



**COLORADO**

Department of Transportation

# I-25: Speer and 23<sup>rd</sup> Bridge and Interchange Project **Children's Museum Stakeholder Meeting**

October 8, 2024



# 23<sup>rd</sup> Avenue Alternatives

## Decision-Making Process

No decisions have been made - CDOT is currently evaluating these alternatives based on Purpose & Need, specific screening metrics, and Public/Stakeholder input.

## Public/Stakeholder Input

Feedback is an important aspect of the decision-making process. CDOT continues to accept and review all Public/Stakeholder comments as they are received.

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

**23rd Avenue Bridge  
Replacement Only**

**23rd Avenue Braid**



# How is traffic being considered/evaluated?

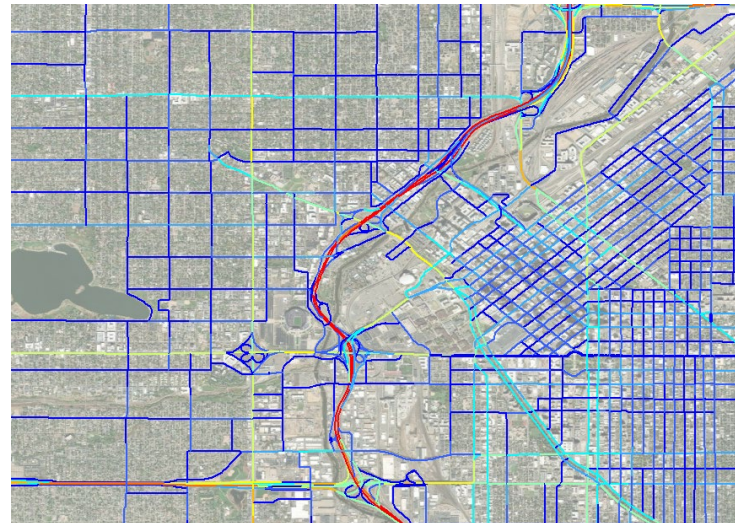
## 1 Data-Driven Conceptual Analysis

- Traffic counts (volumes, speeds, turning movements, truck counts, etc.)
- GPS origin-destination data (cell phones, connected vehicles, etc.)
- Bicycle & pedestrian volumes



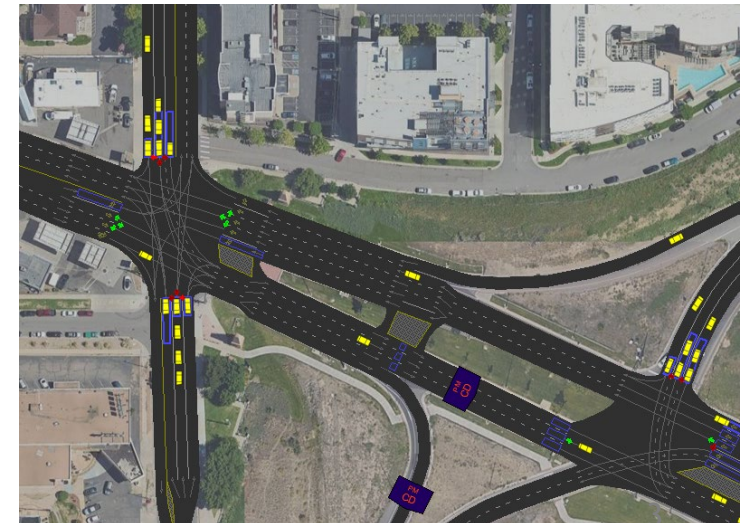
## 2 Regional Modeling (DRCOG Travel Demand Model)

- Considers regional travel patterns
- Uses generalized roadway characteristics
- Accounts for land use and travel pattern changes (new developments, work from home trends, etc.)



