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# Welcome

## I-25 Speer Boulevard and 23rd Avenue Bridge and Interchange Project

## Meeting Purpose

- Recap Alternatives and Public Involvement
- Share Results of Alternatives Evaluation
- Provide Rationale/Approach for Alternatives
- Explain Alternative Refinements
- Learn What You Think

## Project Contacts


Speer.23rd.Bridges@gmail.com

720-515-3311



## Share Your Input

To take the survey, visit the project website or scan the QR code.
www.codot.gov/projects/studies/i25speerand23rd/publicmeeting

Note: Green boxes on information boards indicate which survey question the content relates to (i.e. Q1)

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# Public Involvement Activity

## Overview

A goal of the project is to find solutions that balance the needs of all local stakeholders. In addition to engaging local residents and organizations, the project collaborated with local agency partners, such as the City and County of Denver.

## Stakeholders & Community Members

- Neighborhood Organizations
- Local Businesses
- Mile High Stadium District
- Faith Organizations
- Area Property Owners
- Dining & Recreation Destinations
- Economic Development Organizations
- Police & First Responders

## Engagement Data

**335** Individual In-Person and Virtual Open House Attendees

**220+** Surveys and Comments Submitted (online and in-person)

**1,325+** Online Comments Submitted

**2,760+** Individual Project Web Page Users

## Engagement Activities

- In-Person & Virtual Open House
- Survey
- Email Newsletters
- Stakeholder Focus Group Meetings
- Presentation to Jefferson Park United Neighbors (JPUN)
- Tabling at JPUN Broncos Event
- Dia de los Muertos Table (Denver North High School)
- Bike to Work Day Stations
- Offered opportunities for individuals and organizations to meet with CDOT; hosted several small conversations when requested

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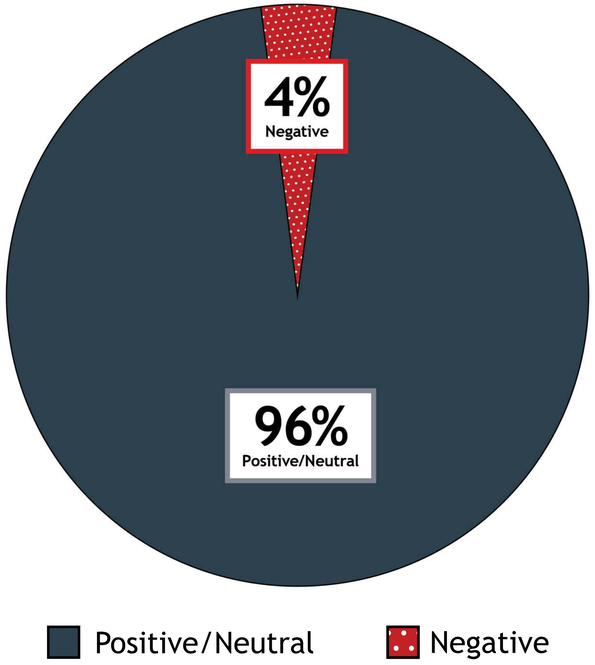
# Public Feedback

## Overview

Public and stakeholder input was collected via email, online surveys and comment forms, formal letters, general comments to the project team and a stakeholder coalition representing various entities. This input was organized into overarching themes. The overwhelming majority of public feedback—96% expressing positive or neutral sentiment—demonstrates broad community support for the project's Purpose and Need, reinforcing its relevance and urgency in addressing regional transportation challenges.

### Purpose & Need




### Overarching Themes

- Pedestrian and Bicyclist Safety
- Increased Community Connectivity
- Access to Businesses
- Improvements to Traffic Flow and Congestion
- Construction Timeline and Impact Questions
- Sustainability and Environmental Considerations
- Continued Public Engagement
- Integration of Public Transportation Options
- Aesthetic Design

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# Purpose and Need Statement

**A Purpose and Need Statement describes what a project is seeking to accomplish and why it is necessary. All potential improvements, including a "No Action" alternative are evaluated against the Purpose and Need, leading to the selection of a "Proposed Action."**

## Purpose

**The purpose of the I-25: Speer Boulevard and 23rd Avenue Bridge and Interchange project is:**

- To address the increasing maintenance needs and deteriorating condition of the aging 23rd Avenue and Speer Boulevard bridges over I-25.
- To provide crossings with adequate vertical clearance over I-25 for interstate travelers.
- To improve the transportation connection across I-25 for all road users.
- To improve the safety issues identified within the interchange complex.


Existing Speer Boulevard bridge.

## Need

**The need of the I-25: Speer Boulevard and 23rd Avenue Bridge and Interchange project is:**

- To improve safety in interchange complex.
- To provide interstate crossings that have adequate clearance over I-25 and structural integrity.
- To accommodate pedestrians, bicycles and other micromobility devices (small, low-speed, human- or electric-powered transportation devices) across I-25 and along Speer Boulevard and 23rd Avenue.

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# NEPA Analysis

## The NEPA document will be made available for public review and comment at CDOT and on the project website.

The National Environmental Policy Act (NEPA) requires that projects using federal funds, requiring a federal permit or linked to a federal action, analyze effects on the natural and social environment. Since CDOT is using federal funding for this project, once a Recommended Proposed Action, including the No Action, is selected, the project will go through NEPA review and documentation.

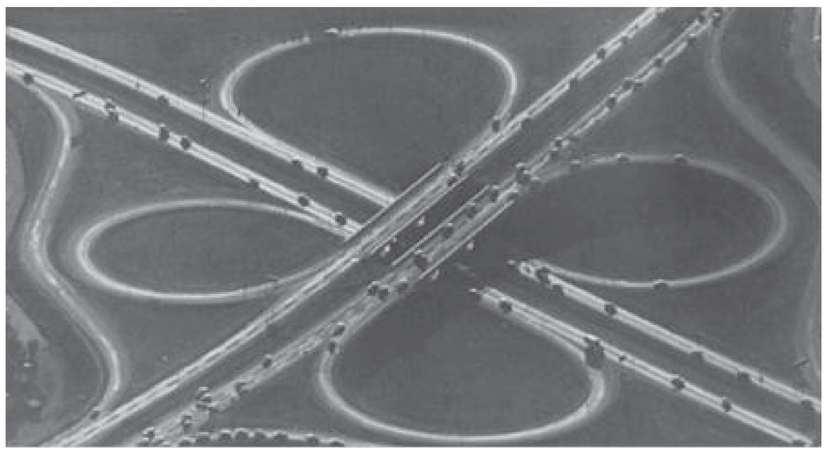
The NEPA document will disclose impacts, necessary permits and mitigation of those impacts for the Proposed Action. Public involvement will continue throughout the NEPA process.

## The following are resources of interest:

- **Cultural Resources**
- **Economic Environment**
- **Air Quality**
- **Social Environment**
- **Biological Resources**
- **Noise**

## All applicable resources will be assessed during the NEPA process.

**Historic Brewmaster's House located on 7th Street adjacent to I-25, 1983.**



**Historic Speer Boulevard Bridges over the Valley Highway, 1962.**

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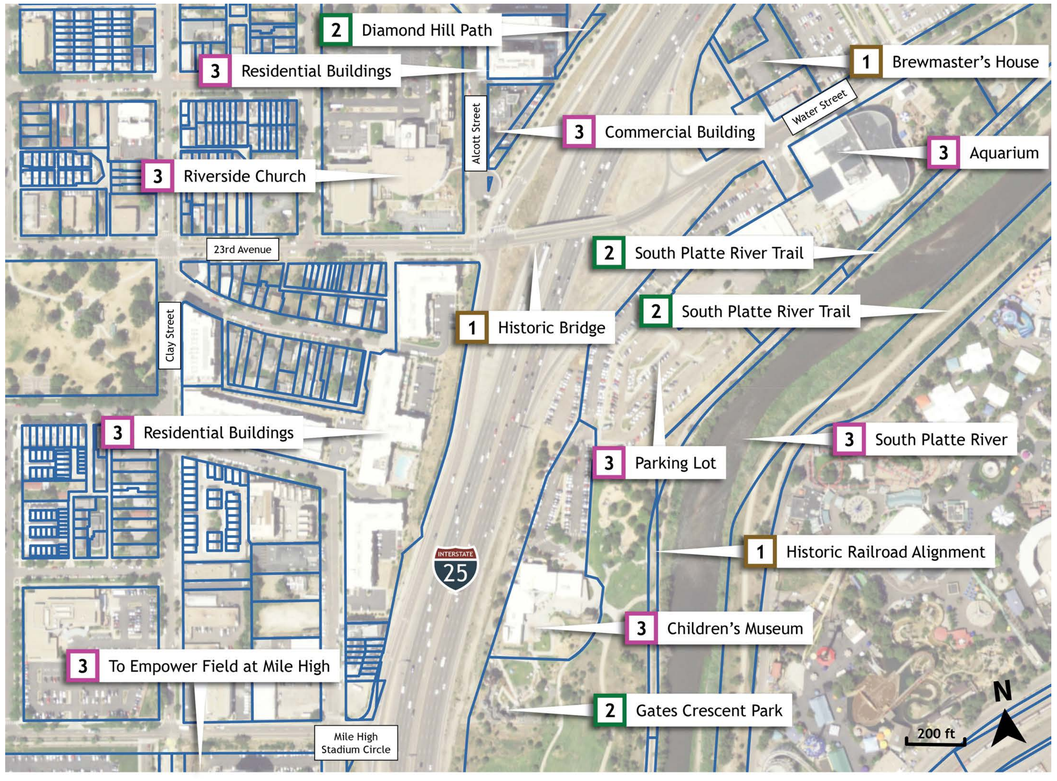
# Adjacent Resources & Land Use

