

NM 502 Trinity Drive Study Public Input Meeting

Incorporated County of Los Alamos

Public Works Department
Wilson & Company

June 6, 2024

NM 502 Trinity Drive Study

Study Limits

- Study Limits: NM 502 (Trinity Drive) from Oppenheimer Drive to Knecht Street
- Length: approx. 0.5 miles
- Posted Speed Limit: 35 mph
- Roadway Classification: Principal Arterial



NM 502 Trinity Drive Study

Project Purpose

- Analyze the existing conditions, develop alternatives for improvements along the corridor and identify the recommended alternative for NM 502 (Trinity Drive)
- This study will include three phases leading up to the project preliminary and final design stages:
 - Phase A provides an initial evaluation of existing conditions and project alternatives
 - Phase B provides a detailed evaluation of alternatives selected to advance from Phase A
 - Phase C involves the preparation of an environmental document such as a Programmatic Categorical Exclusion (PCE) and its subsequent processing through NEPA

NM 502 Trinity Drive Study

Purpose of Meeting

- Introduce project
- Introduce potential alternatives
- Public input – we want to hear from you!



Supports Council Goals

Priority Areas in the 2023 Strategic Leadership Plan

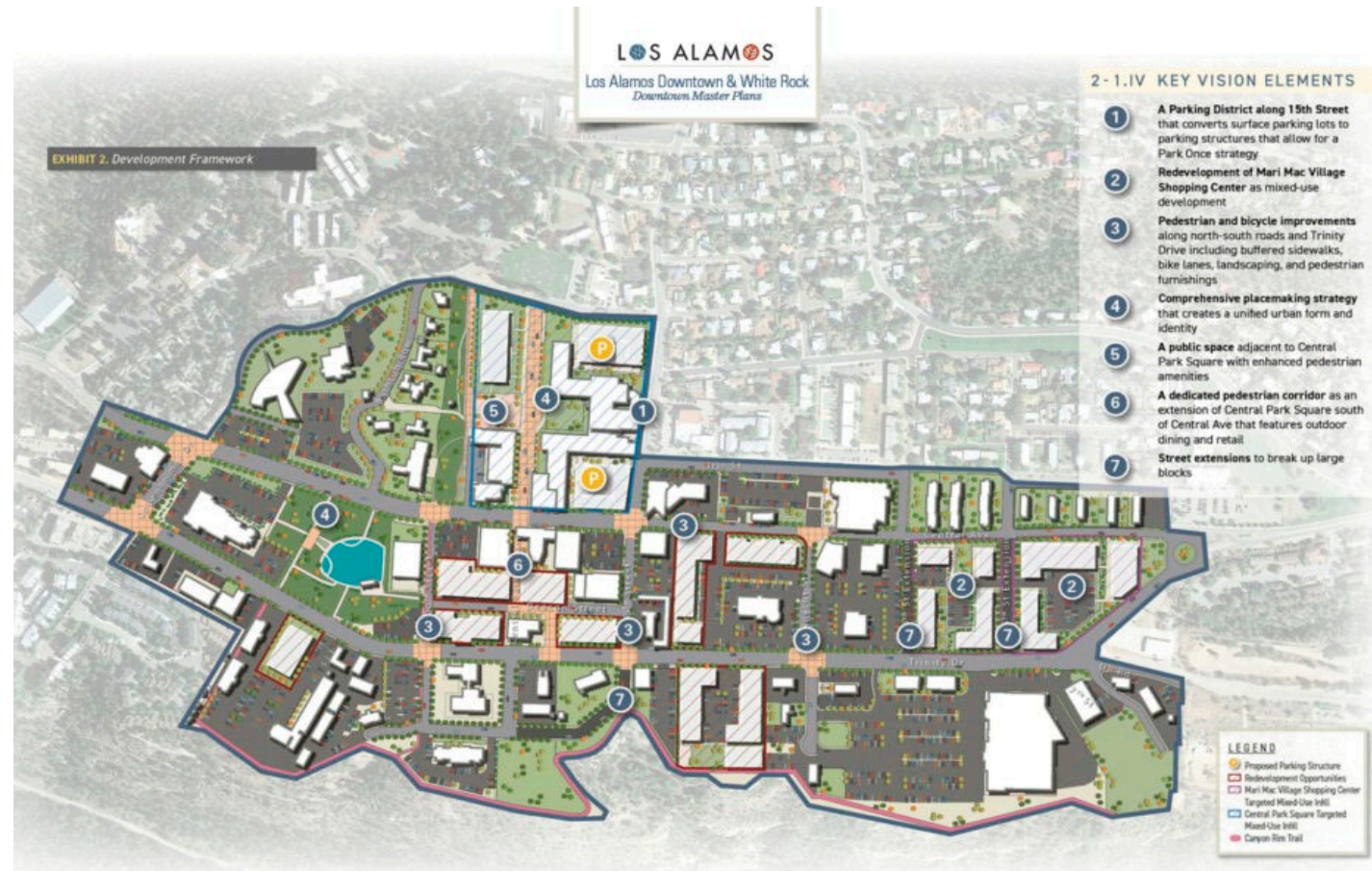
- Protecting, maintaining, and improving our open spaces, recreational and cultural amenities
- Enhancing support and opportunities for the local and new business economy
- Improve and expand access to alternative modes of travel
- Revitalize downtown by facilitating development opportunities
- Evaluate the County's infrastructure to prioritize funding