## 3 Detailed Microscopic Modeling

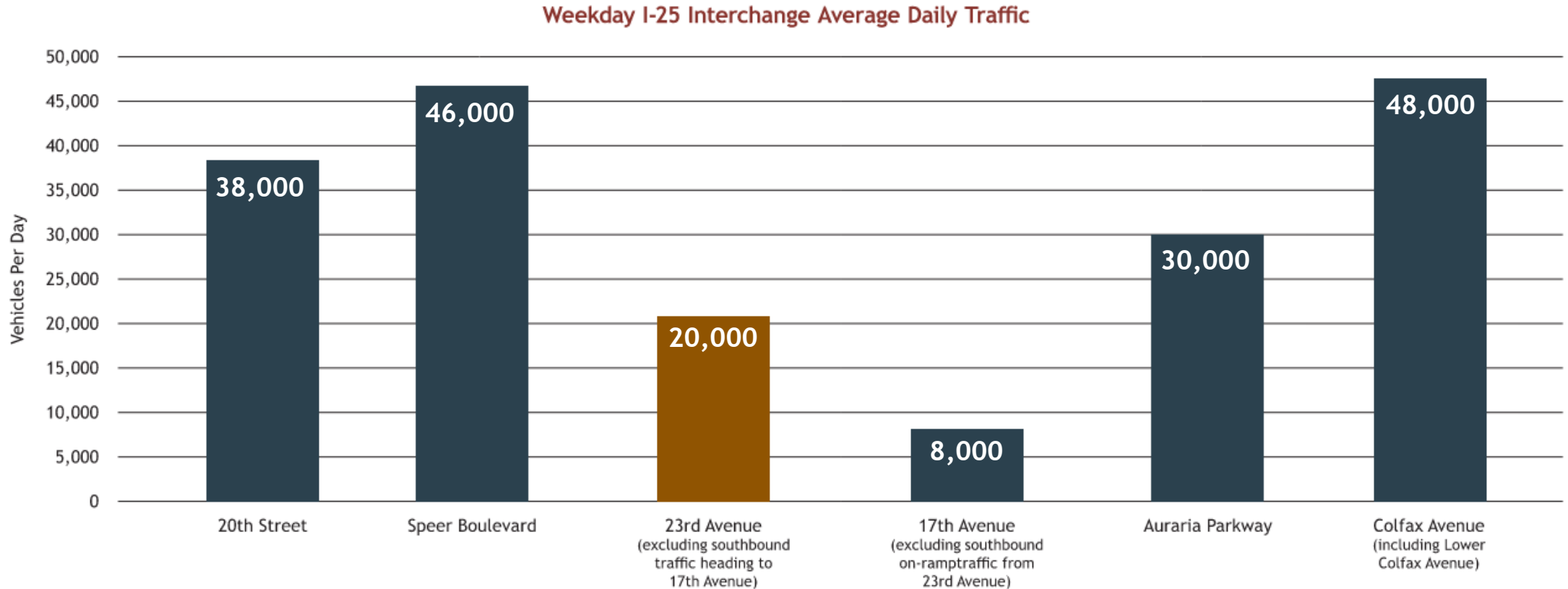
- Evaluates individual intersections





# How many people use the 23<sup>rd</sup> Avenue Ramps Today?

On a typical weekday in 2023, about 20,000 vehicles entered or exited I-25 at 23rd Avenue.



Data Source: In-field traffic counts collected in October 2023.



# Traffic Patterns at the 23<sup>rd</sup> Avenue Interchange

The data below shows the percent of traffic on and off the 23<sup>rd</sup> Avenue ramps going to various locations. For example, 15 percent of all daily weekday traffic at 23<sup>rd</sup> Avenue goes to and from Water Street and Platte Street.

