

WELCOME!

US 85

(I-76 TO 124th Avenue)

Project

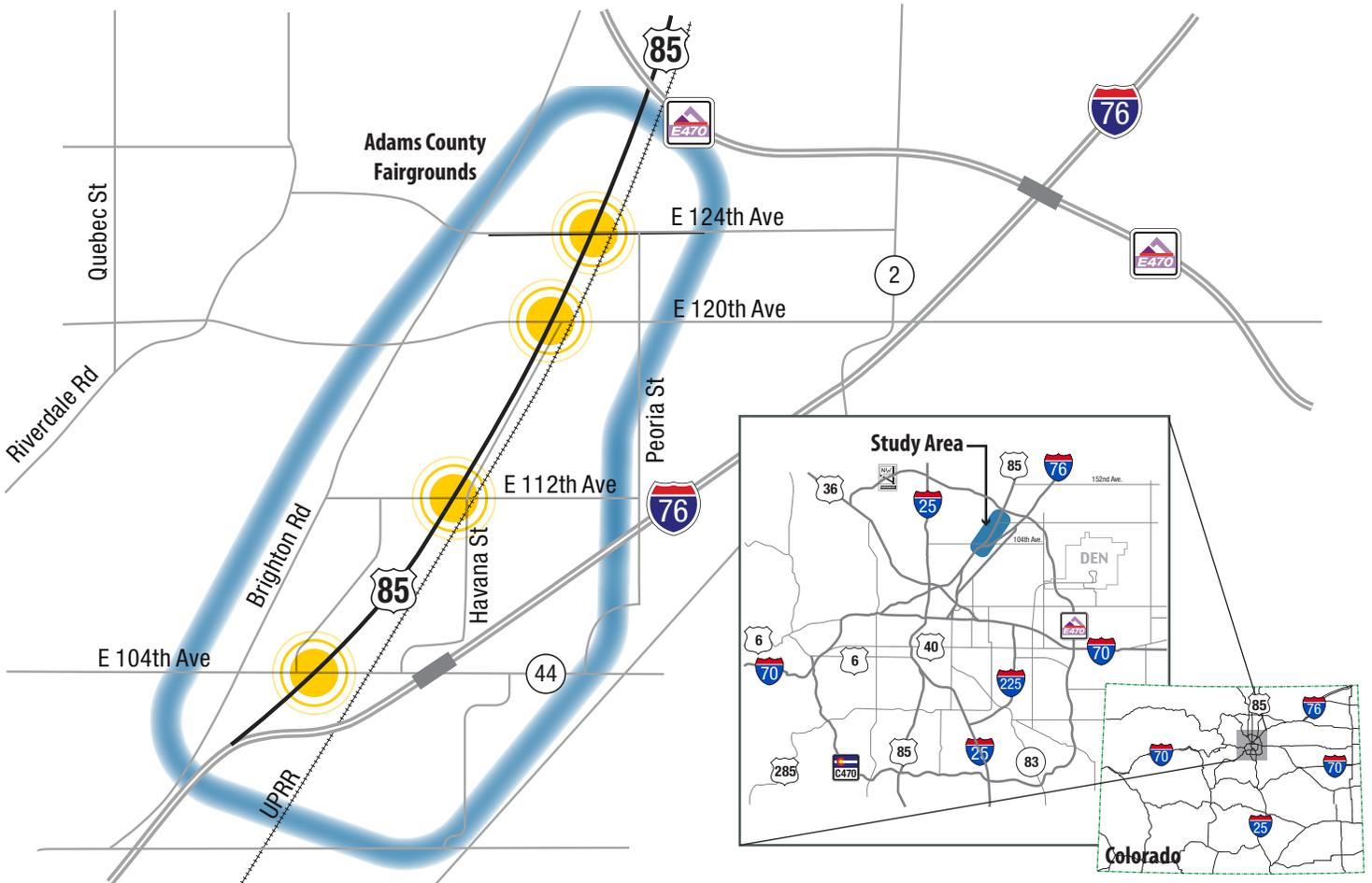


COLORADO

Department of
Transportation

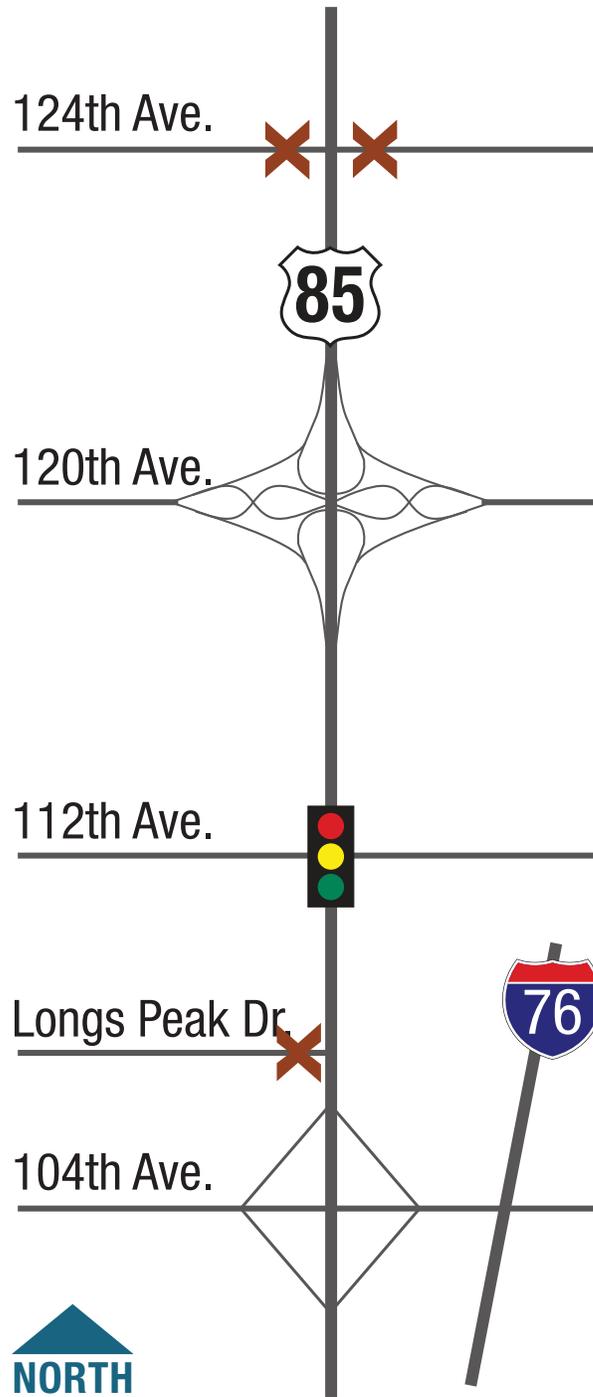


Study Area & Vicinity



LEGEND

-  Study Area
-  Intersections Under Study
-  NORTH



US 85/120th Avenue:
Diverging Diamond Interchange

