SUSTAINABLE TRANSPORTATION

Background Report for Town Hall

- August 7-9, 2008
- Hyatt Regency Tamaya Resort
- Santa Ana Pueblo

Primary Authors
Abigail Rolon, Cambridge Systematics, Inc.
Christopher Wornum, Cambridge Systematics, Inc.

Contributing Editors
Carl Moore, The Community Store
Robert Ortiz, NM Department of Transportation
Elizabeth Perrachione
Charlotte Pollard, New Mexico First

Reviewers
Heather Balas, New Mexico First
Tom Church, NM Department of Transportation
Barbara Deaux, NewMARC
Jeff Kiely, Northwest New Mexico Council of Governments
Patricia Oliver-Wright, NM Department of Transportation

Convener
New Mexico Department of Transportation
New Mexico Association of Regional Councils

Major Sponsor
New Mexico Finance Authority

Additional Sponsor
Kiewit New Mexico Company

Facilitator
New Mexico First

New Mexico DEPARTMENT OF TRANSPORTATION
MOBILITY FOR EVERYONE

NEW MEXICO FIRST
People. Ideas. Progress. 20 Years.

NewMARC

NEW MEXICO FIRST

People. Ideas. Progress. 20 Years.

New Mexico First
320 Gold Avenue SW, Suite 300
Albuquerque, New Mexico 87102
Phone: 505-241-4813
Website: www.nmfirst.org

Table of Contents

Forward

This report was prepared to provide background information for participants attending the August 2008 town hall, *Sustainable Transportation: Paying Our Way From Here to There*. The report will help frame the town hall discussions as well as provide a context for the issues and challenges in finding solutions to sustain a modern transportation system for New Mexicans.

The issues surrounding transportation policy and funding are multidimensional and complex. As a result, no brief explanation of the situation, including this report, can hope to cover all the information and opinions available. Ultimately the people and policymakers of New Mexico must decide what actions to prioritize and where limited resources should be focused.

The report is organized in three main sections:
1. Current and future needs
2. Reasons for concern
3. Possible solutions

Participants are urged to review the entire report prior to attending the town hall.

Town Hall Conveners

The mission of the New Mexico Department of Transportation (NMDOT) is to plan, build, and maintain a quality statewide transportation network that will serve the social and economic interests of New Mexico citizens in a productive, cost-effective, and innovative manner. The department has re-focused its direction to improving affordable transportation modes available to citizens, tourists, and businesses of New Mexico. NMDOT ensures these multimodal transportation choices invigorate the economy, connect people in small towns and cities, and facilitate transportation of goods and people to other states and nations. The department is committed to traffic safety, environmental excellence, and complete planning, design, and engineering services.

The New Mexico Association of Regional Councils (NewMARC) is the statewide network of seven Councils of Governments (COGs). The councils help local governments evaluate their individual and collective needs and priorities. They address problems and opportunities of a regional nature. They serve as a liaison and advocate for local governments within their respective regions at the state and federal levels. Their goal is to take a holistic approach in addressing issues and finding solutions in the areas of transportation, infrastructure development, housing, environmental stewardship, and workforce development.

Town Hall Sponsors

We wish to thank the following organizations as valued partners in making this town hall possible:
- New Mexico Finance Authority
- Kiewit New Mexico Company

Town Hall Facilitator

New Mexico First events bring together people from all walks of life to identify practical solutions to the state's toughest problems. In New Mexico First's 22-year history, it has engaged over 6,000 people in the democratic process. Co-founded in 1986 by U.S. Senators Pete Domenici (R-NM) and Jeff Bingaman (D-NM), the organization conducts three major types of activities: an annual statewide town hall focusing on a critical issue facing the state; specialized forums such as this one for communities and institutions that need consensus feedback; and smaller consensus facilitations such as strategic retreats.

The Town Hall Process

Like all New Mexico First events, this town hall will take participants beyond the typical presentation-filled conference setting and instead draw on their knowledge to find solutions to address the issue at hand. This town hall will include a few guest speakers, all experts in their fields, to set the context. However, the bulk of the work will be done in small groups by the participants themselves. By the end of the town hall, participants will have drafted concrete recommendations for policymakers, local leaders, and state agencies.

Introduction

The transportation infrastructure of our state is something we take for granted—everyday. We use it to commute to work, go shopping at the grocery store, meet an appointment at the health clinic, see our favorite school football team, or visit a beloved relative. We lose sight of the fact that almost everything in our homes, our schools, and our businesses came from somewhere else over roads and bridges, on rails, or through airports.

This infrastructure has an impact on the quality of our everyday lives. Without it our economic, physical, mental, and emotional health would be drastically affected. Its condition affects the time it takes for help to arrive when we need it, the ease with which we go for a Sunday drive, the confidence we feel on a stretch of highway late at night, and our state of mind when we arrive at work. It also affects the cost of our food, the value of our property, and the safety of our family. If the transportation infrastructure is inadequate in meeting our needs, everybody suffers.

Every citizen needs to be informed about the transportation issues facing them, their families, and their elected leaders, so that they can enter into an informed dialogue on the facts and the choices that need to be made. The NMDOT and NewMARC have taken up this challenge by convening such a dialogue.

Possible Futures

The following are possible scenarios of what could happen depending on whether we change our personal behavior, pay attention to the actions we take as a community, and enact sustainable[1] policies at the local, tribal, state, and federal levels. Which one would you choose?

Let's jump ahead and imagine that in 2009 the state of New Mexico will be faced with a serious challenge—how to maintain the transportation infrastructure at reasonable levels of service while expanding to accommodate future demand.

Status Quo Scenario

In 2009, the legislature makes the decision to keep state funding at current levels. Regional and local communities also choose to keep their investment about the same as they have done in the past. By 2012, the result is further deterioration of the system: some local roads are allowed to return to gravel, some smaller bridges are closed, congestion on the state highways increases, and services for the most vulnerable populations are reduced.

There are a variety of reasons for this downward spiral. Even though there is a modest 1.5% growth in the gas tax, there is less revenue because people travel less due to the rise in gasoline prices. Other reasons for the deteriorated system are the rising construction costs (primarily due to increased international competition for raw materials), loss of purchasing power (due to revenue sources not keeping up with inflation), diversion of transportation funds to state needs other than transportation, increased travel demands (especially by freight trucks), and the decline of revenue from existing sources.