## To/From Jefferson Park Area



Typical Weekday

**12% or 2,400 daily vehicles**

Out of 20,000 daily vehicles

Typical Weekend

**12% of daily vehicles\***

## To/From Water Street and Platte Street



Typical Weekday

**15% or 3,000 daily vehicles**

Out of 20,000 daily vehicles

Typical Weekend

**22% of daily vehicles\***

## Other Locations Sloans Lake, Colfax, Federal Blvd, Downtown, etc.



Typical Weekday

**73% or 14,600 daily vehicles**

Out of 20,000 daily vehicles

Typical Weekend

**66% of daily vehicles\***

\*Weekday traffic volumes were not collected as part of this study; therefore; total numbers of vehicles cannot be estimated for weekend trips.

- Routing data comes from StreetLight location-based data analytics, collected between May 2021 and April 2022.
- Absolute traffic volumes are estimates based on StreetLight data applied to in-field traffic counts, collected in October 2023.

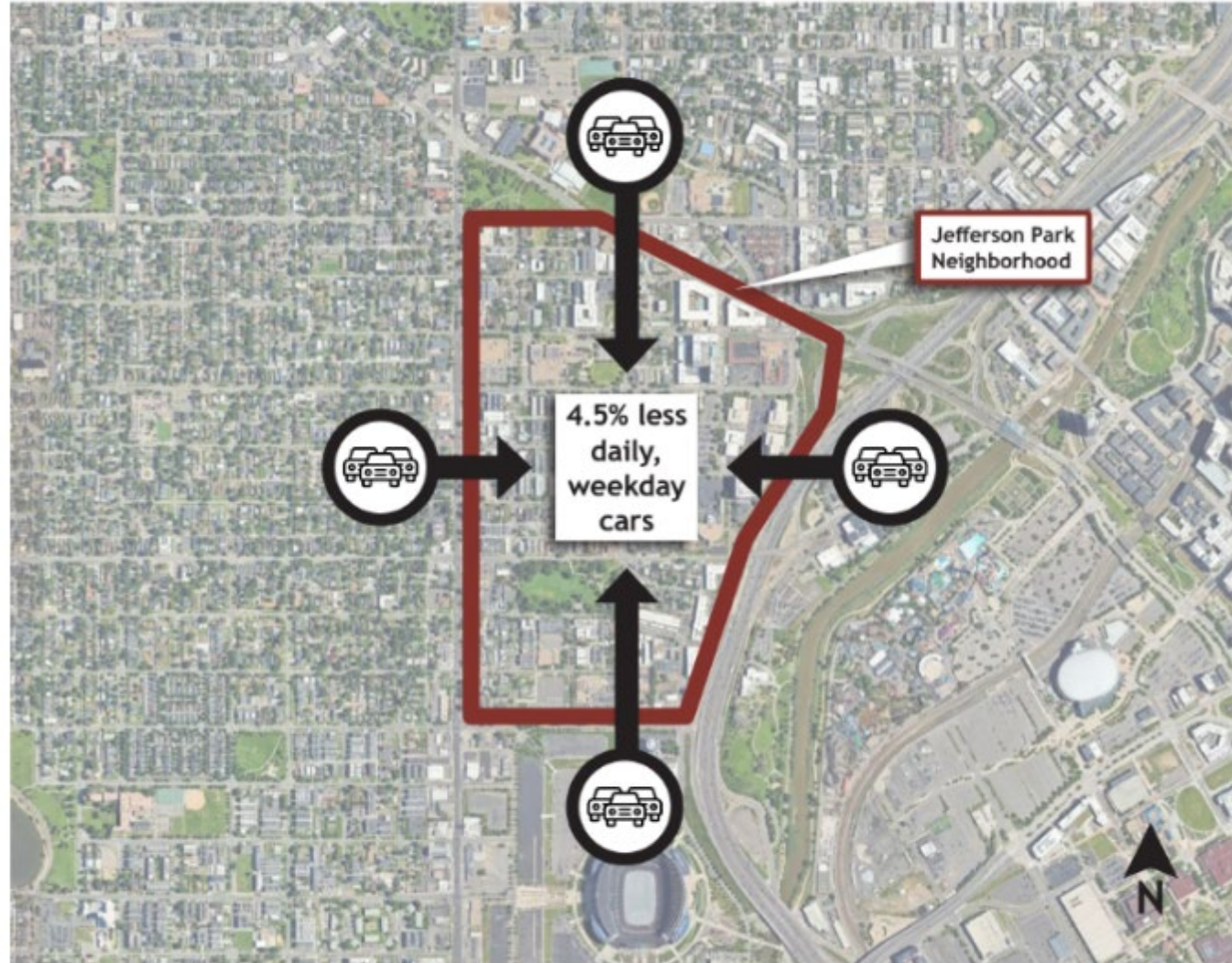


