	Projected Annual Population Growth Rates, New Mexico Counties 2010-2040 (same Excel file as above)		Excel	
BBER	Statewide	All	NM Counties Average Annual Wage & Salary Employment # by Industrial Sector 2001-2011		Excel	
BBER	Statewide	All	NM Counties Average Civilian Labor Force 2012		Excel	
BBER	Statewide	All	NM Counties Per Capita Income 2001-2011		Excel	
BBER	Statewide	All	NM Counties Average Annual Salary per Job 2001-2011		Excel	
BBER	Statewide	All	NM Counties Average Annual Wages by Major Industrial Sector 2001-2011		Excel	
BBER	Statewide	All	NM Counties Annual Total Wages by Major Industrial Sector 2001-2012		Excel	
BBER	Statewide	All	NM Counties Persons Below Poverty 2000-2011		Excel	
BBER	Statewide	All	NM Counties Median Household Income 2000-2012		Excel	
BBER	Statewide	All	NM Counties Business Establishments, Employees, Payroll 1990-2011		Excel	
BBER	Statewide	All	NM Counties Business Establishments with Corresponding Employment by Industrial Sector 2008-2009		Excel	
BBER	Statewide	All	NM Counties Annual Taxable Gross Receipts-Retail 2005-2012		Excel	
Mid-Region COG	Mid-Region	3	MRCOG 2040 Population Projections	Projections/updates	Presentation	
Mid-Region COG	Mid-Region	3	MRCOG Small Area Socioeconomic Forecasting Methods	Methodology	Presentation	
NM Dept of Aging and Long-Term	Statewide	All	Aging in New Mexico, February 2014	Population, labor market, occupational outlook, surplus areas, income, poverty, education, quality of life	Presentation	
NM Dept of Workforce Solutions	Statewide	All	New Mexico Annual Social & Economic Indicators 2013	Issue 73, January 2012	Report	
NMDOT	Statewide	All	Excerpt from Safe Routes to School E-News	Population, historic population trends, employment, income, economy, transportation, public transit ridership counts	Memo	
Northwest NM COG	NW Region	5, 6	NW New Mexico COG Fact book 2012		Report	



Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
Southwest NM COG	SW Region	1	2013 Statistical Abstract	Population, growth projections, demographics, natural resources, agriculture, climate, arts/recreation/tourism, business/finance, economic development, education, health, housing, income, border, workforce, taxes/revenues, transportation	Report	
U.S. Census	Statewide	All	New Mexico 2010 Census of Population and Housing, September 2012	2010 US Census data on population and housing for NM	Report	
U.S. Census	Statewide	All	American Fact Finder database	Census data http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml	Database	
Health and Safety						
Center for Disease Control and Prevention	Statewide	All	Center for Disease Control- New Mexico State Nutrition, Physical Activity, and Obesity Profile- September 2012	Adult and child obesity, physical activity, nutrition stats	Report	
Center for Disease Control and Prevention	Statewide	All	Prevention Status Report 2013: Motor Vehicle Injuries	Public health problem, policy and practice solutions	Report	
Center for Disease Control and Prevention	Statewide	All	Prevention Status Report 2013: Nutrition, Physical Activity, and Obesity	Public health problem, policy and practice solutions	Report	
NMI Health Council	Statewide	All	Health Council Priorities	Priorities Matrix for all Health Council areas (by county)	Table	
NMI Health Council	Statewide	All	Long Range Community Health Plans	Available from each Health Council (by request)		
NMI Highway Safety Improvement Program	Statewide	All	New Mexico Highway Safety Improvement Program 2013 Annual Report	http://nmhealthcouncils.org/Default.aspx?pageid=1766046	Report	
NMDOH	Statewide	All	DOH Guide to Health Related Data 2010	Program, projects, progress in achieving performance targets	Excel	
NMDOH	Statewide	All	DOH NM Environmental Public Health Tracking	Excel list of types of available data, format, responsible divisions, etc		
NMDOH	Statewide	All	NM IBS Community Health Indicator Reports	Exposure data, air quality (ozone and particulates), water, health effects, query (uses IBS)	Database	
NMDOH	Statewide	All	NM IBS Community Health Indicator Reports	https://nmtracking.org/en/		
NMDOT	Statewide	All	NMDOT NM Traffic Crash Annual Report 2011	Downloadable health indicator reports, and profiles by County, includes mortality data, surveys, injury deaths and hospitalization data, population	Database	
NMDOT	Statewide	All	NMDOT NM Monthly Traffic Fatality Report 2013	https://ibis.health.state.nm.us/home/Welcome.html	Report	
NMDOT	Statewide	All	NMDOT NM Fatal and Injury Crash Map 2011 (PDF)	Report of crash stats, historical trends, characteristics, geography, etc. (2011 is most recent available report).	Report	
NMDOT	Statewide	All	NMDOT Safety Corridor Candidates by Districts 2007-2011 Map (PDF)	Crash-related fatalities, by type, age, location, county, seatbelts, etc.	Report	PDF
NMDOT	Statewide	All	NMDOT Safety Corridor Candidates by Districts 2007-2011 Map (PDF)	map of injury and fatalities	Report	
UNM Geospatial Studies	Statewide	All	UNM Geospatial and Population Studies- Traffic Research Unit	NM Traffic Reports, NM Traffic Crash maps, NM Traffic Crash Data, Safety Corridor Candidates (2011), Links to NMDOT	Database	
UNM Geospatial Studies	Statewide	All	NMDOT Safety Corridor Candidates by Districts 2007-2011 Map (PDF)	http://www.dgr.unm.edu/	Map	PDF
Additional Resources						
Amtrak	Statewide	All	Amtrak Fact Sheet, State of New Mexico FY 2013	Map of safety corridors	Map	
BBER	Statewide	All	Economic Impacts of Albuquerque Airport System on the New Mexico Economy, August 2013	Amtrak services and ridership	Report	
Federal Highway Administration	Statewide	All	FHWA Highway Statistics	Data collection, economic impacts, direct, total economic, tax revenue	Report	
FHWA	Statewide	All	Federal Funding by Functional Class	Funding by roadway class	PDF Table	
Montana Dept of Transportation	Outside of NM	NA	Wildlife-Vehicle Collision and Crossing Mitigation Measures: a Toolbox for the Montana Department of Transportation, 2007	Research	Report	
MRCOG	Mid-Region	3	Middle Rio Grande Regional Travel Model Recalibration and Validation Report, March 2010	Multi-modal travel models, methodology	Report	

Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
National Groundwater Association	Statewide	All	Groundwater Use for New Mexico, May 2012	NM groundwater use	Report	
National Wildlife Institute	Statewide	All	Public Land Ownership by State	Total land area, percent owned by various public land agencies	PDF table	
NCHRP	Statewide	All	NCHRP Report 750, Strategic Issues Facing Transportation Volume 2: Climate Change, Extreme Weather Events, and the Highway System, 2014	Practitioner's Guide and Research Report	Report	
New Mexico Office of the State Engineer	Statewide	All	New Mexico Water Use by Categories, 2010 (Technical Report #54)	Water use	Report	
New Mexico Office of the State Engineer	Statewide	All	New Mexico Office of the State Engineer Interstate Stream Commission 2009-2011 Annual Report	State of waters, programs	Report	
New Mexico Office of the State Engineer	Statewide	All	New Mexico Water Resource Atlas, December 2002	Framework for public input to a state water plan, atlases	Report	
NM Geospatial Advisory Committee	Statewide	All	New Mexico Geospatial Advisory Committee	GIS data, Map Services (environmental, water quality, environmental justice, natural resource, NM broadband)	Database	
NM Tourism Department	Statewide	All	NM Tourism Department 2013 Annual Report	Tourism and visitor data	Report	
NM Tourism Department	Statewide	All	NM Visitor Profile (2010-2012)	Tourism and visitor data	Report	
NM Tourism Department	Statewide	All	Economic Impact 2011- Appendix A: NM Regions (Tourism data)	Tourism and visitor data	Report	
NM Tourism Department	Statewide	All	NM Tourism Department 2013 Data Highlights	Tourism and visitor data	Report	
NM Tourism Department	Statewide	All	The Economic Impact of Tourism in NM 2011	Tourism and visitor data	Report	
NMDOT	Statewide	All	Road Fund Outlook 2014	Road fund	Excel Table	
NMDOT	Statewide	All	Revenue Tracking, FY2014	Fund sources	Excel Table	
NMDOT	Statewide	All	State Revenue Tracking for FY 2009 vs. Projection	Transportation coordination	Excel Table	
NMDOT	Statewide	All	State-Tribal Collaboration Act, 2013 Agency Report	Transportation coordination	Report	
NMDOT & NMGSF	Statewide	All	Wildlife Collision Workshop, May 2013 Data Review	Wildlife collision data sources	Presentation	
NMDOT & NMGSF	Statewide	All	Wildlife Collision Mitigation, May 2013 Statewide Workshop	Wildlife collision projects	Presentation	
NMDOT Transit & Rail Div	Statewide	All	Transit and Rail Division 2014 Fact Sheet Packet	Transit system characteristics, ridership, funding	Report	
NMED	Statewide	All	NMED 5 year Network Assessment	Statewide pollutant trends 2004-2008, Air Quality Index and Health Issues	Report	
NMED	Statewide	All	NMED Air Quality Bureau - Real-time Data	Available real-time and historical data	Database	
Outdoor Industry Association	Statewide	All	New Mexico: The Outdoor Recreation Economy	Outdoor recreation data, 2012	Report	
USFWS	Forest Service Lands	All	USFWS Long-range Transportation Plan	In process		
USFWS	Region 2	All	Planning Update 1: Long Range Transportation Plan for F&W Service Lands in Region 2, September 2012	Transportation planning progress, goals	Report	
Data and Information Gaps						
Apache Nations	Jicarilla Apache Nation		No transportation planning documents found			
Ben Archer Health Center	Dona Ana County		No transit system information or data found			
Carlsbad Municipal Transit System	City of Carlsbad		No transit system information or data found			
Chile Line	Town of Taos		No transit system information or data found			
Cibola Area Transit System	Cibola County		No transit system information or data found			
Cibola County			No transportation planning documents found			
City of Socorro Public Transportation	City of Socorro		No transit system information or data found			
Clovis Area Transit System	City of Clovis		No transit system information or data found			
Corre Caminos Transit	Grant County		No transit system information or data found			
DeBaca County			No transportation planning documents found			



Data Owner	Region or Location	NMDOT District	Document or Data	Data Details	Data Format	Map Format
Golden Spread Rural Frontier	Union County		No transit system information or data found			
City of Albuquerque/Jilition			No transportation planning documents found			
Guadalupe County			No transportation planning documents found			
Harding County			No transit system information or data found			
Hobbs Express	City of Hobbs		No transit system information or data found			
Lincoln County Transit	City of Ruidoso Downs		No transit system information or data found			
Meadow City Express	City of Las Vegas		No transit system information or data found			
Mescalero Apache Tribe			No transportation planning documents found			
Miner's Transit	Town of Red River		No transit system information or data found			
Navajo Nation Transit	McKinley/San Juan Co		No transit system information or data found			
Pecos Trails Transit	City of Roswell		No transit system information or data found			
Portales Area Transit	City of Portales		No transit system information or data found			
Pueblo of Acoma			No transportation planning documents found			
Pueblo of Aleta			No transportation planning documents found			
Pueblo of Aleta del Sur			No transportation planning documents found			
Pueblo of Jemez			No transportation planning documents found			
Pueblo of Nambe			No transportation planning documents found			
Pueblo of Ohkay Owingeh			No transportation planning documents found			
Pueblo of Picuris			No transportation planning documents found			
Pueblo of Pojoaque			No transportation planning documents found			
Pueblo of San Felipe			No transportation planning documents found			
Pueblo of San Ildefonso			No transportation planning documents found			
Pueblo of Sandia			No transportation planning documents found			
Pueblo of Santa Ana			No transportation planning documents found			
Pueblo of Santa Clara			No transportation planning documents found			
Pueblo of Santo Domingo			No transportation planning documents found			
Pueblo of Taos			No transportation planning documents found			
Pueblo of Tesuque			No transportation planning documents found			
Pueblo of Zia			No transportation planning documents found			
Pueblo of Zuni			No transportation planning documents found			
Quay County			No transportation planning documents found			
Roosevelt County			No transportation planning documents found			
Shas'rik'a Transit	Pueblo of Laguna		No transit system information or data found			
The Navajo Nation	To'Hajiilee Navajo Ch		No transportation planning documents found			
Union County			No transportation planning documents found			
Village of Tortugas			No transportation planning documents found			

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Last updated 5-5-14

B. Statewide Survey

This attachment provides a comprehensive analysis of the statewide public survey results and regional working group surveys.

B.1 Statewide Survey

The statewide survey was conducted by Harris Interactive Services Bureau in Spring 2014. The survey was conducted online and collected data from a statistically valid sample of 625 New Mexicans. The survey questions were designed to gather public attitudes and perceptions concerning the state's transportation system. The survey was available in English and Spanish and could only be completed by residents that were at least 18 years old. Survey recipients were taken from the Harris Poll Online Panel, which consists of individuals from throughout North America and Western Europe that have been recruited through online, telephone, mail, and in-person approaches to increase population coverage and enhance representativeness. All panel members have double opted-in and voluntarily agreed to participate in various online polls. Nearly three quarters of respondents (74 percent) were urban residents; the remainder were rural. The results were weighted based on age, gender, income, race, and education to achieve a Census-representative sample of public opinion.

