

I-40 Manuelito Interchange Study CN 6101600 Public Meeting March 17, 2024





Agenda

- Introductions
- Study location and area
- Present existing description and conditions
- Needs of the project
- Build alternatives
- Study and project development steps
- Questions



Introductions

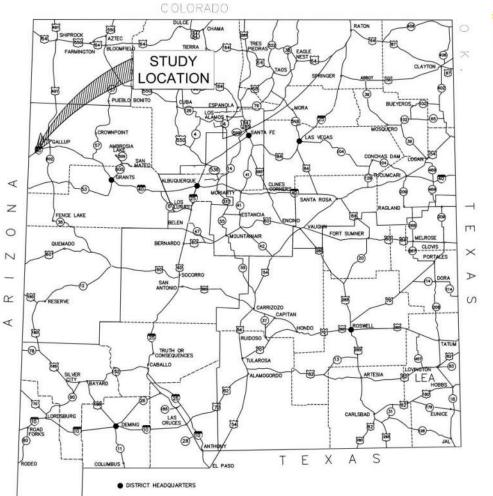
NMDOT

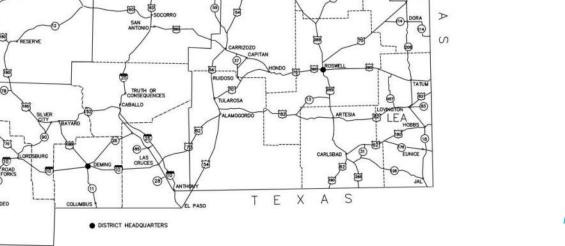
- Gabriel Sanchez-Ramos, Project Development Engineer
- Lisa Vega, PE, District 6 Engineer
- Arif Kazmi, PE, Assistant District 6 Engineer
- Steven Gisler, Environmental Specialist

Consultants

- Danton Bean, PE, Project Manager
- Ravi Sripada, PE, Roadway Engineer
- Andrew Wong, PE, Drainage Engineer
- Maria Altemus, Environmental Planner
- Victoria Romejko, Public Involvement Specialist

Study Location







I-40 Manuelito Interchange Study

New Mexico DEPARTMENT OF TRANSPORTATION

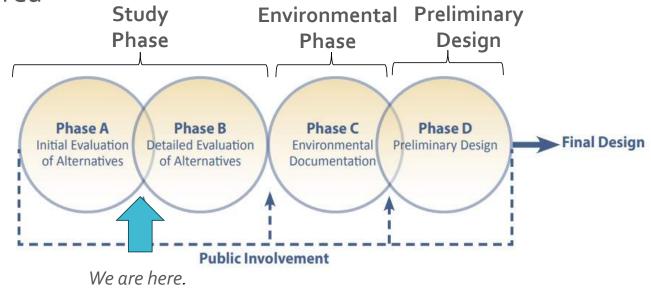
Study Area



I-40 Manuelito Interchange Study

What is the purpose of this meeting?

- Review recent study developments
- Inform the public on study status
- Solicit public feedback and insights of the study area





Bridge

Bridge No. 6502

- Constructed in 1963
- Single barrel concrete box
- 26 feet wide by 14 feet high







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Bridge

Bridge No. 6502

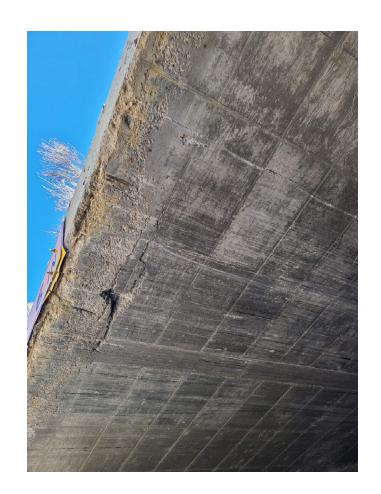
• Limited height and width clearance for large commercial vehicles







Bridge







Bridge





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Roadway

I-40/NM-118 Traffic Interchange

- 1. Limited sight distance on NM 118
- 2. Limited stopping distance on I-40 exit ramps
- 3. Limited acceleration distance on I-40 entrance ramps
- 4. Unusual traffic interchange







Roadway

I-40 Mainline (Eastbound and Westbound)

- 2-12 ft. lanes
- 4 ft. Inside shoulder
- 10 ft. outside shoulder
- Posted speed 75 mph







Roadway

NM -118

- 2-12' lanes
- No usable shoulders
- Posted speed 30 mph
- Deficient horizontal sight distance
 - Supports ~ 25mph