# 23<sup>rd</sup> Avenue Ramp Closure - Expected Changes to Jefferson Park Neighborhood Traffic

## How would the closure of the ramp affect traffic in the Park Neighborhood?

Regional modeling shows that closing the on and off ramps at 23<sup>rd</sup> Avenue could reduce traffic through Jefferson Park by about 4.5% or approximately 1,300 vehicles per day.

This estimate is based on projected traffic data for 2050.





# Pedestrian Bridge Considerations

## Potential Advantages Associated with Pedestrian Bridges

- May provide significant safety benefits by separating non-motorists from vehicular traffic.
- May improve user experience with an inviting and accommodating pathway.
- May provide community benefits because of improved connectivity.

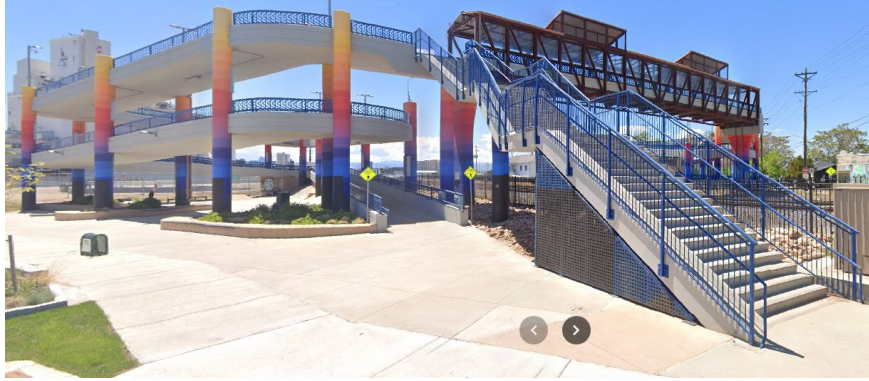
## Potential Challenges Associated with Pedestrian Bridges

- May introduce undesirable out-of-direction travel, which could discourage use.
- Must be designed with grades that do not exceed 5 percent for ADA compliance.
- May require a large footprint, and in some cases they may also require ROW acquisition.





