

WILLIAMS STREET (E 21ST AVENUE TO E 31ST AVENUE)



FIGURE 31: WILLIAMS STREET CONTEXT MAP

PROJECT OVERVIEW

Denver Moves: Bikes and Blueprint Denver recommended High Street from 21st Avenue to 25th Avenue and Williams Street from 25th Avenue to 28th Avenue to be a neighborhood bikeway. This was intended to connect to the neighborhood bikeway on High Street south of 21st Avenue, but the alignment of the bikeway south of 21st Avenue was moved to Franklin Street, thereby eliminating the need for connection at High Street. Additionally, it was decided during the planning process that this bikeway should connect to the existing bike lanes on Williams Street which start at 31st Avenue. Therefore, the actual extent of this project became Williams Street from 21st Avenue to 31st Avenue. This project connects to existing and future bikeways on 21st Avenue, 22nd Avenue, 23rd Avenue, 25th Avenue, and 28th Avenue.

PROJECT DEVELOPMENT

The original bikeway type, a neighborhood bikeway, was maintained through design development except where it was upgraded to a standard bike lane in the southbound direction between 26th Avenue and 27th Avenue. The high speeds documented throughout the corridor were a significant consideration in the design of bikeways along this corridor. The 85th percentile speeds collected at two points within the project area were 28 MPH and 29 MPH, which is higher than acceptable for a neighborhood bikeway, therefore considerable speed control measures were proposed.

ANALYSIS COMPLETED:

- ✓ Crash Analysis
- ✓ Parking Analysis
- ✓ Traffic Counts
- ✓ Cross-Section Options
- ✗ Lane Reduction Analysis
- ✗ Intersection Analysis
- ✓ Speed Reduction Analysis
- ✗ Diversion Analysis

OUTREACH COMPLETED:

- ✓ Network Verification Survey
- ✓ Concept Survey
- ✓ Draft Design Survey
- ✓ Office Hours
- ✓ 5 Network-Wide Public Meetings (2020 to 2022)
- ✓ 6 Network-Wide Stakeholder Meetings (2020 to 2022)
- ✗ One-on-One Stakeholder Engagement
- ✗ Project-Specific Community Meetings

DELIVERABLES COMPLETED:

- ✓ Existing Conditions Analysis
- ✓ Alternatives Analysis
- ✓ Concept Design
- ✓ Opinion of Probable Cost

KEY DRAFT DESIGN FEEDBACK:

The draft design for the project was shared with the public for comment in March 2022. The Williams Street design received 11 comments from 3 respondents. Major themes from public feedback on the proposed designs included:

- 1 Desire for more traffic diverters
- 2 Concern about conflicts with cars at pinch points
- 3 Concerns about conflicts with cars at traffic circles and stop signs

OUTREACH SUMMARY

The outreach approach for the Williams Street bikeway followed the standard Central CTN process.

DOTI collected community feedback for this corridor through a series of online surveys, interactive input maps and public comments. The online map tool was open from March – May 2020. The draft concept surveys were open from July – August 2020. This feedback helped inform recommendations for improving the way people travel (by bicycle, bus, on foot, and by car) on and around this corridor.

KEY CONCEPT FEEDBACK:

Proposed concept designs for Community Transportation Network projects were shared for community input during June and July 2020, including designs for the Williams Street bikeway. Community members were asked to react to proposed designs and provide feedback. The Williams Street design received survey responses from 17 participants. Overall, respondents indicated their top three safety concerns when using Williams Street were:

- 1 High vehicular speeds
- 2 Visibility and sight distance
- 3 High traffic volumes

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SUMMARY OF FINAL DESIGN

The final design included a mixture of elements to slow driver speeds, improve safety and comfort for pedestrians and people on bikes traveling along the corridor, and facilitate safer crossings. Specific elements include:

- Chicanes, pinch points, and bulbouts to reduce traffic speeds.
- Traffic circles at 30th Avenue and 24th Avenue.
- A bike lane between 26th Avenue and 27th Avenue to accommodate varying speeds between bicycles and cars on the uphill climb.
- Green conflict markings and two-stage turning boxes for the bike lane crossing at each intersection.
- Regular wayfinding signage to make drivers aware of the bikeway and help bicyclists find their way to nearby neighborhoods and destinations.