Supports Downtown Plans

Key Vision Elements in the 2021 Downtown Plan

- Pedestrian and bicycle improvements along NM 502 (Trinity Drive) including buffered sidewalks, bike lanes, landscaping, and pedestrian furnishings



Supports Bicycle Transportation Plans

Council Strategic and Comp Plan Goals in the 2017 Bicycle Transportation Plan

- Enhance and facilitate bicycle use for residents and visitors
- Improve the public image of bicycling as a safe mode of travel
- Incorporate bike facilities in new and existing roadways
- Improve bicycle facility safety, design, and maintenance
- Integrate planned bicycle improvements and connections into the planning and design of new land development and redevelopment
- Future Consideration: Shared Use corridor along NM 502 (Trinity Drive)



¹Multi-Use Connection (Path) A bikeway physically separated from motor vehicle traffic by an open space within an independent right-of-way. Multi-use paths may be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Most multi-use paths are designed for two-way travel.

²Shared Use A lane of traveled way that is open to both bicycle and motor vehicle travel.

³Multi-Use Side Path A path located immediately adjacent and parallel to a roadway. Multi-use side paths may be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Most multi-use side paths are designed for two-way travel.

Supports Road Safety Audit

Recommendations and Conclusions in the 2016 Road Safety Audit

- Study Limits: NM 502 (Trinity Drive) from Oppenheimer Drive to 15th Street
- Consideration of a road diet such as going from existing five-lane roadway to a three-lane roadway to promote multi-modal safety
- Incorporate a lane reduction and/or speed reduction along Trinity Drive
- Incorporate bike facilities to encourage ridership on bike paths or lanes

Recommended Countermeasure

Conduct a supplemental traffic count (completed)

Install median refuge island and marked crosswalk at the Ashley Pond/Trinity Drive location

Reduce speed limit/enforcement

Incorporate access management to reduce driveway conflicts (turning movement restrictions with geometric improvements)

Sidewalk ramp improvements, pedestrian countdown and audible pedestrian indications at intersections

Construct bus pull-outs in appropriate locations

Supplementary Route 1 bus route in clockwise direction

Public Outreach/Enforcement/Temporary Traffic control and supplementary parking during special events

Reconstruct sidewalks, provide buffers, and ADA ramps in areas of sufficient right-of-way

Install a traffic signal and incorporate into LAC coordinated signal system on Trinity Drive (future consideration)

Install a Pedestrian Hybrid Beacon and marked crosswalk (Future consideration)

Road Diet or other changes to the typical section on Trinity Drive for multi-modal safety and operational considerations

NM 502 Trinity Drive Study

Project Schedule: (Phases developing concurrently)