Sustainable Scenario

In 2009, the legislature and local communities make several decisions to ensure that the system operates as efficiently as possible. The state chooses to redirect funds from current sources of revenue to pay for transportation. The legislature agrees to add new short-term and long-term revenue sources. Communities also choose to find new sources of revenue for local projects and to collaborate regionally to meet some of the specialized needs of citizens in the regional service areas. Individuals make changes in their transportation habits that help the system and even decrease demands on the system. For example, many more people commute to work using bikes and public transportation in urban areas, and there is a substantial increase in sharing rides for services and shopping in rural areas.

By 2012, the effects are dramatic. Commercial carriers travel on interstate lanes reserved for their use. Public transportation is popular because the number of routes provided and the connecting surface transit systems operated by the communities along the routes operate efficiently. As a result, traffic is far less congested in urban areas and the needs of rural citizens have been met more effectively. The record of crashes and deaths are well below national averages. The system is maintained in a timely, efficient manner.

[1] The definition of "sustain" is to provide for or to prolong. The most widely known definition of sustainable development comes from the Brundtland Commission, which defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Worst Case Scenario
In 2009, because of competing demands and the decisions to give priority to other needs, the legislature does not pass the appropriations to meet the challenge of infrastructure maintenance and expansion. In addition, local communities do not work together to find alternatives. Citizens are not encouraged to make changes in their own behaviors and their habits continue to add to the congestion on the roads and put pressure on road conditions.

The results are disastrous. NM does not have sufficient resources even to maintain the existing transportation system. Congestion increases on all roads and our state is statistically at the top in the number of crashes and fatalities/100,000 population. Commercial carriers have to find alternative routes. This means less stress on the main roads, but also less revenue for road repair and improvement. Public transportation projects are halted and local access to main urban centers become more restricted due to longer travel time and fewer, but more expensive, options for transport. Critical services like emergency response times increase, regional healthcare services become more restricted, and senior services are curtailed.

Now let's return to the summer of 2008. What are we facing right now?

Current Situation

The condition of New Mexico's transportation infrastructure has been deteriorating over the past 20 years. At present, nearly 13% of New Mexico's state highways and 15% of the state's bridges are in a deficient condition. To add to the pressure, over the next 20 years New Mexico's population will increase, and demand for transportation services is estimated to rise more than 40% due to this increase.

This deterioration has been slowed through the passage of a $1.6 billion capital improvement transportation bonding program called Governor Richardson's Investment Partnership (GRIP I) in 2003. However, maintaining the current transportation infrastructure at reasonable levels of service, let alone expanding its capacity to accommodate the future increase in demand, will require changes in policy, community action, and individual behavior as well as additional funding.

It will take political will to implement policies that will lead to a sustainable system. Most likely, regional and local actions by communities will need to be negotiated, planned, and coordinated. Community leaders and citizens will be asked to educate their neighbors, make hard choices, and make decisions that may be challenged. Individuals may need to change their behavior or face new realities that will change their way of life.

There are options available that reduce the demand for transportation infrastructure. Zoning codes and land use regulations can be revised so land and transportation development lead to increased density and mixed use in ways that promote walking and biking and reduce local vehicle use. Commuter rail systems, like the Rail Runner between Belen and Santa Fe, also provide an alternative for vehicle use and can encourage local communities along the route to make other surface transit changes. Business management decisions that reduce the need for travel, such as: telecommuting, flex-time, alternate scheduling, and working remotely, can be promoted.

Our state, like others, faces an enormous challenge in maintaining an adequate funding level for transportation maintenance and expansion. There are three reasons for this challenge:

1. Funding is not keeping up with the cost of building, maintaining, operating, and constructing the current transportation infrastructure. This trend is the same for all states and for federal transportation funding, but it is more acute in states such as New Mexico where revenues from transportation sources are diverted to other public sources. The state's spending on transportation is 23% lower now than it was in 1987, when adjusted for inflation and population growth.
2. Between 2003 and 2008 the cost of maintaining and constructing roads increased over 66% largely because of the skyrocketing demand for raw materials by developing countries like China and India and the increase in the price of oil.[2] When approved, GRIP I had enough committed funds to complete all of its projects, but rising construction and materials costs have resulted in a $495 million shortfall.
3. Federal support to states for transportation investments is uncertain. For the first time in the history of the Highway Trust Fund, which has sustained the nation's highways, it is projected there will be a $3.3 billion deficit in revenues by the end of this year. As a result, federal highway funds to New Mexico are estimated to be cut by 34% or approximately $94 million.

[2] U.S. Bureau of Labor statistics, Highway and Street Construction Price Index

The remainder of this report lays out essential information that can inform participants at the town hall about our state's current and future transportation needs, the reasons for concern in our capacity to maintain a sustainable system, and possible solutions for consideration. So, let's get ready to roll up our sleeves, delve into some pretty scary information, and then, work with our fellow citizens to see, if together, we can recommend practical solutions that will help lead us to a sustainable transportation system for the future for our state.

Current and Future Needs

Roadways

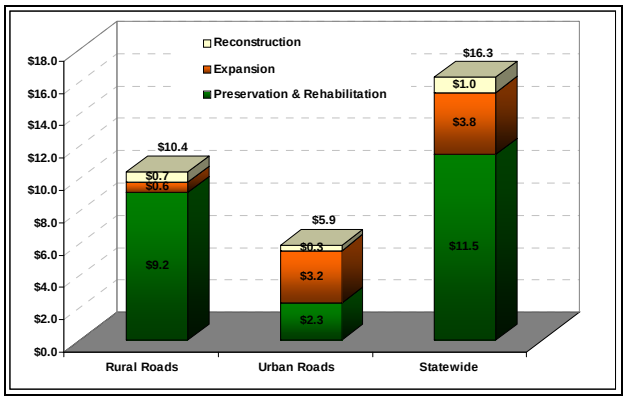
The NMDOT has completed a needs assessment which shows that over the next 20 years, $16.3 billion (in 2008 dollars) will be needed to keep the highway system functioning at satisfactory standards.[3] This amount does not include bridges and interchanges, which are discussed below separately.

This $16.3 billion investment can be divided into two parts:

1. Approximately 80% of the total investment will be required to preserve the current highway infrastructure.
2. The remaining 20% will be needed to expand the highway system just to accommodate new traffic demands from increases in population.