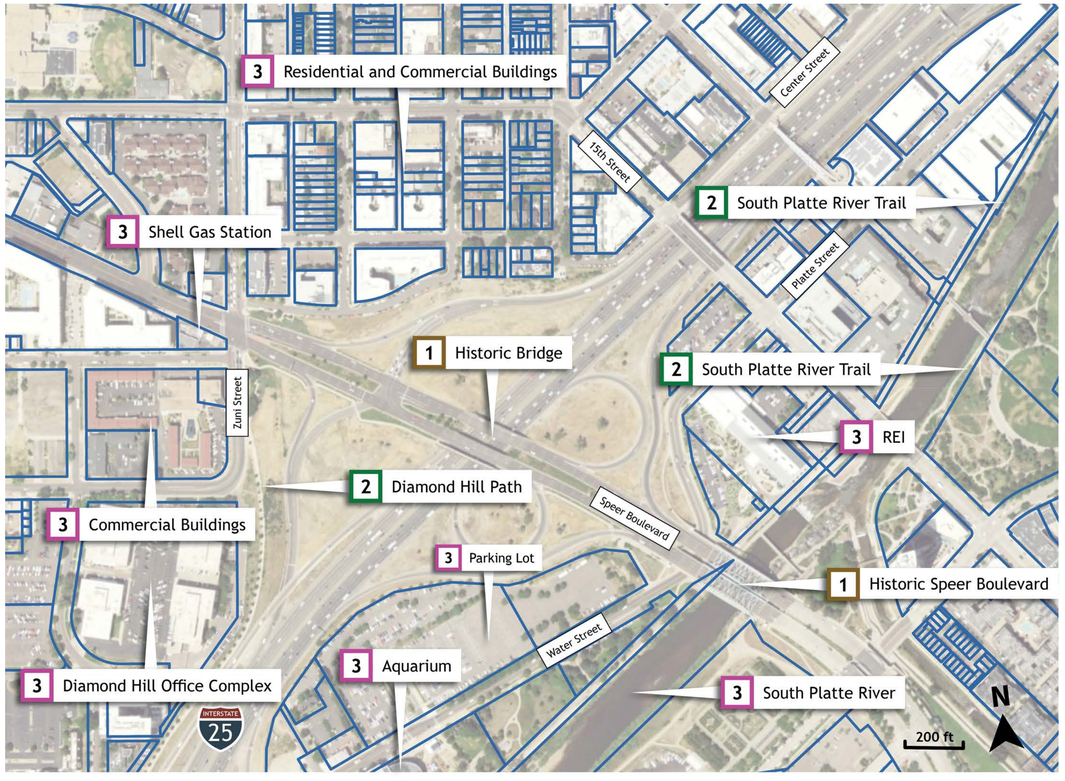
## During the screening process, the project team considered ways to avoid and minimize impacts to adjacent resources and land uses.

### 23rd Avenue




Map showing the project area near the 23rd Avenue and I-25 interchange that highlights historic resources, recreation resources and other adjacent land uses.

### Speer Boulevard




Map showing the project area near the Speer Boulevard and I-25 interchange that highlights historic resources, recreation resources and other adjacent land uses.

**Legend**

- 1 Historic Resources
- 2 Recreation Resources
- 3 Other Adjacent Land Uses
- Adjacent Parcel Boundaries

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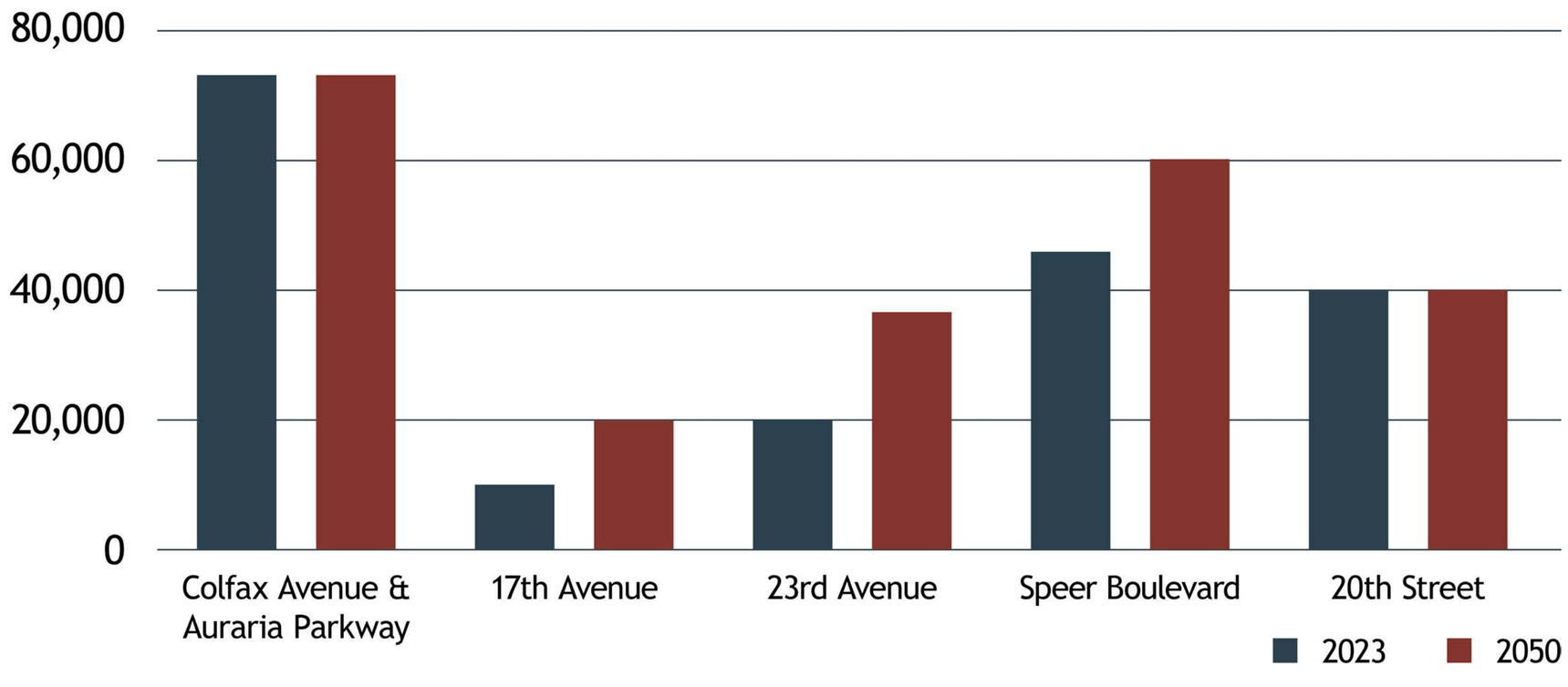
# Traffic Data

Today, I-25 near 23rd Avenue and Speer Boulevard carries approximately **250,000 vehicles per day**. By 2050, this number is expected to rise to almost **300,000 vehicles per day**.

Traffic projections through 2050 indicate that ramp volumes at 17th Avenue, 23rd Avenue and Speer Boulevard will continue to increase.

## Daily Interchange Volumes




Existing conditions on 23rd Avenue show that nearly **600 bicyclists** and **200 pedestrians** crossed I-25 per day.*

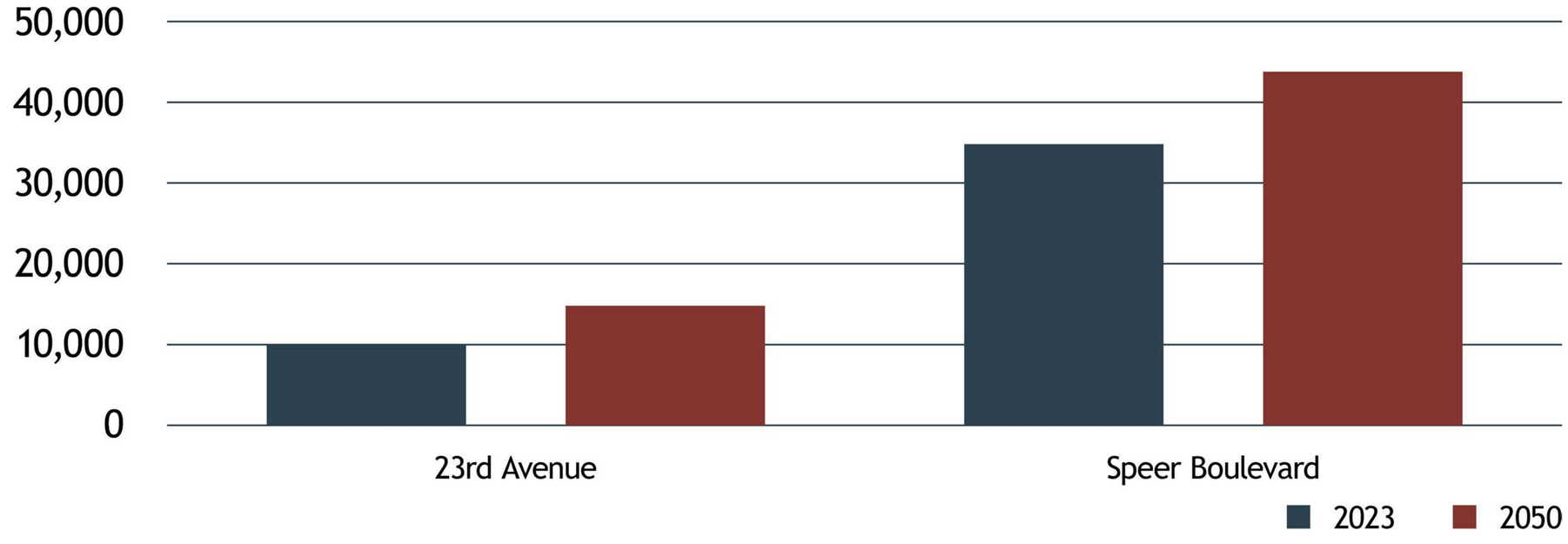
*Bike and pedestrian counts on 23rd Avenue were captured in 2023.

Existing conditions on Speer Boulevard show that approximately **100 bicyclists** and **200 pedestrians** crossed I-25 per day.**

**Speer Boulevard bike and pedestrian data are from 2021. No updates were needed in 2023, as no facility changes occurred.

## Daily Vehicle Volumes on the Bridges Over I-25

By 2050, traffic on the 23rd Avenue and Speer Boulevard bridges over I-25 is also expected to increase.