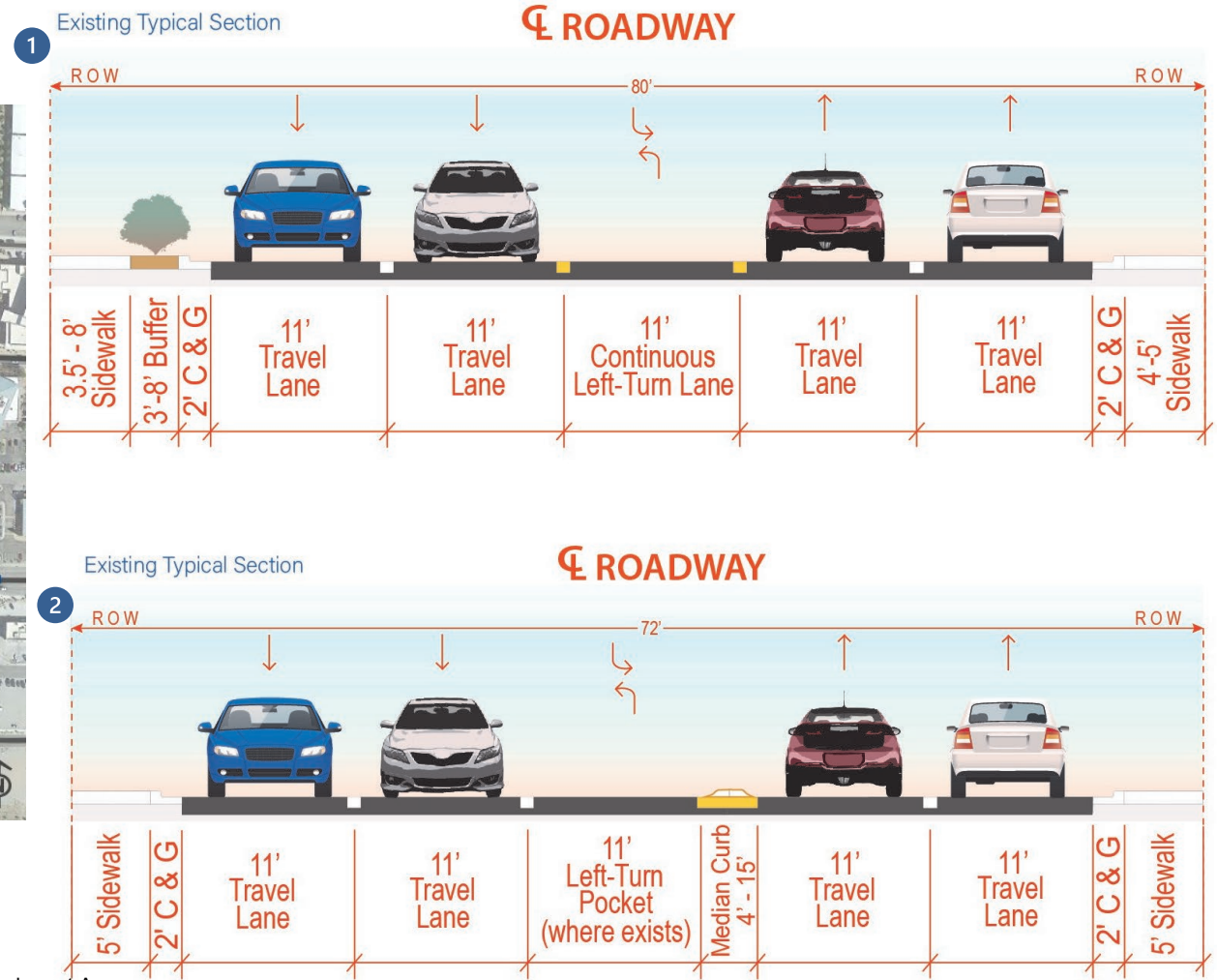
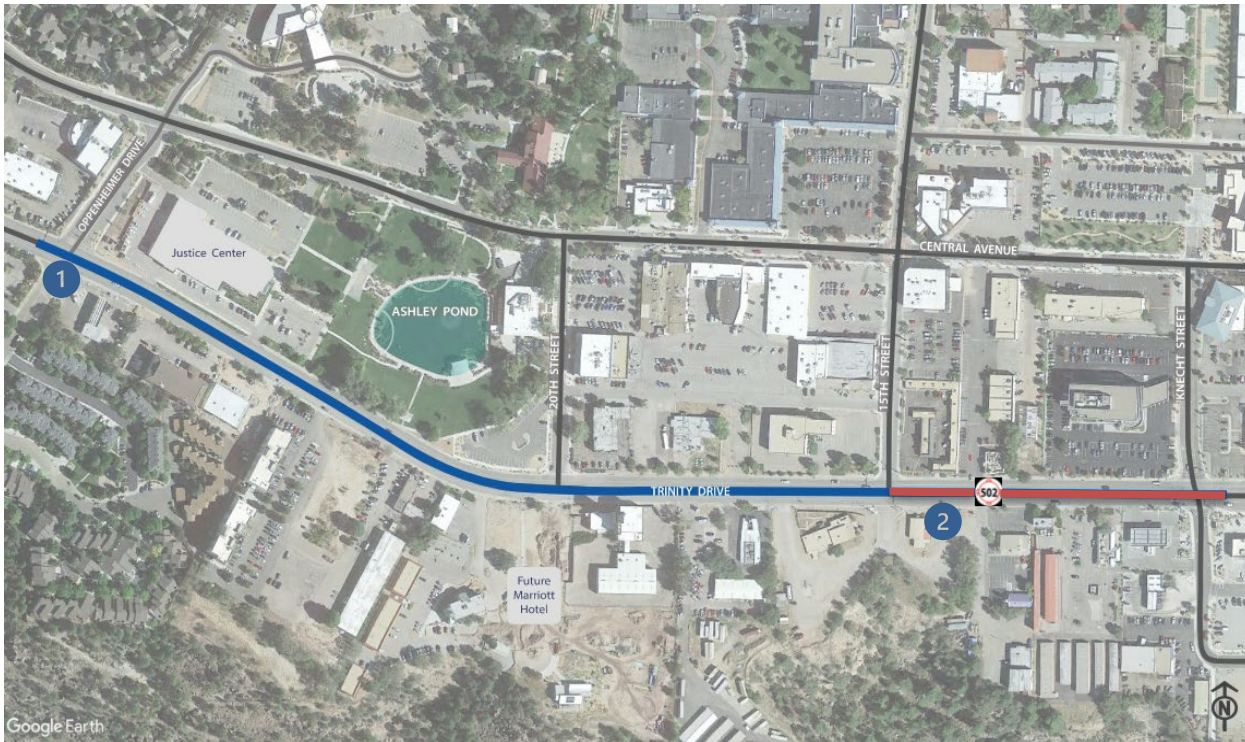
- Project Kick-off: February 2024
- Data Acquisition and Alternative Analysis: February – ongoing
- Public Meeting: June 2024
- Environmental Review and Coordination: May – ongoing
- Preliminary Design: September – December 2024
- Final Design Phase: March 2025