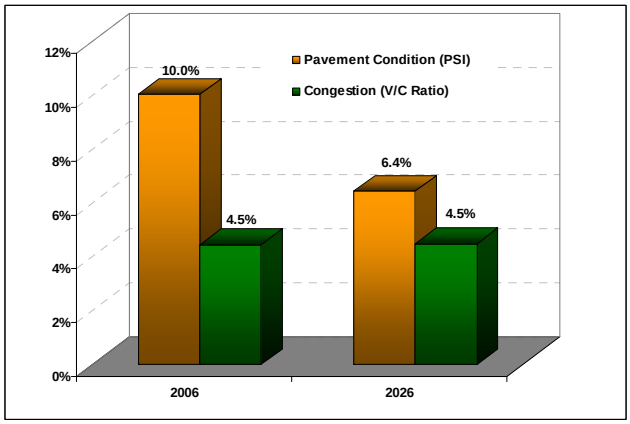
Figure 1 shows these needs divided between rural roads (64%) and urban roads (36%).

Figure 1: 2026 Highway Investment Needs, Billions in 2008 Dollars



In 2006, 4.5% of travel (measured as vehicle miles traveled or VMT) occurred in congested conditions, and about 10% of travel occurred on deficient pavement conditions (Figure 2). If the $16.3 billion needed to keep the roadways functioning at satisfactory standards were fully funded, road congestion conditions in 2026 would be similar to today's conditions. Maintaining the status quo would be a significant accomplishment considering that travel on the roadway system is expected to increase more than 40% over the next 20 years. In regards to pavement conditions, the $16.3 billion investment would reduce the share of driving on deficient highways from 10% to 6% by the year 2026.

Figure 2: Percentage of Statewide Travel on Deficient Roads [4]



Bridges

In addition to its roadway system deficiencies, New Mexico has 338 deficient bridges that need to be repaired or maintained. This is approximately 23% of the state's bridge inventory.

Figure 3: Deficient Bridges in New Mexico, 2008

#	%	Condition	Definition
224	15%	Structurally deficient	Unable to carry the designated vehicle loads or tolerate designed speeds
114	8%	Functionally obsolete	Not compatible with traffic volumes because they are too narrow or have design issues

[3] Preservation and expansion needs of the highway system were estimated by New Mexico Department of Transportation (NMDOT) using the Highway Economic Requirement System (HERS) model, an economic tool that estimates short- and long-range highway deficiencies. The HERS model is the national standard used by state DOTs and the Federal Highway Administration to assess highway needs. NMDOT had previously reported the 20-year needs assessment as $10.6 billion. This previous estimate was based on 2004 dollars and has been updated. The updated estimate is based on 2008 dollars and takes into account inflation.

[4] PSI or Pavement Serviceability Index measures the quality of the pavement (smoothness). V/C Ratio or Vehicle to Capacity Ratio measures the congestion levels on a roadway.

NMDOT estimates that about $418 million is needed to replace the 224 structurally deficient bridges. Assuming that the bridges are replaced on a 20-year schedule, the average cost of bridge replacement is $21 million per year. In addition to the funding required for replacing structurally deficient bridges, the state faces an $8.1 million annual funding gap on maintenance and a $46.3 million funding gap on routine bridge replacement.

Interchanges and Major Projects

The costs of routine maintenance and periodic reconstruction of interchanges to address structural and safety concerns are generally included within the costs estimated for bridges described above. However, there are several projects for new interchanges and reconstruction as well as other major transportation projects that are currently unfunded. While several of these projects have partial funding, none have sufficient funds and in total will require approximately $1.3 billion to complete. These projects are listed in the appendix.

Aviation

Airports in New Mexico are experiencing an increase in demand for non-airside projects such as aircraft hangar storage, manufacturing, and general aviation terminals. Additionally, airside safety needs such as airport markings, lighting, runway conditions, and basic maintenance have increased as well. However, budget constraints have handicapped the ability of NMDOT and local communities to address infrastructure issues over the last decade. Although the aviation program is eligible for federal funds that can cover up to 95% of project costs, the decline in federal aid due to the lack of federal resources will require a higher participation of state resources in the future.

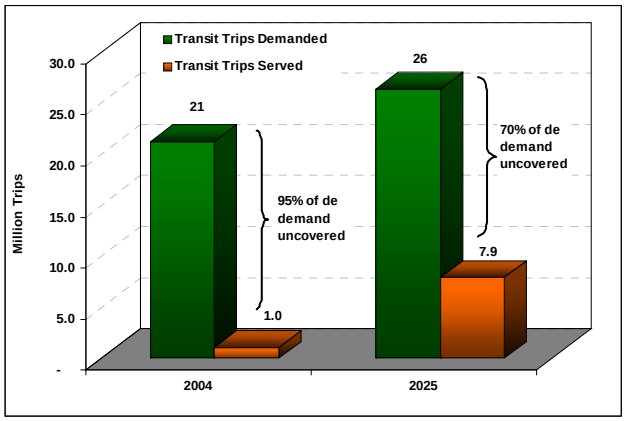
Public Transit

State and local agencies provide different public transit services, including, rural transit, commuter rail, and park and ride services. The demand for transit services is intensifying because of:

- the increase in population
- rising gas prices which undermine the household budgets of both low- and high-income drivers
- the need to provide mobility to transit-dependent populations such as seniors, people with disabilities, and low-income households

Current rural transit services serve less than 5% of the demand and the annual cost is $8 million. Currently, approximately one million annual trips are served, but there is a demand for more than 21 million trips (Figure 4). In order to meet at least 30% of that demand, $30 million per year is needed.

Figure 4: Rural Transit Trips Demand vs. Served



When completed in December 2008, New Mexico's Rail Runner commuter rail will extend from Belen to Santa Fe. Currently, more than 2,000 passengers a day ride the train on weekdays between the city of Belen and the town of Bernalillo. When the extension to Santa Fe is finished, approximately 2,500 more passengers per weekday will be served.

This rail system will provide the opportunity for rural communities to connect to other communities along the Belen - Santa Fe Corridor as well as have easier and faster access to economic, financial, governmental, and educational institutions in these larger urban centers. It is expected that over the next two years, annual passengers will reach one million.

