
CITY OF ALBUQUERQUE
4TH ST COMPLETE STREETS
REVIEW: MENAUL BLVD TO
CANDELARIA RD

August 2025

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CONTENTS

Overview	3
Roadway Context and Characteristics	4
Current Plans and Policy	6
Existing Dimensions and Previous Recommendations	9
Design Considerations for Bikeways Along 4 th St	12
Alternative Street Configurations: Would Bikeways Fit?	13
Bikeway Benefits: Would Bikeways be Useful?	16
General Priorities and Findings of 4 th St Complete Streets Review	18

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Overview

Background and Purpose

The City of Albuquerque recently evaluated and developed design concepts for a road diet along 4th St between Menaul Blvd and Candelaria Rd that includes the removal of one travel lane in each direction and the implementation of on-street parking along both sides of the street. The decision to include on-street parking was based on input from community members and business owners during the design process and the needs of the Calle Cuarta infill development project, which provides much needed housing and relies on off-street and on-street parking to collectively meet City requirements.

This memorandum provides a review of the 4th St corridor from a Complete Streets perspective, as prescribed in the City's Complete Streets Ordinance, and responds to a request from the Greater Albuquerque Active Transportation Committee (GAATC) to consider bikeways as part of the cross section. The memorandum concludes with discussion on potential street design enhancements.

Specific questions and considerations for this memorandum include:

- What types of Complete Streets design treatments are recommended along 4th St in City planning and policy documents?
- What are the recommended bikeway facility types, given the conditions along 4th St, and would they fit within existing curblines?
- Would the introduction of bikeways along the 4th St study area provide benefits in terms of connectivity?

Definition of Complete Streets

Smart Growth America defines Complete Streets as follows:

Complete Streets is an approach to planning, designing, building, operating, and maintaining streets that enables safe access for all people who need to use them, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

Complete Streets design principles are a means of addressing traffic safety and creating human-scale streets; however Complete Streets do not always mean the same design outcome in all contexts. Given competing roadway uses and constraints on roadway space on corridors such as 4th St, it is important to think of individual streets as complementary parts of a complete network in which the needs of all users are met to the greatest extent possible, with some corridors better able accommodate some modes than others.

City of Albuquerque Complete Streets Ordinance

The Complete Streets Ordinance, originally passed in 2015 and updated in 2019, requires that the City of Albuquerque consider Complete Streets principles as part of all new road construction and road rehabilitation efforts. The Ordinance broadly asserts the need to create a balanced transportation system, promote alternative modes of transportation, and support surrounding land uses.

Per the Ordinance, on-street bicycle facilities shall be designed and implemented as identified in the *Bikeway and Trail Facilities Plan*, while on-street parking is identified as a traffic calming technique. With respect to roadway projects on arterial corridors, the Ordinance states:

(The City) shall prioritize the comfort of multimodal users by using traffic calming techniques, such as narrowing traffic lanes, and by providing buffers between vehicle traffic and pedestrian and bicycle facilities where possible. This may include striped buffers, adding parallel parking where it does not currently exist or installing parallel stripes delineating existing parking lanes.

Assumptions

- The proposed road diet and street reconfiguration would only impact the paved area between the curb lines at this time.
- The City of Albuquerque has committed to providing on-street parking on at least one side of the street to support residential infill development along the corridor. On-street parking on both sides of the street has been previously presented to the public as the preferred design.

Roadway Context and Characteristics

Roadway Characteristics: 4th St from Menaul Blvd to Candelaria Rd is a minor arterial with two general purpose travel lanes in each direction. The majority of the corridor features a two-way left turn lane (TWLTL), which becomes a dedicated turn lane at intersections, though there are short stretches of corridor with no TWLTL. 4th St to the north of Menaul Blvd carries an average of 17,700 vehicles per weekday, based on 2023 data from the Mid-Region Council of Governments, and a posted speed of 35 MPH.

Land Use: Land uses along the study area are a mix of auto-oriented businesses, including various auto parts stores and fast food restaurants with parking lots fronting 4th St, while other portions of the corridor feature a distinct Main Street character with buildings that have zero setbacks. A growing number of residential complexes – each built with parking to the side or rear – further contribute to the mixed-use character of the area. In addition to the recent multi-family infill housing projects, the corridor features institutions such as the North Valley Center for Family and Community Health and the St. Therese Catholic Parish. A multigenerational center is planned along 4th St to north of Mildred Ave and south of the Calle Cuarta project.



Pedestrian Environment: Despite the mix of land uses and the characteristics of a Main Street Corridor, sidewalk conditions present a major barrier to walking. Frequent driveways with ramps across the sidewalk present uneven surfaces, most curb ramps lack detectable warning surfaces, and there are numerous obstructions from signs and utility poles that further affect compliance with standards from the Americans with Disabilities Act (ADA). In some cases, the functional sidewalk width is 24" or less, and obstructions can force people walking or rolling to enter the roadway to continue traveling along the corridor. In general, there is little landscaping or shade. Exceptions include areas of recent redevelopment and where buildings are not set back from the street, which can create shade for pedestrians during parts of the day.

There is a distance of 0.4 miles between pedestrian crossings at Menaul Blvd and the Alameda Drain Trail, and a distance of more than 0.6 miles between signalized crossings at Menaul Blvd and Candelaria Rd. These distances greatly exceed the recommended spacing for pedestrian crossings along Multi-modal and Main Street Corridors from the City of Albuquerque *Development Process Manual*, which recommends no

more than 0.25-miles between signalized crossings along Multi-modal Corridors and 0.125 miles along Main Street Corridors.



Transit: ABQ RIDE operates fixed route transit service (Route 10) along corridor, with buses operating every 40 minutes on weekdays and every 35-40 minutes on Saturdays and Sundays. Most stops are simple with a sign pole and in some cases a bench; a small number of stops feature a transit shelter.