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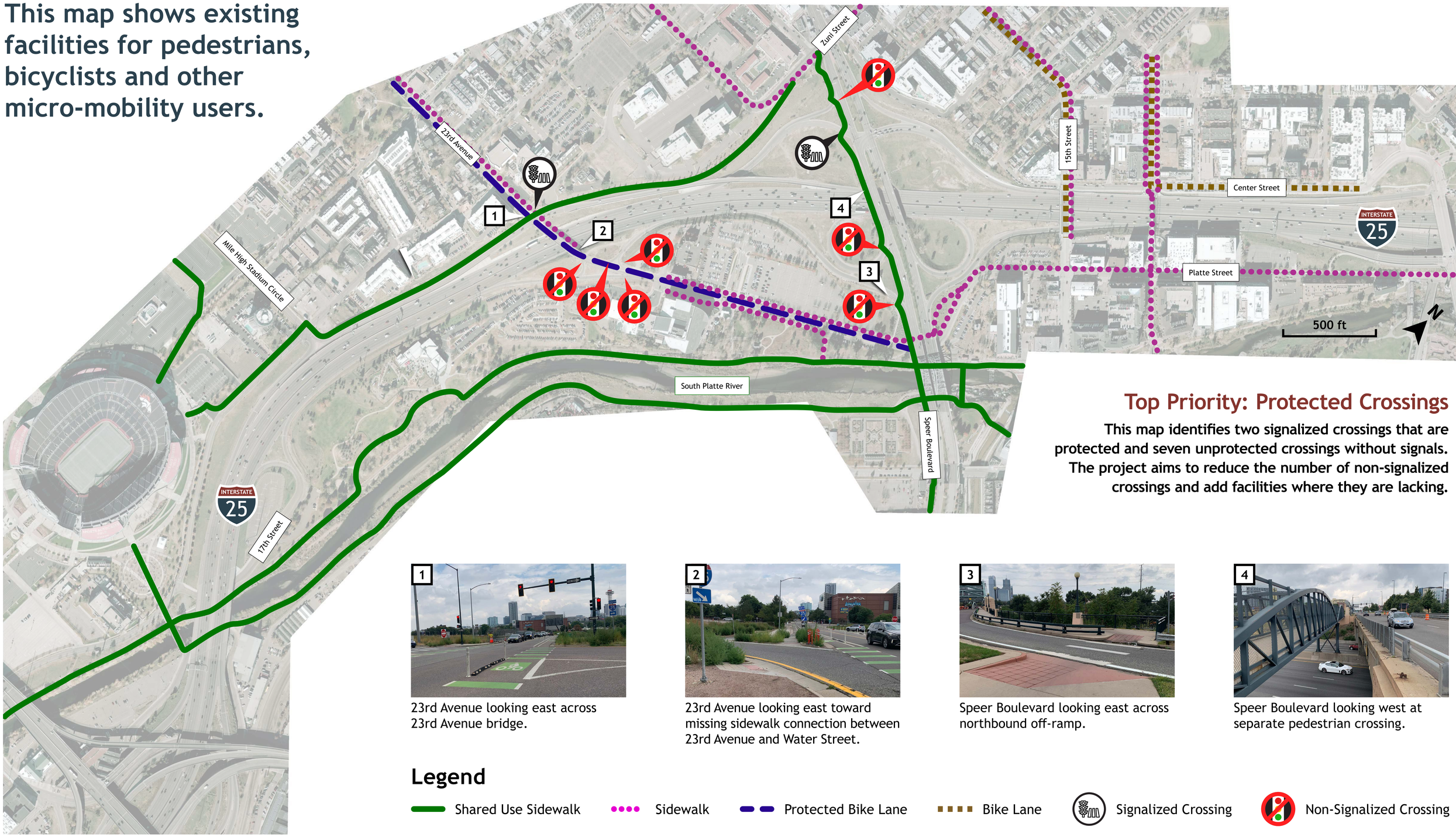
# Existing Bike and Pedestrian Facilities

**This map shows existing facilities for pedestrians, bicyclists and other micro-mobility users.**




## Top Priority: Protected Crossings

**This map identifies two signalized crossings that are protected and seven unprotected crossings without signals. The project aims to reduce the number of non-signalized crossings and add facilities where they are lacking.**




23rd Avenue looking east across 23rd Avenue bridge.




23rd Avenue looking east toward missing sidewalk connection between 23rd Avenue and Water Street.




Speer Boulevard looking east across northbound off-ramp.




Speer Boulevard looking west at separate pedestrian crossing.

## Legend

Shared Use Sidewalk · Sidewalk · Protected Bike Lane · Bike Lane · Signalized Crossing · Non-Signalized Crossing

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# Alternatives Screening Process

**A key project milestone has been reached. Based on the evaluation, a proposed solution has been identified that combines the two interchanges. This option, along with a No Action Alternative, will move forward for further study as part of the environmental review process.**

| Screening Level | Screening Metrics | Alternatives Evaluated (For the Bridges and Interchanges) | |
|---|---|---|---|
| **Purpose and Need**<br>2023 to Early 2024 | • Safety<br>• Structural Clearance and Integrity<br>• Bike and Pedestrian Accommodations | **Started with** | 23rd Avenue — 3 Alternatives<br>Speer Boulevard — 5 Alternatives |
| | | **Ended with** | 23rd Avenue — 2 Alternatives<br>Speer Boulevard — 5 Alternatives |
| **Comparative**<br>Mid to Late 2024 | • Vehicular Safety<br>• Bike and Pedestrian Safety<br>• Operational Performance<br>• Environmental Impacts<br>• Community Resources Impacts<br>• Constructability and Cost<br>• Maintenance | **Started with** | 23rd Avenue — 2 Alternatives<br>Speer Boulevard — 5 Alternatives |
| | | **Ended with** | 23rd Avenue — 1 Alternative<br>Speer Boulevard — 2 Alternatives |
| **Refined**<br>Late 2024 to Early 2025 | • Vehicular Safety<br>• Bike and Pedestrian Safety<br>• Operational Performance | **Started with** | Speer Boulevard — 2 Alternatives |
| | | **Ended with** | Speer Boulevard — 1 Alternative |

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# Purpose and Need Screening

**The following questions were used to measure how well each alternative met the Purpose and Need. Alternatives with a response of "no" to any of the questions were not carried forward to the Comparative Screening. This is considered a fatal flaw analysis.**

## Interstate Crossing Needs


- Does the alternative provide a crossing of I-25 with adequate vertical clearance of at least 16.5 feet over travel lanes and shoulders?
- Does the alternative reduce the ongoing maintenance requirements and improve the structural integrity of the bridges?

## Pedestrian, Bicycle and Micromobility Device Needs

- Does the alternative improve pedestrian, bicycle and micromobility connections on 23rd Avenue and Speer Boulevard and connect to local networks west and east of I-25?

## Safety Needs

- Does the alternative enhance safety by improving access to and from I-25 at the following locations:
  - Northbound weave between the 23rd Avenue on-ramp and eastbound Speer Boulevard off-ramp.
  - Northbound weave between the eastbound Speer Boulevard on-ramp and westbound Speer Boulevard off-ramp.
  - Southbound acceleration lane from Speer Boulevard on-ramp.

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# Comparative Screening Metrics

## Alternatives carried forward from the Purpose and Need Screening and the No Action Alternative were compared using seven screening metrics.

| Screening Metrics | Was it a Differentiator? |
|---|---|
| **Vehicular Safety** | **Yes:** Alternatives have different safety characteristics including vehicle crossing and merging conflict points and ramp spacing on I-25. |
| **Bike and Pedestrian Safety** | **Yes:** Alternatives have different bike and pedestrian safety characteristics, including the number and nature of conflicts between bicyclists and pedestrians and motorists. |
| **Operational Performance** | **Yes:** Alternatives have different operational characteristics including the removal of I-25 ramp terminals on 23rd Avenue and the addition of a signalized intersection on Speer Boulevard that would operate using either a two-phase or three-phase signal. |
| **Environmental Impacts** | **No:** Alternatives are not anticipated to have substantial or different impacts to wetlands, floodplains, water quality, or threatened and endangered species and wildlife. Hazardous materials, noise and air quality were considered at a high level, but were not considered differentiators and will be assessed further during the NEPA process. |
| **Community Resources** | **Yes:** Alternatives are anticipated to have effects to historic resources, have temporary impacts to recreational parks or trails and benefit and impact bicycle and pedestrian infrastructure and access to local businesses and neighborhoods. |
| **Construction Cost** | **No:** Level of detail for design is not enough to differentiate between the range of construction costs between alternatives. |
| **Maintenance** | **No:** The difference in effort and cost to maintain alternatives was not enough to differentiate between alternatives. |

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# 23rd Avenue Screening Results

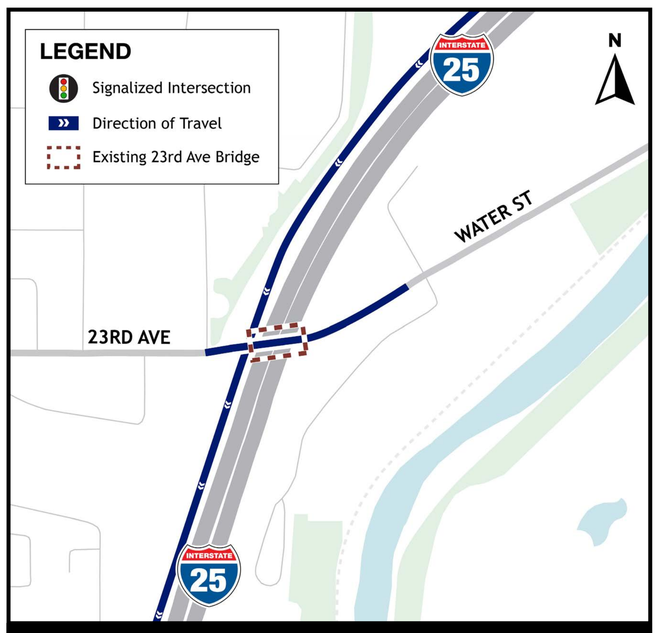
## Legend

- Carry Forward
- Do Not Carry Forward
- Not Applicable


### 23rd Avenue Bridge Replacement Only

**Does Not Meet Purpose and Need**

Does not improve safety at existing northbound I-25 weave length between 23rd Avenue on-ramp and Speer Boulevard off-ramp.




### Close 23rd Avenue Access to I-25 (Ramps)

**Meets Purpose and Need**


### 23rd Avenue Braid

**Meets Purpose and Need**

## Purpose and Need Screening

## Comparative Screening

**Not Applicable**

### Not Carried Forward

Removes existing access to businesses and neighborhoods.

**Vehicular Safety on 23rd Avenue**
Improves safety on 23rd Avenue by removing I-25 ramp conflicts.

**Vehicular Safety on I-25**
Improves safety on I-25 by removing merging conflict points on I-25.

**Bike and Pedestrian Safety**
Improves safety for people walking/rolling and biking by removing ramp conflicts and adding sidewalks, bike lanes and a new signal at 23rd Avenue.

**Operational Performance**
Improves traffic operations by removing existing signal.

**Community Resources**
Out-of-direction travel required for businesses, community resources and neighborhoods that currently rely on direct I-25 access at 23rd Avenue. May create negative economic impacts for businesses that are located near 23rd Avenue with the expectation of interstate visibility and access.

### Carried Forward

**Vehicular Safety on 23rd Avenue**
Improves roadway layout and adds an additional signal.

**Vehicular Safety on I-25**
Improves safety on I-25 by improving short weaving distances.

**Bike and Pedestrian Safety**
Improves safety while maintaining access to neighborhood and businesses.

**Operational Performance**
Adding dedicated left-turn lanes to improve turning movements.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.