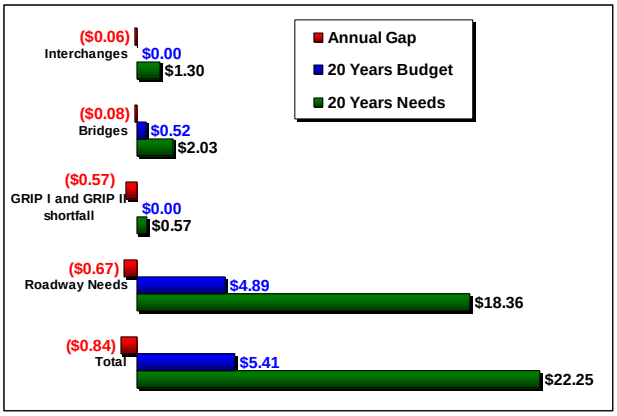
I-25 is the only major transportation route connecting the Santa Fe and Albuquerque metropolitan areas. Forecasts indicate that by 2025 congestion will increase more than 50% on this route, resulting in travel times of nearly two hours between downtown Albuquerque and the Santa Fe plaza during peak periods. So, the Rail Runner will become an alternative to cope with congestion.

Like other transit operations, the Rail Runner will face an annual operating gap that must be subsidized.[5]

Summary of Needs

Transportation experts predict that over the next 20 years more than $22 billion will be necessary to keep roadways, bridges, and interchanges working at reasonable performance levels, but only slightly more than $5 billion will be available to cover such needs, resulting in a funding gap of $17 billion. The funding gap is a conservative estimate as it does not include possible shortfalls in other programs (e.g., aviation, transit) and the likely continued escalation of costs due to inflation.

Figure 5: Summary of Transportation Needs, Billions in 2008 Dollars



[5] New Mexico Department of Transportation. Albuquerque to Santa Fe Commuter Rail Project. Overview and Status of Project Elements, 2008.

Reasons for Concern

Why is there such a difference between our projected needs and the revenue coming in to meet them? Building on reasons touched upon in the previous sections, the following attempts to simplify a number of complex factors:

- The state gasoline tax, a major source of transportation funding, has not kept up with the impacts of inflation on construction costs.
- Some of the revenue that used to be earmarked for transportation projects has been diverted to other uses.
- Federal funding of transportation is decreasing.
- Each year there are more freight trucks and passenger cars on the road, which means more wear and tear on the roads, which increases maintenance costs.
- Construction costs for maintenance and expansion of the transportation system have risen dramatically.

What all of this means is that New Mexico has less purchasing power to fund our transportation needs. To bring what is happening in New Mexico to a personal level, imagine the following example.

Julia used to work for the local community bank. She made $55,000 per year after taxes. Her family expenses totaled $42,000 per year and included: $25,000 in home mortgage; $2,000 in heating, cooling, and electric; $5,000 in food; and $10,000 in transportation costs (including fuel).

Unfortunately, the bank had to lay off Julia. Fortunately, she found a job as a manager in a local department store for $40,000 per year after taxes. This already meant her expenses were $2,000 more than she was earning. However, to make matters worse, her heating, cooling, and electric costs rose to $3,500, her food costs rose to $7,000, and her transportation costs rose to $12,000.

Julia's expenses increased by $5,500 per year and her income decreased by $15,000 per year leaving a gap of $7,500 per year that Julia will have to find ways to manage.

This story shows what is happening with transportation revenue and costs in New Mexico. This section offers a more in-depth look at the factors listed above. Let's look at loss of revenue first, and then, rising costs.

Declining Revenue and Purchasing Power

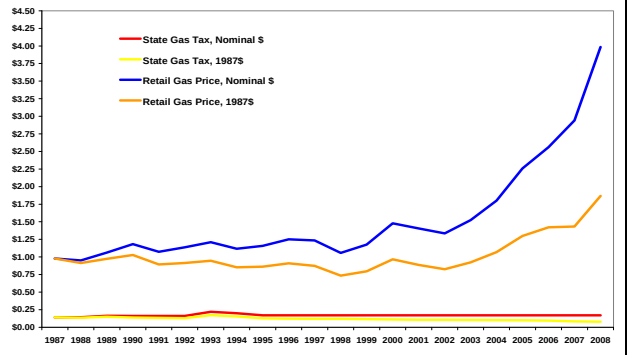
Currently, there are five major funding sources for transportation investments.

Figure 6: Current Transportation Funding Sources

Source	% of Total Funding
Gasoline Tax	28%
Special Fuels Tax (e.g. diesel)	26%
Vehicle Registration Fees	19%
Weight-distance Tax on Trucking	21%
Other (i.e., leased vehicle gross receipts and surcharges, trip tax, and driver's license fees)	6%

The gasoline and special fuels taxes represent a vital source of funding, accounting for over half of all transportation revenue. As Figure 7 shows, the retail gasoline price has increased dramatically over the past few years from $1.34 per gallon in 2002 to $4 per gallon in 2008, but the gasoline tax rate has not changed.

Figure 7: Gasoline Tax Rate and Retail Gas Price, 1987- 2008



Furthermore, the gasoline tax rate was cut 29% between 1992 and 1994. It currently stands at 17 cents per gallon, which was its 1995 level, as seen in Figure 8.

Figure 8: Changes in Gas Tax per Gallon

Year	Gas Tax per Gallon[6]
1987	14.2 cents
1992	22.0 cents
1993	20.0 cents
1995	17.0 cents
2008	17.0 cents

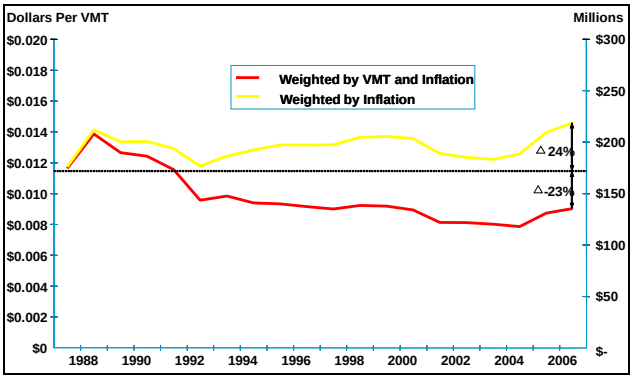
In addition, these fuel taxes were never designed to take into account inflation (known as indexing[7]). Therefore, the purchasing power of the current gasoline tax of 17 cents is really only worth 8 cents per gallon in 1987 dollars, which amounts to a 43% loss in the purchasing power of the gasoline tax over this period.

