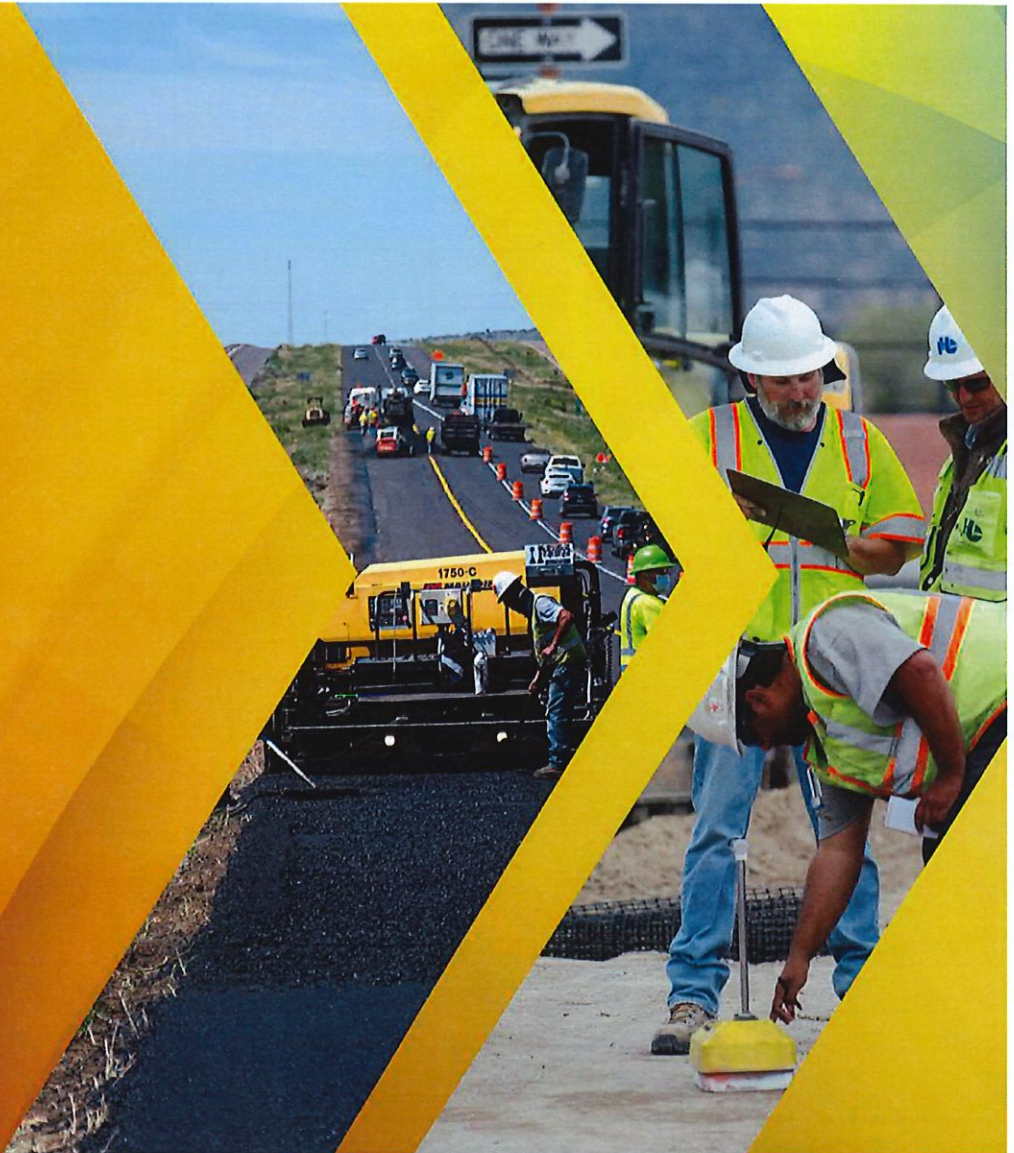


NMDOT

History of US 491 Four-Lane Improvements

Planning to Funding to Construction

Presented by Lisa Vega, P.E. (Acting) District Engineer



US 491 Corridor History

- The corridor begins in Gallup, at the junction with I-40, passes north through the eastern half of the Navajo Nation and continues to the New Mexico/Colorado state line.
- Along the way, the corridor passes through the small tribal communities and trading posts of:
 - Tohatchi
 - Buffalo Springs
 - Naschitti
 - Sheep Springs
 - Newcomb
 - Shiprock.