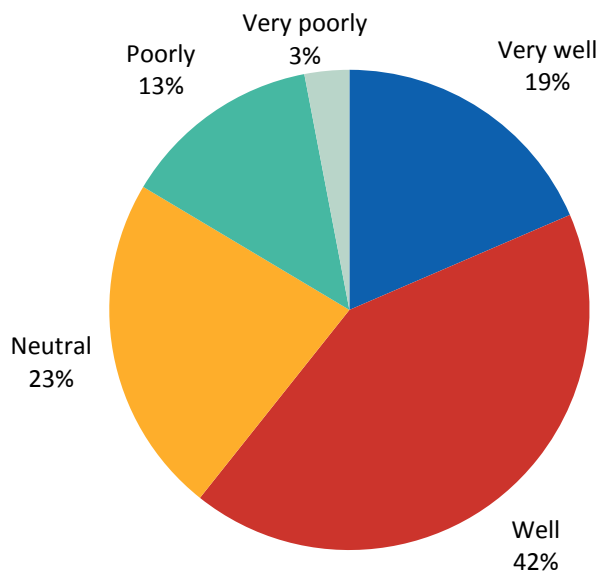
Survey Results

The following sections summarize the results for each of the nine substance questions included in the online survey. Results are also broken out by key demographics such as age (18-34, 35-64, and 65+) and urban/rural residents.

System Performance

In response to the question "How well does the transportation system meet your needs?", 61 percent of the respondents said the existing transportation system is meeting their needs well or very well (see Figure B.1). By comparison, only 16 percent thought it was meeting their needs poorly or very poorly. A clear majority of New Mexicans appear to feel the system is working fine.

Figure B.1 **System Performance**
All Respondents



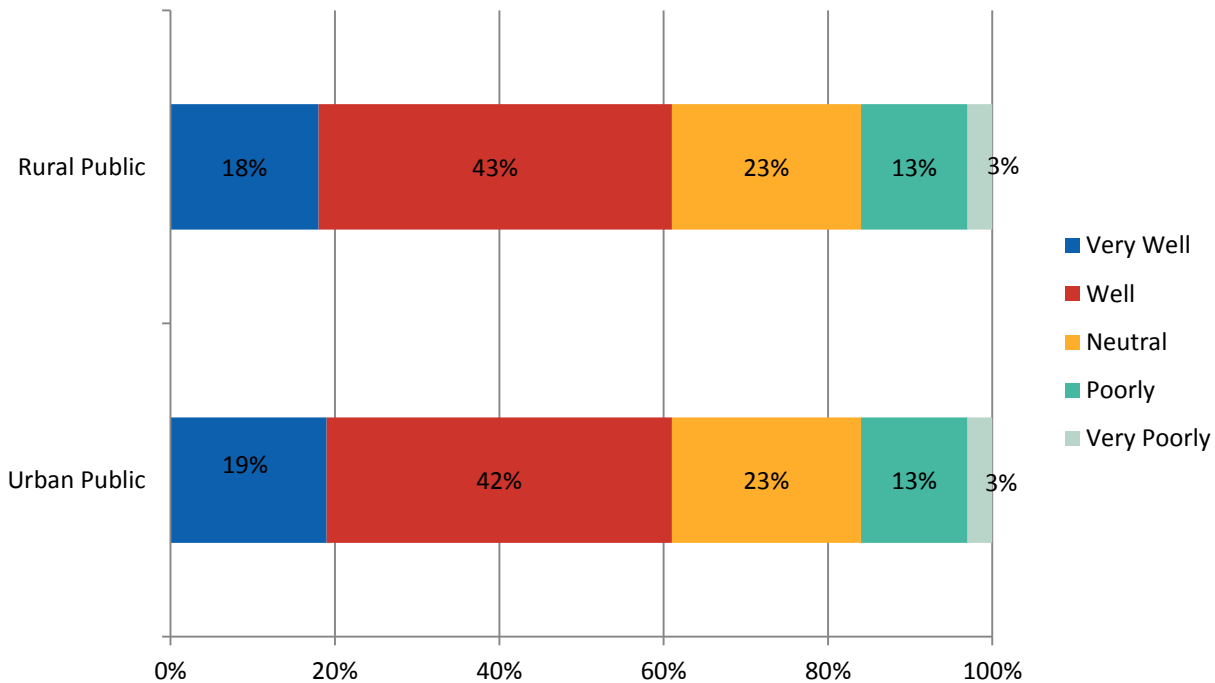
Source: CS analysis of online survey data.

Moreover, as shown in Figure B.2, there are no significant differences between urban and rural respondents on this question. In fact, the proportion of respondents who feel the system is meeting their needs well or very well is the same (61 percent), regardless of urban or rural residence.

Table B.1 breaks down the results by age group. As the table shows, 70 percent of seniors say the transportation system is meeting their needs well or very well, compared to 62 percent of younger respondents and 57 percent of respondents in the middle age bracket. Younger respondents and those aged 35-64 were more likely to rate it as neutral (26 percent and 24 percent respectively, compared to 16 percent for the older age group) – this is close to the statewide average of 23 percent. This divergence may be because seniors that are retired are generally free to travel whenever they wish, thereby avoiding rush hour traffic. Respondents aged 35-64 were more likely to rate the system poorly than either of the other age groups; 16 percent of them said the system meets their travel needs poorly, compared to nine percent for the younger group and 11 percent for seniors.



Figure B.2 System Performance
Urban and Rural Respondents



Source: CS analysis of online survey data.

Table B.1 System Performance
By Age

	Age 18-34	Age 35-64	Age 65+
Very well	24%	14%	24%
Well	38%	43%	46%
Neutral	26%	24%	16%
Poorly	9%	16%	11%
Very poorly	2%	3%	3%
Total	100%	100%	100%

Best Features of the New Mexico Transportation System

Figure B.3 shows New Mexican’s views in response to the question “What are the best features of New Mexico’s transportation system?” Roads and bridges receive the highest marks at 51 percent of the total, followed by pedestrian facilities (38 percent), Rail Runner (36 percent), and bus service (35 percent). On the other end of the spectrum, Amtrak service was only rated as a superior feature by 14 percent of respondents, followed by 12 percent for freight rail (this latter

statistic may be because the survey was not designed specifically to capture opinions from freight rail shippers).

Figure B.3 Best Features of the New Mexico Transportation System
All Respondents

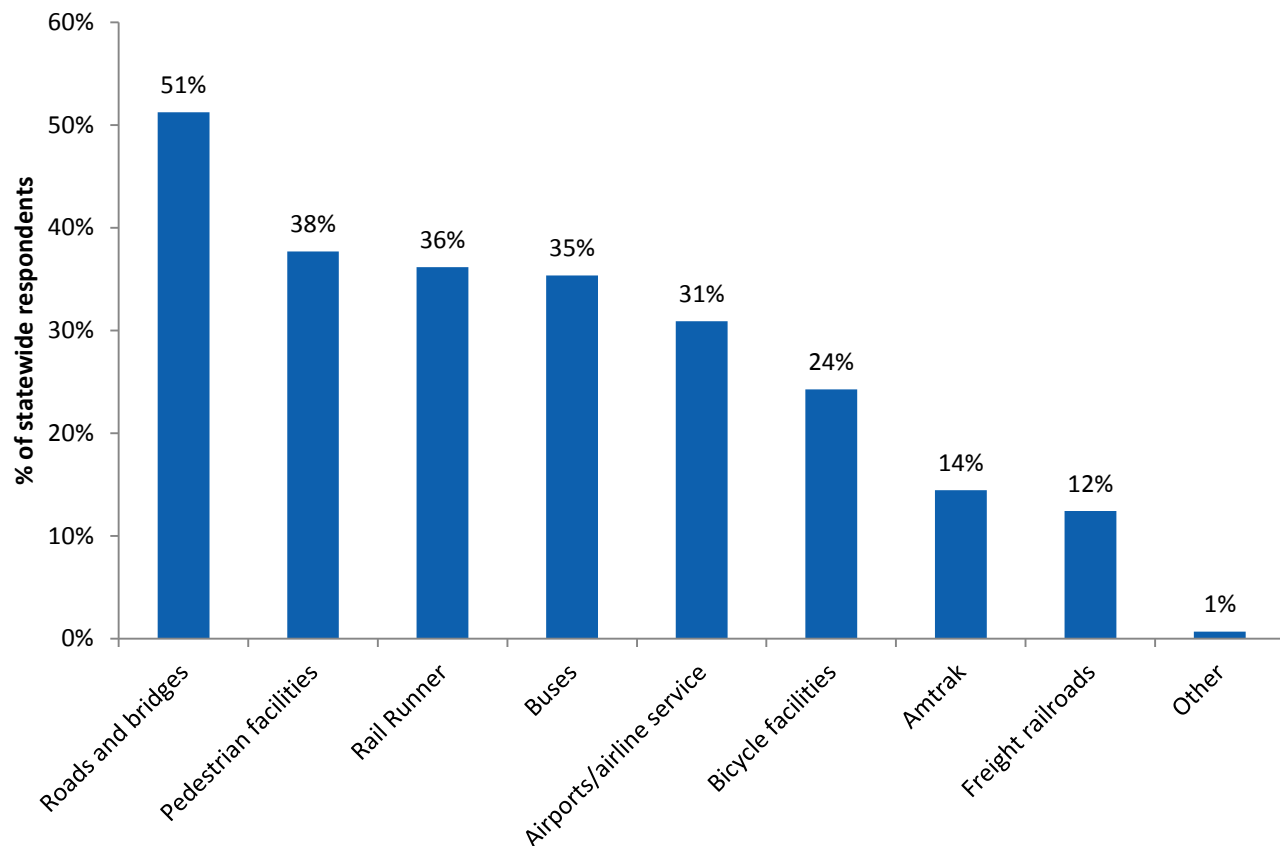
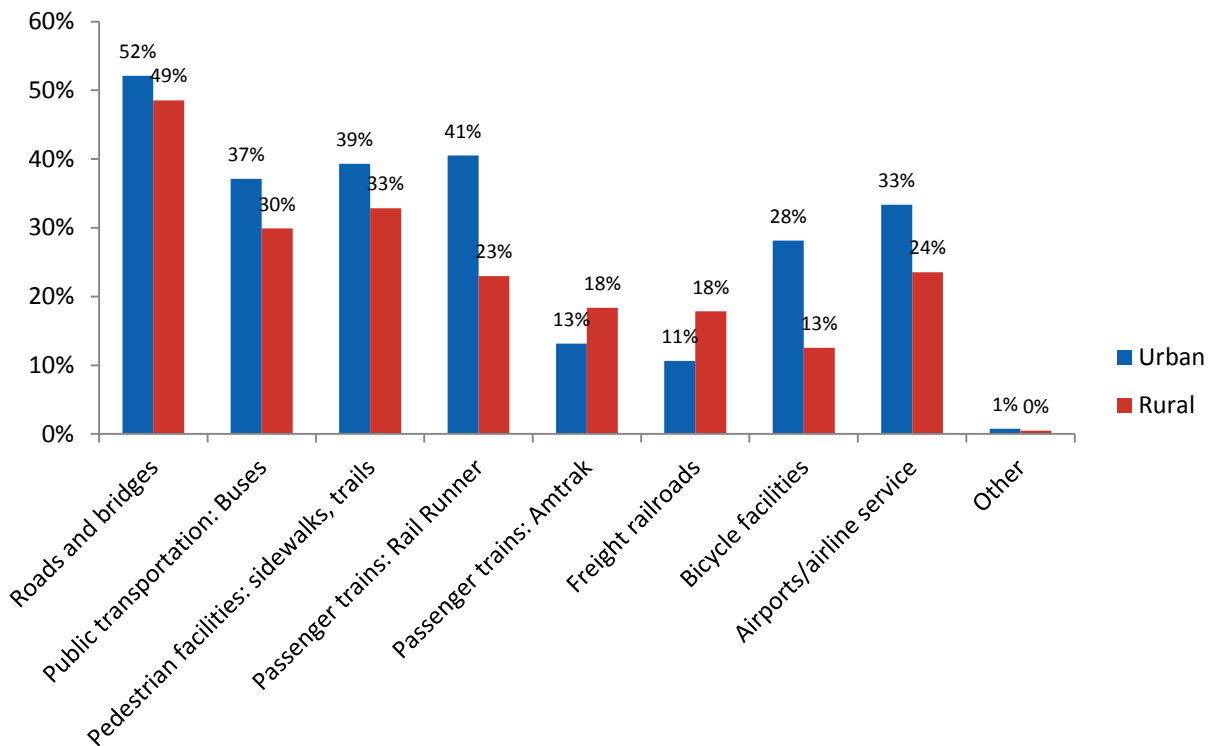


Figure B.4 shows similarities and differences between urban and rural New Mexicans on this question. There is agreement between urban and rural residents that roads and bridges are the best features of the state transportation system (52 percent and 49 percent respectively). Features more likely to be available and used by city dwellers are rated higher by urban respondents, including buses, Rail Runner, and bicycle/pedestrian facilities. Amtrak and freight rail are viewed somewhat more favorably by rural residents, though relatively few respondents view these favorably. Airports and airline service are viewed more favorably by urban populations.