Bikeways: There are no bikeways along the corridor; however, the Alameda Drain Trail, which provides long-distance connections across the North Valley, runs parallel to 4th St two blocks (about 1/6th of a mile) to the east and crosses 4th St near Matthew Rd. Though not formal bikeways, perpendicular neighborhood roads feature access points to the Alameda Drain Trail and provide connections to the 4th St corridor.



Current Plans and Policy

Albuquerque-Bernalillo County Comprehensive Plan

The *Comprehensive Plan*, adopted in 2017, is a vision and policy document that guides growth and investment decisions for the City of Albuquerque. The Plan is organized around a series of designated Centers and Corridors. 4th St to the north of Downtown is designated as a Multimodal Corridor, and the segment from Matthew Ave to north of Candelaria Rd is designated as a Main Street Corridor. Given the similar conditions and the level of redevelopment to the south of Matthew Rd, it is appropriate to apply the policy guidance for Main Street Corridors to the extent of the 4th St study area.

General **policy guidance for Main Street Corridors** is to:

- *Promote Main Streets that are lively, highly walkable streets lined with neighborhood oriented businesses. (Policy 5.1.9)*

Transportation-related guidance for Main Street Corridors is to:

- *Prioritize street and walkway improvements, such as street trees, landscaping, lighting, wayfinding, and wide sidewalks, to create safe and comfortable pedestrian environments.*

The *Comprehensive Plan* also identifies **desired street elements by corridor type** (see Table 7-5: Priority Street Element Matrix). **High priority streets elements** for Main Street Corridors include intersection designs that reduce crossing distances and features that enhance the pedestrian realm, including wide sidewalks, transit stop amenities, landscaping, and on-street parking. **Bikeways are considered a medium priority** for Main Street Corridors.

North Corridor Metropolitan Redevelopment Area Plan

The designation of metropolitan redevelopment areas allows the City of Albuquerque to utilize a variety of tools to revitalize a particular community based on priorities identified through a formal planning process. The *North Corridor Metropolitan Redevelopment Area Plan*, completed in 2020, identifies strategies to spur investment and redevelopment along the 4th St corridor and the surrounding area from south of Mountain Rd to north of Montañó Rd, including the study area for the 4th St Complete Streets Review. Relevant strategies from the *North Corridor Metropolitan Redevelopment Area Plan* include:

- Sidewalk improvements
- Traffic calming measures, including bulb outs, raised medians, and pedestrian refuges
- Implementation of the *Alameda Drain and Trail Master Plan*
- Beautification of the public realm
- Redevelopment of the City owned-Brown property located at 3525 4th St NW (now the Calle Cuarta project)

ABQ RIDE Forward Network Plan

The ABQ RIDE Forward Network Plan, completed in 2025, considers changes to the City of Albuquerque bus transit network to better meet the needs of community members and existing transit users as the system returns to pre-pandemic service levels. The proposed Recovery Network features a streamlined bus network with greater service on evenings and weekends. Proposed service along 4th through the study area between Downtown and the Montañó Rail Runner Station would operate every 30 minutes all day every day. Existing service operates every 35-40 minutes on weekdays and weekend.

City of Albuquerque Bikeway and Trail Facilities Plan

Plan Principles and Priorities

The update to the *Bikeway and Trail Facilities Plan*, adopted in 2024, recommends and prioritizes a series of bikeway and paved multi-use trail projects to create a well-connected and low-stress bike network that appeals to Albuquerque residents and visitors of all ages, abilities, and backgrounds, including people who do not bike on City streets today. The plan applies best practices in bikeway facility selection, with a major emphasis on **technical feasibility** and creating **high-comfort bikeways** that provide as much separation as possible between bicycles and motor vehicles to make biking a safer and more appealing option for a wide range of individuals. The plan does not include recommendations for new bikeways if the width requirements for the desired facility type cannot be met. The plan also asserts that the City should consider parallel route options if a low-stress bikeway cannot be implemented. Table 1 lists key goals from the *Bikeway and Trail Facilities Plan* related to the selection of bikeway facility types and network development decisions.

Table 1: Relevant Goals and Objectives from the Bikeway and Trail Facilities Plan

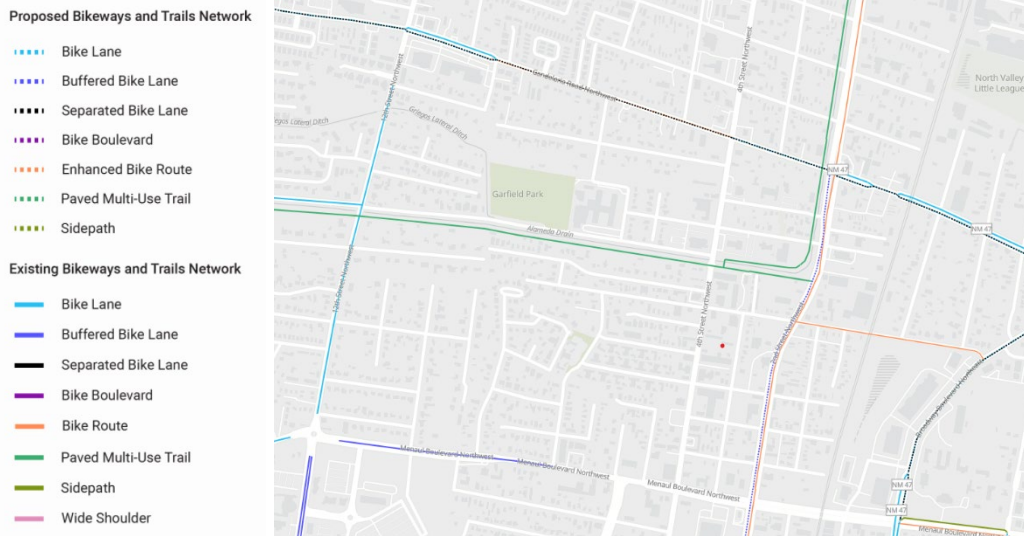
<i>Bikeway and Trail Facilities Plan Goal</i>	<i>Key Objectives</i>
Connected: Improve and expand the on-street bikeway and multi-use trail networks so they are intuitive, convenient, and well-connected.	Create a network of low stress corridors that connect to enable a wider range of trips to be taken by bicycle.
Useful: Create networks of on-street bikeways and multi-use trails that can be used for both recreational and everyday transportation purposes.	- Improve the quality of existing bikeways and trails to increase user comfort levels and encourage bicycle trips to be made by residents and visitors of all ages and abilities. - Provide access to a range of everyday locations, recreational sites, and significant community destinations via the on-street bikeway and multi-use trail networks.
Implementable: Identify feasible improvements that can improve upon and expand the current bikeway and trail networks.	- Improve bikeway comfort levels by providing separation from motor vehicles as part of street reconfiguration efforts and the design of new streets. - Consider technical feasibility as part of proposed improvements, including parallel route options if space is not available to enhance existing bikeways.