Existing Conditions

NM 502 Trinity Drive

Within Corridor Limits

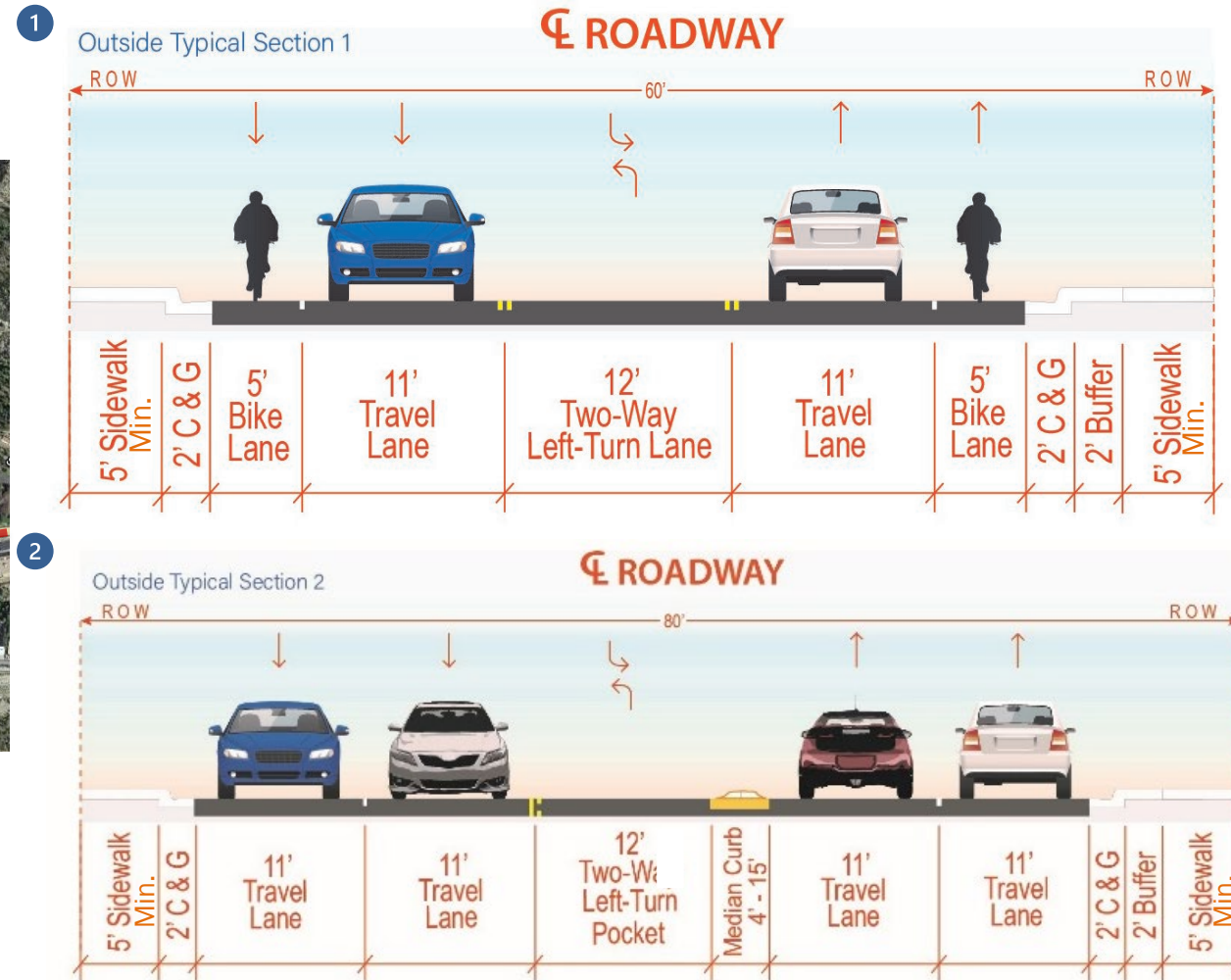
Typical Sections