US 85/112th Avenue
At-Grade Improvements

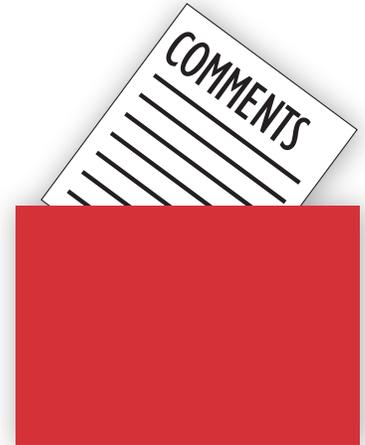
US 85/124th Avenue:
Closure

US 85/104th Avenue:
Standard Diamond Interchange



How to Comment & Stay Connected

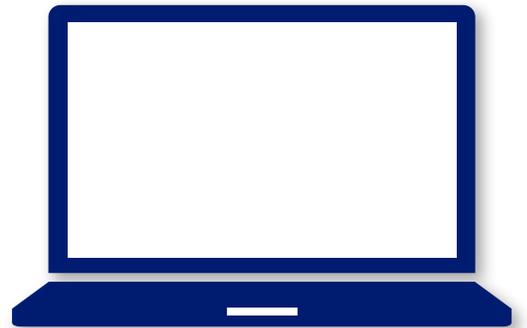
Leave your comments
at today's meeting



Visit the project website:

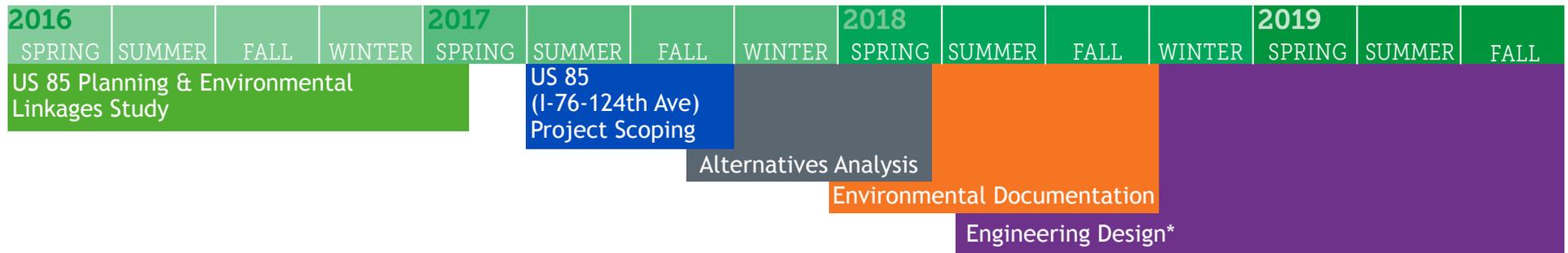
www.codot.gov/library/studies/us-85-from-i-76-to-124th-avenue-highway-design-improvements

Contact the US 85
(I-76 to 124th Ave)
Stakeholder Engagement team:
jody@jseassociates.com





Schedule



*When Funded construction may be within 24 months



What is the Purpose of the Proposed Action?

The purpose of the proposed transportation improvements in the US 85 corridor from I-76 to 124th Avenue are to:

-  Improve safety
-  Reduce existing and future traffic congestion

What are the objectives of the proposed action?

-  Improve connectivity for and between transit (bus), bicyclists, and pedestrians
-  Improve regional operations for cars, freight, and transit (bus), along US 85 between the Denver metropolitan area and communities in Adams and Weld Counties and provide reasonable access for existing and future land use



Why are the Transportation Improvements Needed?

Safety



There is a higher than expected number of rear-end crashes at the US 85/104th Avenue and US 85/120th Avenue intersections. The proximity of the railroad to the intersections is not adequate to safely accommodate queues that form between the railroad tracks and US 85 when a train is present.

Vehicle and Transit (Bus) Operations

Traffic operations along the corridor and at the intersections are congested today and are expected to worsen by 2040 due to local and regional population and employment growth.



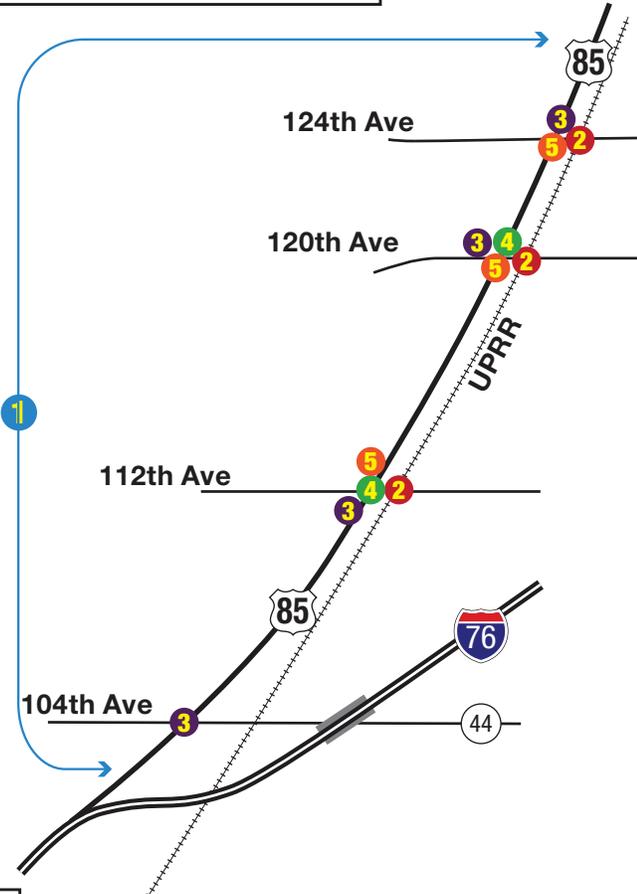


Existing & Forecasted 2040 Operational Deficiencies

1 Existing daily traffic volumes along the corridor are approximately 32,000 to 42,000 vehicles per day (vpd). Daily truck volumes are approximately 13 percent of the daily traffic volumes (4,100 to 5,500 trucks per day).