## Refined Screening

**Not Applicable**

**Not Applicable**

**Recommended Alternative**

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# 23rd Avenue Refined Screening Results

## 23rd Avenue Braided Ramp

### Recommended Alternative

**Recommended as the Proposed Action to be evaluated during the NEPA process by balancing the needs to improve safety for all users and maintain access to businesses, community resources and neighborhoods.**

## Improves Safety on I-25

- Improves northbound ramp connections with I-25.
- Braided ramp design provides increased distance to merge on and off of I-25.

## Community Access

- Maintains I-25 access for nearby homes, community resources and businesses.
- Does not require out-of-direction travel for customers, employees, visitors or residents.
- Preserves existing connections within the community.

## Improvements for Bike and Pedestrian

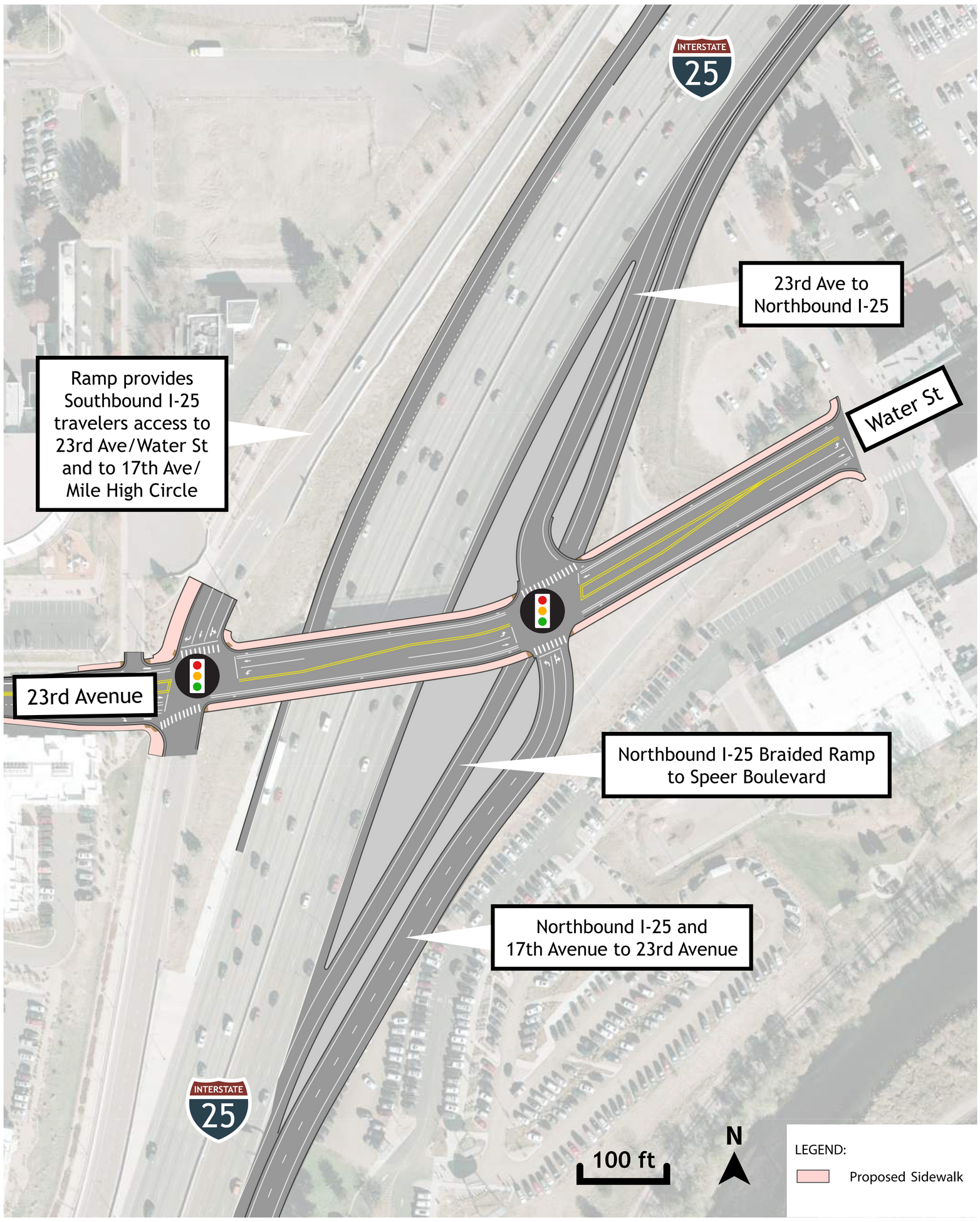
- Adds sidewalks and bike lanes to increase comfort and visibility.
- New signal at the northbound I-25 ramps supports safer ramp terminal crossings.
- Enhances safety for everyone using 23rd Avenue — whether walking, biking or driving.

## Designed with the Community in Mind

This alternative was shaped by input from a variety of people who rely on 23rd Avenue every day:

- Residents and families in nearby neighborhoods.
- Business owners and their customers.
- People walking and biking.
- Emergency services and city operations.

## Design Configuration



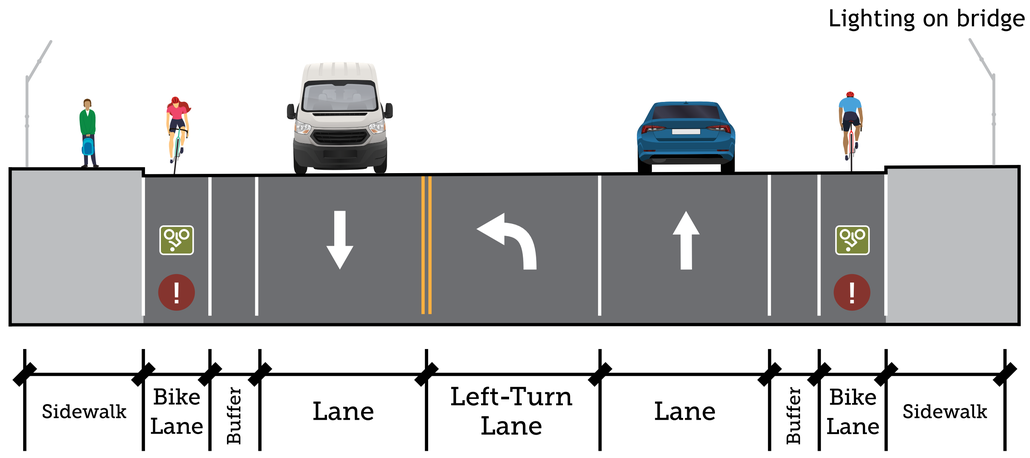

Map showing the recommended braid ramp configuration alternative near the 23rd Avenue and I-25 interchange.

## Representative Typical Section

### 23rd Avenue Looking East

Treatment to be determined with public input and in coordination with the Denver Office of Transportation and Infrastructure (DOTI).

For additional non-motorized design details, refer to the "Bike and Pedestrian Safety Solutions: 23rd Avenue" board.

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# Speer Boulevard Screening Results

**Legend**

- Carry Forward
- Do Not Carry Forward
- Not Applicable


## Bridge Replacement Only

### Purpose and Need Screening

Meets Purpose and Need

### Comparative Screening

**Not Carried Forward**

Comparative increase in non-motorist conflict points and additional delay on Speer Boulevard.

**Vehicular Safety on Speer Boulevard**
Not a differentiator.

**Vehicular Safety on I-25**
Not a differentiator.

**Bike and Pedestrian Safety**
Greater number of non-motorist conflict points compared to alternatives carried forward.

**Operational Performance**
Increases delay by adding a signal at the northbound I-25 intersection.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.
Impacts the eligible historic Diamond Hill Office Complex.

### Refined Screening

**Not Applicable**


## Partial Clover Leaf Interchange

### Purpose and Need Screening

Meets Purpose and Need

### Comparative Screening

**Not Carried Forward**

Comparative increase in conflict points and additional delay on Speer Boulevard.

**Vehicular Safety on Speer Boulevard**
Not a differentiator.

**Vehicular Safety on I-25**
Not a differentiator.

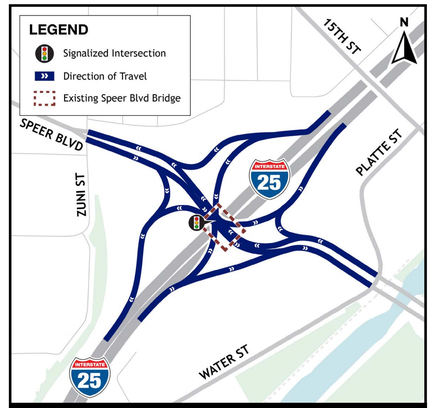
**Bike and Pedestrian Safety**
Greater number of non-motorist conflict points and motorist conflict points compared to alternatives carried forward.

**Operational Performance**
Increases delay by adding a signal at the northbound I-25 intersection.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.

### Refined Screening

**Not Applicable**




## Single-Point Urban Interchange

### Purpose and Need Screening

Meets Purpose and Need

### Comparative Screening

**Not Carried Forward**

Comparative increase in conflict points and additional delay on Speer Boulevard.

**Vehicular Safety on Speer Boulevard**
Not a differentiator.

**Vehicular Safety on I-25**
Not a differentiator.

**Bike and Pedestrian Safety**
Comparative increase in conflict points and additional delay on Speer Boulevard.

**Operational Performance**
Not a differentiator.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.

### Refined Screening

**Not Applicable**


## Speer Boulevard Diamond Interchange

### Purpose and Need Screening

Meets Purpose and Need

### Comparative Screening

**Carried Forward**

**Vehicular Safety on Speer Boulevard**
Not a differentiator.

**Vehicular Safety on I-25**
Not a differentiator.

**Bike and Pedestrian Safety**
Ten total conflict points.

**Operational Performance**
Increases delay more than Diverging Diamond Interchange by adding a three-to-four-phase signal at the northbound I-25 ramp intersection.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.

### Refined Screening

**Not Carried Forward**

Comparable traffic operations to the Diverging Diamond Alternative. However, it provides less safety benefit.


## Speer Boulevard Diverging Diamond Interchange

### Purpose and Need Screening

Meets Purpose and Need

### Comparative Screening

**Carried Forward**

**Vehicular Safety on Speer Boulevard**
Not a differentiator.

**Vehicular Safety on I-25**
Not a differentiator.

**Bike and Pedestrian Safety**
Eight total conflict points.

**Operational Performance**
Increases delay by adding a two-phase signal at the northbound I-25 ramp intersection.

**Community Resources**
Maintains I-25 access for local businesses and neighborhoods.

### Refined Screening

**Recommended Alternative**

Comparable traffic operations to the Traditional Diamond Alternative. However, national crash data shows that diverging diamond interchanges have 15% fewer overall crashes and 45% fewer fatal and injury crashes than traditional diamond type interchanges. Reduced non-motorist conflict points with improved directional driver site distance without left turns across oncoming traffic and crosswalks.