Relevant Recommendations

The *Bikeway and Trail Facilities Plan* does not propose bikeways along 4th St. However, the plan contains various recommendations to improve the bikeway network in or near the 4th St study area, as depicted in Figure 1. These recommendations include:

- Separated bike lanes along Candelaria Rd from Guadalupe Trail to I-25
- Buffered bike lanes along 2nd St to the south of Candelaria Rd
- Enhanced crossing of 4th St along the Alameda Drain Trail

Figure 1: Proposed Bikeways Near 4th St Study Area, City of Albuquerque Bikeway and Trail Facilities Plan



Policy Takeaways

- Given development patterns and the built environment, it is appropriate to apply policy guidance for Main Street Corridors to the extent of the study area.
- High priority street elements for Main Street Corridors in the *Comprehensive Plan* are related to walkability, access to transit, and provision of on-street parking. Priorities from the *North Corridor Metropolitan Redevelopment Area Plan* for 4th St are related to sidewalk improvements and traffic calming.
- On-street parking supports policy guidance related to the land use and character of the 4th St corridor and supports redevelopment objectives along the corridor by minimizing the need for off-street parking. On-street parking along 4th St is also a means of providing a Complete Street by enhancing pedestrian conditions and improving business access.
- The City-wide *Bikeway and Trail Facilities Plan* does not propose bikeways along 4th St through the study area, and bikeways are not identified as a priority for 4th St in area-specific plans.
- Proposed increases in transit service frequency along the corridor can be supported by pedestrian connections to and from transit stops.
- Existing pedestrian and transit stop conditions along the corridor are substandard and do not support City policy guidance, which call for high quality conditions for people to walk and for pedestrian enhancements to be prioritized.
- Implementation of a road diet provides an important opportunity for pedestrian improvements, transit stop enhancements, and traffic calming measures. Landscaping improvements are also recommended, though roadway reconstruction would be required.

Existing Dimensions and Previous Recommendations

Based on the assumption that on-street parking will be provided along at least one side of the street and that existing curb lines are not to be moved in the short-term, this analysis considers whether recommended bikeway facility types could fit within the available roadway space. The sections below outline the existing roadway dimensions along the corridor, as well as the previous design recommendations.

Existing Dimensions

Conditions vary along the corridor, through the total width between the curb lines is generally 52' or 57', including 18" gutter pans on each side of the road, meaning there is about 49' or 54' of roadway space for travel lanes and other street elements. The majority of the corridor features a TWLTL, while short segments feature dedicated on-street parking along one side of the street in place of a TWLTL. Portions of the corridor to the north of Mildred Ave feature a striped median buffer that is narrower than a typical TWLTL. Figure 2 and Figure 3 depict conditions between the curb lines along the corridor based on typical segment widths.

Figure 2: Existing Conditions – Typical Section: 54' of Paved Roadway Space

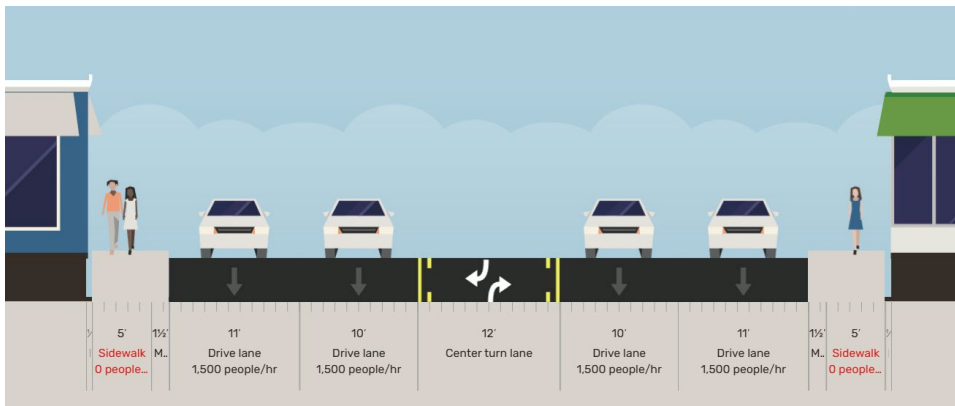
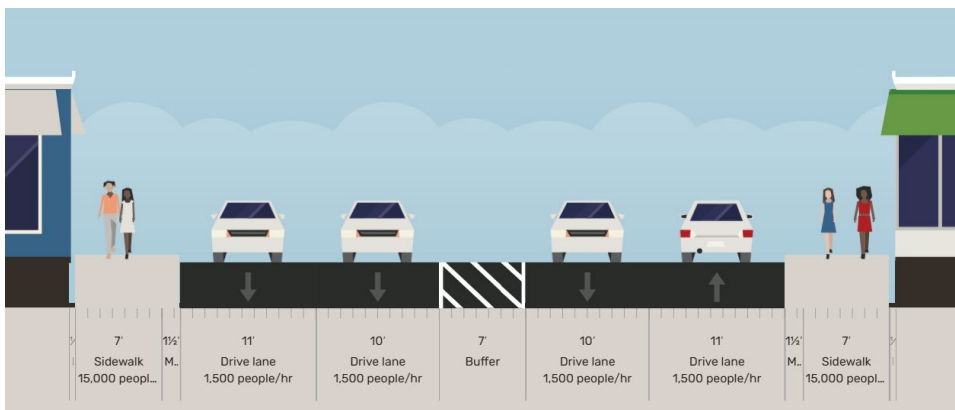


