

Turquoise Trail Corridor Management Plan Version 1.0

10.0 Highway Design and Modification Plan



NM 14 at Los Lomas del la Bolsa heading to Madrid from Golden

10.1 EXISTING HIGHWAY DESIGN STANDARDS

In general, the segments of NM 14, NM 536, NM 333, and NM 337 that make up the Turquoise Trail are well maintained. Potholes and other road misalignments are not common. Road markings and signage appear to be well maintained; however, the existing highway signs (not to be confused with advertising signs) in the highway right of way do detract from the scenic beauty. Vegetation has been allowed to migrate onto some of the shoulders and also detracts from the scenic beauty. Although the vegetation on the very narrow shoulders is unlikely to be a direct safety issue for motorized vehicles, the breakdown of the shoulders could impact bicyclists as they make room for passing vehicles.

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As NM 14 moves north of its intersection with NM 536, the road becomes hilly, curvy, and fun to drive. This continues through Golden and all the way to the southern tip of Madrid. In Madrid, moving motorized vehicles, cars parking, and pedestrians crossing the street anywhere along a half mile strip, present safety problems.

Leaving the northern end of Madrid, the road is quite narrow, with curves presenting a driver very limited visibility and a short stopping distance should something be in the road. Bicyclists are at risk in this three mile section of the road because there are no shoulders and they are hard to see. Once the road approaches Cerrillos, it becomes wider, straighter, yet still scenic.

Several miles north of Cerrillos the road becomes very straight and wide and the design encourages speeding. Much of the byway was designed for a travel speed of 60 MPH. Although this section of the road has the same stated design speed, it is much superior. Vehicles commonly travel more than 70 MPH in this section. The legal speed limit is 55 MPH.

10.1.1 General road specifications

FUNCTIONAL CLASSIFICATION: The predominant functional classification of NM 14 and NM 536 is rural major collector.

ROAD SURFACE: The road surface is primarily high flexible mixed bituminous or bituminous, penetrating asphalt, or cement concrete pavement.

ROAD WIDTH: The typical lane width on NM 14 is 12 feet with two foot shoulders. The byway is two lanes from the southern terminus to I- 40 where it transitions to a four lane highway all the way to the intersection with NM 536. A portion of this byway segment has a center turn lane.

NM 536 has a typical lane width of 13 feet and is predominantly two lanes with two foot shoulders. As the road winds its way to the top of Sandia Crest, some segments have a climbing lane to allow slower vehicles to take a position in the right lane while faster traffic passes.

From the intersection of NM 536 to the northern terminus, NM 14's road lanes are 12 feet and most of the segment is two lanes wide. As NM 14 nears Interstate 25, it transitions to a four lane highway after it intersects with NM 599 about two miles before it reaches the byway's northern terminus.

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TRAFFIC LIGHTS AND STOP SIGNS: There are two stop sign intersections and one traffic light intersection on the byway at this time. A four way traffic sign stop is located in Tijeras at the intersection of NM 333 and NM 337. The second set of stop signs control traffic at the intersection of NM 14 and NM 536 in Sandia Park. The only stop light on the byway manages traffic at the intersection of NM 14 and Vista Del Monte Road (NM 599) in the San Marcos area adjacent to a Phillips 66 service station.

BRIDGES AND UNDERPASSES. There are many small drainage bridges on the Turquoise Trail and three major bridges, one of which is located at NM 14 mile post 35.3 over a railroad track in Cerrillos. The NMSH&TD considers the bridge at mile post NM 14 mile post 35.3 to be substandard in some areas such as bridge railings. The bridge deck geometry is currently "intolerable" and the highway department has the bridge on a high priority schedule for replacement. There are three underpasses. One double underpass is located at the intersection of NM 14 and Interstate 40 in Tijeras, another double underpass is located at the intersection of NM 14 and Interstate 25 in Santa Fe, and the final underpass is located below the eastbound exit ramp from Interstate 40.

10.2 PROJECTED MODIFICATIONS

The NMSH&TD has a computerized database of planned projects know as the Statewide Transportation Improvement Program (STIP) The following projects are in the pipeline.

10.2.1 Fiscal year 1999

- Project Number: TPM-0333(1)06: \$350,000 of preliminary engineering work at NM 333 mile post 6.81 will be performed on NM 333 at its intersection with NM 337 and NM 14.
- TPM-BR-0014(9)31: \$507,000 is being provided to acquire a right of way at NM 14 mile post 31.55 at the junction of NM 14 and the road that goes to Cerrillos, which is a local road and is considered part of the Turquoise Trail.

10.2.2 Fiscal year 2000

- SP-ET-0333(200)06: \$450,000 to improve the intersection and add signal lights at NM 333 mile post 6.81 at its intersections with NM 337 and NM 14.
- TPM-BR-0014(9)31: \$500,000 for final design work at NM 14 mile post 31.44 at the junction of NM 14 and the road that goes to Cerrillos, which is a local road and is considered part of the Turquoise Trail.

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10.2.3 Fiscal year 2001

- TPM-0333(1)06: \$1,300,000 to improve the intersection and add signal lights at NM 333 mile post 6.81 at its intersections with NM 337 and NM 14.

10.2.4 Fiscal year 2002

- TPM-0014(10)28: \$2,000,000 to reconstruct 2.72 miles of road at NM 14 mile post 28.82. The construction will begin just north of Madrid as it winds its way to Cerrillos.
- TPM-BR-0014(9)31: \$9,800,000 to replace the bridge and reconstruct 6.75 miles of road at NM 14 mile post 31.55. This project begins approximately at Cerrillos and heads north toward San Marcos where similar construction was completed a few years ago.