US 491 Corridor History

- The rural highway improvements project consists of safety improvements efficiency and economic improvement for the highway and surrounding communities and the State of New Mexico.
- This major safety improvement consists of constructing two additional lanes with a 46' median separating the northbound and southbound traffic.

US 491 Corridor History

- The modernization of this corridor began with the paving of portions of the route in the 1950's, with upgrades in the 1970's and 1980's.
- Four lanes were constructed in 1982 from Gallup to milepost 15.7 (north of Twin Lakes); and from milepost 84.7 to 92 (Shiprock).
- The Navajo Nation and Legislators began requesting the construction of four lanes in 1982 for the entire corridor.

US 491 Corridor History

- This stretch of roadway was known as the “Devil’s Highway” because of the “666” and the number of deaths that occurred.
- This roadway was listed in the top ten most dangerous highways in the United States, for decades. The remaining two-lane portion still has a higher fatality rate than the US and the state of New Mexico. The overall accident severity rate and fatality rate has fallen since becoming four-lane.

US 491 Corridor History

- US 666 was to be funded under the Governor Johnson administration Citizens Highway Administration Team (CHAT) program in the 1990's. During the 2003 Legislature, and with a multi –state effort the designation of the route was changed from US 666 to US 491. The legislature included the corridor in the 2003 highway bond funding program that was approved as Governor Richardson's Investment Partnership (GRIP). This was the beginning of the current US 491 corridor improvement program.

US 491 Corridor History

- The estimate for the corridor that was included in the original bond funding proposal (\$178M) was for an “Enhance Two Lane” design compared to the “Divided Four-Lane” design that was ultimately recommended as the “Preferred Alternative” by the alignment study. The estimate for the Divided Four-Lane design was in excess of \$280M at the beginning of the final design effort.

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Design

- Prime Consultant for design of the US 491 Corridor was Bohannon Huston Inc. (BHI).
- BHI was required to fast track the design and utilized:
 - Wilson & Co.
 - HDR
 - Gannet Flemming
 - SWCA (Environmental & Cultural Resources)

NMDOT

US 491 ROW Acquisition (Northern Corridor)

- **2003**
 - Original MOU executed by NMDOT and the Navajo Nation
 - Study & Preliminary Engineering work began
- **2004 – 2006**
 - NMDOT initiates correspondence with the Navajo Nation regarding terms and conditions needing to be addressed to secure necessary ROW and easements
 - NMDOT participated in numerous committee meeting and presentations with project updates, plans and terms associated with ROW and provisions for compensation

US 491
ROW
Acquisition
(Northern
Corridor)

- **2006 – 2007**
 - Negotiations continued regarding ROW and terms and conditions for compensation with no resolve.
 - Design for the Northern Segment of the corridor was completed
 - The Navajo Nation's Resources Committee acted on a resolution to authorize and approve the terms for the ROW required on US 491 for the Northern Corridor

- 2008
 - Process and application submittals and reviews continued
 - BIA issued and approved Grant of Easement for ROW for the Northern Corridor
 - Cost: \$48,315
 - 3.17 acres of ROW and Construction Maintenance Easements
 - 4.81 acres for Temporary Construction Permits
 - NMDOT issued request to the Navajo Nation to consider and provide for the needed ROW for the Southern Corridor under similar terms and conditions as the Northern Corridor

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US 491 ROW Acquisition (Southern Corridor)

- **2008-2009**

- Parties worked to develop the terms regarding the Navajo Nation's contribution to the project
- January 2009, a Joint Powers Agreement was fully executed and provided for the Navajo Nation's contribution of \$8 Million to the project. A resolution to support this action was adopted by the Navajo Nation's Resources Committee
- NMDOT participated in numerous committee meetings and presentations on project updates, plans and terms associated with the Southern Corridor ROW needs

- **2008-2009**
 - July 2009, the Navajo Nation's Resources Committee acted on a resolution to authorize and approve the terms for ROW required on US 491 for the Southern Corridor
 - October 2009, BIA issued and approved Grant of Easement for ROW for the Southern Corridor
 - Cost: \$2,183,265
 - 164.84 acres for ROW and Construction Maintenance Easements
 - 5.62 acres for Temporary Construction Permits

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US 491 NEPA

(National Environmental
Policy Act)

NMDOT was required to follow the NEPA process in the development of these projects.