Figure 3: Existing Conditions – Constrained Section: 49' of Paved Roadway Space



Current Dimensions and City of Albuquerque Street Element Standards

Outside (curbside) driving lane

- Current width: 11'
- Analysis: Consistent with the City of Albuquerque *Development Process Manual* standards and the width preferred by ABQ RIDE for travel lanes where buses are in operation as travel lanes narrower than 11' can result in buses encroaching into adjacent bikeways or parking lanes.

Inside general-purpose lane

- Current width: 10'
- Analysis: Consistent with the *Development Process Manual*; matches minimum lane width requirements.

Two-way left turn lane

- Current width: 12' TWLTL
- Analysis: Appropriate given the traffic volume and posted speed. A 10' TWLTL may be appropriate under lower speed conditions. However, left turn lanes at intersections must be 12-14' to accommodate a raised buffer.

Available Roadway Space

Available roadway space for additional street elements can be deduced by assessing the street elements expected to be included in any alternative: one general purpose lane in each direction (11' to accommodate buses), a TWLTL (12'), and at least one lane of on-street parking (7' of paved roadway space).

For an alternative with on-street parking on one side of the street only: There is 13' of available roadway space along typical sections of the corridor but only 8' along constrained sections of the corridor and.

For an alternative with on-street parking on both sides of the street: There is 7' of available roadway space along typical sections of the corridor and 2' along constrained portions of the corridor.

Notes on street element widths:

- The **gutter pan** may not be considered part of the bikeway width, per the City of Albuquerque *Development Process Manual*, but may be included in the width of an on-street parking space.
- A **parking lane** along a road with posted speeds of 30 MPH or above must be at least 8'. The width may include the gutter pan, meaning on-street parking requires 7' of paved roadway width.

Previous Design Recommendations

Through consultant services, the City of Albuquerque developed a conceptual striping plan for portions of the 4th St study area. The proposed cross section and striping concept plan (see Figure 4 and Figure 5) were developed with participation from the Near North Valley Neighborhood Association and other area stakeholders, and include the following elements:

- Two 12' general purpose travel lanes – one in each direction
- 14' TWLTL
- On-street parking on both sides of the street

It is important to note that the proposed cross section features travel lanes that are wider than recommended, which could lead to higher motor vehicle speeds. Narrower travel lanes and the use of striped buffers and other traffic calming measures would help manage speeds along the corridor.

Figure 4: Proposed Cross Section for 4th St, City of Albuquerque, 2023

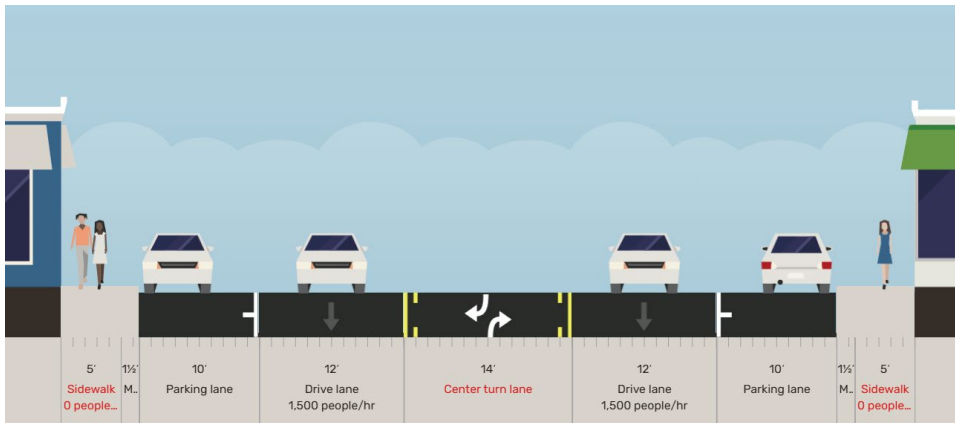
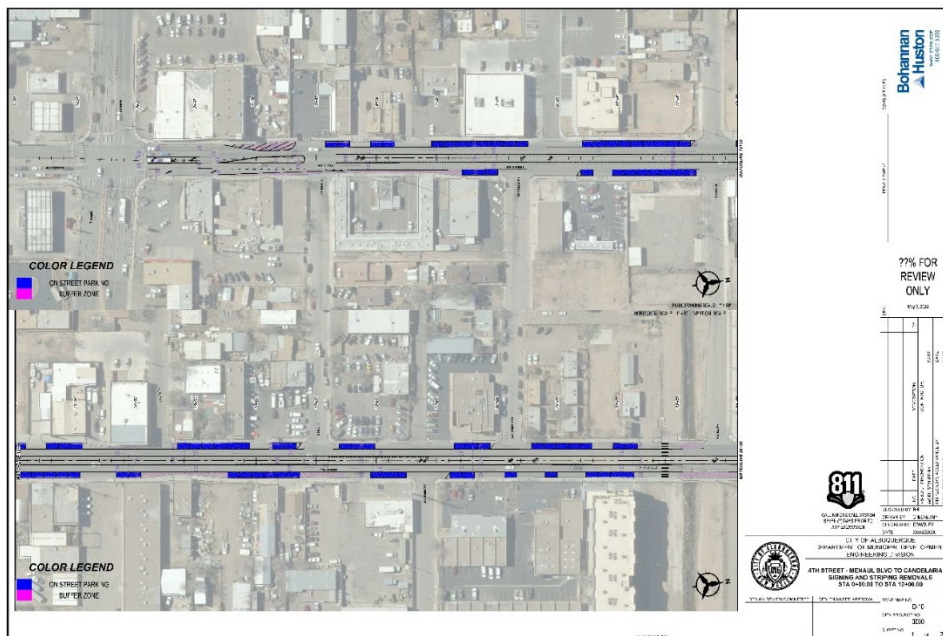