10.3 ANALYSIS OF HIGHWAY MODIFICATION IMPACT ON INTRINSIC ASSETS

10.3.1 Two major projects

Over the next 3 years, two major projects are scheduled: (1) intersection and traffic signal improvements in Tijeras, and (2) a new bridge and nine miles of new road in the Madrid and Cerrillos area.

The positive impact of all the projects would likely be to allow the byway to handle more traffic more safely, and to provide construction jobs. Most people believe the bridge near Cerrillos should be made safer, but they are at odds on how to do it. Many in the area dispute the claim that the money spent on any projects will improve current conditions. In fact, what follows is a list of counterclaims and comments:

- The lights in Tijeras will cause more destructive accidents as drivers run the lights at high speeds instead of stopping at the stop signs as they do now.
- Accidents are caused by drunk drivers and bad weather, not the lack of signal lights.
- A new bridge in Cerrillos will look ugly. Can't we fix it instead and not damage the land?
- A new bridge will destroy the natural look and the area vegetation. Note: An environmental impact study was recently completed and may shed light on this claim.

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- A wider road will encourage speeding as it does now in San Marcos.
- Higher speeds will mean more deadly accidents.
- The new construction will damage the land and the scenic beauty of the area.
- A wider, faster road will encourage through traffic and more people will use the road as a shortcut.
- A faster way to Santa Fe from the southern portions of the byway will encourage people to live there and use the byway for commuting to work in Santa Fe.
- Increased traffic will cause bottlenecks in Madrid as people from the south end of the byway go to work. All the safety reasons for the road improvements will be lost.

10.3.2 The short and the long of it

In the short run, all the construction projects will have a negative effect on tourism.

- There will be bottlenecks between Madrid and Cerrillos, the bridge near Cerrillos, and for several miles north of that point. The American Automobile Association is likely to tell their clients to avoid the Turquoise Trail all together if one is simply trying to get from Albuquerque to Santa Fe.
- The impact of the construction projects in Tijeras are expected to be much smaller and can be mitigated due to the availability of alternative routing. Depending on the route taken, one may be able to avoid the construction altogether.

In the long run, the construction projects will have a negative effect on the scenic beauty of the area and the leisure atmosphere people have enjoyed in the past.

- The road will likely be wider, straighter, and flatter up in the Madrid/Cerrillos area--pretty boring according to some people.
- The bridge will be newer, but it will also look new, something that does not fit the character of the region.
- At this time, there is only one light on the Turquoise Trail. Once the intersection and traffic light project is completed in Tijeras, the lights on the byway could increase by 100%, 200%, or even more.

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- The rural nature of travel will be lost, as the area becomes more suburban. Most first time visitors to the area will probably not even notice the lights as they transition from Interstate 40, but the locals will.

10.3.3 What to do about it.

It is up to the area residents, area businesses, and the NMSH&TD to make the transitions as painless as possible; however, a major constraint is funding, whereby mitigating travel distress may not be possible to everyone's liking. Another unfortunate situation is that to minimize the short term inconvenience, it may be necessary to destroy some of the scenic beauty. One example would be to build a bridge in a different location, keeping the old one until the new one is complete, thus destroying a greater amount of vegetation.

The local population is not idly standing by; instead, they are trying to keep the scenic beauty. Local residents in the Madrid and Cerrillos area were so upset over the wider, bigger, faster road design put forth by the NMSH&TD that they asked the state to bring in outside consultants to see if an alternative could be found. The final result is still pending; however, the residents also made it known to their legislators that they want the area to stay scenic and rural. The legislators listened and on March 17, 1999, the New Mexico State House passed a Memorial, HM-50, sponsored by Representative Rhonda S. King in a 52-0 vote indicating that in their collective wisdom, tourism and the preservation of local scenic, natural, and cultural character are important to New Mexico and New Mexicans. The entire text of the memorial may be found on the next page.

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A MEMORIAL

REQUESTING THAT THE STATE HIGHWAY AND TRANSPORTATION DEPARTMENT RESPECT TRADITIONAL RURAL COMMUNITIES, HISTORIC AND CULTURAL SITES AND INVOLVE LOCAL COMMUNITIES DURING RECONSTRUCTION OF STATE HIGHWAY 14.

WHEREAS, state highway 14 is a scenic roadway between Santa Fe and Cedar Crest, attracting significant tourist dollars to communities along the route; and

WHEREAS, the highway corridor traverses several traditional communities designated by Santa Fe county; and

WHEREAS, there are many historic sites also along the route; and

WHEREAS, these scenic, historic, prehistoric and culturally valued communities and sites may be damaged by construction of improvements to state highway 14; and

WHEREAS, the United States department of transportation federal highway administration has developed flexibility in highway design that allows for the preservation of historic and scenic value while ensuring safe and efficient highways;

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE STATE OF NEW MEXICO that the state highway and transportation department be requested to involve the local communities, neighborhoods and businesses along state highway 14 in the development and adoption of the environmental assessment and final design of the reconstruction of state highway 14; and

BE IT FURTHER RESOLVED that the state highway and transportation department be requested to exercise care and sensitive planning in carrying out the reconstruction of state highway 14; and

BE IT FURTHER RESOLVED that the state highway and transportation department be requested to incorporate flexibility in highway design as set forth by the United States department of transportation federal highway administration in the final design of the reconstruction of state highway 14; and

BE IT FURTHER RESOLVED that a copy of this memorial be transmitted to the secretary of highway and transportation, members of the Santa Fe board of county commissioners and state highway 14 citizen advisory committee.