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Roadway

I-40 Exit Ramps

- Stop controlled at NM 118
- Inadequate deceleration lane length
 - Eastbound exit ramp ~ 183 ft (705 ft is required)
 - Westbound exit ramp ~ 240 ft (705 ft is required)







Roadway

• I-40 Entrance Ramps

- Entrance ramp controlled by yield sign
- Limited view of oncoming traffic
- Inadequate acceleration lane length
 - Eastbound Entrance Ramp ~ 290 ft (1,750 ft is required)
 - Westbound Entrance Ramp ~ 342 ft(1,750 ft is required)







Roadway

Roadway Summary

- Limited Sight Distance for
 - NM-118 through the box culvert
 - I-40 Exit Ramps
 - I-40 Entrance Ramps
- Inadequate Acceleration Distance
 - I-40 Entrance Ramps
- Inadequate Deceleration Distance
 - I-40 Exit Ramps
- Unconventional Traffic Interchange
 - Does not meet driver expectations and design standards





Crashes from 2017 to 2021

Traffic

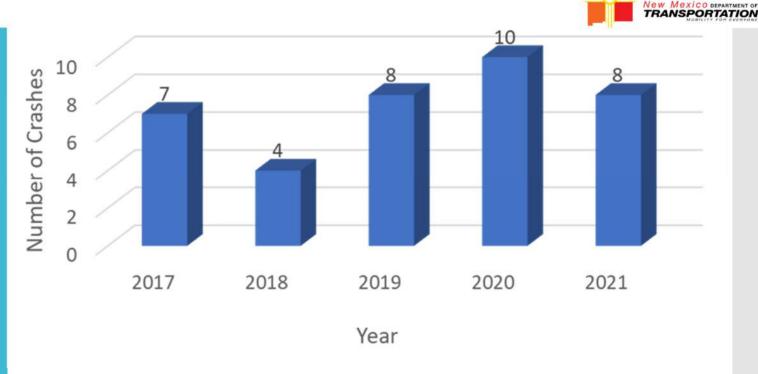




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Crashes from 2017 to 2021 (Cont.)

Traffic



- 27 property damage only crash
- 9 injury crash
- 1 fatal crash





Crashes from 2017 to 2021 (Cont.)

Traffic

Top four types of crashes are:

- Fixed object (32%)
- Other vehicle (23%)
- Animal (15%)
- Overturn/rollover (12%)

51% of crashes occurred at dark 24% of crashes occurred during snow

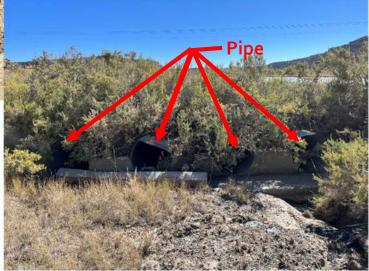


Drainage



Corrosion, scour, and sedimentation

Corrugated metal pipes (CMPs)



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Drainage



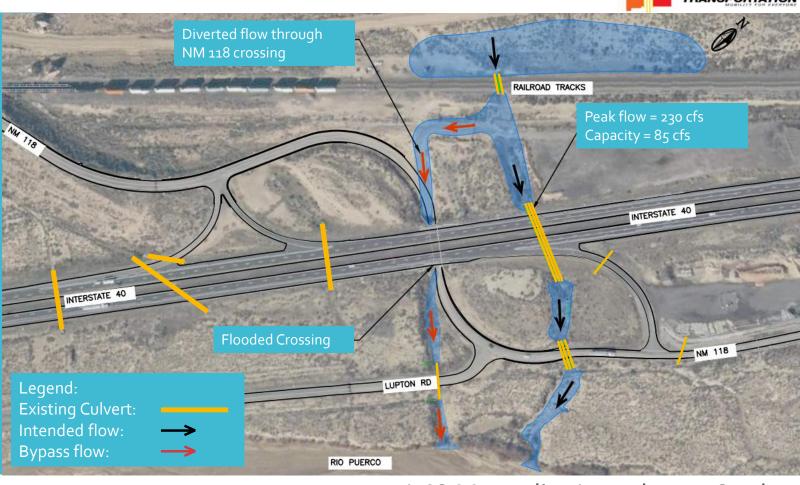
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Drainage