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# Speer Boulevard Refined Screening Results

## Diamond Interchange at Speer Boulevard

**Not Carried Forward**

### Safety

National crash data indicates that traditional diamond interchanges generally experience a similar number of crashes as partial cloverleaf interchanges (which is what the Speer Boulevard interchange is today).

### Non-Motorist Road User Safety

**From Zuni St. to S. Platte River**

**Traveling on north side of the bridge:**

- Total travel length: 1,800 feet
- Number of times a person has to cross vehicle traffic: 4
- Total number of vehicles lanes to be crossed: 8

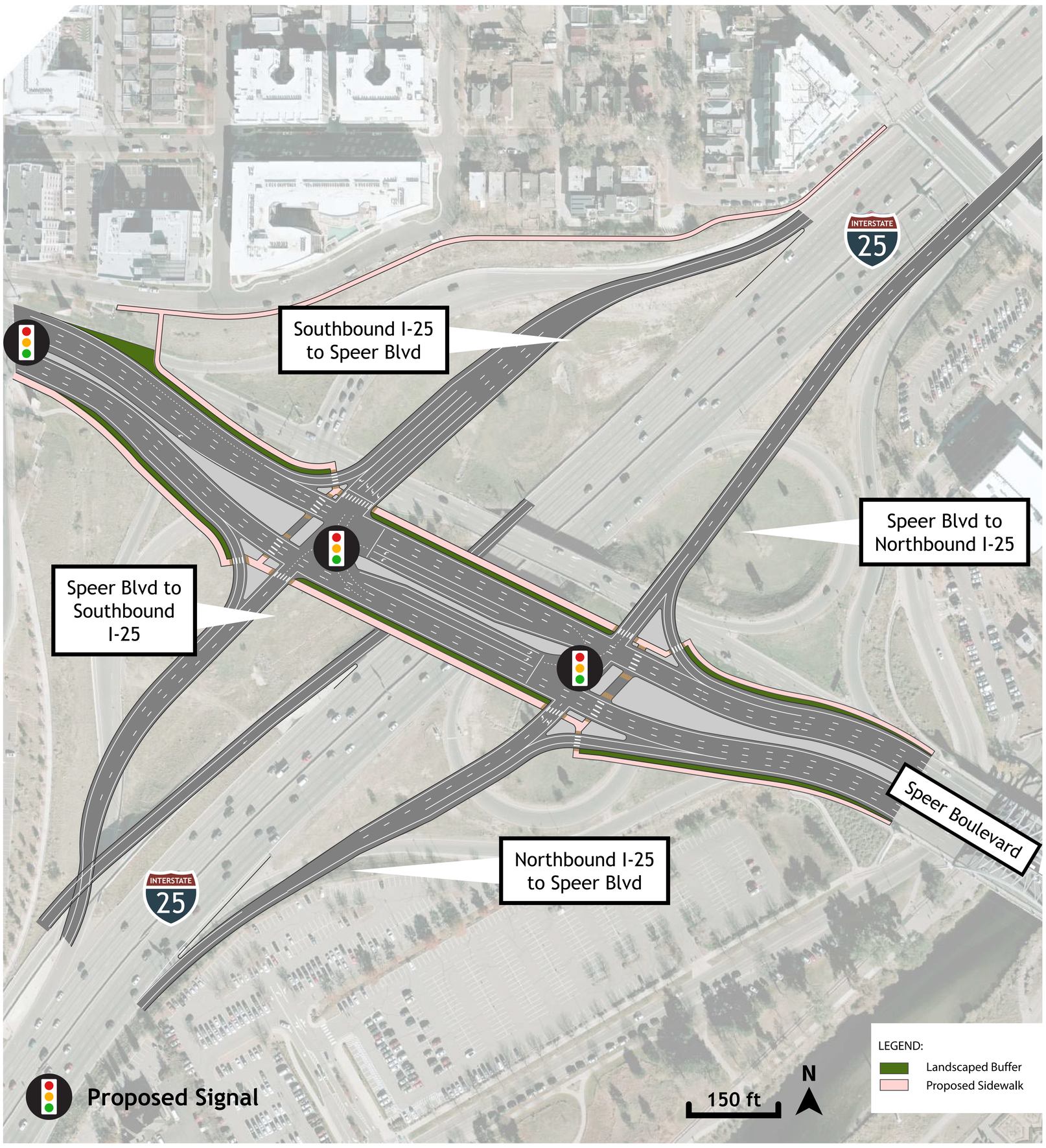
**Traveling on south side of the bridge:**

- Total travel length: 1,700 feet
- Number of times a person has to cross vehicle traffic: 4
- Total number of vehicles lanes to be crossed: 6

### Operations

Preliminary traffic analysis shows that the traditional diamond interchange would have a similar overall delay as the diverging diamond interchange (DDI). During the evening commuting period, it is anticipated there may be additional congestion caused by eastbound left-turns and westbound right-turns.

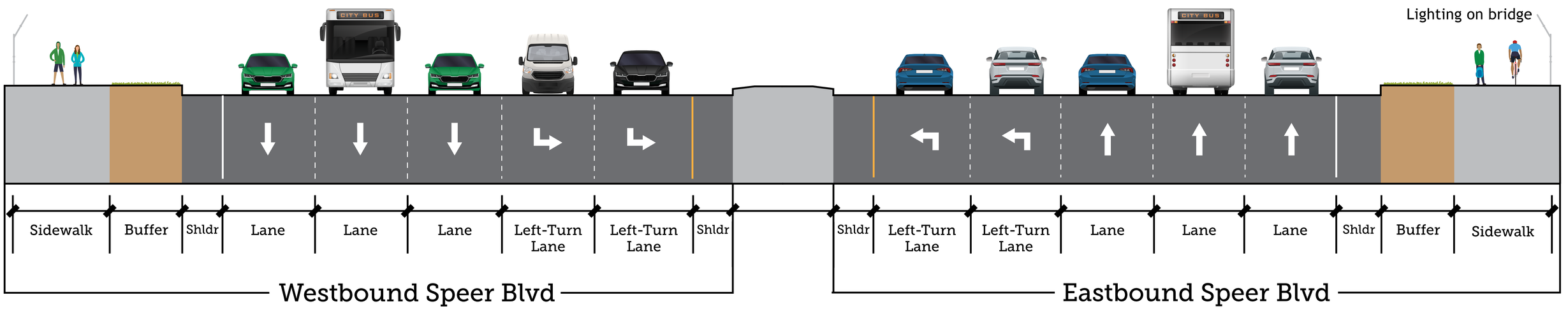
### Design Configuration




Map showing the diamond design configuration alternative near the Speer Boulevard and I-25 interchange.

### Representative Typical Section

**Speer Boulevard Looking East**

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# Speer Boulevard Refined Screening Results

## Speer Boulevard Diverging Diamond Interchange

**Recommended Alternative**

### Recommended as the Proposed Action to be evaluated during NEPA process.

## Safety

National safety data indicates that diverging diamond interchanges (DDI) generally experience 15% fewer crashes than traditional diamond interchanges. DDIs generally have 45% fewer crashes resulting in a fatality or serious injury compared to traditional diamond interchanges.

## Non-Motorist Road User Safety

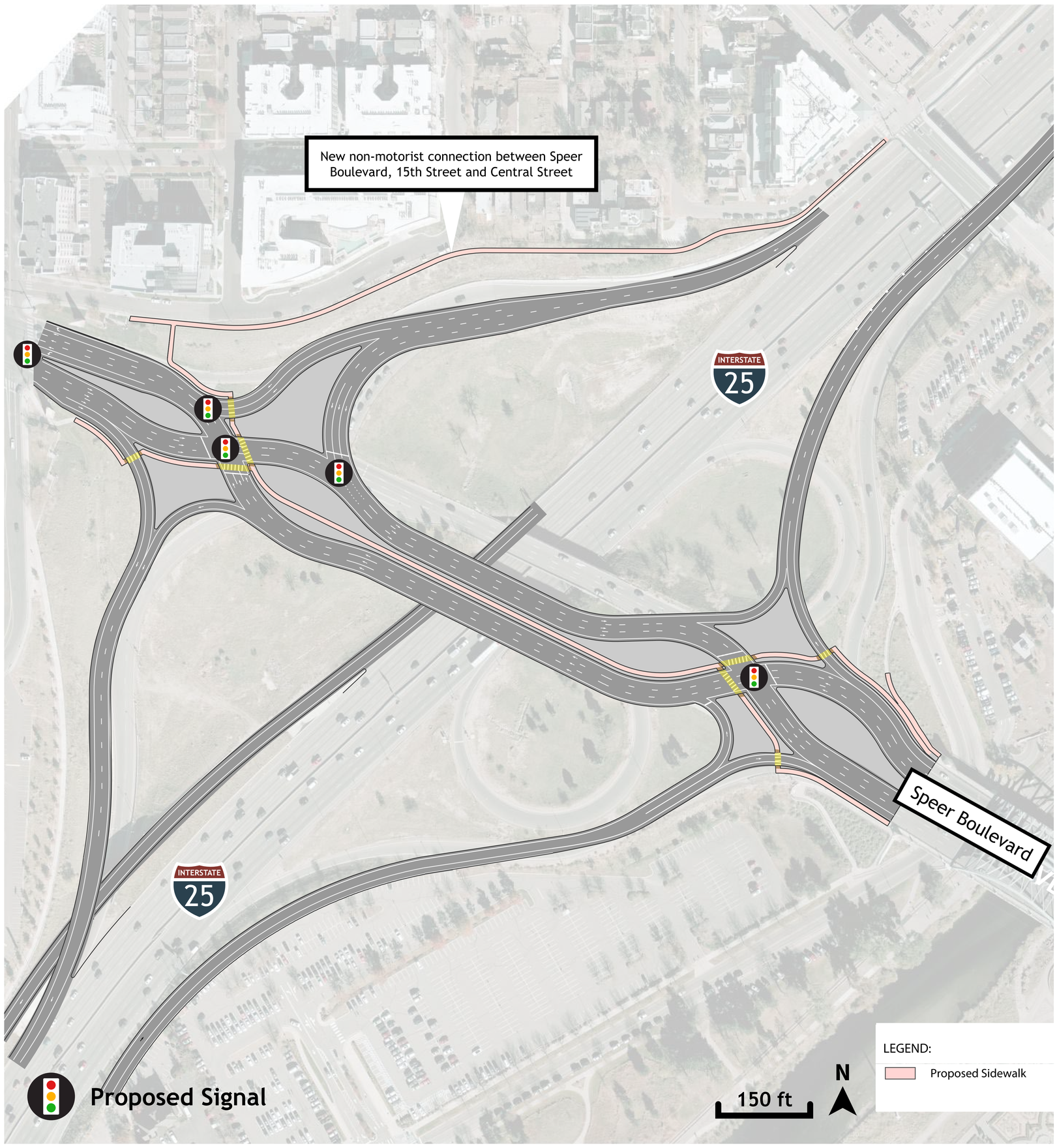
**From Zuni St. to S. Platte River**

- Total travel length: 1,900 feet
- Number of times a person has to cross vehicle traffic: 4
- Total number of vehicles lanes to be crossed: 8-9

## Operations

Preliminary traffic analysis completed on the DDI indicates that it would have a similar overall amount of delay as the traditional diamond interchange. However, the short distance between traffic signals at the southbound I-25 ramp and Zuni Street may cause congestion.