PROJECT BENEFITS

CONNECTS DESTINATIONS

Saint Joseph Hospital, schools, local parks

LINKS BIKEWAYS/TRAILS

22nd and 23rd Avenues

CONNECTS PROPOSED BIKEWAYS

Connects to proposed bikeways on 21st, 25th, and 28th Avenues

LOWER STRESS CROSSINGS

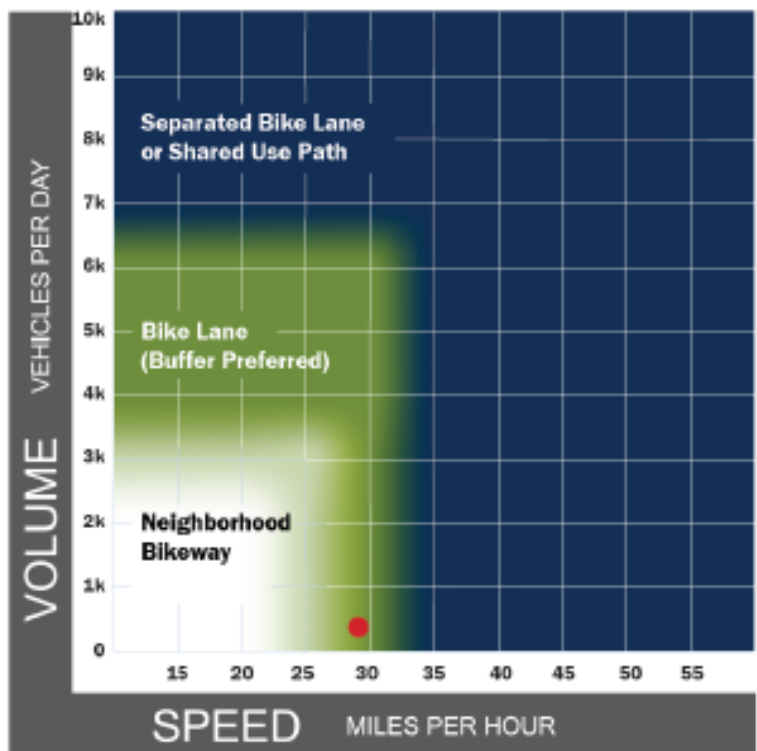
All-way stops at: Williams Street/26th Avenue, Williams Street/27th Avenue, and Williams Street/28th Avenue

QUALITY CONNECTION

Travels through neighborhoods; less traffic than Downing Street or York Street

BIKEWAY FACILITY SELECTION CHART

The Bikeway Facility Selection Chart is a tool DOTI uses to identify the appropriate bikeway facility on a given street. As traffic speeds and volumes increase, more separation from motor vehicles is necessary to maintain a safe and comfortable bicycling experience. Based on traffic data collected, a neighborhood bikeway with treatments is recommended on Williams Street (see red dot).



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TABLE 13: PUBLIC FEEDBACK SUMMARY

What We Heard	Incorporated into Project
Concerns about walking barriers at 28th Avenue and Williams Street	Bulbouts to improve crossing visibility and reduce crossing distance
Traffic speed concerns on Williams Street	Chicanes, pinch points, and bulbouts to reduce traffic speeds

Legend

Traffic Calming Elements

Treatment type

- Traffic Circle
- Diverter
- Pedestrian Refuge
- Speed Cushion
- Chicane
- Pinchpoint
- Curb Extension Only
- RRFB
- Bike Box