2 The distance between the railroad and US 85 ranges from approximately 200 to 220 feet between US 85 and the 112th Avenue, 120th Avenue, and 124th Avenue at-grade railroad crossings. The distance between US 85 and the 104th Avenue railroad crossing is approximately 800 feet.

Existing and projected average queues exceed the available storage between the railroad crossing and US 85 at these locations when a train is present. The eastbound vehicle queues can extend onto the northbound US 85 mainline causing northbound vehicles to come to a complete stop. There is a moderate risk of increased crash and severity rates on the northbound US 85 mainline.



	Existing AM/PM LOS	2040 No Action Alternative AM/PM LOS
124th Ave	B/D	E/D
120th Ave	C/D	F/F
112th Ave	D/E	E/E
104th Ave	D/E	F/F

3 Existing traffic operations for the US 85/104th Avenue, US 85/112th Avenue, US 85/120th Avenue, and US 85/124th Avenue intersections in the morning (AM) and evening (PM) are level of service (LOS) D/E, LOS D/E, LOS C/D, and LOS B/D respectively.

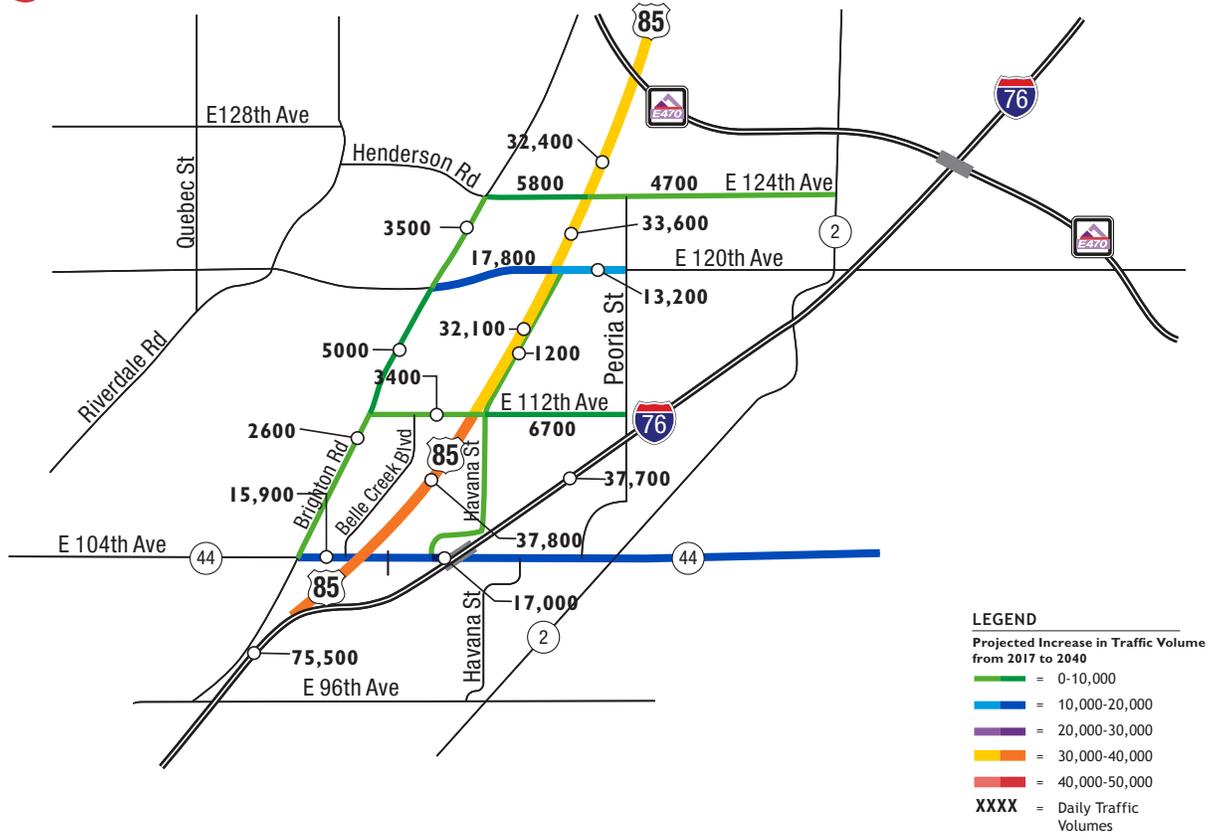
Projected 2040 traffic volumes indicate that the US 85/104th Avenue, US 85/112th Avenue, US 85/120th Avenue, and US 85/124th Avenue intersections in the morning (AM) and evening (PM) are F/F, E/E, F/F, and E/D respectively.