Figure 5: Striping Concept Plan for 4th St Study Area



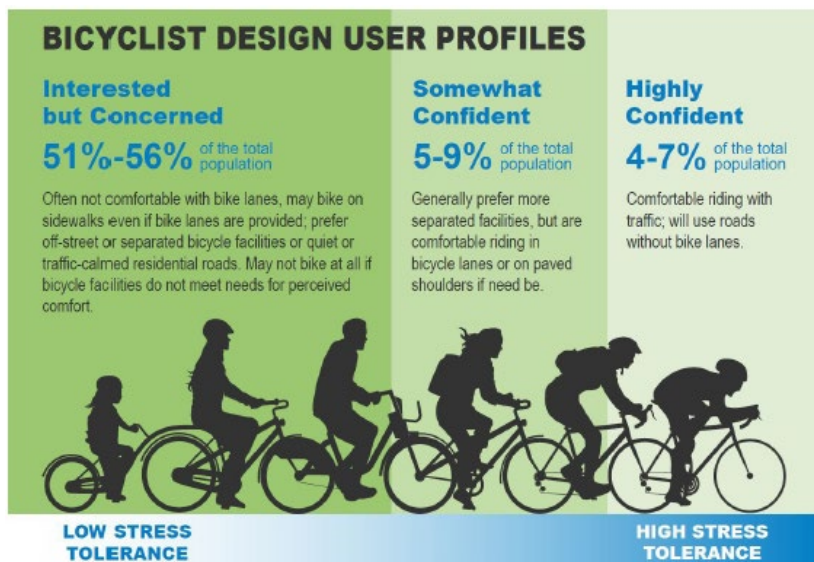
Design Considerations for Bikeways Along 4th St

Bikeway Design Principles

Safety and User Comfort: The *Bikeway and Trail Facilities Plan* recommends that “infrastructure improvements create a robust **low-stress network** that is appealing to people of all ages and abilities.” Designing for the group often referred to in national research as “interested but concerned” bicyclists (see Figure 6), which includes the vast majority of adults and children, requires prioritizing safety and user comfort to meet the needs of the vast majority of bicyclists. Failing to create low stress conditions has two drawbacks:

- Bikeways are unlikely to be highly utilized.
- Bicyclists and people traveling on scooters will use the street in unintended ways, including biking where cities do not intend them to (e.g., the sidewalk) because they do not feel comfortable in a bikeway that does not offer sufficient protection.

Figure 6: Bicyclist User Types



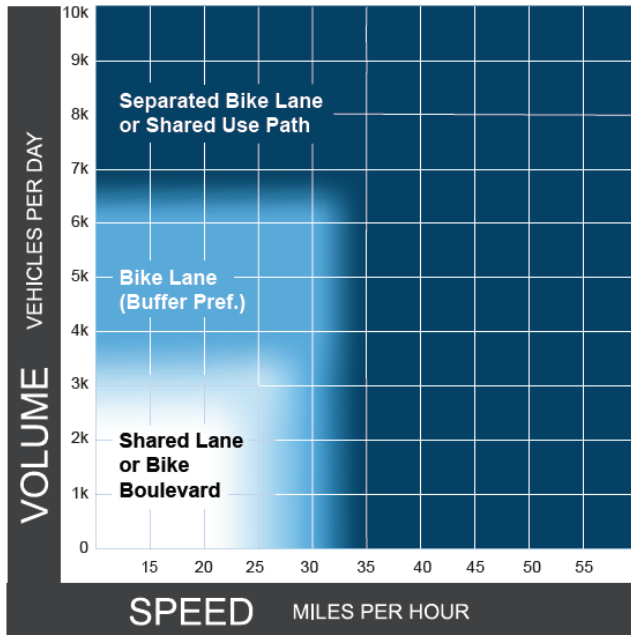
Source: FHWA Bikeway Selection Guide

As part of its emphasis on comfort and safety, the AASHTO *Guide for the Design of Bikeway Facilities* encourages designers to take the following approach:

Identify roads with high vehicle volumes and speeds. Plan low-stress bikeways on these roads or on nearby alternate routes. Plan safe and comfortable crossings where bikeways intersect with these roadways. (Table 3-3, Page 3-14)

Facility Type Selection: Figure 7 depicts the appropriate bikeway facility types for “interested but concerned” users along urban streets, based on the daily traffic volume and vehicle speeds, per the FHWA *Bikeway Selection Guide*. As speeds and volumes increase, the level of separation that is required to create a low-stress facility also increases.

Figure 7: Bikeway Facility Selection Guidance for Urban Streets, FHWA



Source: FHWA Bikeway Selection Guide

Preferred Facility Types for 4th St Study Area

Given the traffic volumes and speed and along 4th St – 17,700 vehicles per day and a posted speed limit of 35 MPH – the *Bikeway and Trail Facilities Plan* and the *FHWA Bikeway Selection Guide* indicate that **separated bike lanes, a sidepath, or a multi-use trail** would be required to create low stress conditions. Other options, such as a two-way cycle track, may be considered, depending on the location and context.

Standard or buffered bike lanes would not be considered an all ages and abilities facility, given the speed and traffic volumes along the corridor. User comfort would be further reduced if on-street parking were located immediately adjacent to the bike lane.