In fact, almost 80% of the funding sources for transportation are not increased at the rate of inflation. This means that while the cost of maintaining and expanding the transportation system increases over time, the revenue sources (i.e., fees and taxes) purchase fewer tons of concrete, hours of labor, or miles of resurfacing every year. This steady decay in the purchasing power of existing transportation funding sources is the result of a flat fuel tax, the primary source of revenue, which is not increased with inflation.[8]

Revenue from vehicle registration fees and other state transportation funds have increased at a faster rate than inflation and travel demand. But, this is a much smaller source of revenue and so the increase has not been sufficient to offset decreases in gasoline tax revenue and other road fund revenue.

Therefore, between 1987 and 2006, transportation revenue, when adjusted for inflation, grew only 24%. But, when adjusted for both inflation and an increase in travel demand (measured as vehicle miles of travel or VMT) revenues have actually decreased by 23%. This is shown in Figure 9.

Figure 9: NMDOT Revenue Adjusted for Inflation and VMT, FY 1987 to FY 2006



Along with a reduction of revenue for a variety of reasons, some of the money that was being generated as revenue for transportation infrastructure is now being rerouted for other uses. Between 1987 and 2006, the share of revenues that came from transportation funding sources and spent on transportation needs fell from 88% to 64%.

- The share of gasoline tax revenues spent on transportation dropped from 86% to 63% between 1987 and 2006. This is a result of significantly higher distributions over time to counties and municipalities, the Tribal Tax Sharing Agreement, and other agencies.
- The driver's license fee revenues used for transportation needs have also fallen, from 79% in 1987 to 47% in 2006.
- In 1996, all of the motor vehicle excise tax was shifted from transportation to the state general fund.

The vehicle registration fee is the only funding source where the share of revenue to transportation increased. Transportation projects now receive 73% of this revenue, as compared to 41% in 1987.

But, overall, in 2006, the state collected $616 million from transportation funding sources from which $222 was spent on other funding priorities.

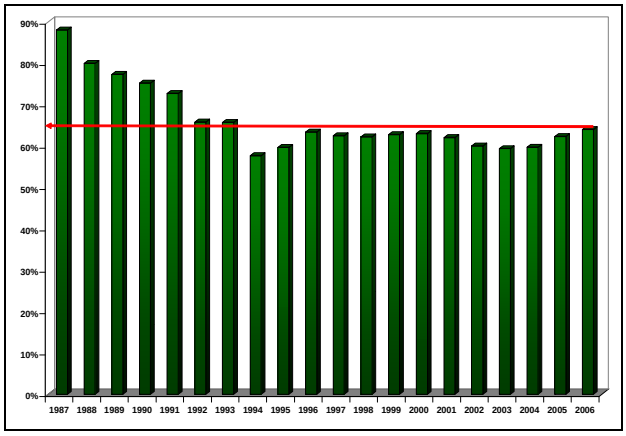
Figure 10 shows the overall downward trend of funding over the past 20 years.

[6] Most of us assume that higher gasoline tax rates drive up the cost of gas at the pump. However, there is no strong relationship observed between retail gasoline prices and tax levels. Research prepared by the U.S. Energy Information Administration shows that the five primary factors that affect fuel prices are: cost of crude oil and refining, seasonality of demand (typically higher in the summer), distribution costs from refineries to market, supply disruptions, competition in local markets, and environmental regulations.

[7] Indexing means adjusting the tax rate or fee to account for the effects of inflation.

[8] Only three states increase their fuel tax rates with inflation. Many states have a sales tax on fuel (akin to the gross receipts tax in New Mexico) that tracks with the increase in fuel costs.

Figure 10: Transportation Sector and NMDOT Funding, FY 2006



Another cause of declining revenue is the state's federal funding, a key source of revenue for construction. In fiscal year 2008, the state's federal funding reached $331 million. However, for the first time since its creation in 1956, the federal Highway Trust Fund is projected to experience a $3.3 billion deficit in revenues by the end of this year. Due to this projected shortfall, federal highway funds to New Mexico are projected to be cut by 34% or approximately $94 million.[9]

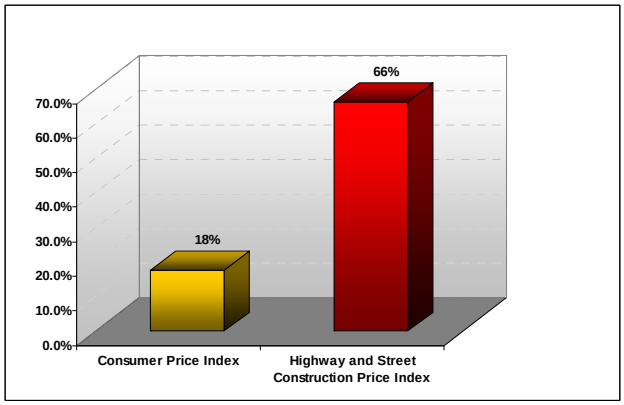
Increasing Costs and Demand

Construction costs have skyrocketed over the past five years by 66%, much higher than the 18% increase in general inflation.

- In 2004 the average cost of interstate reconstruction was $4 million per mile. In 2008 the average cost reached $5.2 million per mile, a 30% increase.
- Asphalt used in highway construction was priced at $320 per ton in the summer of 2007. One year later, it is priced at $650 per ton with projections ranging from $950 to $1000 per ton by the end of this summer.

Due to higher levels of demand for construction materials worldwide, construction costs are expected to increase more rapidly than general inflation levels for the foreseeable future.

Figure 7: Highway and Street Construction Costs, 2003-2008



Demand for transportation services is also expected to skyrocket. Population growth will require more movement of goods around the nation and accommodating this retail trade is a major driver of the state and national economy. Over the next 20 years travel demand by trucks within and through the state are projected to increase 45%. While estimates vary, one industry standard is that one tractor trailer truck does the equivalent damage of 10,000 cars. The movement of freight is a major factor in the wear and tear on the road system.

Increased population also means more passenger cars on the roads. Travel demand by cars is projected to increase 40%. In addition to increasing congestion, which is a safety concern, this increase in cars also puts more stress on maintaining the roadway system.