Figure B.4 Best Features
Urban and Rural Respondents



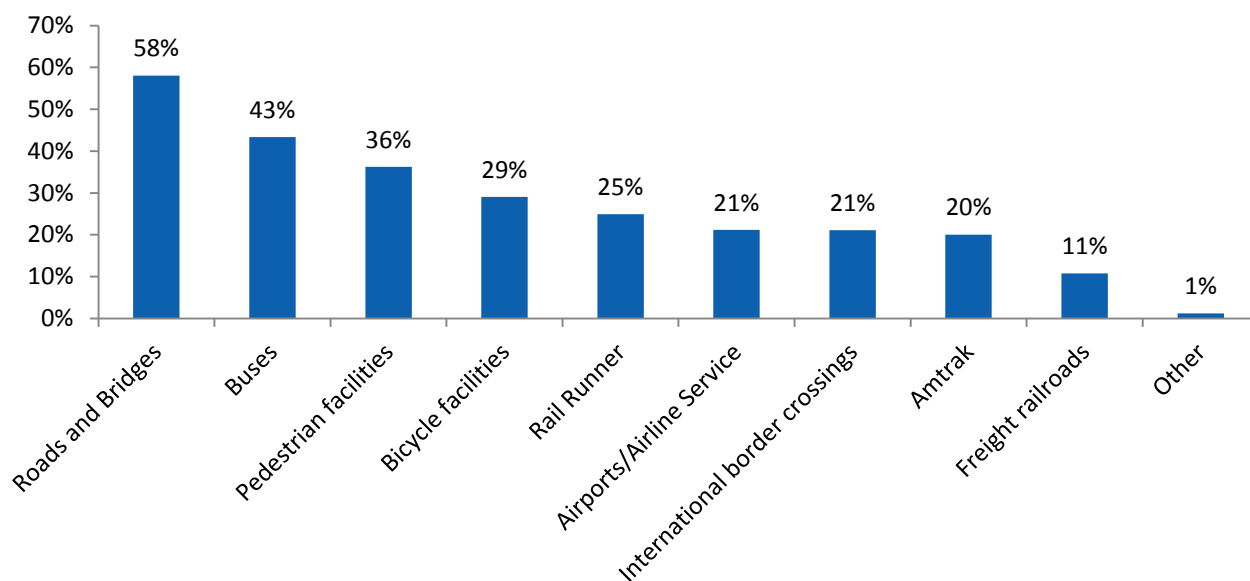
Source: CS analysis of online survey data.

Features in Need of Improvement

As shown in Figure B.5, roads and bridges also ranked highest on the features in need of improvement for survey respondents (58 percent). Buses were also frequently cited at 43 percent of the total, as were pedestrian facilities at 36 percent. Features least in need of improvement include airports (21 percent), international border crossings (21 percent), Amtrak service (20 percent) and freight rail roads (11 percent).

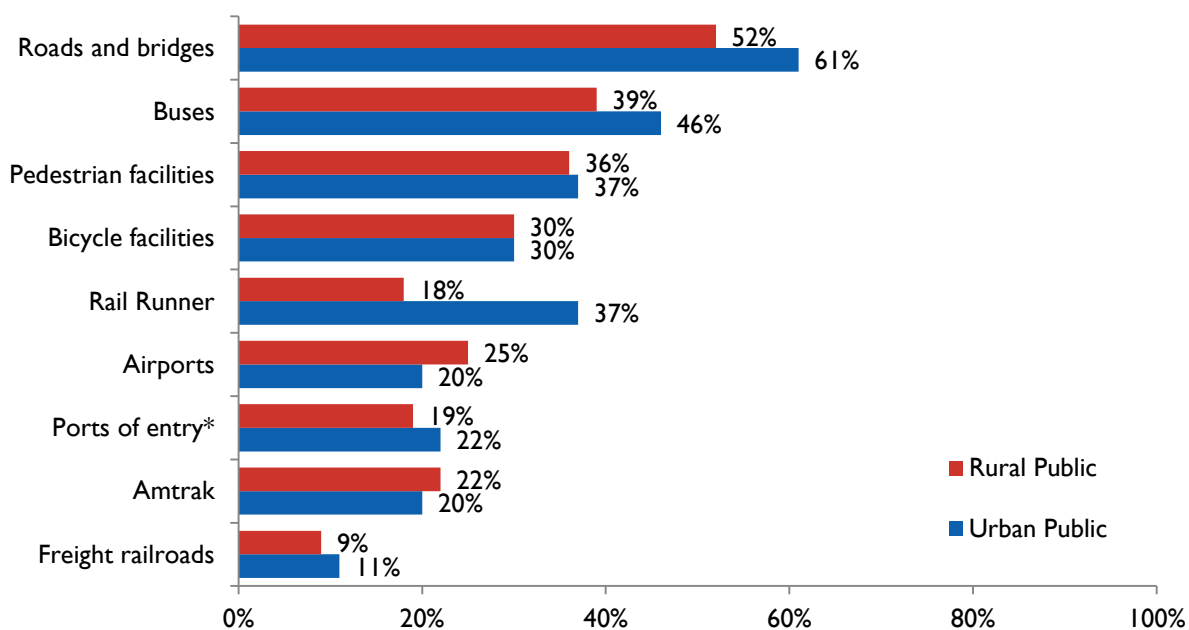
However, Figure B.6 highlights some differences of opinion between urban and rural respondents to this question. In general, urban respondents identified higher levels of need on most modes than rural respondents. More specifically, urban residents were more than twice as likely to identify needed improvements to Rail Runner, which is not surprising given that rural residents have limited access to use Rail Runner. Overall, rural respondents were more likely to list airports as a need. This could indicate an access issue. Although there are numerous general aviation airports around the state, five cities are served by primary commercial service airports: Albuquerque, Santa Fe, Roswell, Hobbs, and Farmington (Las Cruces area residents use El Paso International Airport). Nonetheless, the top four features cited in need of improvement (roads and bridges, buses, pedestrian facilities, and bicycle facilities) are the same for both groups.

Figure B.5 Features in Need of Improvement
All Respondents



Source: CS analysis of online survey data.

Figure B.6 Features in Need of Improvement
Urban and Rural Respondents



Source: CS analysis of online survey data.

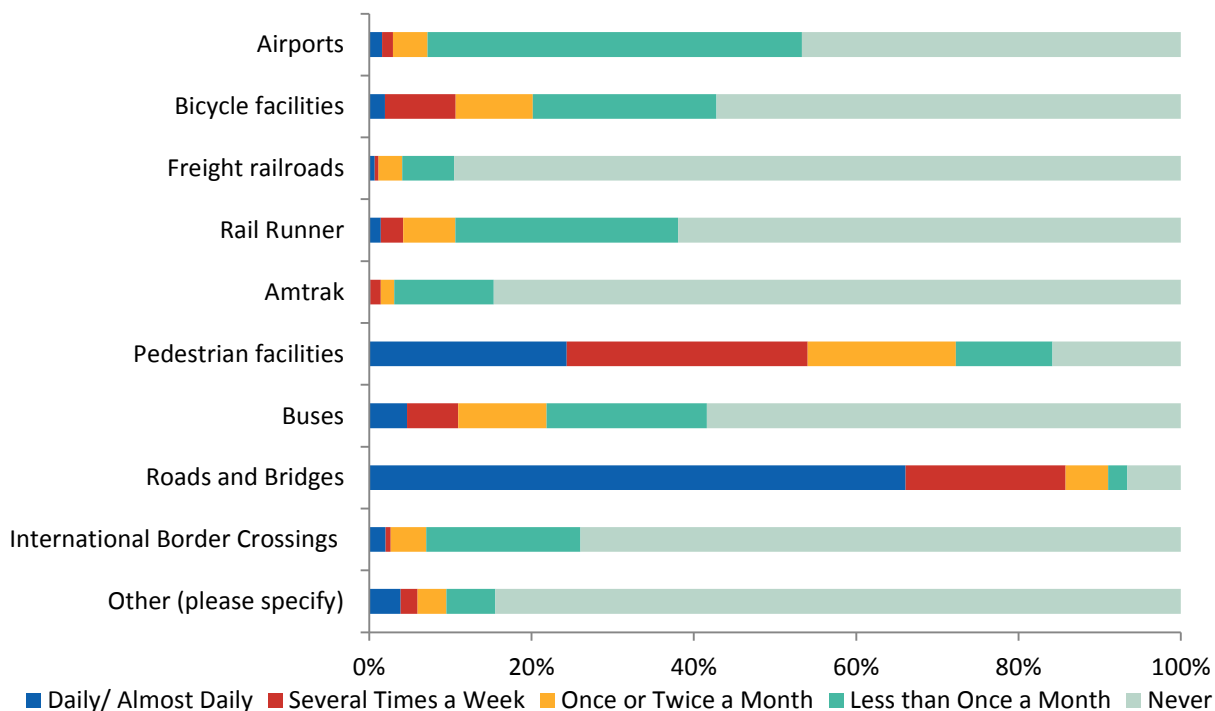


System Usage by Mode

Respondents were also asked how frequently they used different modes of transportation. Figure B.7 shows the results for all 625 respondents. Not surprisingly, roads and bridges are the most frequently used parts of the system, with nearly 70 percent of respondents stating they use those features on a daily or near-daily basis. Another 20 percent stated they use them several times a week. Pedestrian facilities were the next most-used part of New Mexico’s transport infrastructure, with about half of all respondents saying they used them either daily or almost daily, or several times a week. Bus services and bicycle facilities were the next most frequently used modes, with almost 11 percent of respondents indicating they use these modes at least multiple times a week.

When comparing urban and rural responses to this question, rural dwellers are much less likely to use airports even on an infrequent basis. About 53 percent of urban respondents reported using airports less than once a month, compared to just 26 percent of rural respondents. Sixty-five percent of rural dwellers said they never use airports. Not surprisingly, Rail Runner is more likely to be used by city dwellers; however, most do not use it regularly. Only five percent of urban respondents said they used Rail Runner daily/almost daily or several times a week, while 34 percent stated they use it less than once per month. Eighty-seven percent of rural residents polled said they never use Rail Runner.

Figure B.7 Usage by Mode
All Respondents



Source: CS analysis of online survey data.

Ease of Access

Roads are also the most accessible mode for most New Mexicans. Only five percent of respondents said roads and bridges were not an option for them to use (Figure B.8). Only nine percent said pedestrian facilities were not an option and 16 percent said they have no access to bus service. Conversely, 72 percent stated freight rail is not an option for them, followed by international border crossings (55 percent – this may be a function of respondents that actually live near a border crossing), Amtrak (44 percent), and Rail Runner (37 percent).

Sixty percent said pedestrian facilities were easy to use, followed by airports (46 percent). Freight rail, Amtrak, and international border crossings were regarded as the most difficult modes to use, although as noted before the survey instrument was not designed to capture the views of freight shippers who might use railroads.

Figure B.9 highlights ease of access amongst those modes respondents were able to access. Nearly 80 percent of respondents said roads and bridges were an easy option, followed by pedestrian facilities (about 60 percent) and airports (about half).

As with frequency of use by mode, there are some unsurprising differences between urban and rural views on ease of access by mode. For example, urban residents were much more likely to say that airports were an easy option (42 percent, compared to just 18 percent for rural respondents). Similarly, 53 percent of urban residents stated that Rail Runner was either an easy option or a possible option, compared to 20 percent of rural residents. Sixty-three percent of rural respondents felt that Rail Runner was not an option. However, bus accessibility was fairly similar for both groups, suggesting that rural transit (e.g., dial-a-ride) services are providing a similar level of service to their urban counterparts in New Mexico.



Figure B.8 Lack of Access by Mode
All Respondents

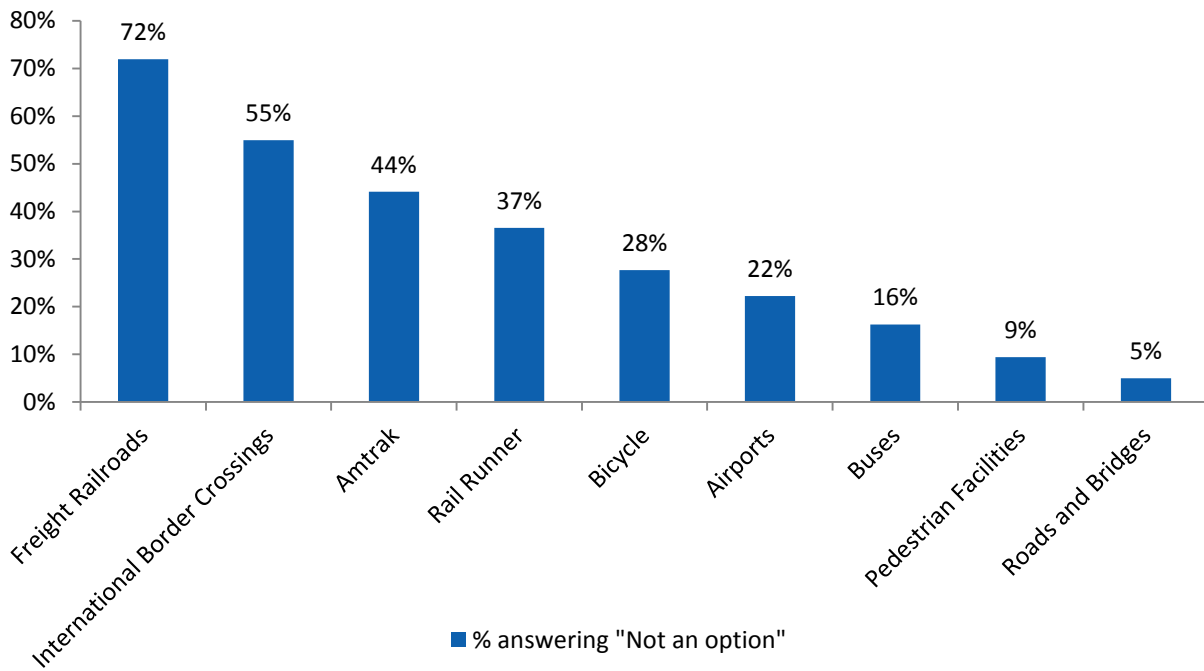
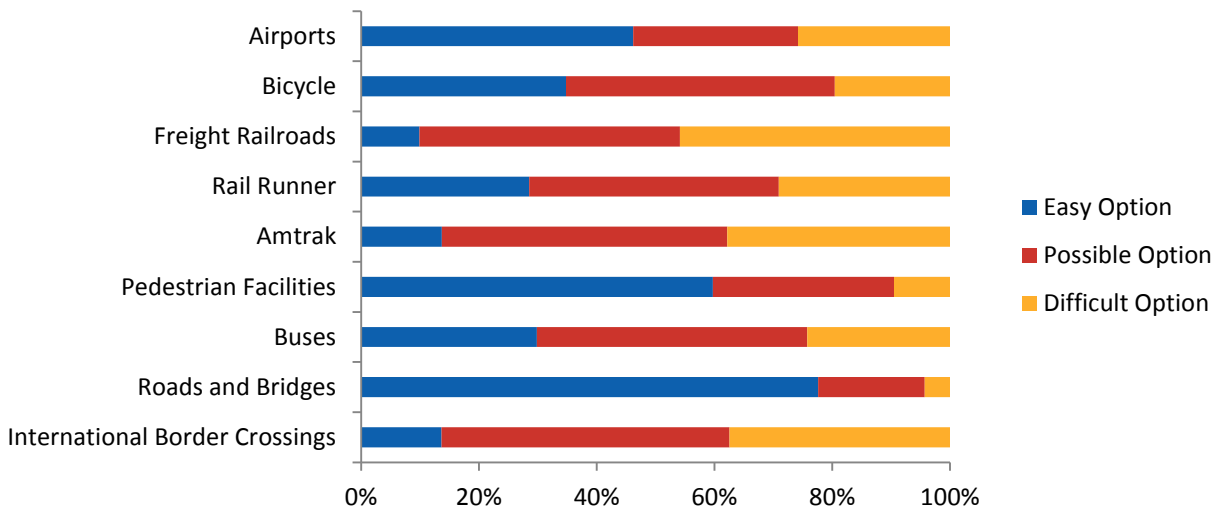


Figure B.9 Ease of Access by Mode
All Respondents



Source: CS analysis of online survey data.