### Design Configuration

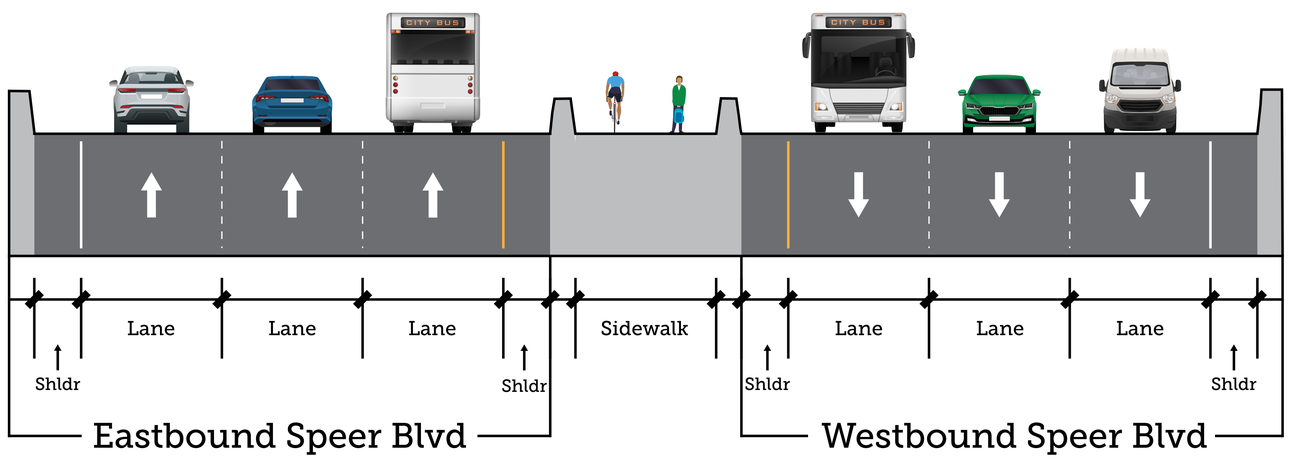



Map showing the recommended diverging diamond design configuration alternative near the 23rd Avenue and I-25 interchange.

## Representative Typical Section

**Speer Boulevard Looking East**

For additional non-motorized design details, refer to the "Non-Motorized Safety Solutions: Speer Boulevard" board.

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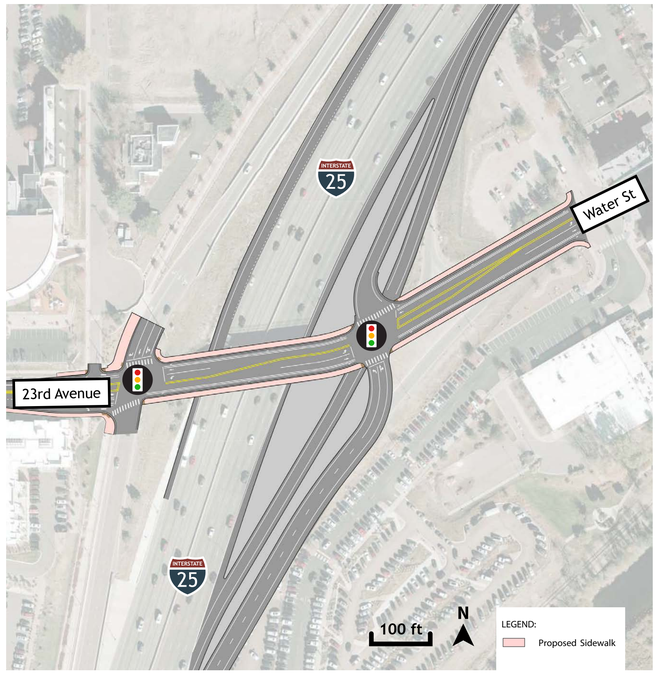
# Alternatives Selection Summary

For an alternative to be chosen as the best option, it needs to improve safety for everyone—whether walking, biking, or driving. It should also provide a safe way to cross the interstate with enough height clearance and meet key design standards. Additionally, it must consider the needs and feedback from the community and stakeholders.

The screening process determined the best option for 23rd Avenue and the best option for Speer Boulevard. The combination of these two options is the Recommended Proposed Action.

## 23rd Avenue

This alternative was selected after the Comparative Screening because it met a broad range of criteria related to safety, operations and community and stakeholder needs. Both alternatives improve safety for everyone. **This design in particular provides enhanced safety for all users—especially people walking and biking—while maintaining access for local residents, businesses and commercial motor carriers.**




## Speer Boulevard

This alternative was selected after the Refined Screening because it better **supports safety for everyone—especially people walking and biking.** It includes protected crossings for those most at risk, such as kids, older adults and people biking or using mobility aids. By removing left-turn conflict points, the design improves safety for pedestrians, bicyclists and drivers.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Video Demonstration

# Diverging Diamond Interchange

## Learn how it works by watching this video filmed at McCaslin Boulevard and US36 in Superior, CO

I-25: Speer Boulevard and 23rd Avenue Bridge and Interchange Project

# Thank You for Attending!

## Design and Study Schedule

### 2023

Data collection and preliminary alternatives development

### Early 2024

Purpose and Need Screening

### Mid 2024 to Early 2025

Comparative and Refined Screening

### Late 2025 to Mid 2026

NEPA analysis and documentation; initiate preliminary design

## Next Steps

### 2026 and Beyond: Final Design and Construction

Identify construction delivery method, identify construction funds and finish design.

## Share Your Input

To take the survey, visit the project website or scan the QR code.
www.codot.gov/projects/studies/i25speerand23rd/publicmeeting

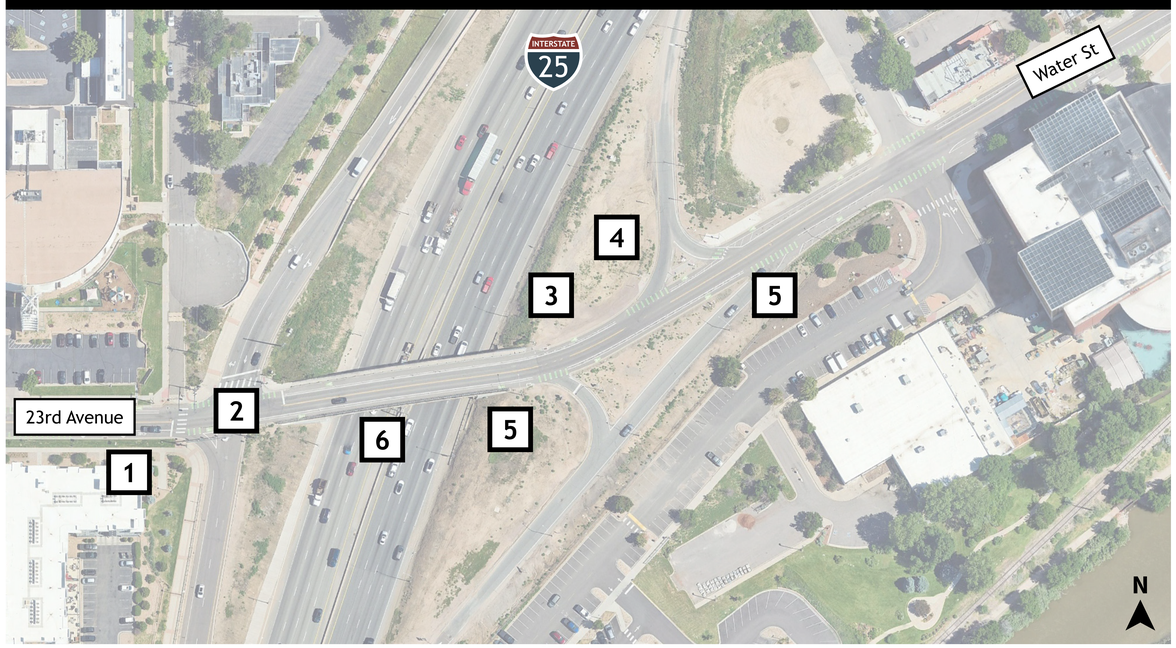
Note: Green boxes on information boards indicate which survey question the content relates to (i.e. Q1)

# Bike and Pedestrian Safety Solutions

## 23rd Avenue

### Problems

**Exisitng Conditions**




**1** Eastbound bicyclists must share a lane with right-turning vehicles. High traffic volumes make this uncomfortable for some bicyclists.

**2** Vehicles have a free left turn (WB 23rd to SB I-25 on ramp) and drivers can misjudge the gap for bikes coming down the hill going into downtown, resulting in near misses.

**3** There is a gap in the sidewalk through this section forcing pedestrians to walk in the dirt shoulder. This does not meet current accessibility standards.