Alternative Street Configurations: Would Bikeways Fit?

Preferred Facility Types

Separated Bike Lanes

Definition: Separated bike lanes provide a physical barrier between motorists and bicyclists, which offers a high level of user comfort, including along streets with higher vehicle speeds and traffic volumes. Separated bike lanes require additional width compared to standard bike lanes; the City of Albuquerque *Development Process Manual* recommends a total width of 9.5' for a one-way separated bike lane, including a 6' bike lane and 3.5' buffer area.

Appropriateness: 4th St through the study area is too narrow to include at least one lane of on-street parking and separated bike lanes in both directions, even if travel lanes were narrowed to their absolute minimums. Separated bike lanes are also not well suited for streets with high numbers of curb cuts and driveways – such as 4th St – that limit the ability to provide a continuous bikeway.

Findings: **At present, separated bike lanes are not a feasible option for 4th St** without roadway reconstruction that moves curb lines and likely includes right-of-way acquisition and structural condemnation and demolition at existing pinch points.

Sidepath

Definition: Sidepaths are paved two-way, off-street facilities that are shared among people biking, walking, and rolling. Sidepaths are located within the public street right-of-way on the outside of the curb. Because sidepaths are located at curb level, they provide vertical separation between people biking and motor vehicle traffic.

Appropriateness: Similar to separated bike lanes, sidepaths are not well suited for streets with high numbers of curb cuts and driveways that lead to frequent conflicts with turning vehicles. The implementation of a sidepath would also require substantial improvements in bike network connections on either end of the corridor and additional crossings, as well as access management efforts to consolidate site access to reduce the number of conflict points along the corridor.

Findings: **At present, a sidepath is not a feasible option for 4th St** without roadway reconstruction that moves curb lines – and which is not under consideration at this time.

Alternative Facility Types

Two-way Cycle Track

Definition: Two-way cycle tracks are fully separated bikeway facilities that support people biking in opposite directions. Cycle tracks can be located at sidewalk-level or at the same level as vehicle travel lanes if there is a form of physical separation. The NACTO *Urban Bikeway Design Guide* indicates a minimum 12' total width is required for a two-way cycle track, of which a minimum 3' is required for a buffer. The AASHTO *Guide for the Design of Bicycle Facilities* indicates that cycle tracks could be a minimum of 11' total width under constrained conditions, including 4' bike lanes in each direction plus a 3' buffer, though additional width is preferred.

Appropriateness: The City of Albuquerque *Bikeway and Trail Facilities Plan* indicates that two-way cycle tracks may be considered on a case-by-case basis and are most appropriate for “short connections between segments of on-street bikeways or sidepaths and streets where there is not enough room for separated bike lanes on both sides of the street” (62). Two-way cycle tracks are generally discouraged in the *Development Process Manual* (see 7-4(F)(3)(iii)).

Cycle tracks are best suited for corridors with few curb cuts and consolidated business access to limit the gaps in the facility and reduce turning movement conflicts. Other limitations include the fact that two-way cycle tracks only provide access to businesses on one side of the street.

Two-way cycle tracks can present significant intersection design challenges and require improvements to the intersections on each end of the corridor to create safe opportunities to exit and enter the facility. Without such improvements and connections, cycle tracks can create significant safety risks.

Findings: **A two-way cycle track is not recommended for this corridor** due to the lack of connections on either side of the 4th St study area and the presence of frequent curb cuts and driveways.

Higher Stress Bikeway Options

It is important to note that standard bike lanes *can* fit along the corridor under multiple design configurations; however, such designs result in a high level of traffic stress and would not be considered all ages and abilities bikeways.

Alternative 1: On-street Parking on One Side Only

For typical sections, standard bike lanes could generally fit under a scenario with on-street parking on one side of the street (see Figure 8). However, such facilities would be high stress and would be *appealing to confident bicyclists only*.

As shown in the figures below, for the constrained portions of the corridor, bike lanes would also be narrower than the *minimum* width if the standard widths for other street elements are applied (see Figure 9).

To maintain minimum bikeway widths along constrained portions of the corridor would require that the general-purpose lanes and the TWLTL be narrower than City standards.

Design Considerations

- Standards for bike lane width (AASHTO *Guide for the Design of Bicycle Facilities*):
 - 6' is the preferred minimum width for bike lanes adjacent to parking lanes.
 - 5' is the minimum acceptable width in constrained conditions.
- Per the City of Albuquerque *Development Process Manual*, bike lanes and buffers wider than the minimum widths are desired where posted speeds are 35 MPH or higher.
- The City of Albuquerque *Development Process Manual* requires a combined 13' for a bike lane adjacent to parallel parking. Such width can be met in the typical section of the corridor only.
- Part of the southbound bike lane would be in the door zone (approximately 3.5' wide) for the on-street parking lane.
- There are inherent conflicts where bike lanes are immediately adjacent to travel lanes where buses operate, including buses pulling into the bike lanes when stopping to pick up and drop off passengers.