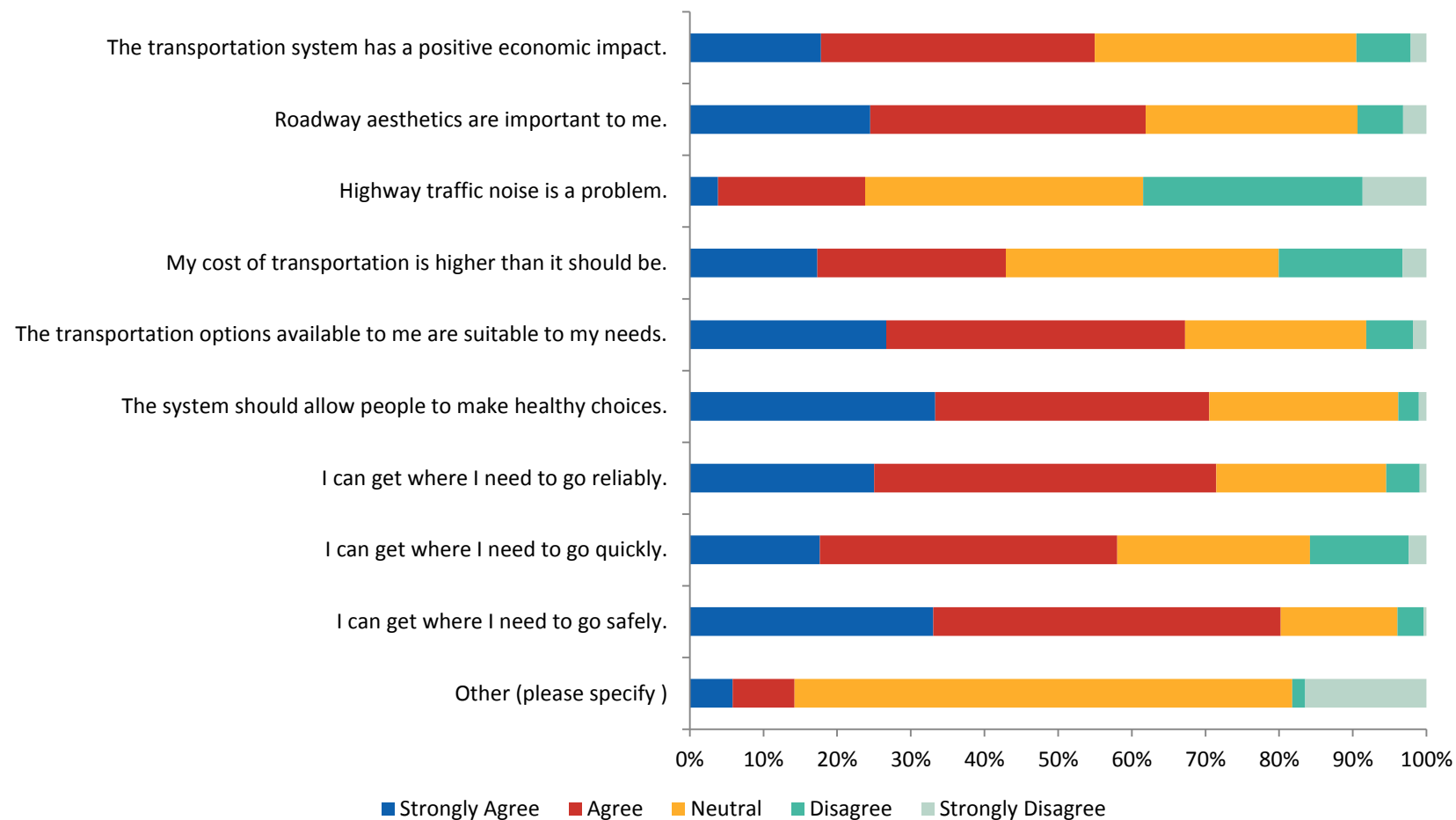
Safety, Reliability, and Efficiency

One question asked participants whether they agreed, were neutral, or disagreed with a series of statements about the New Mexico transportation system. Figure B.10 summarizes the results. Key points include:

- There is broad agreement that the system is safe. Eighty percent of respondents either strongly agreed or agreed they can get to their destinations safely most of the time.
- There is also general agreement that the system is reliable in terms of being able to arrive on time (71 percent strongly agreed or agreed with that statement).
- New Mexicans appear to prefer a transportation system that offers the opportunity to make healthy lifestyle choices like walking or bicycling; 70 percent of respondents felt that the state transportation system should allow people to make these choices.
- Sixty-one percent of all respondents felt that roadway aesthetics are important.
- The cost of transportation is an issue for some – 41 percent of those responding agreed or strongly agreed their household's cost of transportation was too high – but 37 percent were also neutral on this subject.
- In general, most people feel that the transportation options (modes) available to them suit their needs.



Figure B.10 How Much do you Agree or Disagree About the Following Statements?
Online Surveys



Source: CS analysis of online survey data.

There were some differences between urban and rural respondents on this question:

- Urban respondents were more likely to agree that the transportation system should offer healthy choices like walking or bicycling (74 percent of urban residents agreed or strongly agreed with this statement, compared to 61 percent of rural residents).
- Urban residents were also slightly more likely to say that the options available to them meet their needs: 69 percent of them strongly agreed or agreed with that statement, compared to about 63 percent of rural respondents.
- The largest difference had to do with household transportation costs. Among rural respondents, 53 percent strongly agreed or agreed with the statement “My household’s cost of transportation is higher than it should be.” Only 39 percent of urban respondents answered the same way. In general, rural populations have fewer choices other than driving and typically take longer trips.

There were also some differences when looking at responses to these questions by age group:

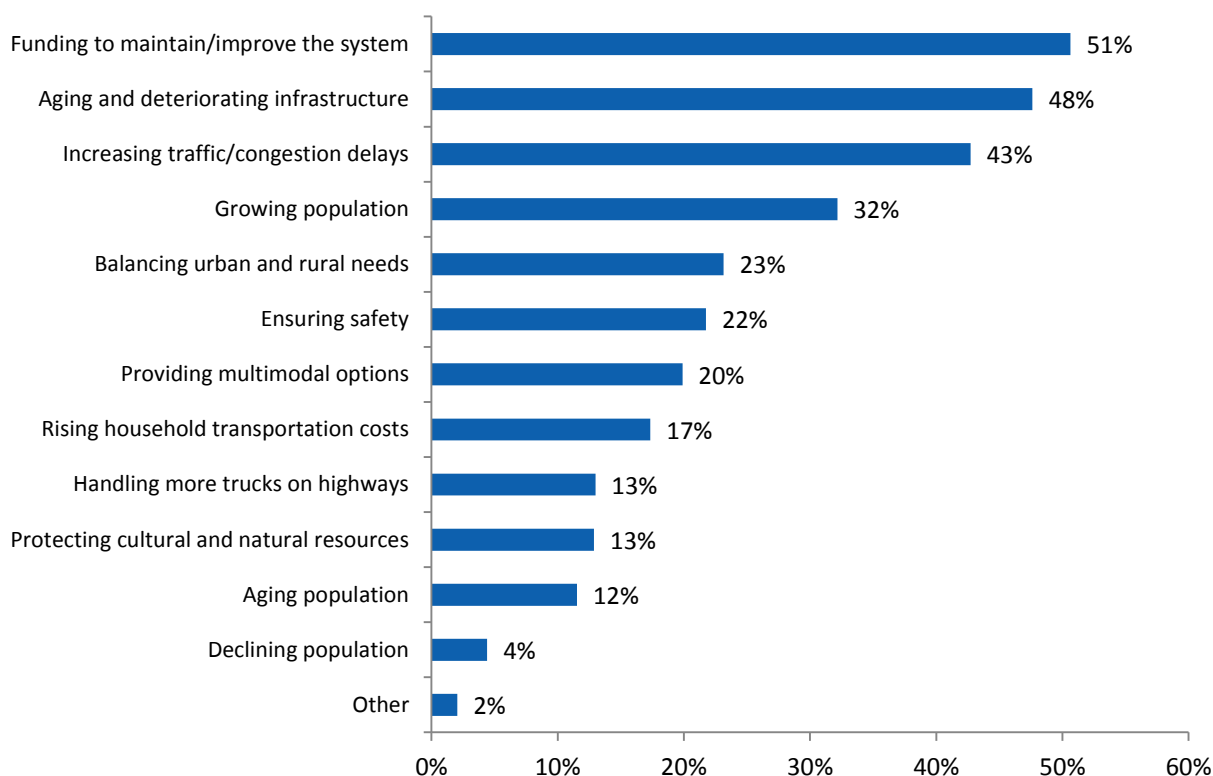
- Seniors (those age 65 or older) were more likely to agree that the system is reliable, i.e., they can get to their destination on time. Eighty-one percent of seniors felt they could get to where they need to go reliably most of the time, compared to 65 percent of those age 18-34. As noted above, retirees typically have more freedom to travel whenever they wish and thus avoid rush hour, and this may help explain differences of opinion on system reliability (although it should be noted the survey did not distinguish between retired seniors and those that are still working).
- Similarly, 72 percent of seniors thought that the modes available to them were suitable to their needs, but only 61 percent of younger respondents agreed with that statement. There is some evidence at the national level suggesting that the younger generation (also known as ‘Millennials’) do not drive as much as previous generations and prefer alternative modes such as transit, but it is hard to conclude that is the case in New Mexico based on the survey responses. Younger respondents were more likely to feel neutral about the modes available to them (32 percent); only eight percent disagreed or strongly disagreed with this statement.

Most Significant Transportation Challenges

Survey participants were asked to identify what they believe are the most pressing transportation challenges New Mexico will face over the next 25 years. Figure B.11 highlights responses for all respondents. Finding adequate funding for system maintenance and improvements was the number one concern, followed closely by aging and deteriorating infrastructure and increasing traffic congestion. Population growth and balancing urban and rural needs rounds out the top five most frequently cited concerns.



Figure B.11 New Mexico’s Most Significant Transportation Challenges
All Respondents

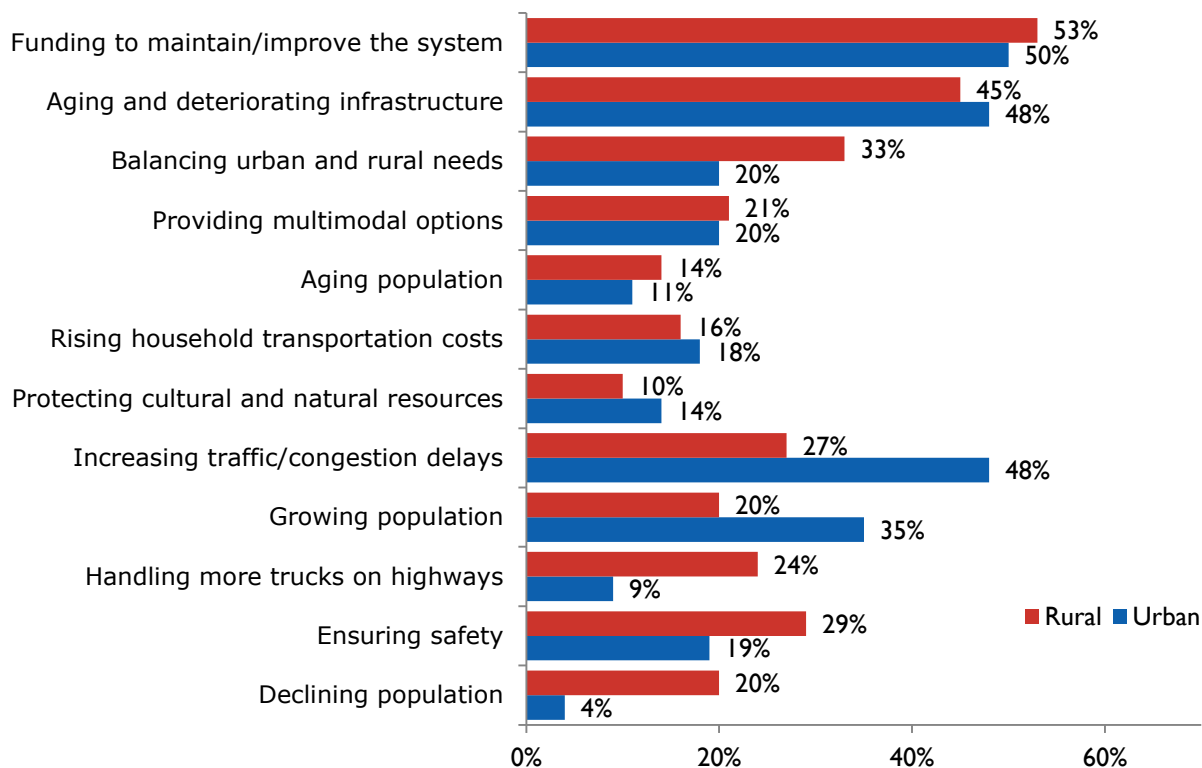


Source: CS analysis of online survey data.