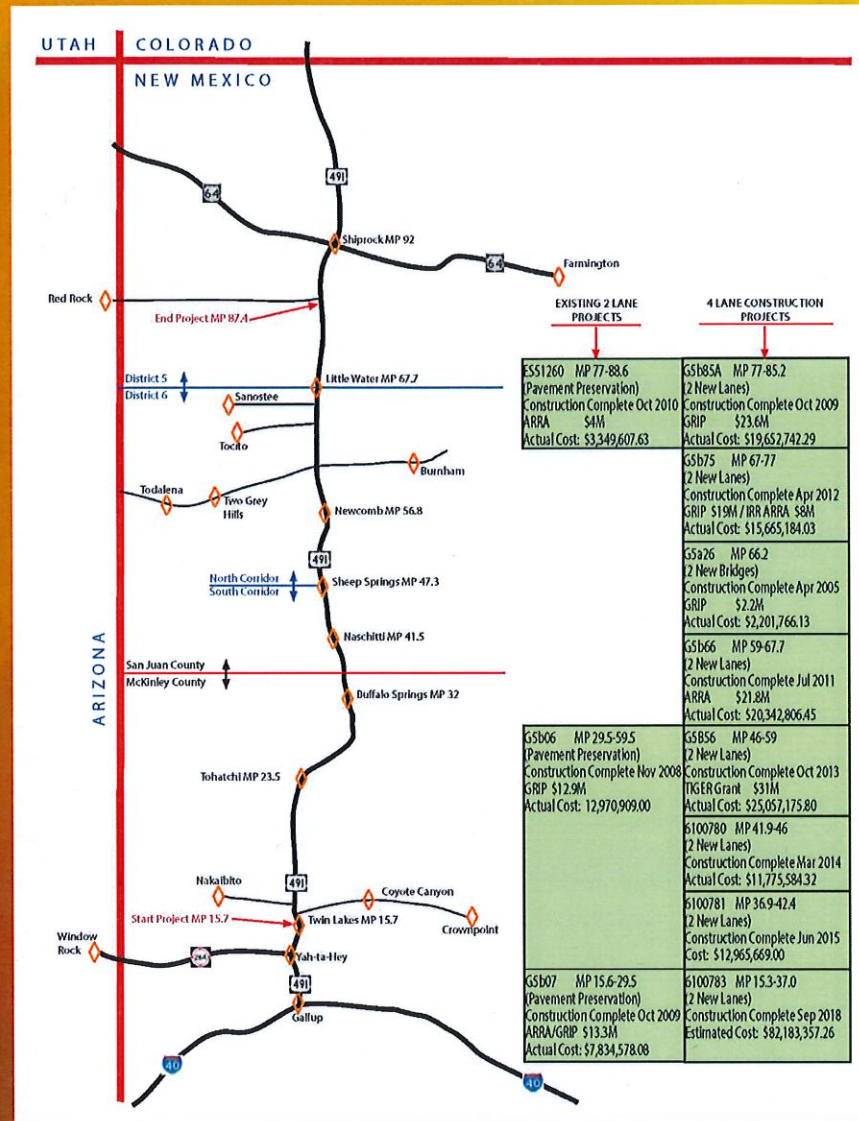
As each project was being designed, certification was issued for each of the following 5 criteria:

- ROW
- Rail
- ITS
- Environmental
- Utility

Once certification was obtained, each project was let to construction.

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US 491 Corridor Projects



Existing 2-Lane Projects

- **CN ES51260 – MP 77 – 88.6 (South of Shiprock)**
 - Pavement Preservation
 - ARRA - \$4 Million
 - Actual Cost: \$3,349,607.63
 - COMPLETED CONSTRUCTION OCTOBER 2010
- **G5b06 – MP 29.5 – 59.5 (South of Buffalo Springs to Todadena)**
 - Pavement Preservation
 - GRIP - \$12.9 Million
 - Actual Cost: \$12,970,909.00
 - COMPLETED CONSTRUCTION NOVEMBER 2008
- **G5b07 – MP 15.6 – 29.5 (Twin Lakes to South of Buffalo Springs)**
 - Pavement Preservation
 - ARRA/GRIP - \$13.3 Million
 - Actual Cost: \$7,834,578.08
 - COMPLETED CONSTRUCTION OCTOBER 2009



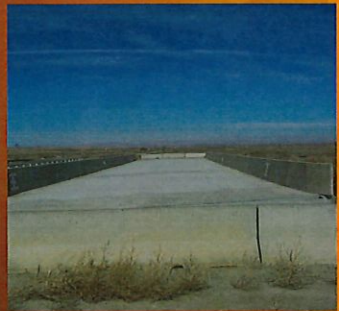
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New Four-Lane Projects