NM 502 Trinity Drive

Outside Corridor Limits

Typical Sections

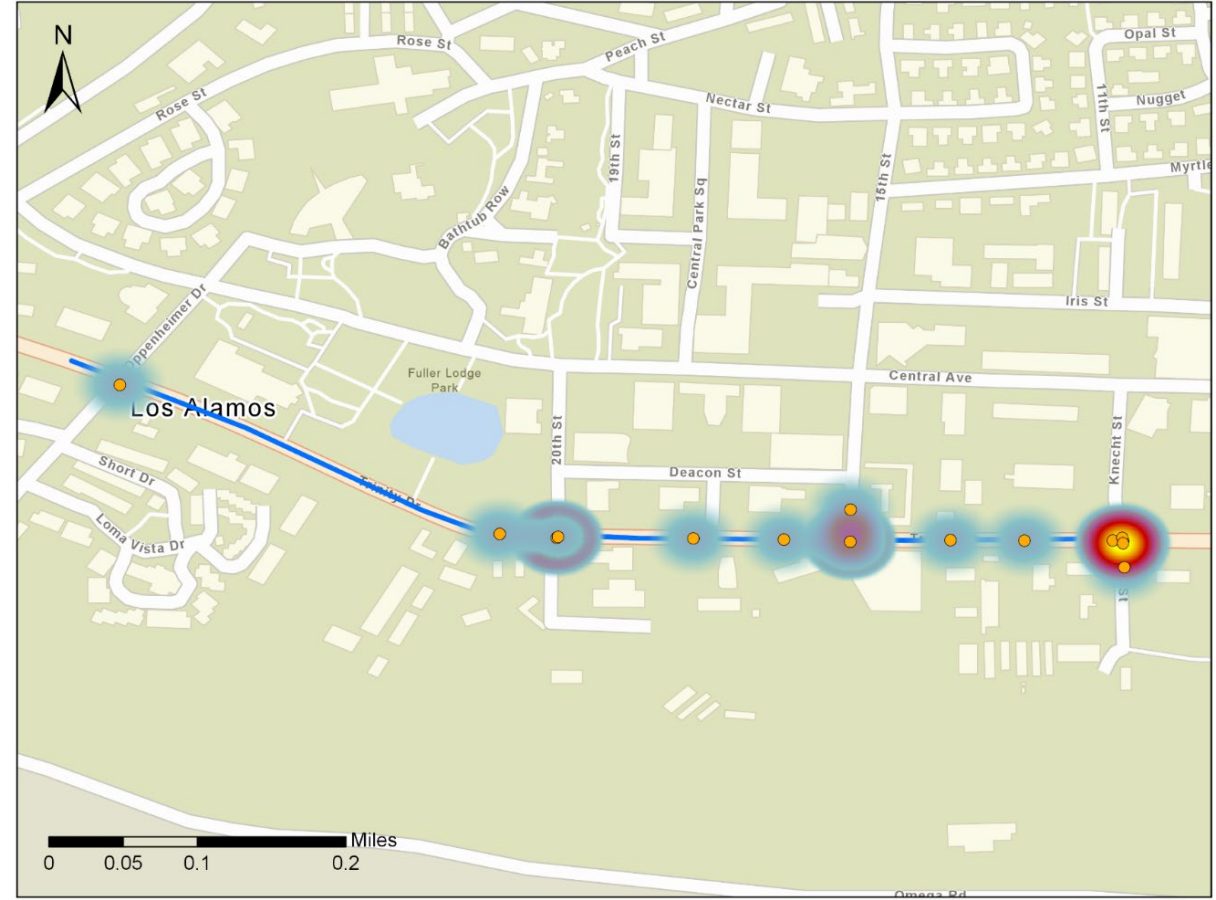
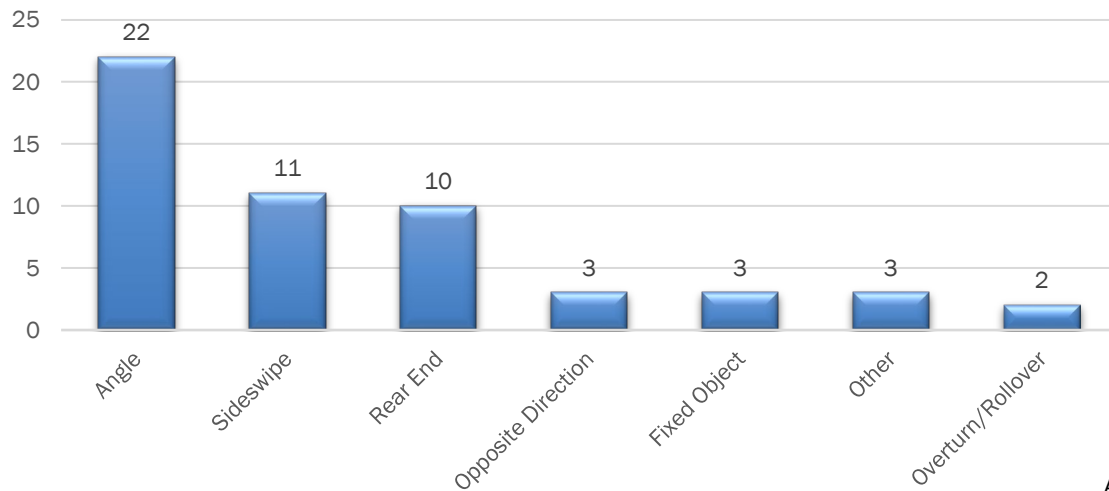