As shown in Figure B.12, there were some differences between urban and rural respondents for this question. Although funding and deteriorating infrastructure are the top concerns for both groups, balancing urban and rural needs was a much bigger concern for rural participants, as was population decline, ensuring safety, and handling more trucks on the state’s highways. By contrast, urban dwellers appear to be more concerned with population growth and increasing congestion.

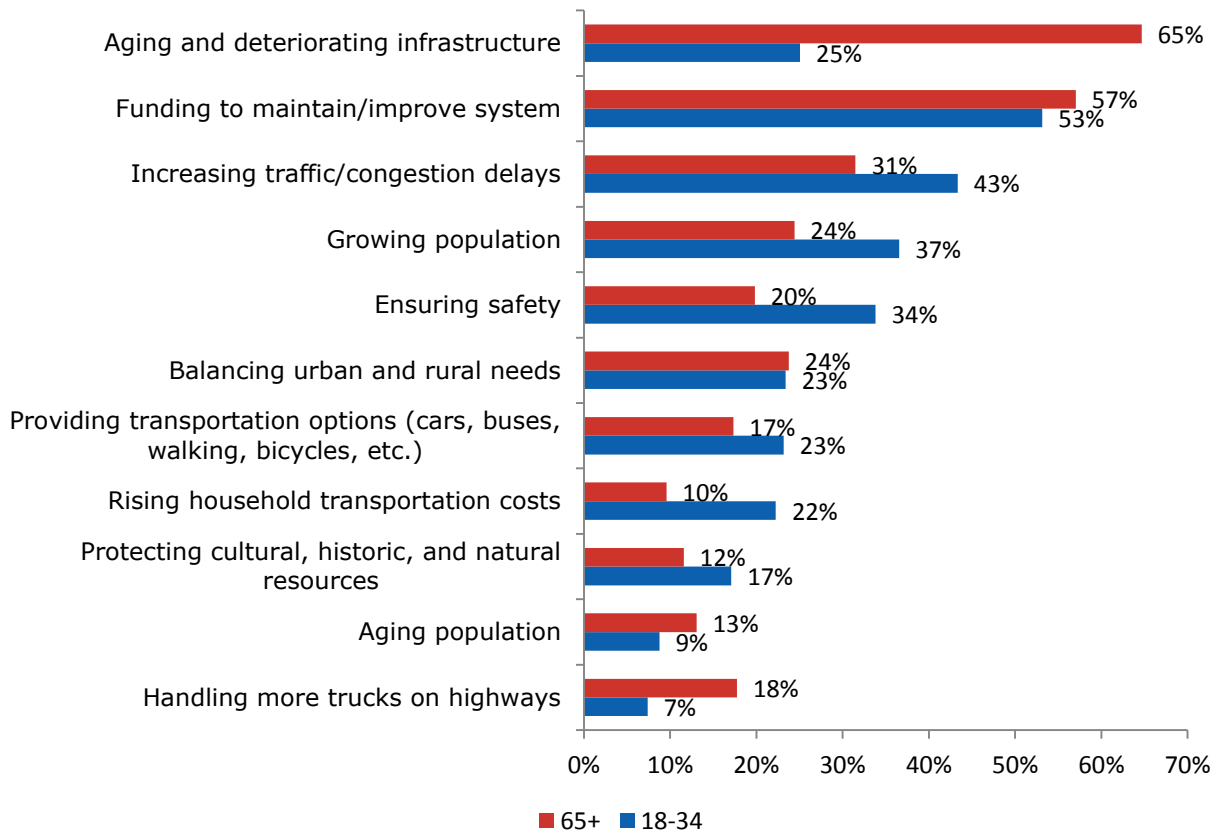
When looking at the data by age group, the top five most pressing challenges were nearly identical for 18-34 year olds and those over 65. However, the relative importance of each was different in some cases (see Figure B.13). For instance, the top concern for seniors was aging and deteriorating infrastructure (cited by 65 percent of respondents age 65 or older), but for the younger group this challenge was ranked fifth (25 percent of the total). Younger respondents were more concerned with growing traffic congestion (43 percent vs. 31 percent for seniors) and population growth (37 percent vs. 24 percent). Ensuring safety also seems to be an important challenge for younger New Mexicans, as are rising household transportation costs.

Figure B.12 New Mexico's Most Significant Transportation Challenges
Urban and Rural Respondents



Source: CS analysis of online survey data.

Figure B.13 New Mexico’s Most Significant Transportation Challenges
Age 18-34 and 65+



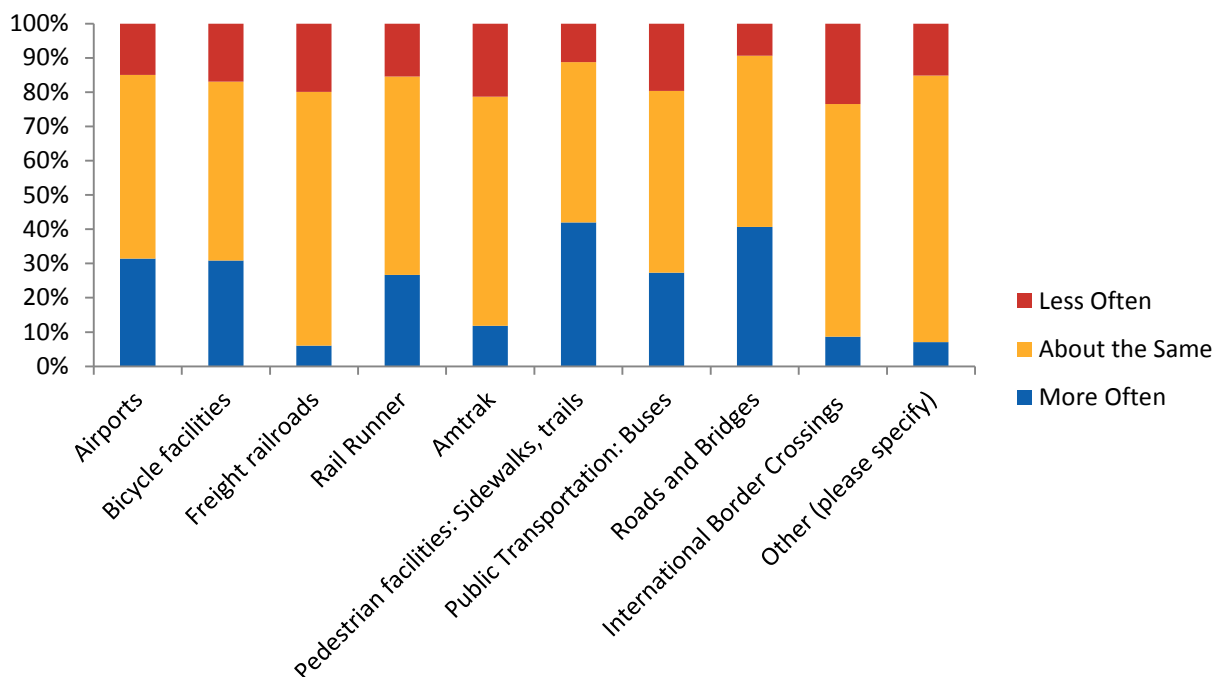
Source: CS analysis of online survey data.

Expected Modal Usage

Respondents were asked if they expected to use certain modes/transportation system features less often, more often, or about the same in 10 years’ time. As shown in Figure B.14, ‘About the same’ was the most common response for all modes/features. Pedestrian facilities and roads/bridges were the modes the most people expected to be using more in 10 years, while more people stated they would be using international border crossings and freight railroads less often in the future.

Urban dwellers were more likely to say they expect to use Rail Runner more frequently in the future (31 percent, compared to 14 percent of rural residents). Urban dwellers were also more likely to state they would use sidewalks and trails more often in the next 10 years (45 percent vs. 34 percent). Rural respondents anticipate using both Rail Runner and pedestrian facilities about the same amount in the future.

Figure B.14 Expected Modal Usage
All Respondents



Source: CS analysis of online survey data.

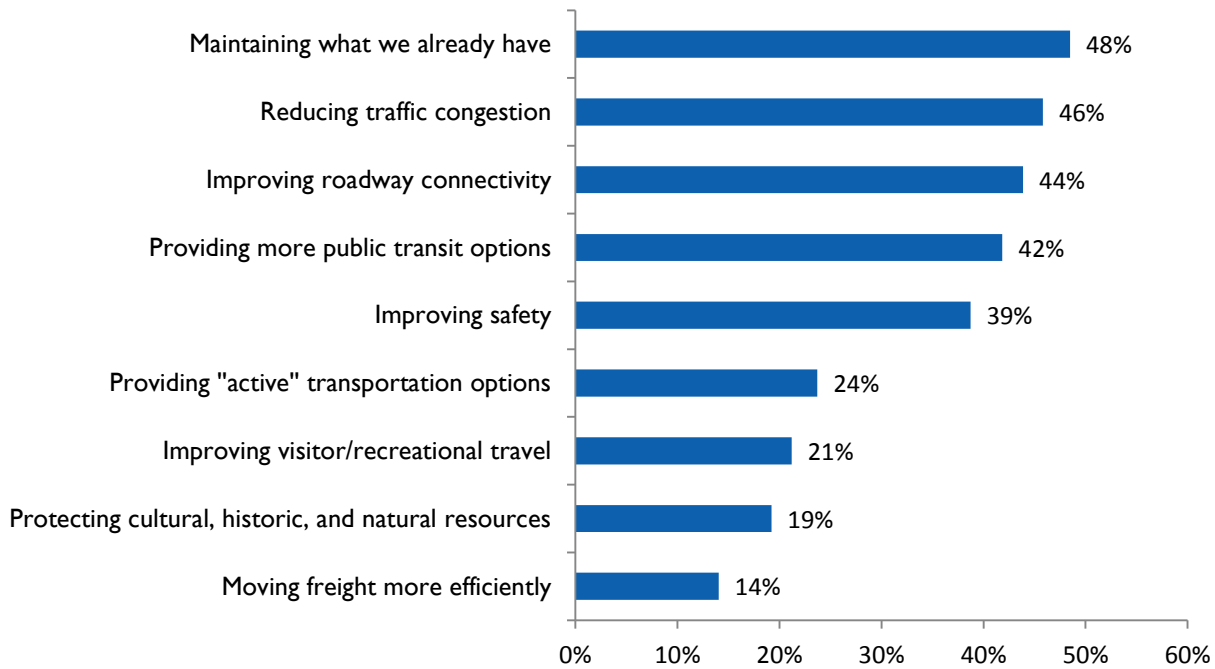
Top Priorities for Future Transportation Investments

The final question of the online survey asked respondents to choose what they feel should be the top three priorities for future investments in the state's transportation system. Figure B.15 shows the results for all respondents. Maintaining the existing system, reducing congestion, and improving roadway connectivity were the three most frequently cited priorities, followed closely by providing more public transit options and improving safety.

As Figure B.16 shows, reducing traffic congestion ranked as the top priority among the urban group (52 percent, compared to just 26 percent for the rural respondents), while nearly two-thirds of rural respondents ranked maintaining what the state already has as the top priority. Improving safety is also a higher priority among the state's rural residents.

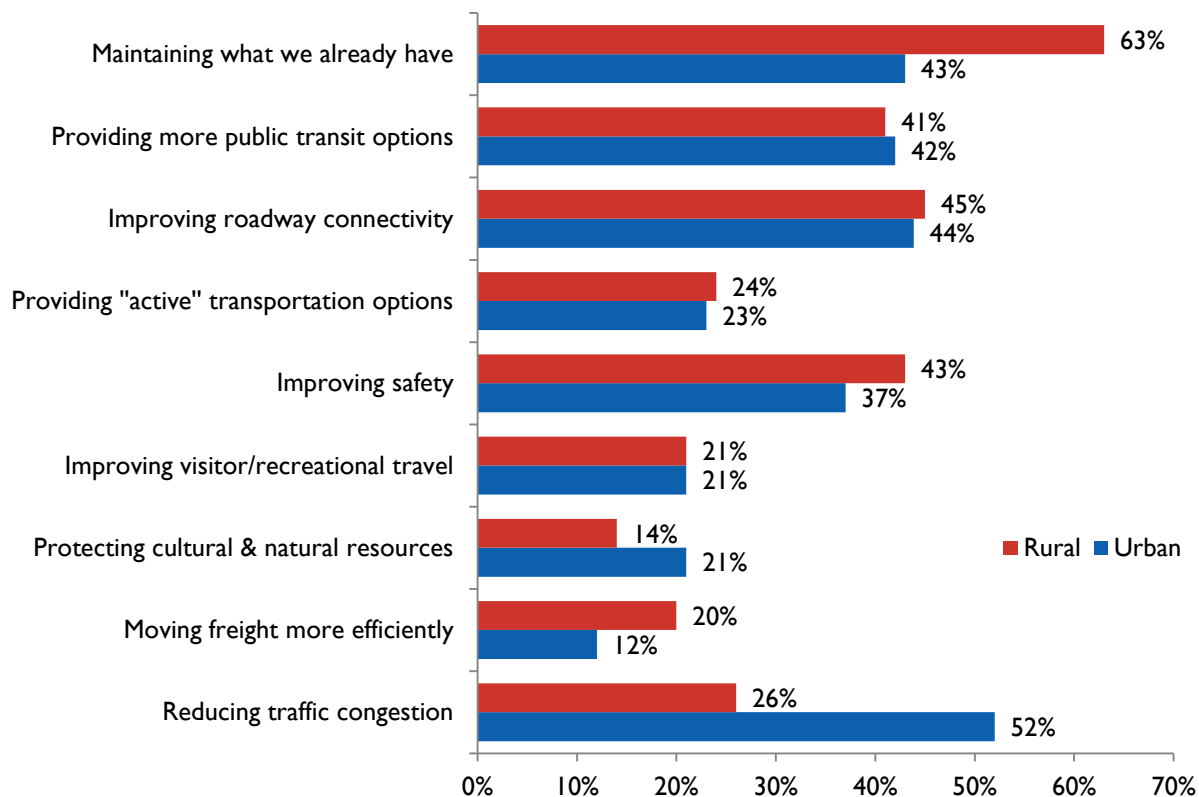


Figure B.15 Priorities for Future Transportation Investments
All Respondents



Source: CS analysis of online survey data.