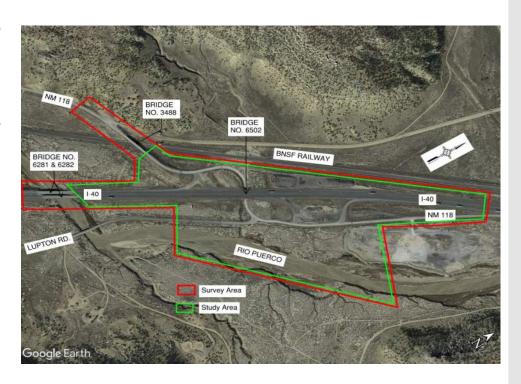




I-40 Manuelito Interchange Study

Environmental

Natural resources
Water resources
Historic and
cultural resources
Section 4(f)
Noise
Air quality
Visual resources
Farmlands
Floodplains
Social resources





Needs & Purpose

Needs:

- Aged, dilapidated and deficient bridge
- Poor stopping sight distance on exit ramps and NM 118
- Deficient exit ramps
- Deficient entrance ramps
- Unstable side slopes
- Undersized and damaged drainage structures
- Obsolete interchange layout that does not meet drive expectations

Purpose:

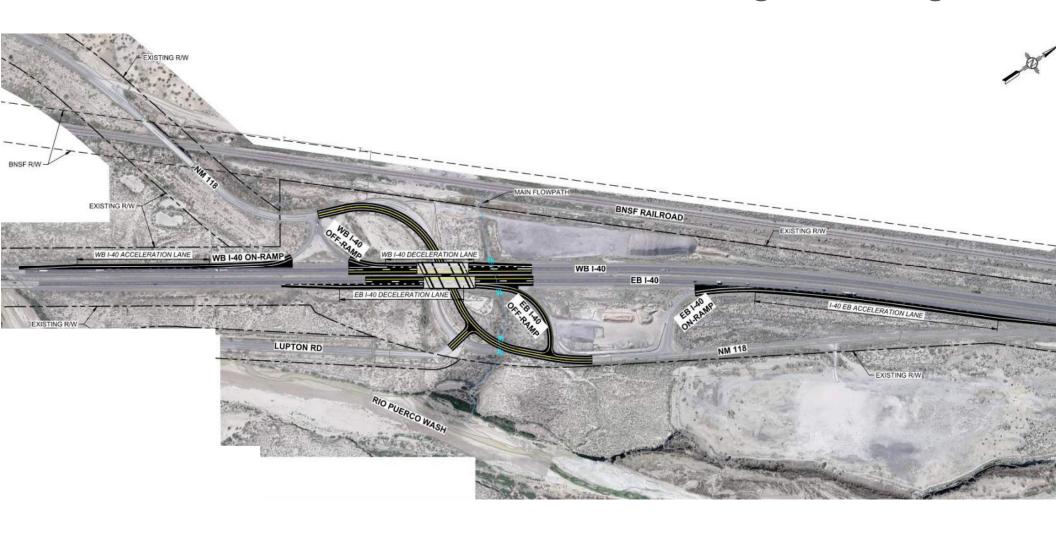
• Improve the safety and operations of the I-40 Manuelito interchange and improve NM 118 as a viable truck route for incident management on I-40



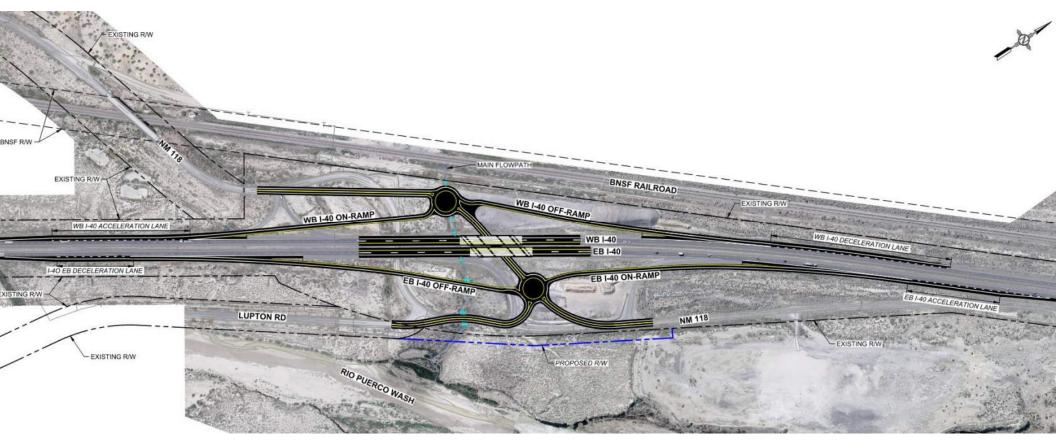
Proposed Alternatives

- No-build
- •Build alternatives:
 - Alt. No. 1: Enhanced Existing Interchange
 - •Alt. No. 2A: Diamond Interchange (NM 118 under I-40) and roundabouts.
 - •Alt. No. 2B: Diamond Interchange (NM 118 over I-40)
 - Alt. No. 3: Tight Diamond Interchange

