



I-25: Speer and 23rd Bridge and Interchange Project Stakeholder Focus Group Meeting 4

**Department of Transportation** 

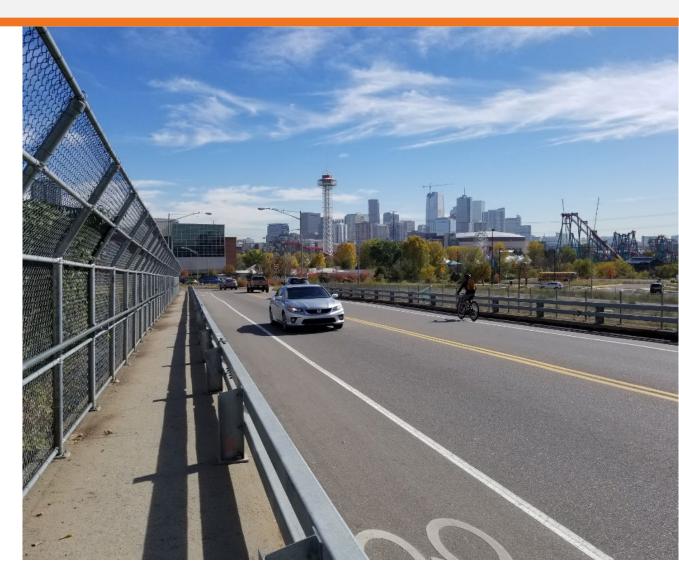
July 15, 2025



#### **Meeting Objectives**

#### **Navigating the Project:**

- 1. Shared Understanding of the Alternatives Screening Process & Results
- 2. Shared Understanding of Stakeholders' Concerns and Interests
- 3. Shared Understanding of Next Steps







- 1. Welcome and Introductions
- 2. Process Overview
- 3. Alternatives Analysis
- 4. Stakeholders' Concerns, Interests, & Ideas
- 5. Next Steps



## Process Overview



#### **Navigating the Project**

#### Understanding the Project's Process, Challenges, and Goals

#### Goals

- Existing Conditions Assessment
- Develop Purpose and Need
- Develop Full Range of Alternatives

# Public Involvement

#### Alternatives Analysis

- Design Criteria
- Environmental Resources
- Meeting Purpose and Need

# Public Involvement

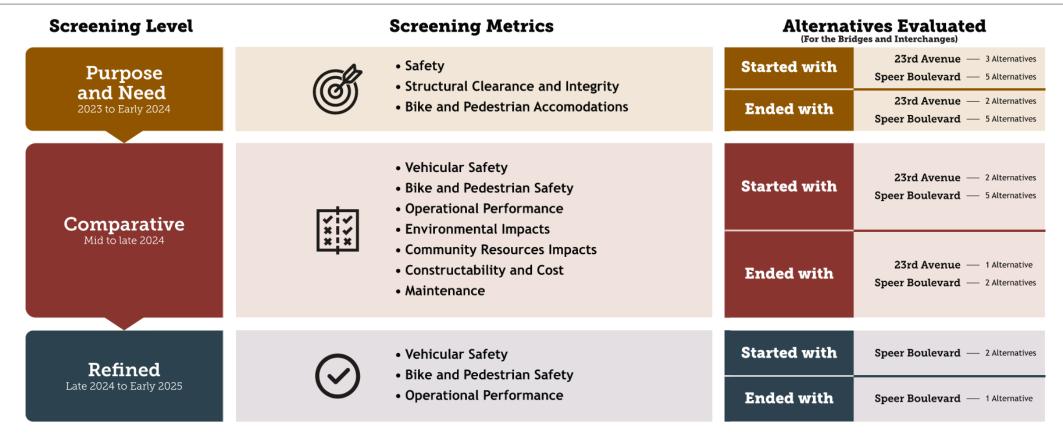
#### **NEPA**

- Confirm Purpose and Need
- Proposed Action Refinement
- Impacts and Mitigation Analysis
- Public feedback considerations
- Federal approval



#### **Alternatives Analysis Process**

The Alternatives Analysis Process is designed to evaluate and select the best design options based on several criteria. This process involves three levels of screening, each focusing on different aspects to ensure that the chosen alternative meets all necessary requirements and addresses key concerns.