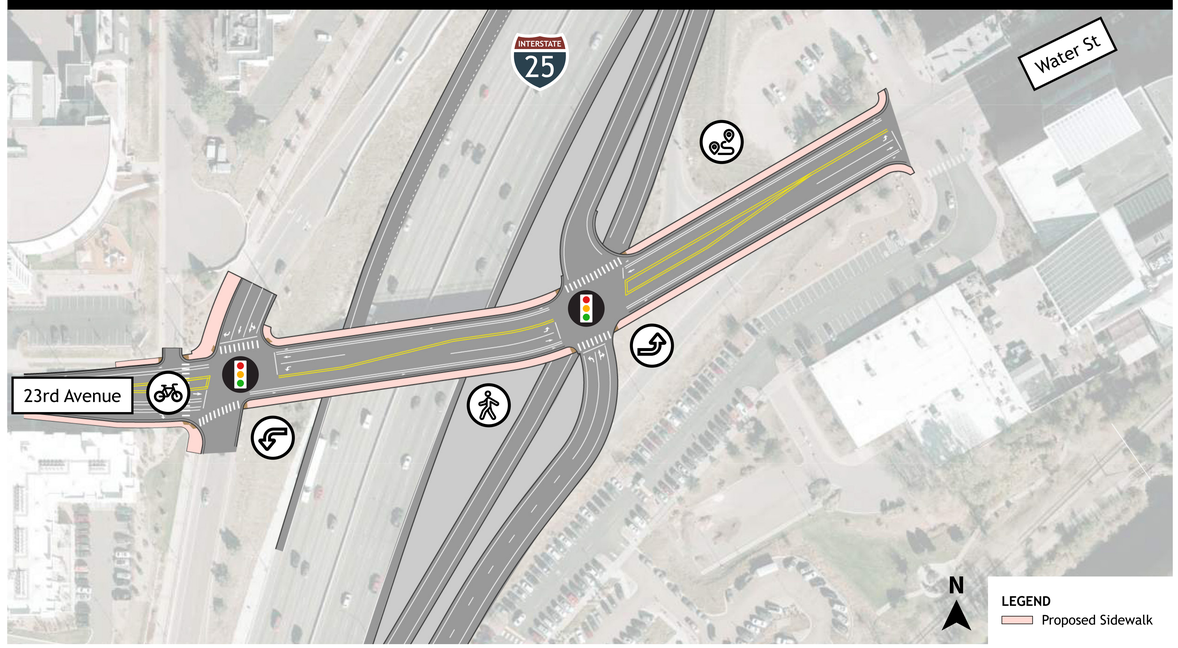
**4** In the evening, westbound traffic backs up from the existing traffic signal. These cars leave a gap to allow for eastbound traffic to turn left onto the I-25 on-ramp; however, these eastbound cars cannot easily see westbound bicyclists. This results in near-misses.

**5** The placement of the stop sign and the geometry of the roadway makes it difficult for drivers exiting I-25 to see oncoming eastbound vehicles and bicyclists.

**6** There is no sidewalk on the south side of the bridge. This forces pedestrians to either cross the street or walk in the bicycle lane.

### Potential Solutions

**Proposed Condition: 23rd Avenue Braided Ramp**




The existing bicycle lane could be extended to the intersection eliminating the need for eastbound bicyclists to mix with right-turning vehicles. This could be paired with a leading pedestrian interval (LPI) at the traffic signal, which would allow pedestrians and bicyclists to begin crossing the intersection a few seconds before vehicles are given a green light. LPIs are a proven safety countermeasure to reduce conflicts between people and turning vehicles.

A dedicated westbound left-turn lane would create the opportunity for a protected left-turn arrow to be installed at the intersection. Only allowing left-turns on a green arrow would prevent conflicts between left-turning vehicles and eastbound traffic (including pedestrians and bicyclists).

Addition of a sidewalk on the south side.

A dedicated eastbound left-turn lane would create the opportunity for a protected left-turn arrow to be installed at the intersection. Only allowing left-turns on a green arrow would prevent conflicts between left-turning vehicles and westbound traffic (including pedestrians and bicyclists).

New sidewalk to close the existing north sidewalk gap between the ramp and 7th Street.

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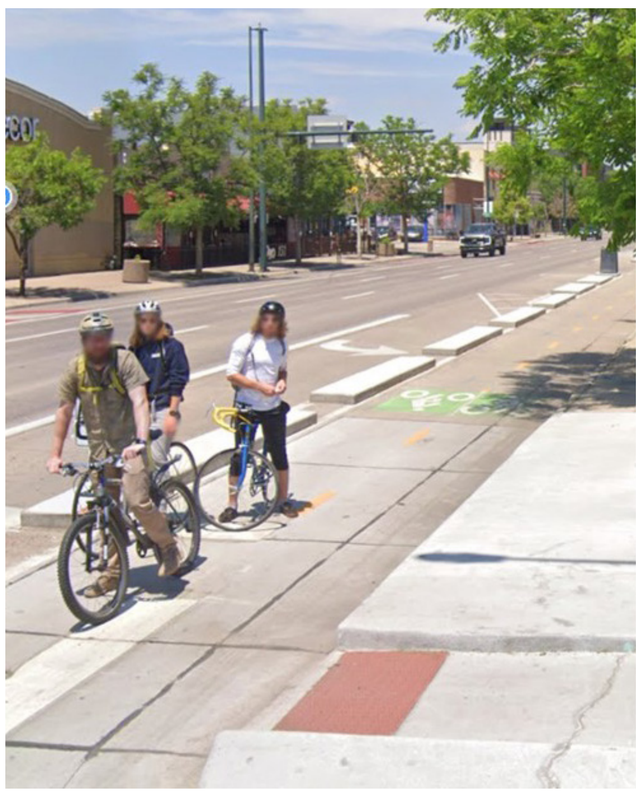
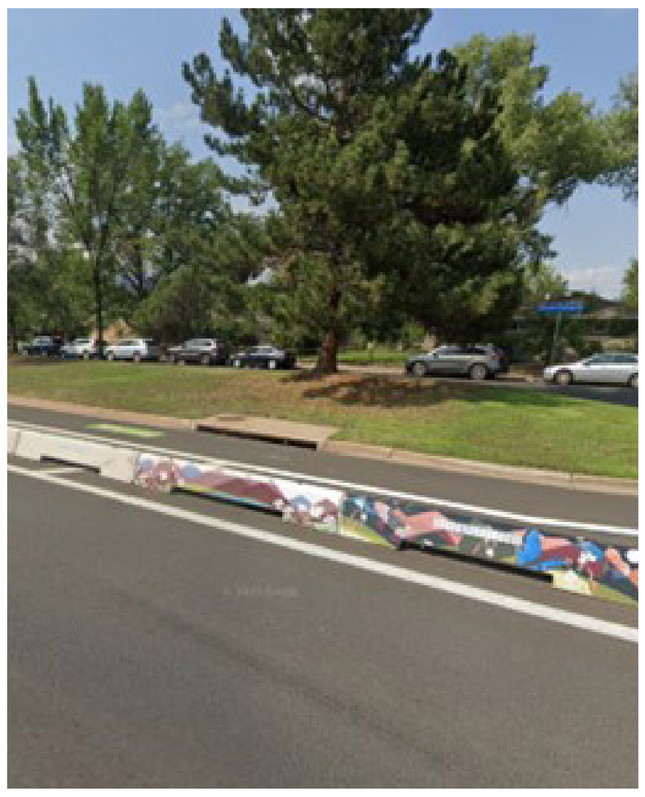
# Bike and Pedestrian Safety Solutions

## 23rd Avenue

### Example Design Solutions



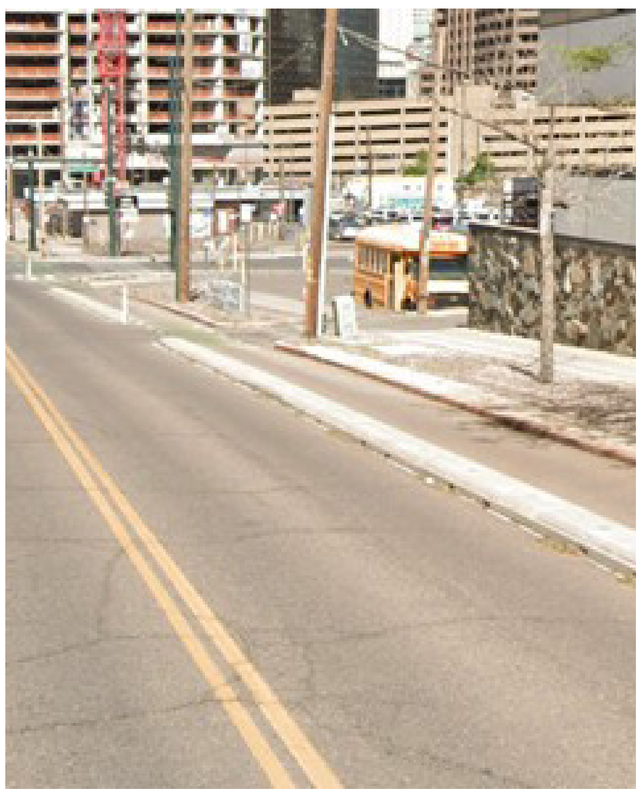
Concrete curb-protected two-way bike lane.



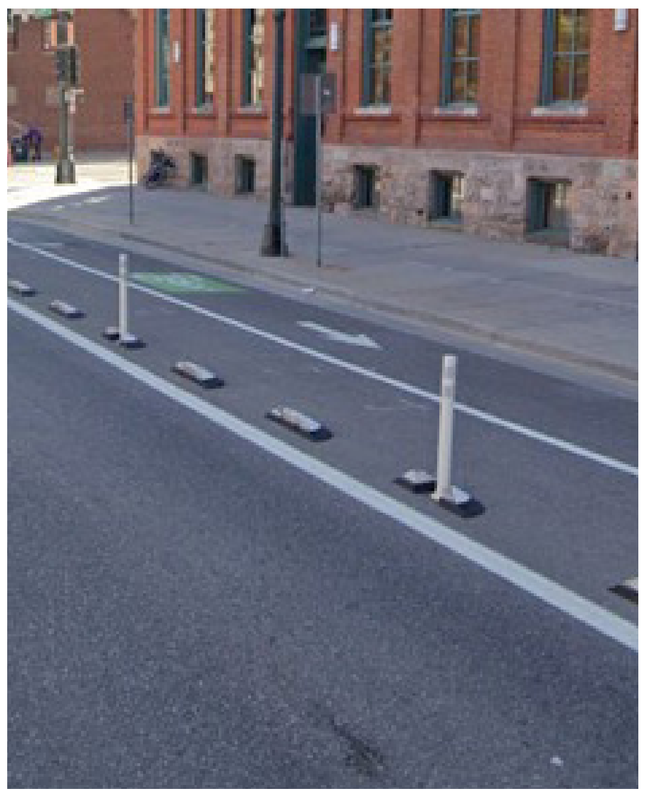
Concrete barrier with striped buffer-protected bike lane. Painted barrier makes the design more aesthetically pleasing.

Raised, sidewalk-level bike lane with streetside buffer. Different colors of pavement are used to distinguish between the bike lane and pedestrian route.

Concrete curb-protected bike lane with colored buffer.



Continuous concrete curb-protected bike lane.



Bike lane with flex posts and Zicla curbs. Reflective posts and curbs are more visible to drivers at night.