- **G5b85A – MP 77 – 85.2 (South of Shiprock)**
 - 2 New Lanes
 - GRIP - \$23.6 Million
 - Actual Cost: \$19,652,742.29
 - COMPLETED CONSTRUCTION OCTOBER 2009
- **G5b75 – MP 67 – 77 (North of Little Water)**
 - 2 New Lanes
 - GRIP - \$19 Million / IRR ARRA - \$8 Million
 - Actual Cost: \$15,665,184.03
 - COMPLETED CONSTRUCTION APRIL 2012

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New Four-Lane Projects

- **G5a26 – MP 66.2 (Sanostee)**
 - 2 New Bridges
 - GRIP - \$2.2 Million
 - Actual Cost: \$2,201,766.13
 - COMPLETED CONSTRUCTION APRIL 2005
- **G5b66 – MP 59 – 67.7 (Newcomb to Little Water)**
 - 2 New Lanes
 - ARRA - \$21.8 Million
 - Actual Cost: \$20,342,806.45
 - COMPLETED CONSTRUCTION JULY 2011

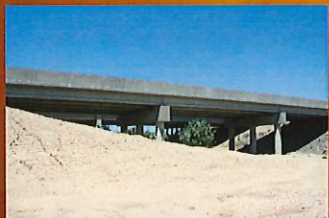
New Four-Lane Projects

- **G5B56 – MP 46 – 59 (Sheep Springs to Todalena)**

- 2 New Lanes
- TIGER Grant - \$31 Million
- Actual Cost: \$25,057,175.80
- COMPLETED CONSTRUCTION OCTOBER 2013

- **6100780 – MP 41.9 – 46 (Naschitti to Sheep Springs)**

- 2 New Lanes
- Actual Cost: \$11,775,584.32
- COMPLETED CONSTRUCTION MARCH 2014



New Four-Lane Projects



- **6100781 – MP 36.9 – 42.4 (North of Buffalo Springs to Naschitti)**
 - 2 New Lanes
 - Actual Cost: \$12,965,669.00
 - COMPLETED CONSTRUCTION JUNE 2015
- **6100783 – MP 15.3 – 37 (Twin Lakes to North of Buffalo Springs)**
 - 2 New Lanes
 - Actual Cost: \$73,061,715.93
 - COMPLETED CONSTRUCTION SEPTEMBER 2018

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Additional US 491 Projects

- **COMPLETED PROJECTS**

- US 491, MP 32.733 – 37.076 (North of Buffalo Springs)
 - Roadway Rehabilitation
 - \$6,135,477.40
 - Completed construction April 2021

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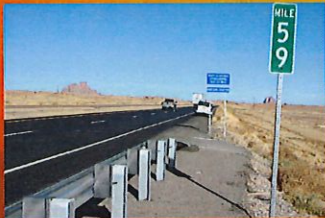


Additional US 491 Projects

- ***ON-GOING* PROJECTS**

- **US 491, MP 61.760 – 68.106 (North of Little Water)**
 - Roadway Rehabilitation
 - \$13,496,881.41
- **US 491/Carbon Coal Road Intersection (9th Street, Gallup)**
 - Roadway Reconstruction & Rehabilitation, Lighting & Signalization
 - \$23,850,000.00
- **US 491, MP 40.500 – 42.00 (Naschitti)**
 - Lighting
 - \$494,008.80

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Additional US 491 Projects

- STIP (*UP-COMING*) PROJECTS
 - US 491 at I-40, MP 20.4 – 21.2 (Exit 20, Gallup)
 - Ramp Realignment
 - \$8,000,000.00
 - Currently under study with Wilson & Co.

In 2017, a Joint Powers Agreement was signed by NMDOT and the Navajo Nation for a Global Lighting Agreement for the US 491 Corridor. The Navajo Nation is responsible for electrical energy costs for fully functional system; maintenance of all equipment installed for fully functional systems.

- **US 491 & 64 Shiprock (Effective 2/15/2006)**
 - Roadway signal and light improvements installed at the following locations:
 - Upgraded traffic signal at US 491 & US 64, includes a vehicle detection system with cameras
 - New street lighting along US 491 in Shiprock

- **US 491 (Effective 6/20/2012)**
 - Roadway lighting improvements installed along US 491 at the following locations:
 - MP 47.3 – 8 Luminaries
 - MP 63 – 71 – 19 Luminaries
 - MP 79 – 80 – 8 Luminaries
 - MP 85 – 86 – 8 Luminaries

- **US 491, Naschitti Community (CN 6100782 started construction 7/17/20)**
 - Install roadway lights
 - MP 41 – 41.8 – approximately 28 Luminaries

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Thank You