Increased vehicle miles traveled ordinarily would increase revenues generated. However, as vehicles become more fuel efficient, they require less fuel to travel the same distances. This decreases revenue from fuel taxes per mile traveled even though more cars and trucks are on the road traveling more miles. While this trend is positive for the environment, it widens the gap between investment needs and revenues generated

Existing Investment Shortfalls

The state has made some significant effort to reduce transportation deficiencies. GRIP I was approved by the Legislature in 2003 and includes a six-year capital improvement plan of $1.6 billion addressing some of the critical needs. Initially, GRIP I had enough committed funds to complete all of its projects, but construction and materials costs have risen more than 60% since the program started and has resulted in a $495 million shortfall. The funding gap is compromising the delivery of

[9] The reduction from federal funding will not only jeopardize the completion of projects under the Statewide Transportation Improvement Program (STIP) that are already planned for the coming year, but also will put pressure on New Mexico's debt service since federal funds are used to pay back the bonds issued to fund the Citizen's Highway Assessment Task Force (CHAT) and GRIP programs.

several highway projects vital to the state. A list of the unfunded projects is provided in the appendix.

The GRIP II program was passed in 2007 and consists of 116 local lead projects totaling $182 million. The legislation, however, only provided $103 million in funding resulting in a funding gap of $77.2 million. The combined GRIP I and II funding gap is $572.2 million.

So, like Julia, New Mexico faces a dilemma that we New Mexicans will have to manage.

Possible Solutions

There are essentially three ways to help close the gap between what is needed for transportation services and what is available for transportation investment:

1. decrease the demand for services
2. more efficiently use current services and resources
3. increase the available resources for services

Decrease Demand for Services

Both changes in individual behavior and actions taken at the regional and local community level can have long-term impacts on the transportation system, for example:

- creating networks of bikeways and pedestrian walkways and trails, especially those that link to shopping and working destinations
- encouraging business locations to include retail and service establishments in walkable configurations
- promoting telecommuting and flexible work schedules
- providing incentives for carpooling

More Efficient Use of Services and Resources

Potential savings from more efficient operations, procurement practices, or other activities will not generate sufficient cost savings. While there will always be potential to wring more efficiency out of the state's transportation spending, so far there are no states that have gained sufficient savings from more efficient operations to reverse the trend New Mexico now faces.

However, local communities and collaboration among communities regionally could result in cost savings and reduced stress on the transportation system by decreasing driver demand. Examples include:

- encouraging the practice of building more housing near transit services
- planning for more bikeable/walkable neighborhoods
- changing regulations to allow for more efficient use of transit sharing for special needs populations
- using technology that alerts drivers to use less congested roads to reduce peak hour congestion and to take advantage of unused road capacity

Increase Available Resources for Services

Perhaps the most complex and challenging solutions involve ways to increase the available funding for transportation. New Mexico has taken steps to increase its transportation revenue within the past five years, including increasing its:

- special fuels (e.g., diesel) tax rate
- weight distance tax rates for trucking
- vehicle registration fees

From 2001 to 2006, these efforts helped to increase total state revenue for transportation. However, when adjusted for inflation and increased driver demand, revenues increased only 11.1%.

GRIP increased the state's investment to accomplish projects designated as critical in need or necessary for safety and economic opportunity. However, if no additional funding is made available, the state will be confronted with choices that could include: closing roads and bridges, allowing the congestion on its most heavily used roadways to increase, and reducing service for its lowest priorities.

The political challenge of raising more revenue, especially during the current dramatic increase in fuel prices, may be complex. Nevertheless, many states and regions have succeeded in raising revenues for transportation. A more complete review of potential funding options is provided in the appendix. This information is the result of a year long process undertaken by the New Mexico Legislature, NMDOT, citizen participants, and transportation experts.

Conclusion

Transportation infrastructure is not only vital to economic growth, it is integral to the quality of life and the health and welfare of New Mexico citizens. The deterioration of the state's transportation infrastructure appears to be at odds with public demand for better service.

Which solutions are implemented will depend on the political will of state, tribal, and local leaders. It will also depend on the willingness of local communities and individual New Mexicans to consider changes in their own

behavior in order to create efficiencies that will allow for a greater return on the value of current investments in transportation. And, it will also be a balancing act between funding a sustainable transportation system and the need to fund other priorities.

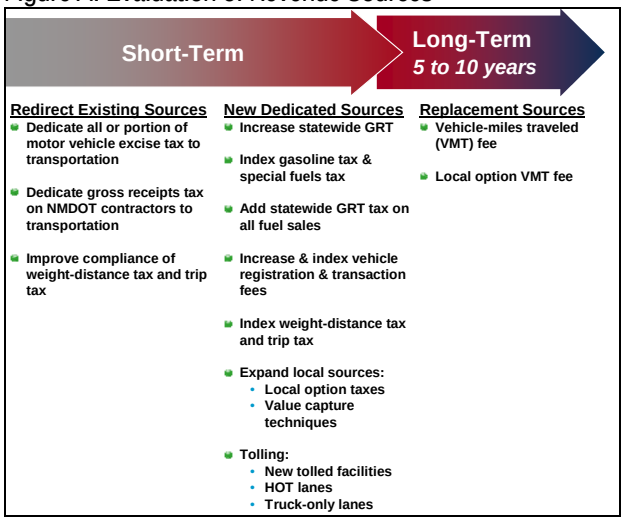
Each additional dollar spent on transportation comes from New Mexico's citizens, whether through taxes and fees or through dollars not spent on other important needs. Ultimately, even doing nothing will cost more as we will bear the increased cost of goods transported over poor roads, lost hours spent in traffic, or loss of life as emergency responses fail. As citizens, we have the opportunity and the responsibility to tell our policymakers and community leaders how the choices they make on our behalf will affect us.

Although the issues are technical, we have to educate ourselves about them in order to get our needs met. Reading, questioning, and discussing these issues will help participants of the town hall create recommendations that can succeed in the face of today's economic realities and tomorrow's needs.

Appendix A: Funding Options

The following funding options (shown in Figure A) are mindful of the complex political challenge of raising more revenue, especially during the current dramatic increase in fuel prices. The options are divided into two timeframes: short-term (one to four years) and long-term (five to 10 years). The short-term contains relatively conservative revenue increases, and the long-term becomes more aggressive.