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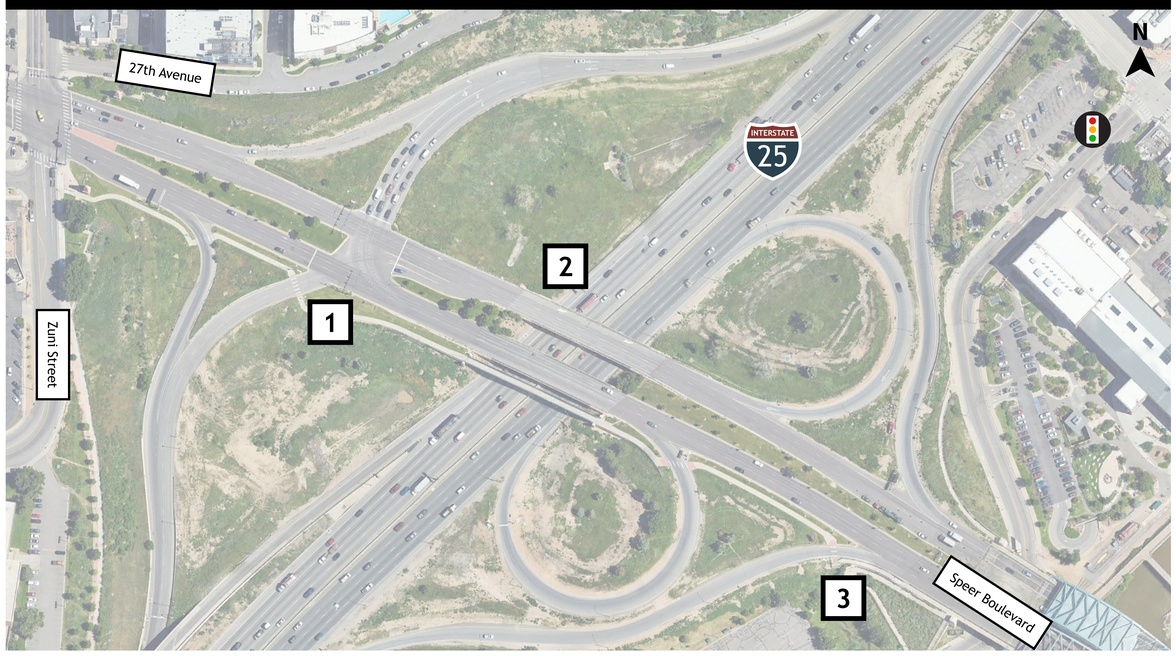
# Bike and Pedestrian Safety Solutions

## Speer Boulevard

### Problems

#### Exisitng Conditions



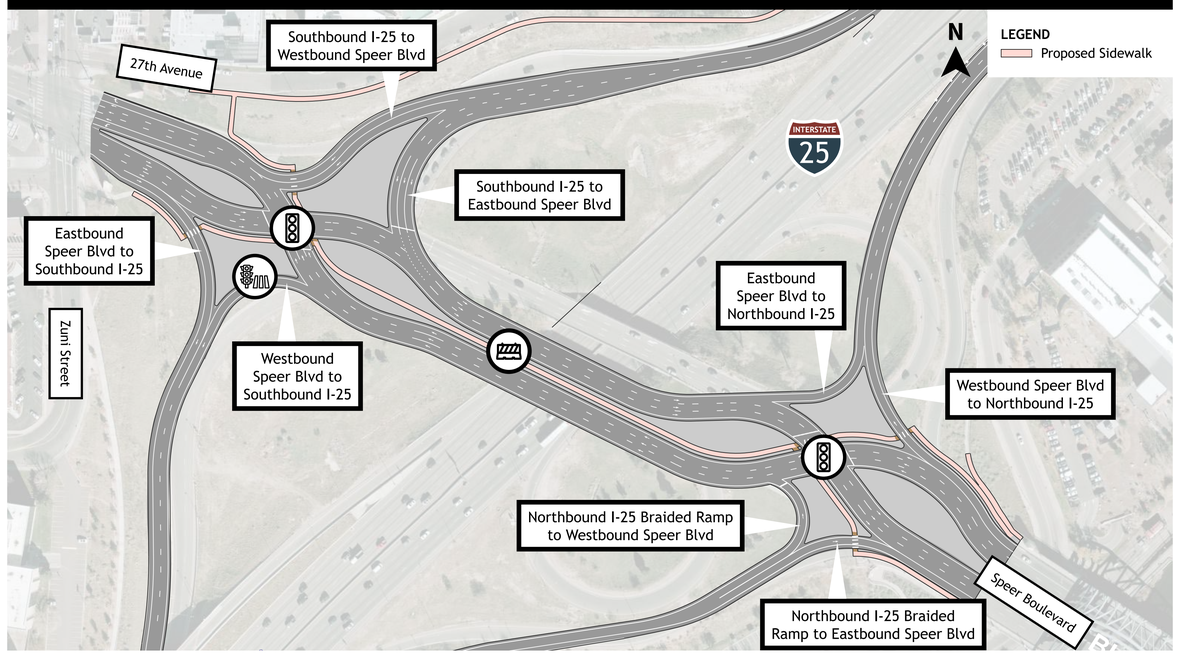

**1** Large distance between left-turning vehicles and pedestrian crossing.

**2** No sidewalk on the north side of the bridge.

**3** Vehicles exiting I-25 are at higher speeds when approaching the uncontrolled pedestrian crossing.

### Potential Solutions

#### Proposed Condition: Diverging Diamond Interchange




Signalized non-motorist crossing.

Signalized non-motorist crossing.

Barrier-separated area for non-motorist users.

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# Bike and Pedestrian Safety Solutions

## Speer Boulevard

### Example Design Solutions

A Diverging Diamond Interchange (DDI) in Superior, CO near US36 at McCaslin Boulevard Bridge.

Features of a DDI include a center walk and bikeway as a multi-use path(a wide center path, which provides safe and comfortable travel for bikes, pedestrians and micromobility users).

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# Recommended Proposed Action

## 23rd Avenue Braided Ramp and Speer Boulevard Diverging Diamond Interchange

### What's Moving Forward?

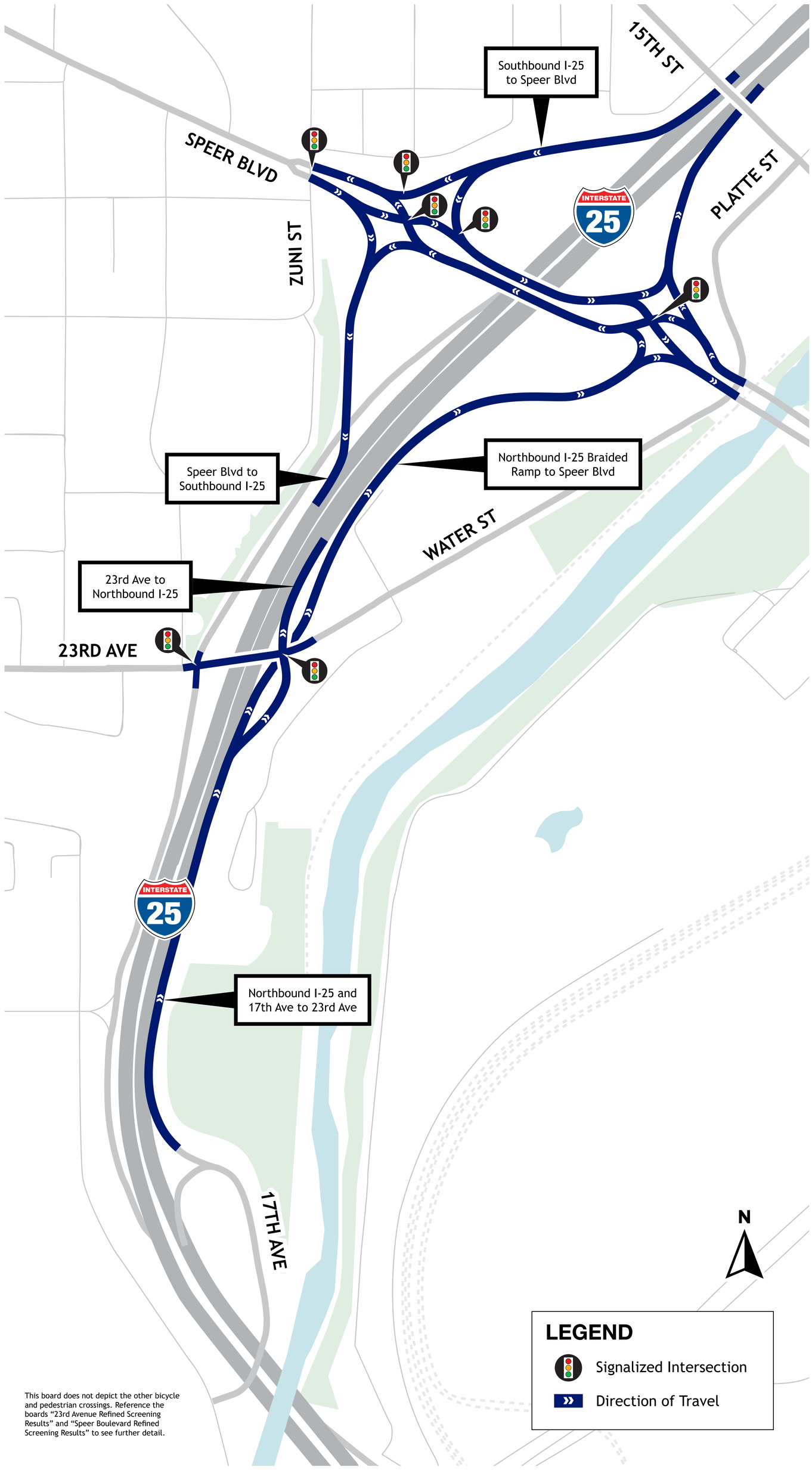
The 23rd Avenue Braided Ramp and the Speer Boulevard Diverging Diamond Interchange have been combined into one recommended design.

This combined option, called the Proposed Action, will move forward for further study and detailed design.

As part of the NEPA process analysis, the recommended Proposed Action will be compared to the No Action (No Build/Do Nothing).

Potential impacts will continue to be assessed, necessary permits will be obtained and efforts will be made to minimize any negative effects. Public Involvement will remain a key part of the process every step of the way.

### Design Configuration




This board does not depict the other bicycle and pedestrian crossings. Reference the boards "23rd Avenue Refined Screening Results" and "Speer Boulevard Refined Screening Results" to see further detail.

Map showing the recommended proposed action combining the 23rd Avenue Braided Ramps alternative and the Speer Boulevard Diverging Diamonds Interchange alternative.

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