Crash History

NM 502 Trinity Drive

Year	Crash Severity		Total
	Injury	PDO*	
2014-2020	25 (46%)	29 (54%)	54 (100%)

Crash Type

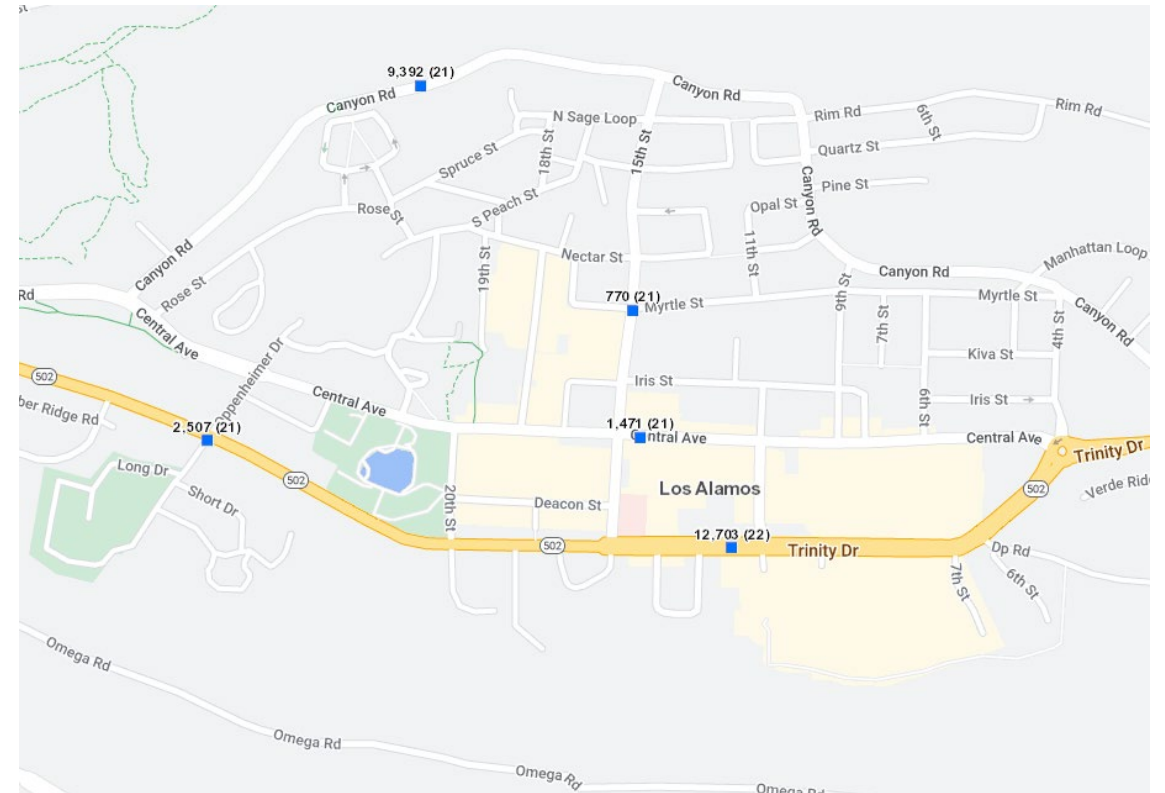


Traffic Volumes

NM 502 Trinity Drive

Year	AADT
2022	12,703
2021	11,269
2020	9,894

Source: NMDOT Traffic Count Database



Existing Modal Split

NM 502 Trinity Drive

Intersection	Vehicles		Pedestrians		Bicycles	
	Total	Percentage	Total	Percentage	Total	Percentage
Oppenheimer Drive and Trinity Drive	13,550	99.22%	101	0.74%	5	0.04%
20 th Street and Trinity Drive	13,427	99.76%	27	0.20%	5	0.04%
15 th Street and Trinity Drive	13,467	99.66%	44	0.33%	2	0.01%
Knecht Street and Trinity Drive	13,114	99.50%	63	0.48%	3	0.02%

NM 502 Trinity Drive Study

Design Criteria:

- Minimum Lane Width for Principal Arterial – 11 ft
- Posted Speed Limit – 35 mph
- Meet all American with Disabilities Requirements Including:
 - 5% (1:20) maximum trail grade on independent trail alignments
 - Surface must be “firm and stable”
- Crosswalk visibility enhancements to improve bicycle and pedestrian safety
- Lighting, only where needed for safety

Potential Alternatives

Description of Alternatives

Widening Paved Shoulders – Eliminated

Benefits

- Increases effective turning radii at intersections