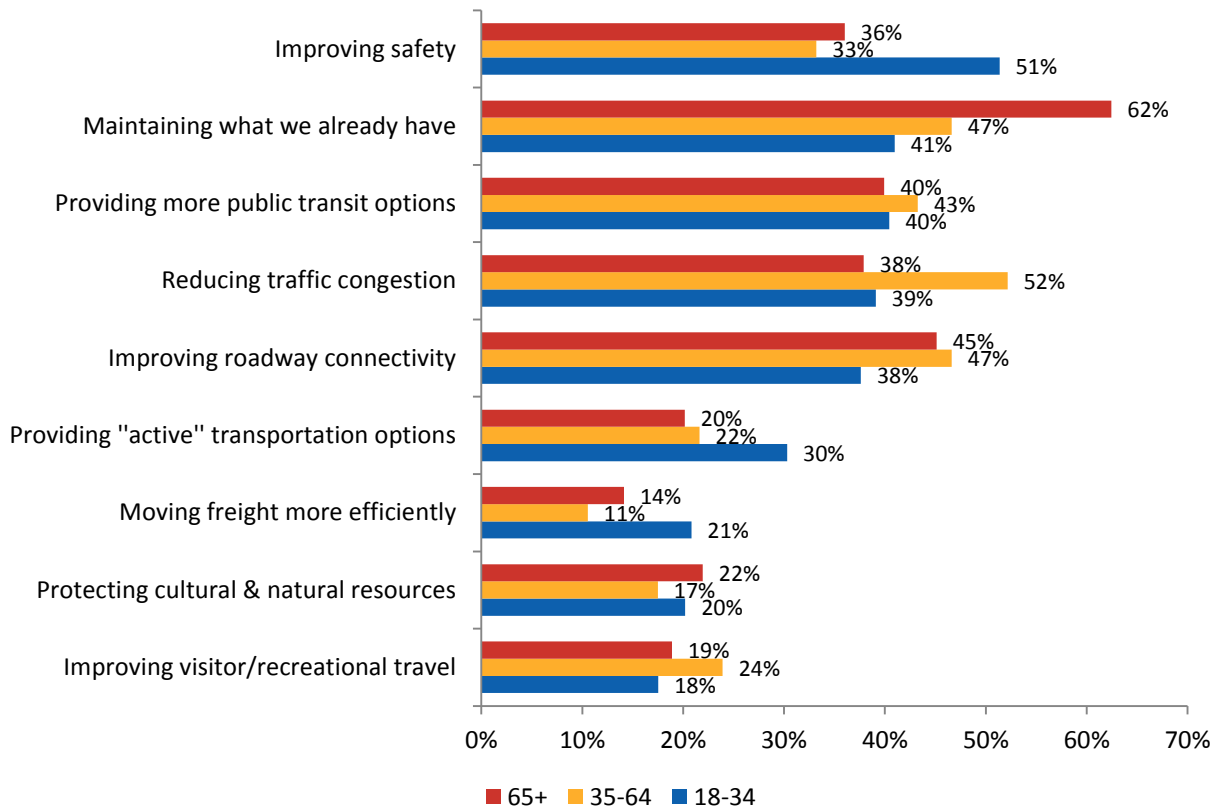
Figure B.16 Priorities for Future Transportation Investments
Urban and Rural Respondents



Source: CS analysis of online survey data.

Figure B.17 highlights key differences between age groups on this topic. The biggest differences are found in improving safety, which is the top concern for 18-34 year olds but is much less important for those age 65 and up and those aged 35-64, and in maintaining the State's existing system which was the most important priority for 62 percent of seniors but only 41 percent of 18-34 year olds and 47 percent of middle aged respondents. Improving roadway connectivity is slightly more important to older respondents. Reducing traffic congestion was the number one priority for 35-64-year old respondents (52 percent), compared to 38 percent and 39 percent for seniors and the young. Providing "active" transportation options is a bigger priority for the younger group that it is for seniors or middle aged residents. Improving visitor and recreational travel to stimulate the economy appears to be a slightly bigger priority for the middle aged as well.

Figure B.17 Priorities for Future Transportation Investments
By Age



Source: CS analysis of online survey data.

B.2 Regional Working Group and Tribal Surveys

A series of Regional Working Group (RWG) meetings were held in each of the seven Regional Transportation Planning Organization (RTPO) regions (Mid-Region, Northeast, Northern Pueblos, Northwest, South Central, Southeast, and Southwest) in early 2014. Participants at these meetings represent individuals who are actively involved in transportation issues and decision making in their communities. At each meeting, attendees were asked to complete a paper survey which asked many of the same questions as the online instrument. A total of 114 responses were gathered in this way.

In addition, NMDOT distributed a targeted survey to the state's tribal leadership as a supplement to the statewide and regional surveys to better understand the perspectives of tribal communities regarding transportation issues in New Mexico. The tribal survey included the same set of questions as the RWG survey. NMDOT collected a total of 36 tribal surveys.

Although Working Group meeting attendees and tribal survey respondents do not represent a statistically valid random sample, it is informative to compare their answers to these questions across the seven RTPO regions, and to compare their overall answers to those received from the online survey. This section summarizes and compares responses to the Regional Working Group surveys by region, and also compares and contrasts the views of this “informed stakeholder” group to those of the State’s residents as a whole. Results from the tribal survey are also included for comparison.

Regional Comparison

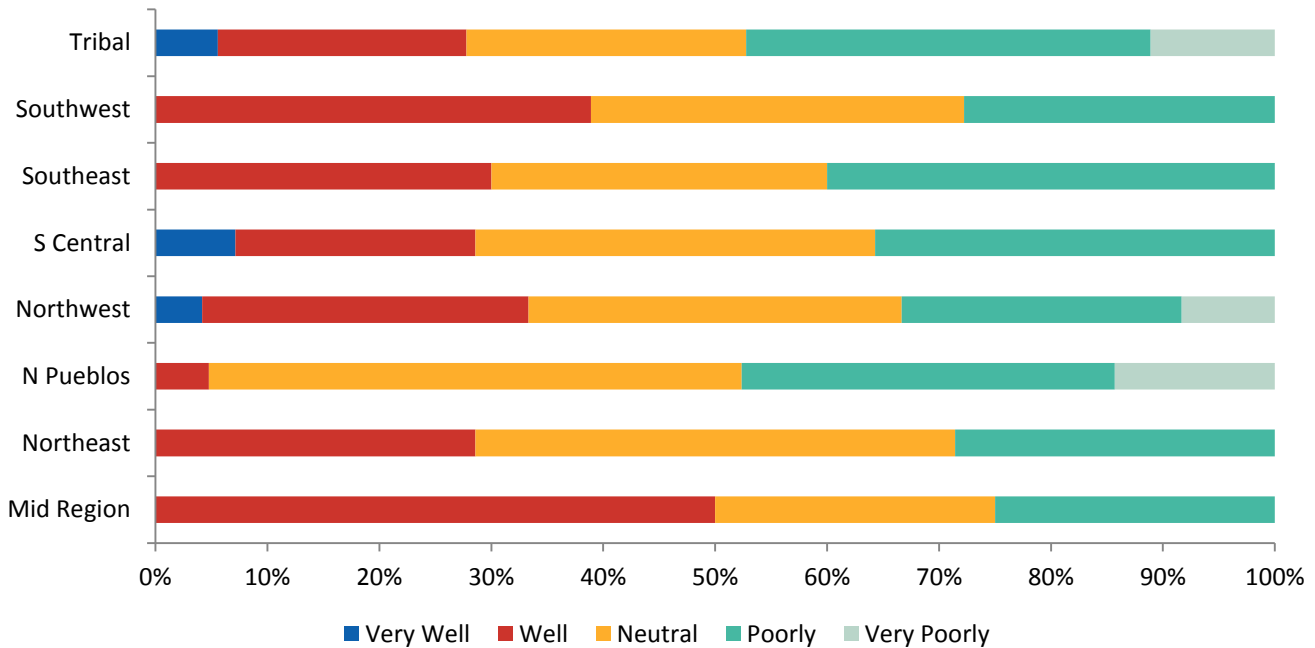
Transportation System Performance

Meeting attendees were asked how well the State transportation network (roads, bridges, railroads, airports, buses, sidewalks, trails, bicycle facilities, etc.) meets their needs. Figure B.18 compares their responses across regions. Many of the respondents in all regions reported the system meets their needs “Well” or “Very Well” but there is variation between regions. The Mid-Region received the highest ratings with three quarters of respondents rating the system positively or neutrally. By contrast, in the Northern Pueblos region only about 52 percent of respondents felt this way, with nearly 48 percent holding a “Neutral” view on this question. Nearly 48 percent of Northern Pueblo participants said the system meets their needs “Poorly” or “Very Poorly.” Forty percent of Southeast region participants also rated the system as “Poorly.” These data appear to indicate a disconnect between perceptions of system performance in the Mid-Region (i.e., the Albuquerque region) and the rest of the state.

Similar to the Northern Pueblos region, approximately 47 percent of the tribal survey respondents said the system meets their needs “Poorly” or “Very Poorly.” In contrast, about one-quarter of the tribal respondents indicated the system is meeting their needs “Well” or Very Well.”



Figure B.18 System Performance by Region



Source: CS analysis of RWG and tribal survey data.

Areas in Need of Improvement

Table B.2 shows which areas of the State transportation network RWG meeting participants and tribal respondents viewed as needing improvements. Note that respondents to this question were asked to “select all that apply”; therefore, the responses do not sum to 100 percent for each region. There is some variation in responses by region. For example, Amtrak service was viewed as in need of improvement by all of the respondents from the Northeast region but by less than half of respondents from any other region. Freight rail was also seen as in need of improvement in the Southeast and Northeast regions. In the Southeast region, this may reflect growth in oil field-related cargo. In the Northeast, BNSF Railway stopped operating freight trains on their line in that part of the state, which has led to calls for service restoration in the area. Several respondents in the South Central region and in the Northern Pueblos region said Rail Runner was in need of improvement, though curiously only a few in the Mid-Region stated the same.

There are also some similarities. Five out of the seven regional groups thought there was a need for better roads and bridges (Northeast, Northern Pueblos, Northwest, Southeast, and Southwest). The tribal respondents were in strong agreement on the need for improvements to roads and bridges as well. There appears to be broad agreement between regions about the need for better bicycle and pedestrian facilities, with the exception of the Northwest region and tribal respondents. Relatively few saw a need for airport or airline service improvements, except in the Northern Pueblos region.

Table B.2 Areas in Need of Improvement by Region

Percent of respondents who think there is a need to improve...	RWG-1	RWG-2	RWG-3	RWG-4	RWG-5	RWG-6	RWG-7	Tribal
	Mid Region	Northeast	N Pueblos	Northwest	S Central	Southeast	Southwest	
	n = 8	n = 7	n = 23	n = 24	n = 14	n = 20	n = 18	n = 36
Airports/airline service	38%	0%	70%	25%	14%	35%	56%	14%
Bicycle facilities	88%	86%	83%	38%	64%	70%	72%	39%
Freight railroads	25%	100%	26%	29%	0%	60%	6%	11%
Rail Runner	38%	57%	70%	13%	71%	25%	39%	22%
Amtrak	38%	100%	48%	8%	21%	40%	22%	11%
Sidewalks and Trails	100%	86%	91%	63%	79%	80%	78%	50%
Buses	88%	57%	74%	50%	71%	45%	67%	36%
Roads and bridges	50%	86%	70%	83%	36%	75%	61%	97%
Other	13%	14%	26%	13%	0%	0%	0%	25%

Note: Percentages do not sum to 100 because the survey instructed respondents to “select all that apply.”

Source: CS analysis of RWG meeting and tribal survey data.

Safety, Reliability, and Efficiency

As with the online survey, RWG meeting participants and tribal respondents were asked if they agreed or disagreed with a series of statements about the New Mexico transportation system. Table B.3 shows the average of responses to each question by region, along with the number of responses (n) in each region. A few key points are apparent:

- RWG meeting attendees and tribal respondents generally favor policies that provide for non-motorized transportation options such as walking or bicycling – this statement generated a high level of agreement across all of the regions/tribes.
- Highway traffic noise is generally not regarded as an issue by these groups.
- Attendees at the Northern Pueblos and Southwest region meetings broadly disagreed with the statement “Most of the time, I can get where I need to go quickly.” Attendees at other regional meetings tended to be more positive about this statement.
- Transportation costs are a lesser concern for those from the Mid-Region than elsewhere in the state. Respondents from the Northwest region, South Central region, and tribal surveys had the highest level of agreement that “My household’s cost of transportation is higher than it should be.”
- Aesthetic issues on roads are important to participants from most regions, but appear to be more so in the Northern Pueblos, South Central, and Southwest regions.