Figure 8: Potential Cross Section for Bike Lane Alternative 1, Typical Section

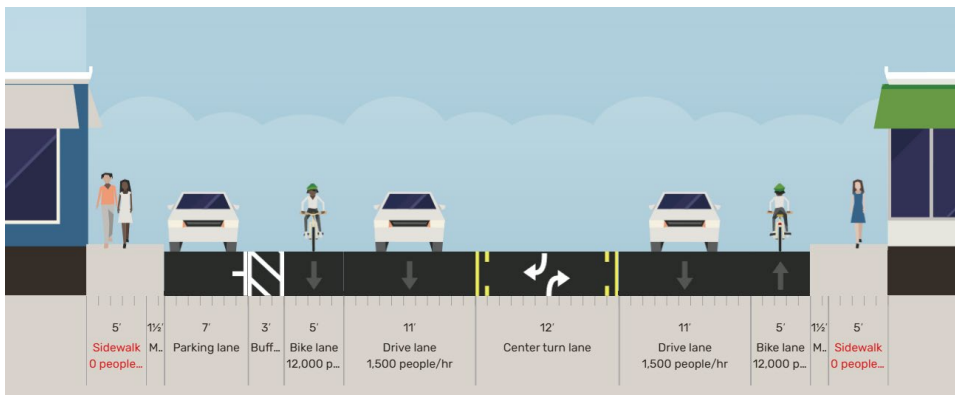
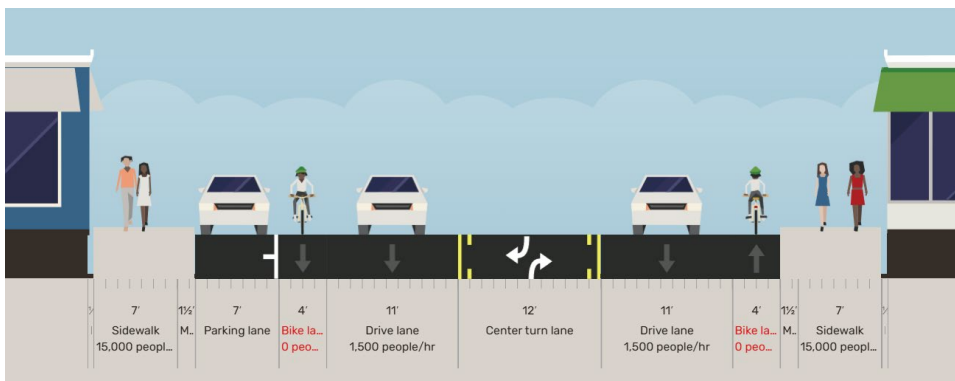


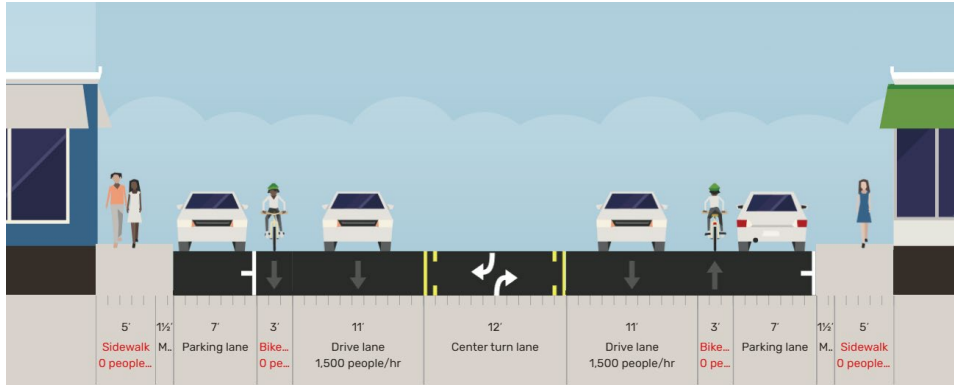
Figure 9: Potential Cross Section for Bike Lane Alternative 1, Constrained Section



Alternative 2: On-street Parking on Both Sides of the Street, Typical Section Only

If on-street parking were provided on both sides of the street, *standard bike lanes would not fit* using recommended widths for other street elements (see Figure 10). Narrow bike lanes can fit in typical sections along the corridor only if *all* roadway features are below desired widths – a design that would not meet the required City of Albuquerque threshold for combined width of a bike lane and on-street parking.

Figure 10: Available Space for Bike Lanes Under Alternative 2, Typical Section



Discussion and Key Takeaways

- **High comfort on-street bikeways** (i.e., separated bike lanes) that meet best practices and needs of bicyclists of all ages and abilities would *not fit* along 4th St under a street configuration that includes on-street parking in at least one direction.
- **Two-way separated facilities** (i.e., sidepaths) are *not feasible* at present without roadway reconstruction and access management that consolidates the number of curb cuts and driveways along the corridor. Two-way cycle tracks are not appropriate given site access levels along the corridor and would create serious safety concerns for bicyclists entering and exiting a facility.
- **Standard bike lanes** would *meet minimum width requirements with on-street parking on one side only*, but not with parking on both sides of the street. Standard bike lanes would not comply with the principles established in the *Bikeway and Trail Facilities Plan* and would result in *high stress facilities* that appeal to confident bicyclists only. For constrained portions of the corridor, standard bike lanes would fall below the recommended facility widths.
- **Bikeways along 4th St would present general design challenges** due to the lack of connections to other facilities. Bikeways are not present or proposed along other portions of the 4th St corridor, and intersection improvements would be needed to better protect bicyclists entering and exiting any proposed facility.

Bikeway Benefits: Would Bikeways be Useful?

Route Selection Principles

Complementary to the question of whether bikeways would fit is whether bikeways would be useful. This review puts forward three principles for assessing whether bikeways should be included along a corridor.

1. **Established Need: Are bikeways proposed in the *Bikeway and Trail Facilities Plan* or an area-specific plan?** The *Bikeway and Trail Facilities Plan* is a comprehensive reference document for bikeway planning decisions and contains a City-wide network and list of recommendations that should be referred during project development. The Complete Streets Ordinance states that bikeways shall be implemented as identified in the *Bikeway and Trail Facilities Plan*.

2. **Network Connectivity: Is there a gap between two other facilities that needs to be filled?** This consideration accounts for locations that may have been omitted from the *Bikeway and Trail Facilities Plan* and for changing conditions along the bikeway network. A route that would connect between two existing or proposed facilities would meet the definition of a network gap. Filling in network gaps is consistent with the concept of *legibility* from the *AASHTO Guide for the Design of Bicycle Facilities* in which continuous bikeways are recommended to support network connectivity (3.2.4).
3. **Policy Guidance: Are there other viable uses that provide Complete Streets benefits along the corridor?** Corridors in established parts of the City of Albuquerque often feature constrained right-of-way that requires some level of trade-off among potential roadway uses. Per the Complete Streets Ordinance, bikeways should be considered alongside other potential street elements, including wider sidewalks, enhanced crossings and curb extensions, and traffic calming measures, including on-street parking.