4 The US 85/104th Avenue, US 85/112th Avenue, US 85/120th Avenue, and the US 85/124th Avenue intersections have an above average number of rear end crashes compared to other similar facilities. Fatalities have occurred at US 85/112th Avenue, US 85/120th Avenue, US 85/124th Avenue, and in the median along the corridor.

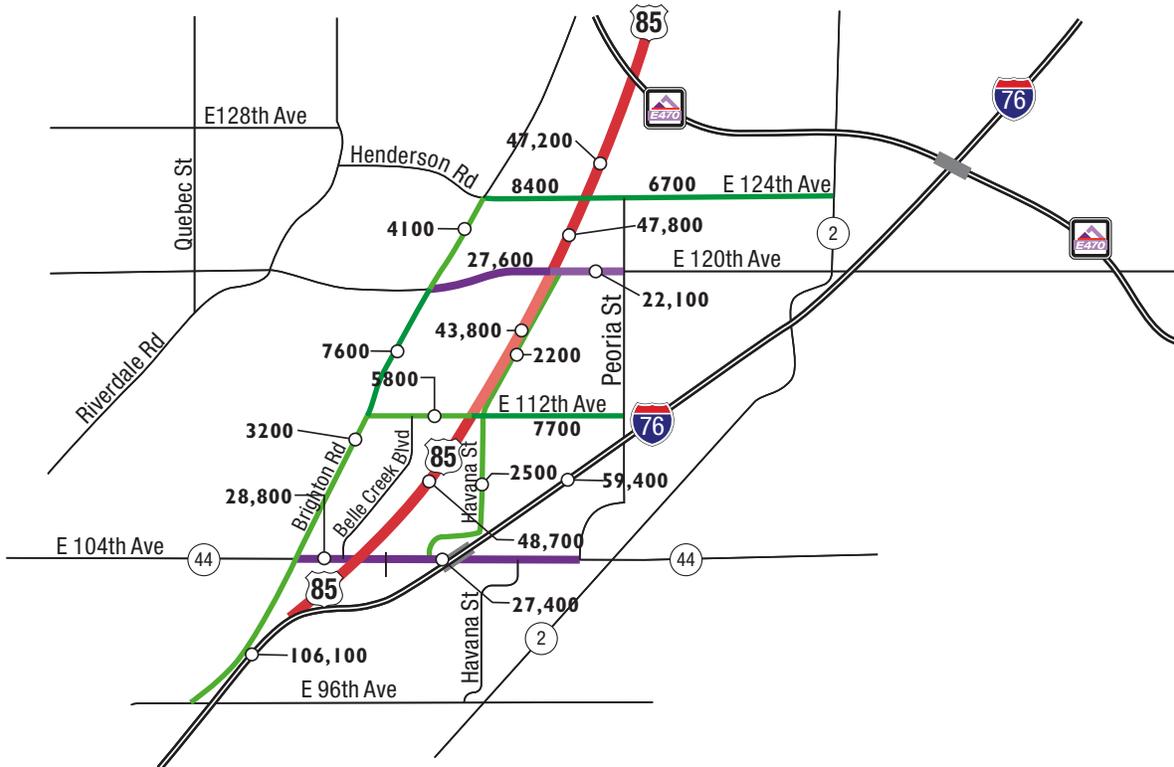
5 Sidewalks for pedestrians and transit users do not exist at US 85/112th Avenue, US 85/120th Avenue, and the US 85/124th Avenue intersections. Northbound and southbound bus stops are located along US 85 at 104th Avenue, 112th Avenue, and 120th Avenue. Eastbound and westbound bus stops are located along 104th Avenue and 120th Avenue.