Figure A: Evaluation of Revenue Sources



Short-term Funding Options

The short-term funding options rely on two strategies for additional transportation revenues:

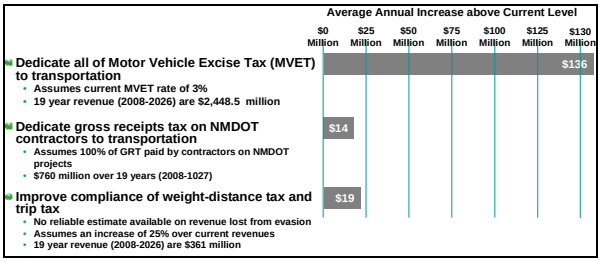
1. Redirect existing revenues that are derived from transportation funding sources and improve compliance with the existing weight distance fees on commercial trucking.
2. Adding revenues from three new categories of revenue sources:
   a. increase existing dedicated transportation sources
   b. increase State General Fund sources, but dedicate these revenues to transportation
   c. give regional agencies, specifically, the metropolitan planning organizations (MPOs) and regional planning organizations (RPOs) authority to raise transportation-dedicated sources

The first group of short-term funding options redirects existing revenues and improves compliance with the current weight-distance and trip taxes on large commercial vehicles. These options involve specific assumptions and are forecasted to produce revenues described below and shown in Figure B.

1. Motor Vehicle Excise Tax (MVET). None of the revenue from the current 3% MVET tax is being spent on transportation. This source generally keeps pace with inflation without the need for rate adjustments, since the tax is assessed as a share of vehicle values, which historically have increased in line with inflation. The full dedication of this source would provide about $136 million more revenue annually. The 19-year revenue total (2008 to 2026) would come to about $2.5 million.
2. GRT on Transportation Construction Activities. A gross receipts tax (GRT) of 5% is currently collected for construction activities. Contractors currently pay about $14 million annually in GRT to the state on the value of approximately $300 million worth of state-funded transportation projects on average per year. If this source were dedicated to transportation, the 19-year revenue total (2008 to 2026) would come to about $266 million. This amount is net of the share that GRT provides to local governments.
3. Improving compliance of weight-distance tax and trip tax. If stepped up enforcement of the weight-distance tax were to net 25% more revenue over the current stream, this would result in about $19 million more revenue annually. This would generate a total of $335 million over the next 19 years.

If all three of these existing sources were redirected to state transportation, NMDOT would receive approximately $169 million more annually, or about $3.2 billion over 19 years (2008 to 2026). The forecast annual amounts are shown in Figure B.

Figure B : Redirecting Existing Transportation Revenue Sources for Transportation Purposes



The second group of short-term funding options that follows consists of nine additional revenue sources that either involve increasing the tax rate of existing transportation sources or increasing the tax rate of a non-transportation sources and dedicating the additional revenue to transportation expenditures. Four of these additional sources involve indexing[10] the tax rate or fee amount to inflation, which is assumed to be 3% to account for a mix of long-term construction and maintenance cost escalation, and a 6% rate to reflect more recent price trends in construction and materials. The critical assumptions used to estimate the annual yield for each source and its total over 19 years (2008 to 2026) are described below:

1. Increase the statewide GRT. Add 25 cents to the existing 5% GRT and dedicate the annual $121 million to transportation. This would generate a 19-year total of $2.2 billion
2. Charge a 5% GRT on gasoline sales. If the statewide GRT were applied to gasoline sales, it would generate about $116 million more revenue annually and a 19-year total of $2.1 billion
3. Charge a 5% GRT on special fuel sales. If the statewide GRT were applied to diesel and other non-gasoline fuel sales, it would generate about $78 million more revenue annually and a 19-year total of $1.4 billion.
4. Increase vehicle registration and transaction fees. Increase these fees according to the axle weight. This proposal has been studied in Colorado, where the average fee across all vehicle types would be about $69. These annual registration fees would be dedicated to the maintenance and preservation costs for state highways. This increase in the flat annual fee would generate about $122 million annually or approximately $2.2 billion over 19 years. If this increase was indexed at 3%, this source would generate $160 million annually and approximately $2.9 billion over 19 years. If indexed at 6%, the new annual charge would generate about $213 million annually and $3.8 billion over 19 years.
5. Authorizing increases in local sources. Give metropolitan planning organizations and regional planning organizations authority to ask voters to approve increases in the GRT that would be dedicated to transportation. The yield would vary widely from MPO to RPO. The highest grossing local option GRT would be the Mid-Regional Council of Governments (MRCOG).[11] The yield from a one-quarter cent GRT would generate about $40 million annually or about $760 million over 19 years. A one-half cent GRT would generate about $80 million annually or about $1.5 billion over 19 years.[12]
6. Indexing gasoline tax. If the current 17 cent gas tax rate was indexed to inflation at 3% annually, the additional funds would average $25 million annually or about $455 million over 19 years. A 6% annual increase would generate approximately $60 million more revenue annually or $1.1 billion over 19 years. These amounts take into account projected improvements in vehicle fuel efficiencies.
7. Indexing special fuels tax. If the current 21 cent tax rate was indexed to inflation at 3% annually, the additional funds would average $31 million annually or about $565 million over 19 years. A 6% annual increase would generate approximately $76 million more revenue annually or $1.4 billion over 19 years. These amounts take into account assumed improvements in truck fuel efficiencies.
8. Index existing vehicle registration and transaction fees. The current annual registration fees range between $21 and $27 per vehicle. If these fees were indexed at 3%, this source would generate about $19 million annually or approximately $341 million over 19 years. If they were indexed at 6%, the higher fees would generate about $46 million annually or $819 million over 19 years.
9. Index weight-distance tax and trip tax. Even if improved enforcements yield significant increases in yield, these fees are flat and thus do not track with inflation. In order to maintain parity with raising construction and maintenance costs, indexing the fees at 3% annually (and maintaining the short-term improvement in compliance) could increase revenues by about $25 million more revenue annually or $451 million over 19 years. If the rate for indexing the fees was set at 6% annually, we should expect an increase of about $60 million more revenue annually or $1.1 billion over 19 years.

If all nine of these existing sources were enacted and dedicated to state transportation needs, NMDOT would

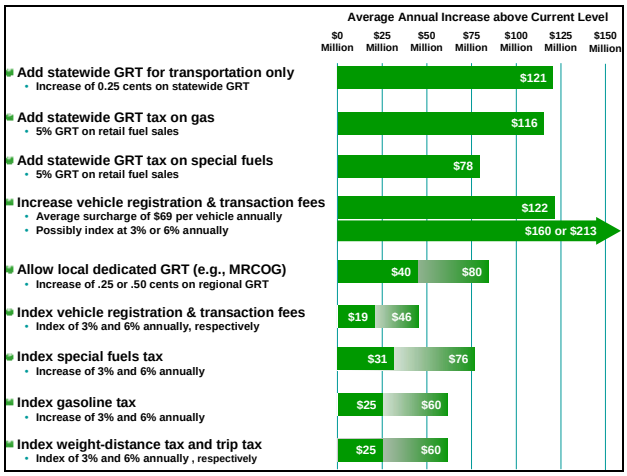
[10] Indexing means adjusting the tax rate or fee to account for the effects of inflation.