## Alternatives Analysis



#### Purpose and Need Screening

The following questions were developed to measure how well each alternative meets Purpose and Need. Alternatives with a response of "no" to any of the questions will not be carried forward to the next level of screening. This is considered 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 23<sup>rd</sup> 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 23<sup>rd</sup> Avenue on-ramp and eastbound Speer Boulevard off-ramp
  - Northbound weave between the eastbound Speer Boulevard on-ramp and westbound Speer Boulevard offramp
  - Southbound acceleration lane from Speer Boulevard onramp



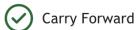
### Purpose and Need Screening Results for 23<sup>rd</sup> Avenue

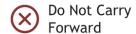






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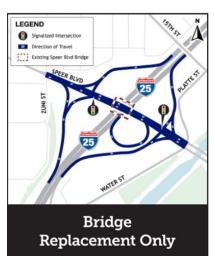








### Purpose and Need Screening Results for Speer Boulevard



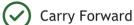


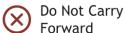






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#### **Comparative Screening**

Alternatives carried forward from the Purpose and Need Screening, and the No Action Alternative, were then compared using seven screening metrics. As the comparative screening process progressed, it was determined that four screening metrics were major differentiators.

#### Screening Level

#### Level 2: Comparative



#### Screening Metrics

- Vehicular Safety
- Bike and Pedestrian Safety
- · Operational Performance
- Environmental Impacts
- Community Resources Impacts
- Constructability and Cost
- Maintenance

#### Major Screening Differentiators

- Vehicular Safety
- Bike and Pedestrian Safety
- Operational Performance
- Environmental Impacts
- Community Resources Impacts
- Constructability and Cost
- Maintenance



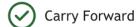
### Comparative Screening Results for 23<sup>rd</sup> Avenue

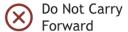






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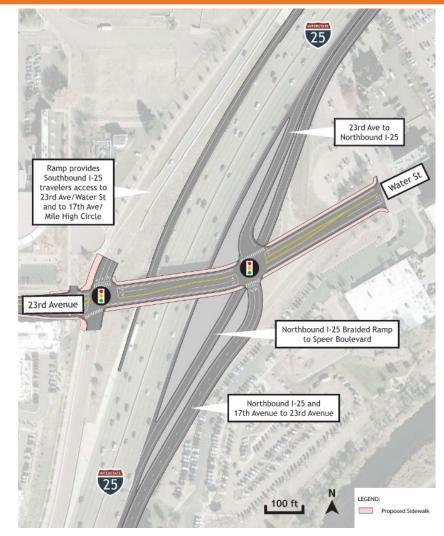




### Recommended Alternative for 23<sup>rd</sup> Avenue

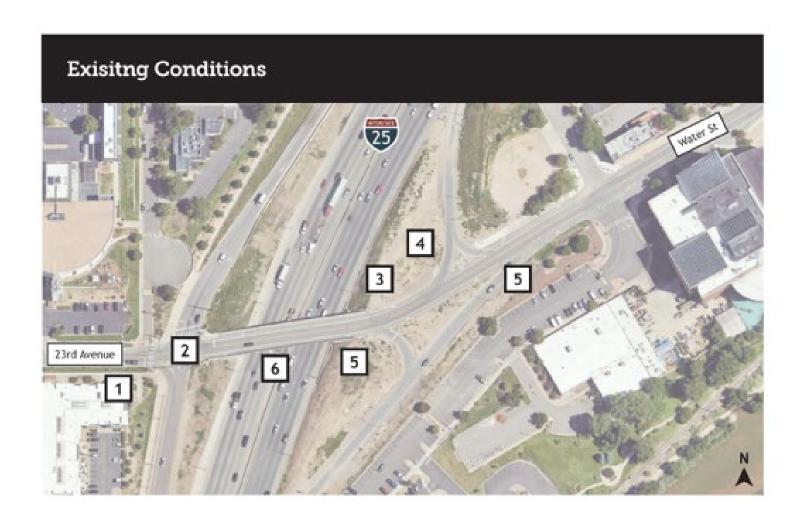
The **23rd Avenue Braid** is recommended as the Proposed Action to be evaluated during the NEPA process because it balances the needs of all local stakeholders. Specifically, it achieves this balance because it:

- Improves Safety on I-25 by increasing the distance to merge
- Enhances safety for everyone using 23<sup>rd</sup> Avenue whether walking, biking, or driving
- Maintains I-25 access for nearby homes, community resources, and businesses
- Accommodates the entire community including residents and families in nearby neighborhoods, business owners and their customers, people walking and biking, as well as emergency services and city operations





## Existing Bike and Pedestrian Safety Problems for 23<sup>rd</sup> Avenue



- Eastbound bicyclists must share a lane with rightturning vehicles. High traffic volumes make this uncomfortable for some bicyclists.
- 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.
- 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.
- 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.
- 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 Bike and Pedestrian Safety Solutions for 23<sup>rd</sup> Avenue (Part 1)





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.



A dedicated westbound left-turn lane would create the opportunity for a protected leftturn arrow to be installed at the intersection.



Addition of a sidewalk on the south side.



A dedicated eastbound left-turn lane would create the opportunity for a protected leftturn arrow to be installed at the intersection.



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



## Potential Bike and Pedestrian Safety Solutions for 23<sup>rd</sup> Avenue (Part 2)



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.



Continuous concrete curb protected bike lane.



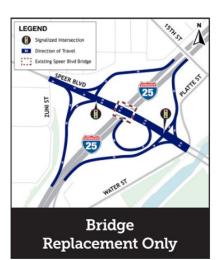
Bike lane with flex posts and Zicla curbs. Reflective posts and curbs make more visible to drivers at night.



Concrete curb protected bike lane with colored buffer.



## Comparative Screening Results for Speer Boulevard



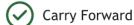


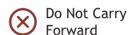






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#### **Refined Screening**

Alternatives carried forward from the Comparative Screening were then evaluated at a more refined level to ensure that the final recommended alternatives are the best available options. For an alternative to be chosen as the best option, it needs to improve safety for everyone, provide a crossing of I-25 with adequate vertical clearance, and consider the needs and feedback from the community and stakeholders.