Existing Denver Bicycle Facilities

- Protected Bike Lane
- Neighborhood Bikeway
- Bike Lane
- Buffered Bike Lane
- Shared Roadway
- Trail
- Shared Use Path

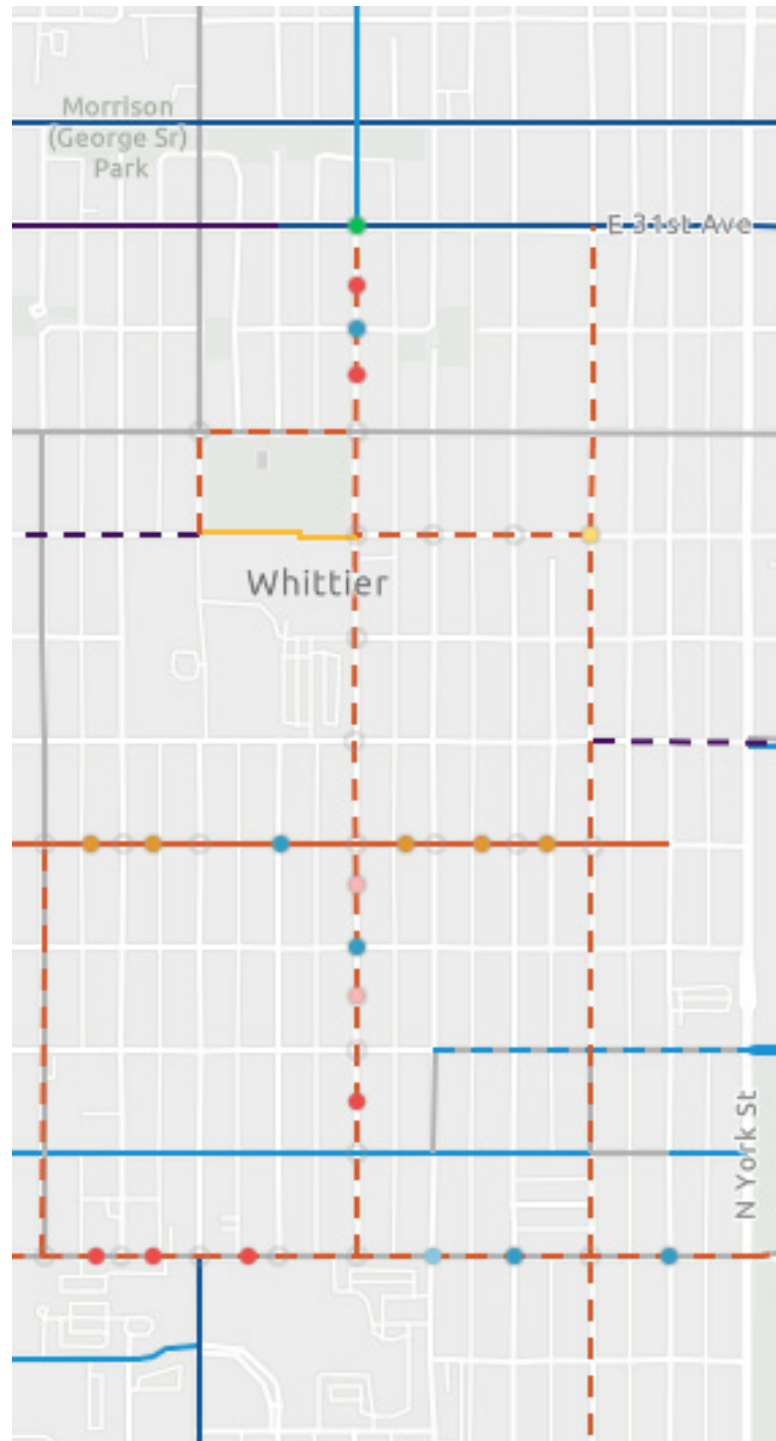


FIGURE 32: WILLIAMS STREET TRAFFIC CALMING