- Provides space for maintenance operations and snow storage
- Provides an increased level of comfort for bicyclists

Cons

- Requires additional right-of-way (typically 10-ft throughout the corridor) for each 5-ft bicycle lane
- Requires reconstruction of the existing curb and gutter, retaining walls, sidewalk, turnouts, ADA ramps, and bicycle lanes
- Impacts to buildings such as the Century Link building located on the south side of Trinity Drive by pushing the new sidewalk adjacent to the structure



Description of Alternatives

Roundabouts – Eliminated

Benefits

- Improve safety
- Promote lower speeds and traffic calming
- Reduce conflict points

Cons

- Expensive
- The intersecting roadways (Oppenheimer Drive, 20th St. 15th St.) are typically 3 – 4 feet lower in elevation as you approach from the south
- This elevation difference does not allow the driver to have the required sight distance to navigate the roundabout



Description of Alternatives

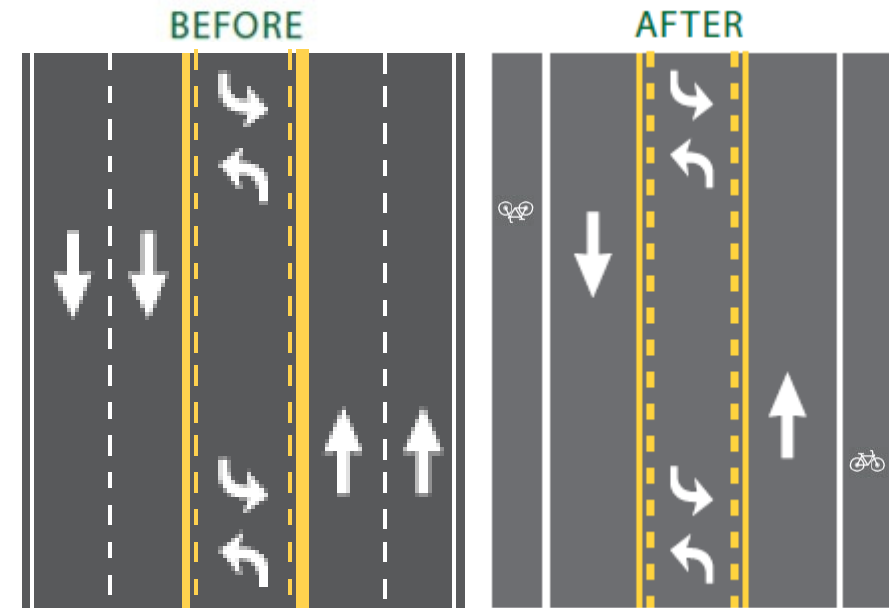
Road Diet

Benefits

- Reduction of rear-end and left-turn crashes
- Reduces right-angle crashes as side street vehicles cross three versus five travel lanes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands, bicycle lanes, or transit stops
- Traffic calming and more consistent speeds