Existing Conditions



2040 No-Action

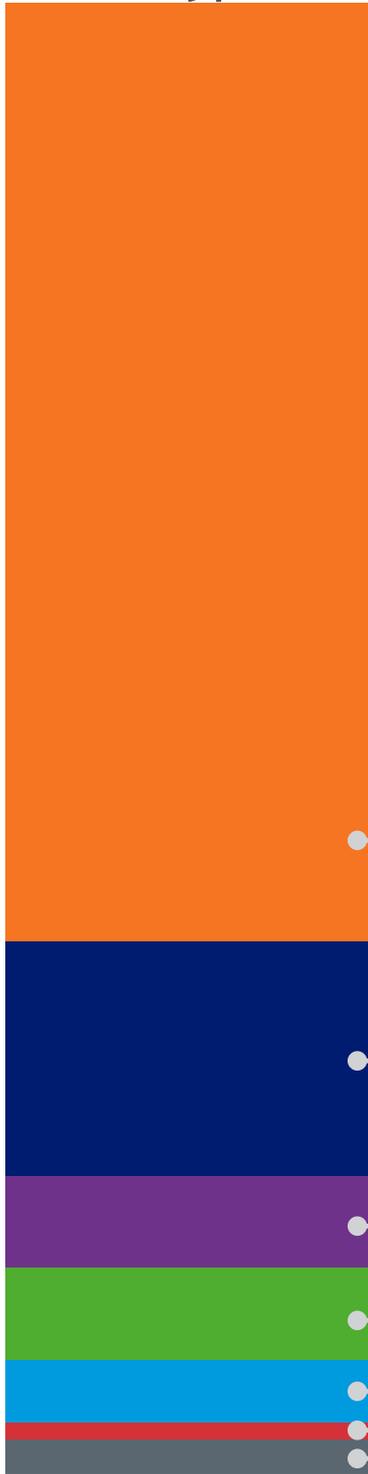




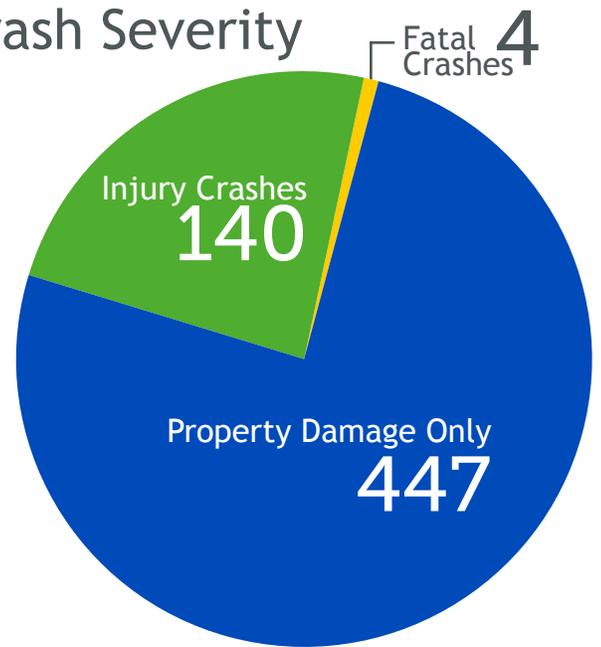
Corridor Crash History

January 1st, 2011-June 30th 2016
(Intersection and Non-Intersection Related Crashes)

Crash Types



Crash Severity

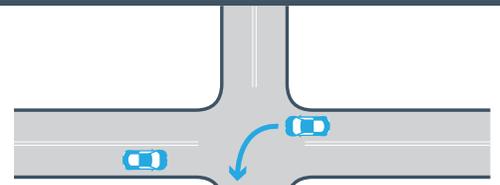




Level of Service (LOS)

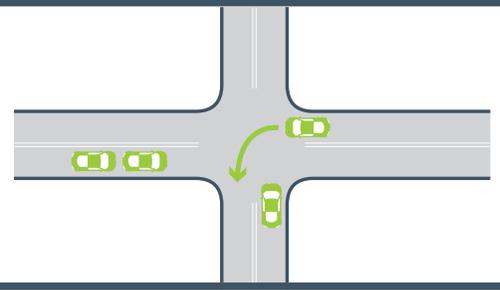
A

No vehicle waits longer than one signal cycle.