Discussion and Key Takeaways

- Bikeways are not proposed in City planning documents through the study area or along other portions of 4th St, and high stress bikeways along 4th St would not fill a critical gap in the greater Albuquerque bicycle network as the Alameda Drain Trail provides a parallel low-stress option for traveling through the study area.
- New bikeways would provide access from the Alameda Drain Trail crossing at Matthew Rd to businesses along 4th St. However, business access can also be provided through neighborhood connections from the trail and enhanced crossings of 4th St. Additional crossings would also improve access to transit and connections to the neighborhoods located west of 4th St.
- Bikeways are not proposed on other portions of 4th St, and a lack of connectivity between potential bike lanes along 4th St through the study area with other existing or planned bikeways would create serious safety concerns and significantly limit the usefulness of the bikeways
- Other viable Complete Streets elements could be implemented along 4th St and are more highly prioritized along 4th St than bikeways, per City policy documents. As a Main Street corridor, the priority street elements for 4th St include pedestrian enhancements and on-street parking.
- From a pedestrian standpoint, bike lanes act as buffers from traffic for people walking and using the sidewalk. However, the presence of bike lanes may limit the City's ability to provide the pedestrian enhancements identified in City policy guidance, including curb extensions.

General Priorities and Findings of 4th St Complete Streets Review

Prioritize the pedestrian realm: The combination of severe pedestrian facility shortcomings and policy guidance suggests the City of Albuquerque should prioritize enhancing pedestrian conditions along 4th St, including the provision of on-street parking, to further create Main Street-type conditions. General priorities should include curb extensions that reduce crossing distances, median refuge islands, and creating wider and pedestrian ways to enable people walking to bypass obstructions. Other desired improvements include transit stop amenities and landscaping to provide shade.

On-street parking is a viable use along 4th St and supports Complete Streets objectives: On-street parking supports the infill development that is prioritized along 4th St and enhances pedestrian conditions by providing a traffic calming effect and creating a buffer from motor vehicle traffic. On-street parking is also a flexible use; instead of providing a continuous lane, on-street parking areas can be interspersed with buffers, street amenities, and curb extensions at intersections and pedestrian crossings.

Apply pedestrian enhancements through quick build opportunities: Converting the outside travel lane in each direction to on-street parking would allow for the application of quick build treatments that enhance pedestrian conditions. Quick build refers to a range of street design interventions that create safety conditions and that can be applied using semi-permanent materials without requiring roadway reconstruction. Potential treatments that may be considered along 4th St are depicted in Figure 11 and include:

- **Curb extensions and median refuges** at intersections and crossings to reduce the crossing distance of the street and require motor vehicles to reduce their speed during turning movements.
- **Pedestrian ways** along the street that are separated from traffic using flex posts, parking stops, or other vertical elements. Priority locations include portions of the corridor with obstructed sidewalks.
- **Floating bus stops** comprised of a raised platform that create additional space for pedestrians and transit users and allow buses to stop in line with the travel lane.

Create new pedestrian crossings and enhance existing facilities: Additional crossings and enhancements to existing crossings that promote pedestrian safety would promote general walkability, improve access to transit, and better connect the Alameda Drain Trail to businesses and communities on the west side of 4th St. Recommended improvements include:

- Enhance the crossing of the Alameda Drain Trail to the south of Matthew Rd, as recommended in the *Bikeway and Trail Facilities Plan*. The crossing type (i.e., a rectangular rapid flashing beacon or a pedestrian hybrid beacon) depends on the selected cross section.
- Enhance the Mildred Ave crossing with curb extensions and a median refuge island.
- Create a new crossing between Menaul Blvd and Matthew Rd to reduce the spacing between crossings, as recommended in the *Development Process Manual*.

Figure 11: Pedestrian Enhancement Opportunities Along 4th St



Pursue a road diet and separated bike lanes along Candelaria Rd: The *Bikeway and Trail Facilities Plan* identifies separated bike lanes along Candelaria Rd from San Isidro St to I-25 as a “very high” priority. The implementation of bikeways along Candelaria Rd would improve access to the 4th St corridor and enhance general safety in the study area. Bikeways could be implemented through a road diet. The corridor carries 12,000-16,000 vehicles per day across two lanes in each direction between 12th St and Broadway Blvd.

Consider a road diet along 4th St from Candelaria Rd to Griegos Rd: The proposed road diet along 4th St from Menaul Blvd to Candelaria Rd could be continued to the north of the study area to Griegos Rd. Such a reconfiguration would support further infill development and would create a continuous cross section along 1-mile plus stretch of 4th St, thereby providing clearer expectations for roadway users.

Daily traffic volumes along 4th St north of Candelaria Rd are relatively high for a road diet – the segment carries 19,000, at which level City of Albuquerque guidance call for a study of traffic operations and intersection delay. However, much of the segment does not feature a TWLTL. A four-lane to three-lane conversion with one travel lane in each direction and a TWLTL could improve operations and would provide significant safety benefits by reducing the risk of rear-end collisions associated with motorists making left turns.

Consideration of a road diet along other portions of the 4th St likely requires further study. In particular, 4th St carries higher traffic volumes approaching the intersection with Montañó Rd, which is an important east-west river crossing. Concerns about congestion resulting from a road diet may be offset by the fact that 2nd St is under capacity, per MRCOG traffic counts, and could absorb additional trips if they were redistributed to a parallel route.

Other recommendations:

- **Remove the bollards along the Alameda Drain Trail** on west side of 4th St to reduce crash risks for bicyclists.
- **Change the limits of the Main Street Corridor designation** to include the area between I-40 and Matthew Rd.