#### Screening Level

Level 3: Refined

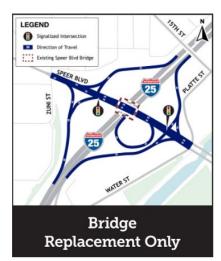
#### Screening Metrics



- Vehicular Safety
- Bike and Pedestrian Safety
- Operational Performance

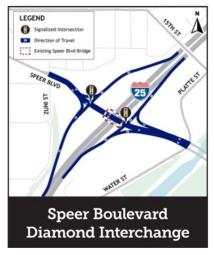


#### **Refined Screening Results** for Speer Boulevard



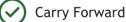


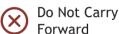


























## Recommended Alternative for Speer Boulevard

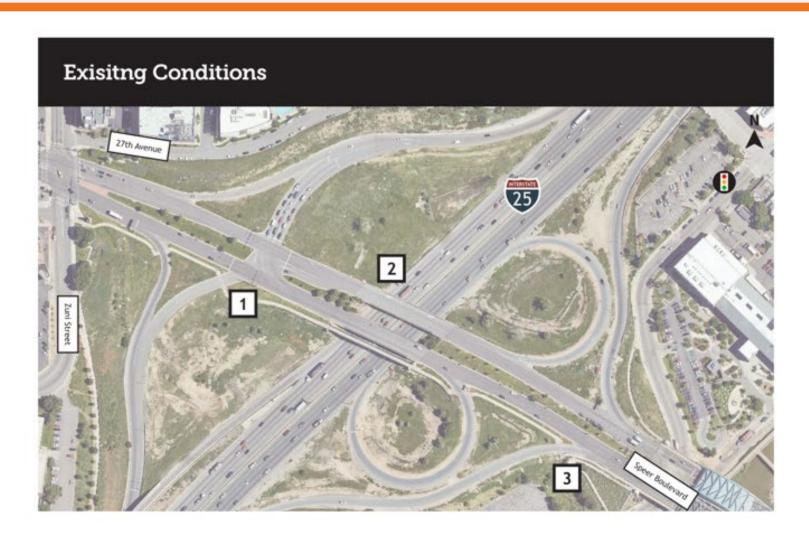
The Speer Boulevard Diverging Diamond Interchange is recommended as the Proposed Action to be evaluated during the NEPA process because it best supports safety for everyone.

- When compared to traditional diamond interchanges,
  Diverging Diamond Interchanges generally experience 15% fewer crashes, and 45% fewer crashes resulting in a fatality or serious injury
- Diverging Diamond Interchanges remove left-turn conflicts, which improves safety for pedestrians, cyclists, and drivers alike
- Diverging Diamond Interchanges also provide short and convenient crossings, as well as a wide barrier protected center path for cyclists and pedestrians





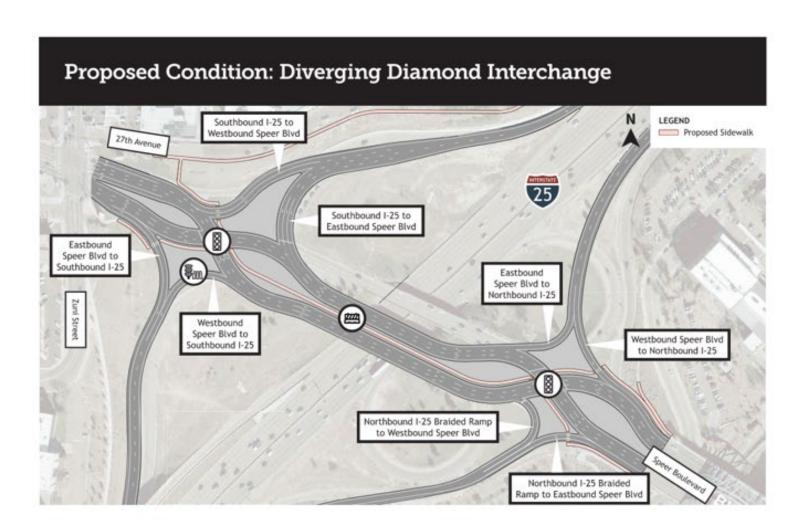
## Existing Bike and Pedestrian Safety Problems for Speer Boulevard



- Large distance between left-turning vehicles and pedestrian crossing.
- 2 No sidewalk on the north side of the bridge.
- Vehicles exiting the interstate are at higher speeds when approaching the uncontrolled pedestrian crossing.



## Potential Bike and Pedestrian Safety Solutions for Speer Boulevard





Signalized non-motorist crossing.



Barrier separated area for non-motorist users.



Signalized non-motorist crossing.



## Examples of Diverging Diamond Interchange Features



This is an example of 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 and pedestrians and micromobility users.



#### **Recommended Proposed Action**

The 23<sup>rd</sup> Avenue Braid and the Speer Boulevard Diverging Diamond Interchange have been combined into one recommended design that will move forward for further study and detailed design.

This recommended design, known as the Proposed Action, will be compared to the No Action (No Build/Do Nothing) in the NEPA analysis process.

Public Involvement will remain a key part of the process moving forward.





## Stakeholders' Concerns, Interests, & Ideas



#### Discussion (Part 1)

# Do you have questions or comments regarding the project's decision-making, or other process considerations?





## Are there any potential impacts of this project that you are concerned about?





## What general comments or questions do you have for the project team?



## Next Steps





#### 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



2026 and Beyond: Final Design and Construction

Identify construction delivery method, identify construction funds and finish design