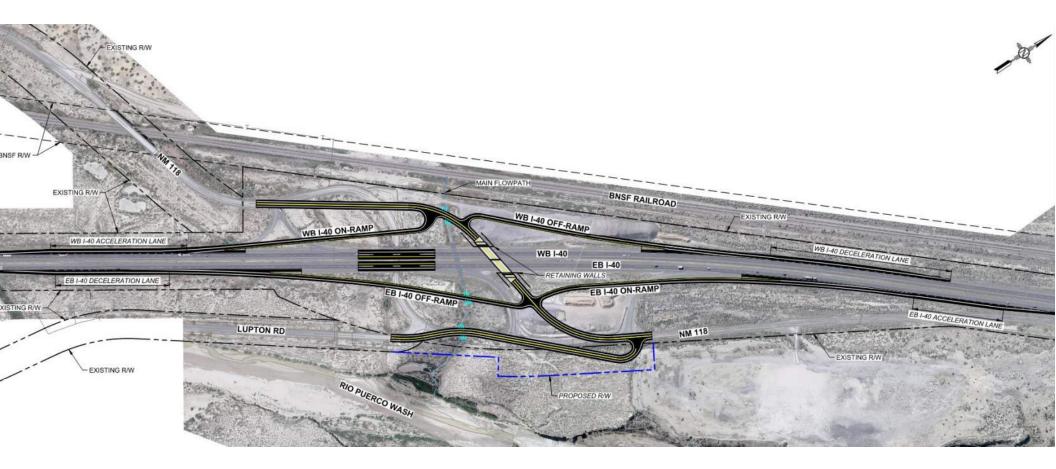
Build Alternative – Alt. No. 1: Enhanced Existing Interchange



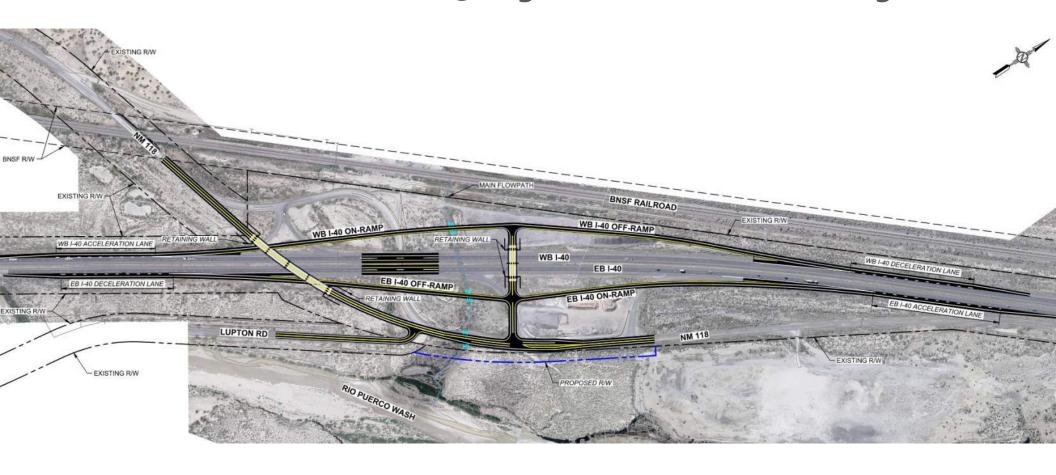
Build Alternative — Alt. No. 2A: Diamond Interchange (NM 118 under I-40) with roundabouts



Build Alternative – Alt. No. 2B: Diamond Interchange (NM 118 over I-40)



Build Alternative – Alt. No. 3: Tight Diamond Interchange





Next Steps

- Second public outreach effort: Summer 2024
- Finalize study document : Summer/Fall 2024
- Preliminary design (Phase I-D): Fall/Winter 2024
- Environmental documentation: Winter/Spring 2025
- Final design (Phase II): TBD
- Construction (Phase III): TBD



How to Provide Input

- Website Comments: www.dot.nm.gov/projects/i4omanuelitointerchange/
- Call: 505-357-7327
- Email: i4omanuelitointerchange@hdrinc.com
- Mail:

I-40 Manuelito Interchange Study c/o HDR Engineering 2155 Louisiana Blvd NE, Ste 3000 Albuquerque, NM 87110

Comments should be received by April 16, 2024



• Questions?





THANKYOU FORYOURTIME