Cons

- Loss of passing opportunities
- Reduce the existing five-lane cross section to a three-lane section
- Increase travel delay



Includes: one 12-ft lane in each direction with a 14-ft two-way left-turn lane (TWLTL), 5-ft bike lanes, 5-ft sidewalk, and standard curb and gutter

Description of Alternatives

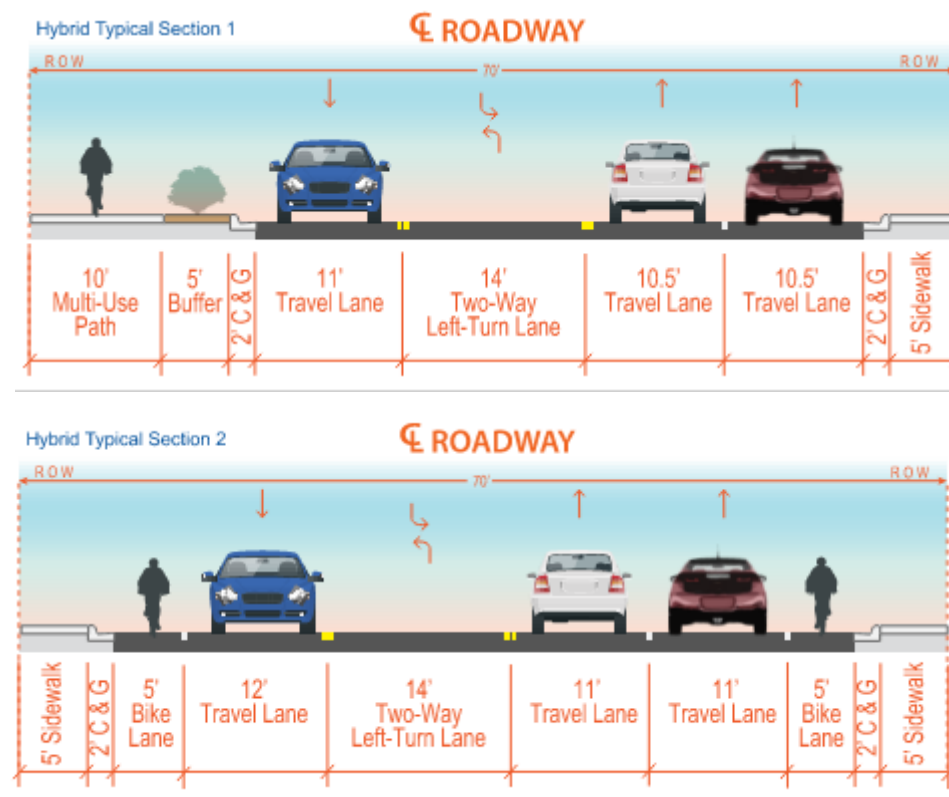
Hybrid

Benefits

- Reduction of rear-end and left-turn crashes
- Reduces right-angle crashes as side street vehicles cross four versus five travel lanes
- Fewer lanes for pedestrians to cross
- Opportunity to install pedestrian refuge islands, bicycle lanes, or transit stops
- Traffic calming and more consistent speeds

Cons

- Loss of passing opportunities
- Reduce the existing five-lane cross section to a four-lane section
- Increase travel delay



Includes: one lane in the westbound direction, and one lane in the eastbound direction with a 14-ft two-way left-turn lane (TWLTL), bike lanes or multiuse path, 5-ft sidewalk, and standard curb and gutter

Alternatives Matrix

Evaluation Criteria	No-Build Alternative	Road Diet Alternative	Hybrid Alternative
Traffic Operations	(++)	(o)	(+)
Multimodal	(-)	(++)	(++)
Safety	(o)	(++)	(++)
LAC Master Plan	(-)	(++)	(++)
ROW	(++)	(++)	(++)
Cost	(o)	(-)	(-)

Positive, Good	(++)	
Above Average	(+)	
Average	(o)	
Below Average	(-)	
Negative, Poor	(--)	

Public Input

Comments / Contacts:

Please submit all comments by **June 20, 2024** to:

Public Works Department

1000 Central Avenue, Suite 160

Los Alamos, NM 87544

or

Phone: (505) 662-8150; Fax: (505) 662-8109

Email comments to: lacpw@lacnm.us

Questions?



Thank you!

The Public Works and Public Utility Department staff thanks you for taking time out of your busy schedule to participate in this important public project!