- Likewise, there is general agreement that the transportation system has a positive impact on the economy, but agreement seems to be stronger in the Northwest, South Central, Southeast, and Southwest regions. This could be linked to economic growth associated with oil and gas and mining operations in these regions.

Table B.3 How Much do you Agree or Disagree About the Following Statements?
Regional Working Group Meetings; Averages by Region

RESPONSE	RWG-1	RWG-2	RWG-3	RWG-4	RWG-5	RWG-6	RWG-7	Tribal
	Mid Region <i>n</i> = 8	Northeast <i>n</i> = 7	N Pueblos <i>n</i> = 23	Northwest <i>n</i> = 24	S Central <i>n</i> = 14	Southeast <i>n</i> = 20	Southwest <i>n</i> = 18	<i>n</i> = 36
Most of the time, I can get where I need to go safely.	3.43	3.86	3.22	3.61	4.07	3.70	3.56	3.56
Most of the time, I can get where I need to go quickly.	3.29	3.86	2.83	3.42	3.79	3.45	2.94	3.11
Most of the time, I can get where I need to go reliably (i.e., arrive at my destination on time).	3.75	3.86	3.13	3.79	4.14	3.75	3.50	3.33
The transportation system should allow people to make healthy lifestyle choices (e.g., provide opportunities to walk or bike).	4.50	4.29	3.78	4.21	4.57	4.45	4.33	4.17
My household's cost of transportation is higher than it should be.	2.38	3.57	3.70	3.83	4.00	3.50	3.50	3.89
Highway traffic noise is a problem.	2.88	2.57	2.64	3.00	2.50	2.60	2.61	3.28
Roadway aesthetics are important to me. Roads should be attractive and complement their physical settings.	3.88	3.14	4.22	3.92	4.07	3.95	4.11	3.92
New Mexico's transportation system has a positive impact on our economy.	3.57	3.71	3.48	4.17	4.14	4.10	4.22	4.00

Note: Figures shown are averages. Response options were: 5=Strongly agree; 4=Agree; 3=Neutral; 2=Disagree; 1=Strongly disagree.

Source: CS analysis of RWG meeting and tribal survey data.

Most Significant Transportation Challenges

RWG meeting attendees and tribal respondents were also asked to identify the three most important transportation challenges facing New Mexico over the next 25 years. Table B.4 compares responses across all regions.

The area with the most agreement seems to be finding money to maintain and improve the system. At least half of respondents ranked that in the top three challenges in five of the seven regions (the Northwest and South Central regions being the exceptions). Half of the tribal



respondents ranked funding to maintain/improve the system as a top three challenge. Aging and deteriorating infrastructure was the next greatest challenge identified but there was more variation among the regions. For instance, 71 percent of respondents from the Northeast region selected this as a top three challenge, compared to just one quarter of those from the Mid-Region. Other key conclusions from this data include:

- Providing multimodal options was not viewed as a big challenge in six of the seven regions and tribal survey. Only those from the Mid-Region viewed this as a key challenge;
- Interestingly, balancing urban and rural needs was only seen as a top three challenge by more than half of respondents in two regions (the Mid-Region and the Southwest region). It does not appear to be as important to the tribal respondents or other regions, many of which are rural;
- Half of respondents from the South Central region and 47 percent of tribal respondents thought rising transportation costs were a top 3 challenge, but less than 30 percent of those from any other region felt the same way;
- Population decline was seen by some (29 percent) as a major challenge in the Southeast, but no one from any other region listed it in their top three;
- Protecting cultural, historic, and natural resources was identified as a top three challenge by more than one-third of the tribal respondents and participants from the Northern Pueblos and South Central regions; and
- The tribal respondents were more likely than the participants from the RWGs to identify safety as one of the State's top three challenges.



Table B.4 New Mexico’s Most Significant Transportation Challenges by Region

Percent of respondents ranking each challenge in the top 3	RWG-1	RWG-2	RWG-3	RWG-4	RWG-5	RWG-6	RWG-7	Tribal
	Mid Region <i>n</i> = 8	Northeast <i>n</i> = 7	N Pueblos <i>n</i> = 23	Northwest <i>n</i> = 24	S Central <i>n</i> = 14	Southeast <i>n</i> = 20	Southwest <i>n</i> = 18	<i>n</i> = 36
Rising household transportation costs	25%	14%	9%	29%	50%	5%	17%	47%
Providing multimodal options	63%	29%	35%	25%	36%	30%	44%	22%
Aging population	38%	29%	22%	17%	7%	25%	28%	6%
Growing population	13%	0%	9%	21%	21%	0%	17%	31%
Declining population	0%	29%	0%	0%	0%	0%	0%	0%
Balancing urban and rural needs	75%	14%	48%	46%	36%	30%	56%	25%
Aging and deteriorating infrastructure	25%	71%	39%	33%	43%	65%	50%	39%
Handling more trucks on highways	0%	14%	0%	17%	0%	30%	11%	8%
Ensuring safety	0%	0%	9%	13%	14%	5%	6%	25%
Funding to maintain/improve the system	63%	86%	78%	46%	43%	90%	56%	50%
Increasing traffic/congestion	0%	0%	9%	29%	14%	15%	11%	8%
Protecting cultural, historic, and natural resources	0%	0%	39%	17%	36%	5%	0%	36%
Other	0%	14%	0%	0%	0%	0%	6%	3%

Note: Percentages do not sum to 100 because the survey instructed respondents to “choose only three items.”

Source: CS analysis of RWG meeting and tribal survey data.

Priorities for Future Transportation Investments

The final question in the RWG and tribal surveys asked respondents to select what they thought should be the top three priorities for New Mexico as it considers new investments in transportation.

Table B.5 compares responses across the seven regions and tribal survey. Maintaining the existing system was the most frequently cited priority by the RWG participants overall: at least half of the respondents in five of the seven regions considered it a top three priority. From the tribal perspective, improving safety was the most frequently cited priority. Providing better public transit was a popular choice in the Mid- and South Central regions (and slightly less so in the Northern Pueblos and Southwest regions), but was not as important to the other regions. Similarly, providing “active” transportation options was more important to RWG participants from the Mid-Region and the South Central region. Improving roadway connectivity was listed as a top three priority by most participants in the Northwest and Southwest regions, but by a lower proportion in the other regions. Protecting cultural, natural, and historic resources was a top three item for 57 percent of those from the Northern Pueblos and 47 percent of the tribal respondents, far more than in any other region of the State. Similarly, moving freight more efficiently was cited by 57 percent of those from the Northeast region (perhaps linked to the recent cessation of freight rail service as noted above), but did not rise to the top in any other region. In general, reducing traffic congestion and improving safety were not top priorities for most participants from any region.



Table B.5 Priorities for Future Transportation Investments by Region

New Mexico's top three transportation priorities should be...	RWG-1	RWG-2	RWG-3	RWG-4	RWG-5	RWG-6	RWG-7	Tribal
	Mid Region <i>n</i> = 8	Northeast <i>n</i> = 7	N Pueblos <i>n</i> = 23	Northwest <i>n</i> = 24	S Central <i>n</i> = 14	Southeast <i>n</i> = 20	Southwest <i>n</i> = 18	<i>n</i> = 36
Maintaining what we already have	63%	86%	43%	50%	43%	50%	67%	36%
Providing “active” transportation options	63%	29%	30%	25%	57%	50%	44%	28%
Providing more public transit options	75%	0%	52%	33%	71%	25%	56%	39%
Improving roadway connectivity	25%	43%	26%	50%	29%	45%	61%	31%
Reducing traffic congestion	13%	0%	13%	21%	7%	15%	17%	33%
Protecting cultural, historic, and natural resources	13%	14%	57%	21%	36%	0%	11%	47%
Supporting the economy by improving visitor/recreational travel	25%	29%	39%	21%	29%	20%	11%	22%
Supporting the economy by moving freight more efficiently	0%	57%	9%	21%	7%	45%	11%	6%
Improving safety	25%	29%	22%	42%	21%	40%	22%	56%
Other	0%	14%	9%	8%	0%	10%	0%	3%

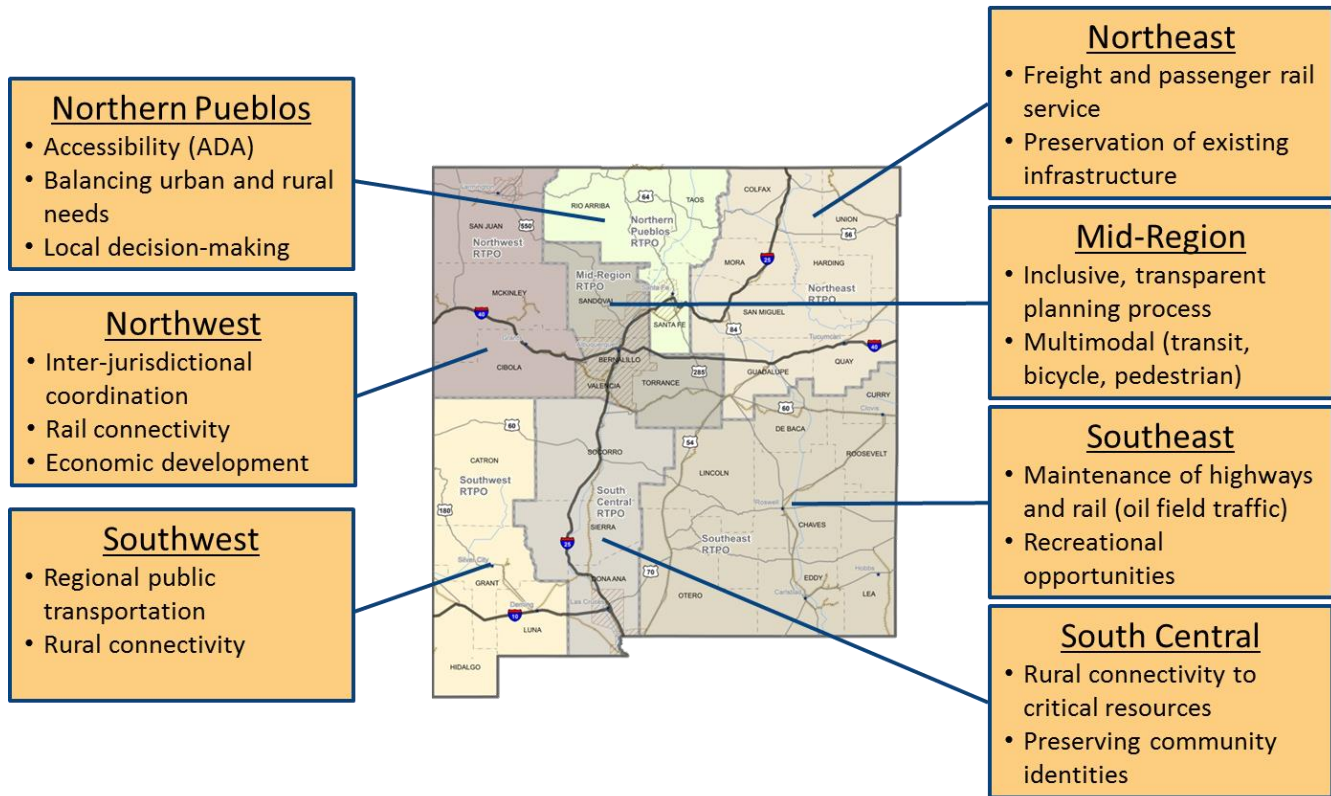
Note: Percentages do not sum to 100 because the survey instructed respondents to “choose only three items.”

Source: CS analysis of RWG meeting and tribal survey data.

While the regional working groups identified many consistent transportation challenges and priorities described above, the discussions within the groups and the survey results highlighted some regional variations in transportation priorities across the state (Figure B.19).



Figure B.19 Regional Variations in Transportation Priorities



Comparison to Online Survey Results

Attendees at the RWG meetings may be thought of as “informed stakeholders” in the sense that they are actively engaged in state and regional transportation policy. Therefore, it can be useful to compare their viewpoints to those of New Mexico as a whole (as captured by the online survey). This section compares and contrasts the views and opinions of this “informed stakeholder” group to those of the rural and urban public, and offers some implications of these findings for transportation policy.