# 47<sup>th</sup> Avenue & York Street Pedestrian Bridge Over Union Pacific Railroad







# Colorado Center Drive Pedestrian Bridge Over I-25, near Evans Avenue



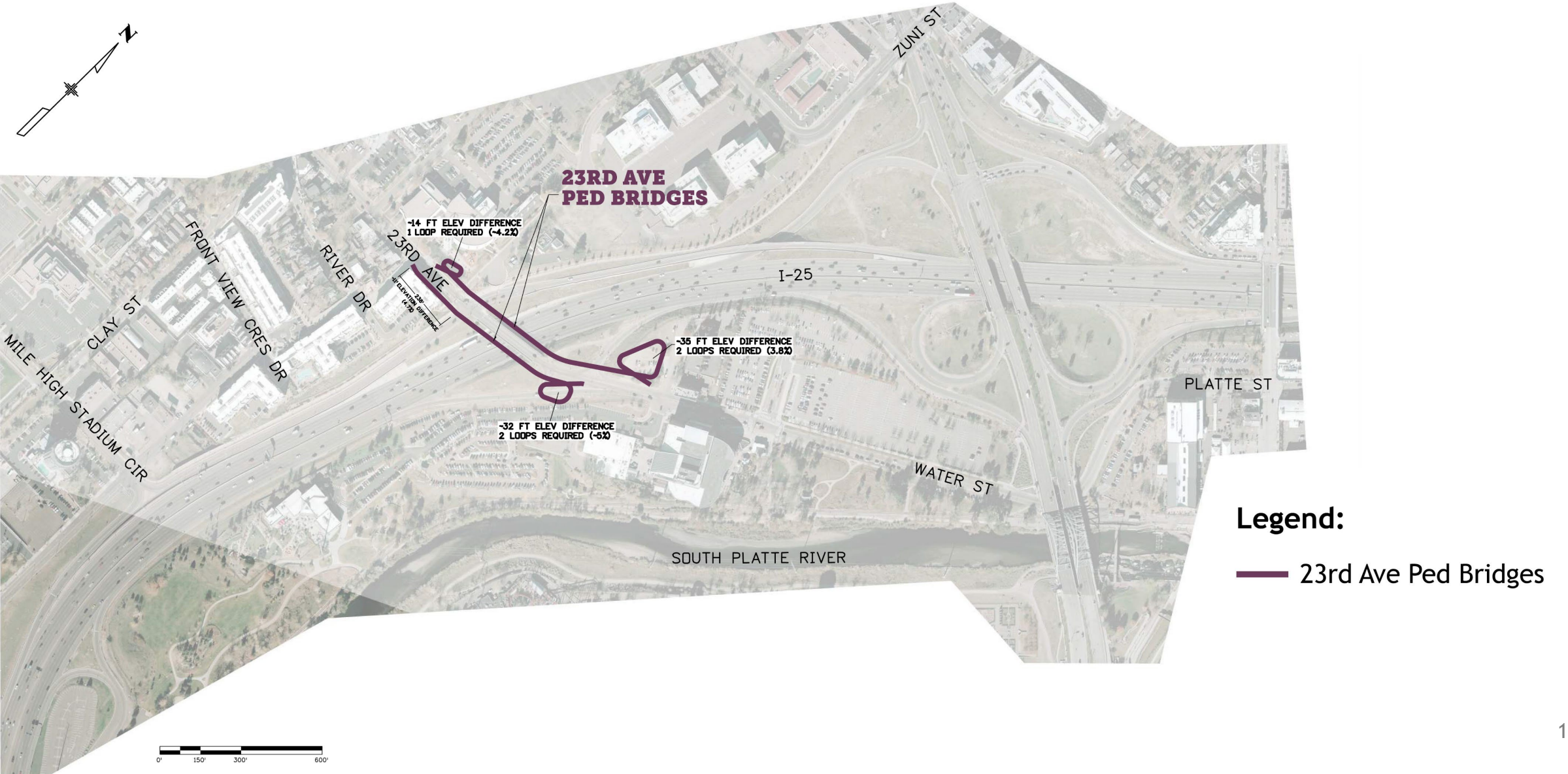


# Westminster Park-N-Ride Pedestrian Bridge Over US 36, near Sheridan Boulevard



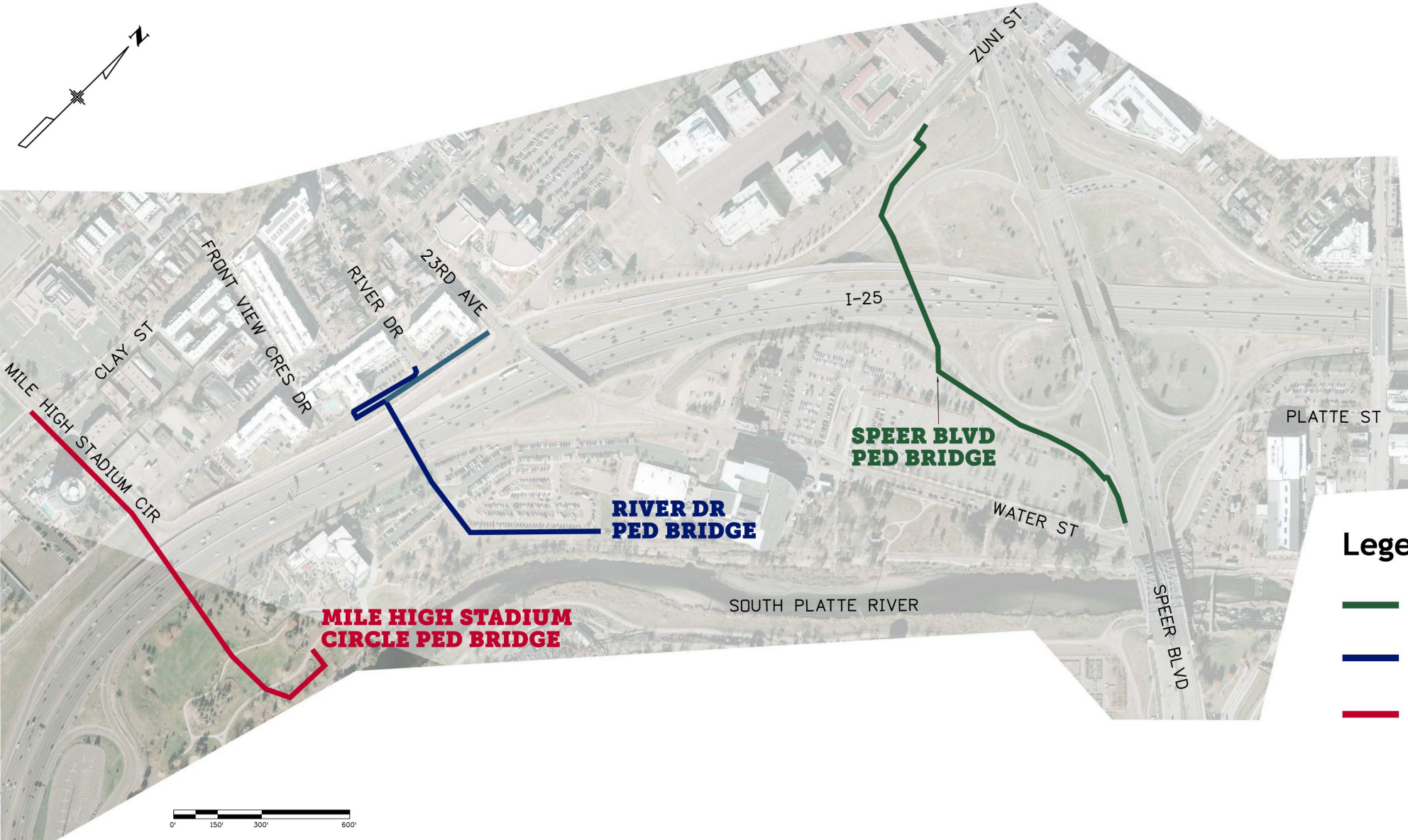


# Pedestrian Bridge Options Adjacent to 23<sup>rd</sup> Avenue








# Pedestrian Bridge Options Near 23<sup>rd</sup> Avenue



## Legend:

-  Speer Blvd Ped Bridge
-  River Dr Ped Bridge
-  Mile High Stadium Circle Ped Bridge



# Pedestrian Bridge Options - By the Numbers

- **Cost** - These pedestrian bridge options are estimated to range in cost from **\$25M to \$40M**.
- **Structure Length** - These pedestrian bridge options range from **500 feet to nearly 950 feet in length**.
- **Out-of-Direction Travel** - These pedestrian bridge options would detour users off of 23<sup>rd</sup> Avenue by **as much as half a mile**.
- **Grade/Steepness** - All of these pedestrian bridge options require segments of **5 percent grade** so that they can achieve adequate clearance over I-25.