[11] MRCOG is the Metropolitan Planning Organization for the Albuquerque Metropolitan Planning Area (AMPA).

[12] These amount are approximate and do not include the feedback effects that higher taxes have on consumer spending.

receive between $577 million and $850 million more revenue each year, or between $11 billion and $16 billion over 19 years (2008 to 2026). The forecast annual amounts are shown in Figure 15.

Figure C: New Sources of Transportation Revenue



Some new sources involve either indexing (at either 3 or 6%) or one-time increases in their rates, or both. While they are independent of each other, some may offer modest synergies if enacted in combination, such as indexing and increasing the fuel tax rates for both gasoline and special fuels. Other new dedicated sources may crowd each other out, such as an increase in statewide GRT and giving MPOs and RPOs the authority to increase their own dedicated GRT.

The unsustainable funding difficulty that the state finds itself in is in large part due to the funding sources not keeping up with the cost of building, maintaining, and operating the current transportation infrastructure. This difficulty is the same for all states and for the US Department of Transportation. If some form of indexing[13] is not included in the state's funding strategies, the same unsustainable funding difficulty will be re-created in the future.

Long-term Funding Options

Beyond these short-term funding options, long-term fixes to the way we pay for transportation may be needed to avoid the same problems we have now reoccurring in the future. The following two fixes could be implemented as a revenue-neutral transition from taxes and gas tax (an indirect user fees) to a direct user fee:

1. A vehicle miles traveled fee could be structured to replace an equivalent amount of revenue from other revenue sources. A 1.9 cent vehicle miles traveled fee with a 6% inflation adjustment would generate about $240 million annually.
2. A local, vehicle miles traveled fee could be added on to the statewide vehicle miles traveled fee as the primary source of funding for local transportation needs. This rate could be set according to local needs and voter support, but would impose very little administrative cost since the statewide collection system would be in place.

These direct user fees can be adjusted readily to send a clear price signal to drivers. The most effective adjustment would increase vehicle miles traveled fees during peak periods in congested corridors and lower fees in off-peak periods. These price signals can help manage demand so the need to fund more road capacity is reduced.

[13] Indexing means adjusting the tax rate or fee to account for the effects of inflation.

Appendix A: Unfunded Projects

GRIP Projects
currently unfunded

G2a13	I25, Tramway to Bernalillo, MP234.7 – 242	$ 60,695,000
G3a42	US54, Tularosa to Vaughn, MP 146-163	$ 20,384,000
G3a32	US54, Tularosa to Vaughn, MP 130-146	$ 17,000,000
G3a82	US54, Tularosa to Vaughn, MP 81.17(Bridge)	$ 5,500,000
G3a22	US54, Tularosa to Vaughn, MP 119-130	$ 9,900,000
G4034	US64, Raton to Clayton, MP 378 – 390	$ 28,500,000
G4024	US64, Raton to Clayton, MP 360 – 374	$ 18,500,000
G5b16	US491, Tohatchi to Shiprock, MP 20-31	$ 31,613,000
G5b26	US491, Tohatchi to Shiprock, MP 31-37	$ 17,692,000
G5b46	US491, Tohatchi to Shiprock, MP 45-53	$ 14,849,000
G5b56	US491, Tohatchi to Shiprock, MP 53-59	$ 19,446,000
G5a56	US491, Nav 9 to Tohatchi, Br #5830	$ 18,637,000
G5b36	US491, Tohatchi to Shiprock, MP 37-45	$ 22,548,000
G6005	US491, Shiprock to Col S/L, MP94.2- 107	$ 18,700,000
G2023	NM45, I25 to Central Ave., MP 3 – 8	$ 14,000,000
G2033	NM45, I25 to Central Ave., MP 8-13	$ 15,000,000
G2211	NM11, Columbus to Deming, MP 3.9-22.6	$ 3,300,000
G2414	US56, Springer E to Abbot, MP 0-8	$ 5,500,000
G2612	US380, Capitan to Hondo, MP 85-92	$ 8,250,000
G2725	US64, Rio Arriba C/L to US84, MP114.7-120	$ 5,271,000
G2715	US64, Rio Arriba C/L to US84, MP87-107	$ 13,726,000
G2755	US64, Rio Arriba C/L to US84, MP141-148	$ 24,200,000
G2802	NM8, Eunice N to Jct US62	$ 13,000,000
G36xx	US285, Clines Corners to Lamy	$ 10,000,000
G18a4	I-10, Vado & Mesquite Intchg	$ 4,730,000
G18a2	I-10, Texas S/L to Las Cruces	$ 43,155,000
G18a3	I-10, NM404 Interchange	$ 7,040,000
PE	Preliminary Engineering	$ 12,000,000
Total Funding Gap		$495,071,000

New Interchange, Interchange Reconstruction, and Other Need currently unfunded (2007 dollars)		
I40, Embudo Channel, Louisiana to Eubank	D3	$ 90,000,000
I25, Paseo Del Norte Interchange	D3	$350,000,000
I25, Montgomery, Jefferson, Comanche Interchanges	D3	$122,000,000
I25, Gibson, Rio Bravo, Rdwy capacity, Intchg Reconstr	D3	$150,000,000
US550/I25, expansion of capacity, new Interchange	D3	$150,000,000
I25, Los Lunas – Belen New Intchg & River Xing	D3	$ 70,000,000
I10/NM39, Jackrabbit Intchg & High Mesa Rd	D1	$ 55,000,000
I10, Arrowhead Intchg, Las Cruces	D1	$ 10,000,000
I10, Exit 86 Reconstr, Deming	D1	$ 10,000,000
US180, Silver City Relief Route	D1	$ 40,000,000
US60, Ft. Sumner to Clovis, 4-Lane Expansion	D2	$ 57,000,000
US54, Tucumcari to Texas S/L, 4-Lane Expansion	D4	$100,000,000
NM41, Moriarty to Estancia, 4-Lane Expansion	D5	$ 68,000,000
NM68, La Posta to Camino Placita, Expansion	D5	$ 13,000,000
I40, New Interchange W of Gallup, Nav Nation Gaming	D6	$ 10,000,000
Total		$1.3 Billion