System Performance

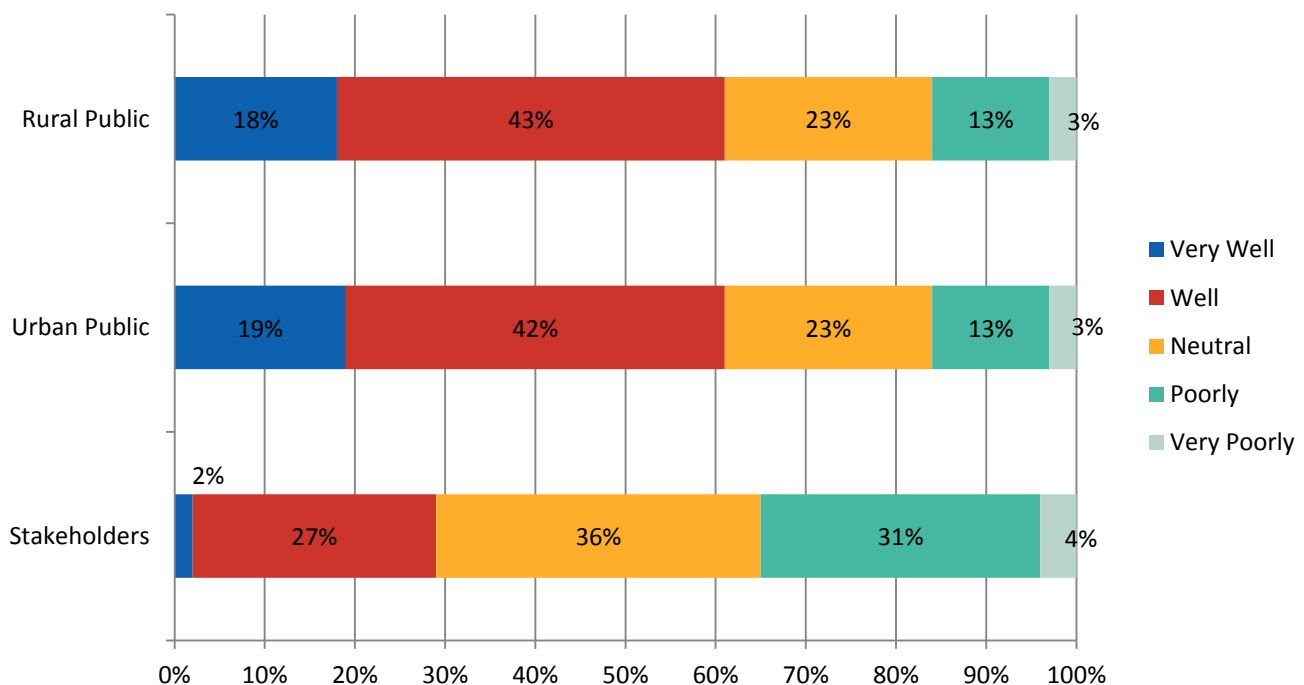
As shown in Figure B.20, 61 percent of the public (regardless of urban or rural) says the existing transportation system is meeting their needs well or very well, compared to only 29 percent of informed stakeholders. The informed stakeholders were more likely to view the system poorly – 34 percent of the informed stakeholders indicated the system was functioning poorly or very poorly, compared to only 16 percent of the public.

Responses among urban and rural residents in the statewide public survey were consistent with statewide averages.

Possible explanations for the differences between the public and informed stakeholders include:

- The public may be more likely to view the system from how it impacts their daily lives today, whereas the informed stakeholders may be more likely to anticipate the future challenges associated with addressing the state’s transportation needs.
- The informed stakeholders participating in the regional working group meetings are a self-selected group that have expressed an interest in improving the transportation system in the state. They may be more likely to come into the discussion with issues and challenges in mind.

Figure B.20 System Performance Views
Public Versus “Informed Stakeholders”



Source: CS analysis of online and RWG meeting survey data.

System Features in Need of Improvement

Figure B.21 compares urban and rural public views to those of the informed stakeholder group in terms of features in need of improvement. Roads and bridges were identified by a majority of the public (urban and rural) and informed stakeholders as a system feature in need of improvement.

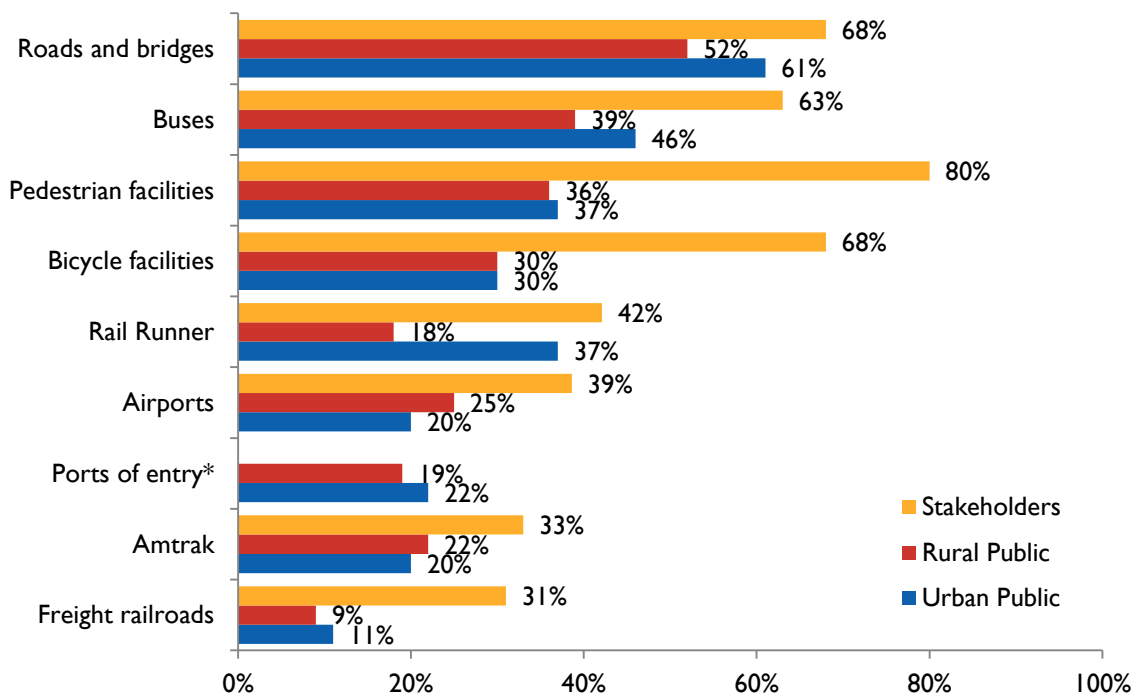
In general, the informed stakeholders attending the RWG meetings were more likely than the public (urban or rural) to identify improvement needs across all modal categories. For example, 80 percent of the informed stakeholders indicated pedestrian facilities are in need of improvement compared to only 36-37 percent of the public. Likewise, over two-thirds of the informed

stakeholders indicated bicycle facilities are in need of improvement compared to 30 percent of the public. A similar discrepancy plays out for all of the modal categories.

This suggests that the public does not share the same sense of urgency and extent of transportation needs that is perceived by informed stakeholders across the state. This could have implications when trying to gain public support for increases in gas taxes, registration fees, or other options to increase funding for transportation investments. The public may prioritize other social needs higher than transportation.

Moreover, the informed stakeholders may be more likely to view needs from a system perspective, whereas the public is likely to reflect only on the system elements that they use on a day-to-day basis. Overall system needs are likely to exceed needs viewed from a more localized user perspective.

Figure B.21 System Features in Need of Improvement
Public versus “Informed Stakeholders”



Source: CS analysis of online and RWG meeting survey data.

Most Significant Transportation Challenges

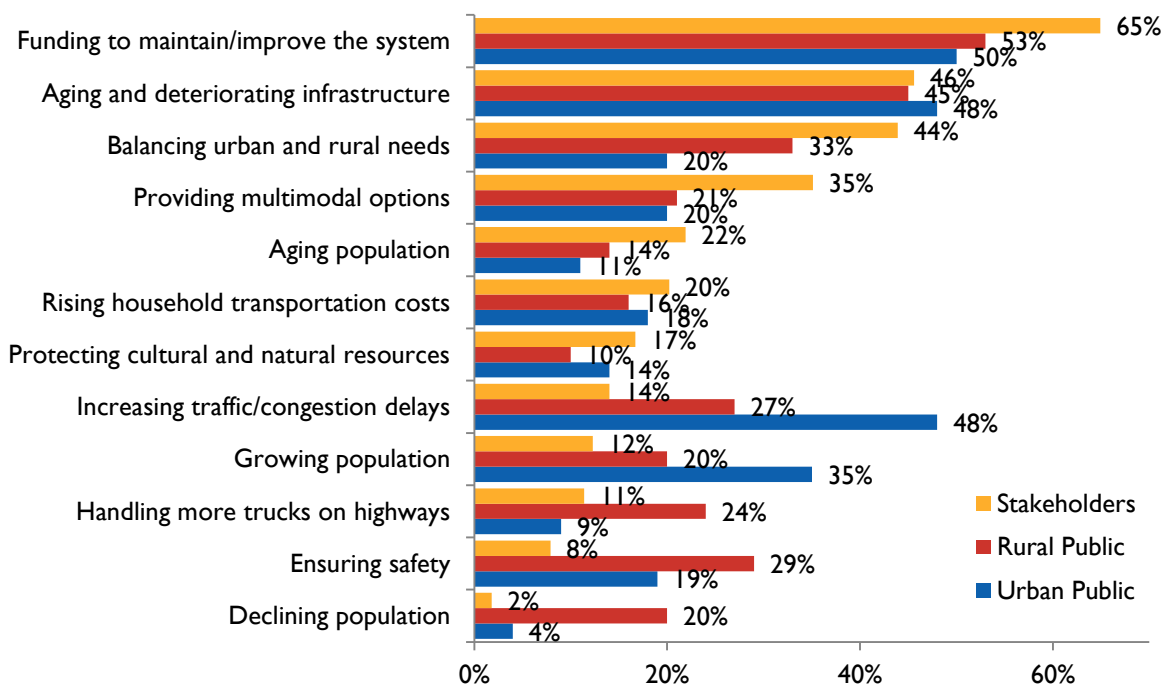
As shown in Figure B.22, the two most commonly selected challenges in all three groups were funding to maintain and improve the system and aging/deteriorating infrastructure. Half of the general public respondents (urban and rural) and almost two-thirds of the informed stakeholders

identified funding as a significant challenge, while just under half of the respondents in all three groups selected aging and deteriorating infrastructure as a top three challenge.

Other key findings include:

- Informed stakeholders and the rural public are more likely to be concerned about urban/rural equity (44 percent and 33 percent respectively, vs. 20 percent for the urban public).
- Safety was the 4th most commonly identified challenge among the rural public, and was more important to this group than to either the urban public or the informed stakeholders.
- One in five rural respondents identified declining population as a key challenge; in contrast, it was the least commonly selected challenge among the urban public and informed stakeholders.
- The rural public was more concerned than the other groups about the increase in truck traffic on the State’s highways, whereas the urban public was more concerned about increasing traffic/congestion delays and growing population.
- Providing multimodal options was among the top challenges identified by the informed stakeholders (35 percent), but did not rank as high among the public (urban and rural).

Figure B.22 Most Significant Challenges
Public Versus “Informed Stakeholders”



Source: CS analysis of online and RWG meeting survey data.

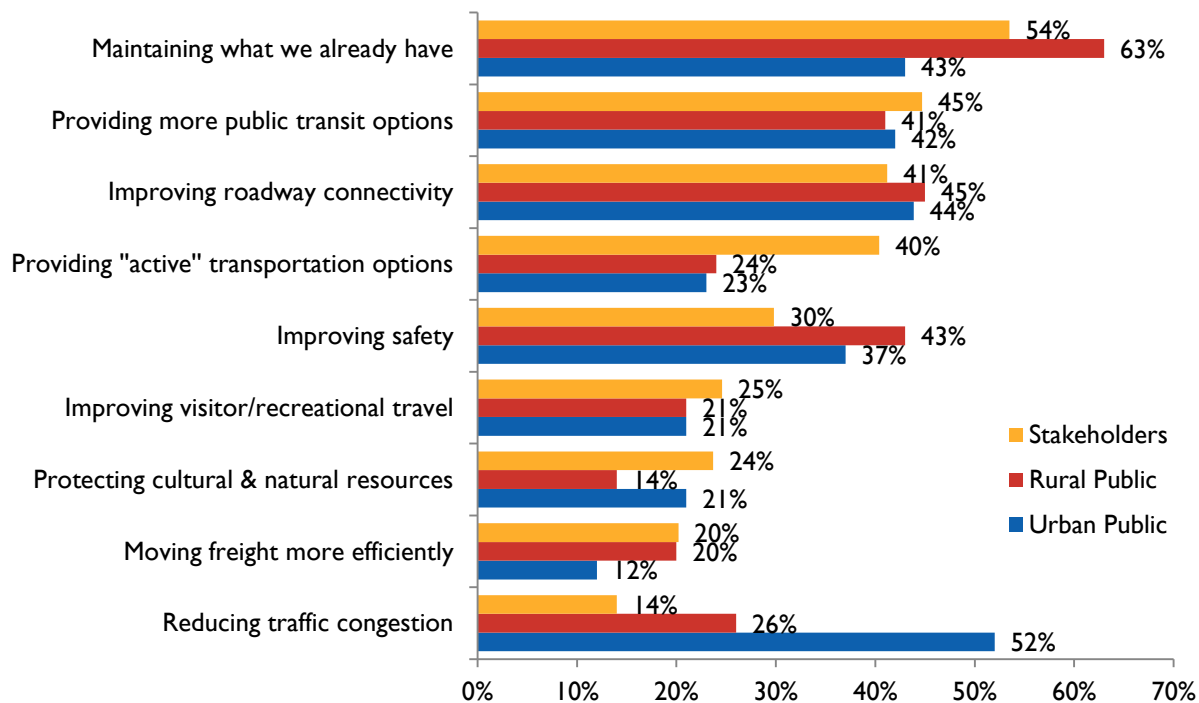


Priorities for Future Transportation Investments

Figure B.23 highlights the three groups' top priorities for future transportation investments. There was general consistency among all three groups in terms of the importance of maintaining the state's existing transportation assets, providing more public transit options, and improving roadway connectivity. However, there were a few notable differences among the groups:

- Reducing traffic congestion ranked as the top priority among the urban public, but was much less important to the rural public and was the lowest ranked priority for the informed stakeholders.
- “Maintaining what we already have” ranked as the top priority among the rural public (almost two-thirds). Improving safety is also a higher priority among the rural public. Nonetheless, as noted above, this priority was important to all respondents – it ranked within the top three across all three groups.
- The informed stakeholders ranked “active” transportation options higher than the urban or rural public, perhaps again indicating the self-selecting nature of this group and its awareness of broad transportation issues.

Figure B.23 Top Priorities for Future Transportation Investment
Public Versus “Informed Stakeholders”



Source: CS analysis of online and RWG meeting survey data.