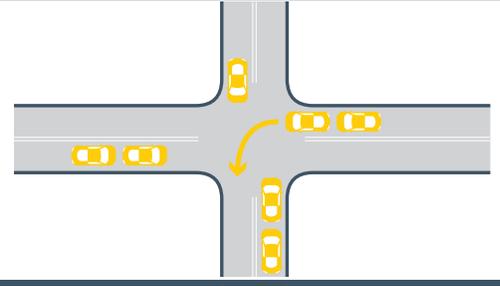
B

On rare occasions vehicles wait through more than one signal indication.



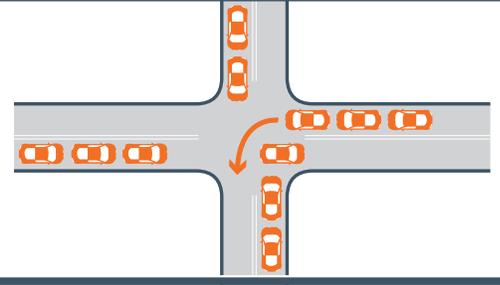
C

Vehicles wait intermittently through more than one signal cycle. Occasionally backups may develop. Traffic flow is still stable.



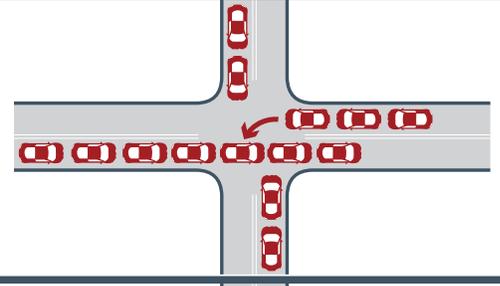
D

Delays at intersections may become extensive, but enough cycles with lower demand occur to permit periodic clearance, preventing excessive backups. LOS D has historically been regarded as a desirable design objective in urban areas.



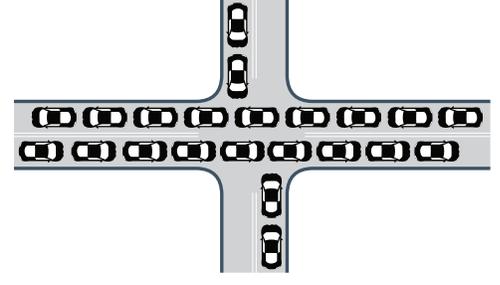
E

Very long queues may create lengthy delays.



F

Backups from locations downstream restrict or prevent movement of vehicles out of approach, creating "gridlock" condition.





Existing Conditions

Existing (2017) LOS Morning (AM)

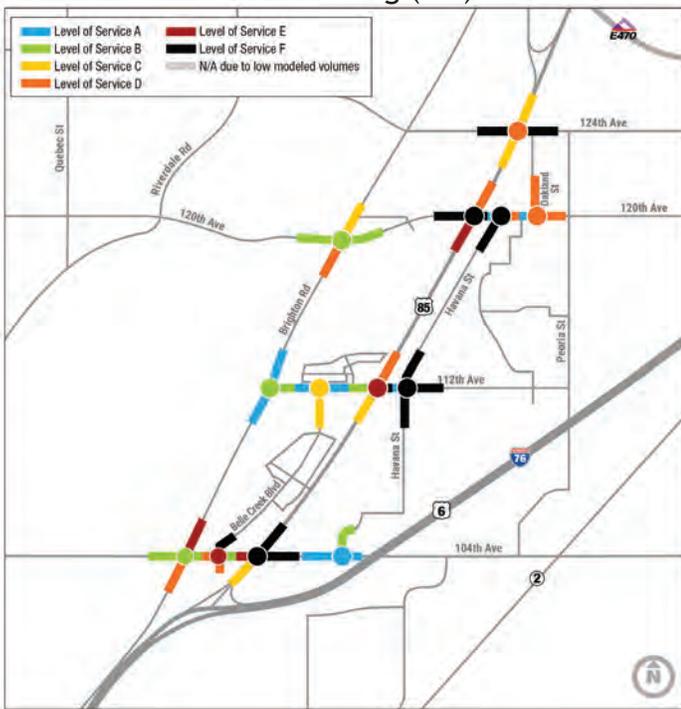


Existing (2017) LOS Evening (PM)

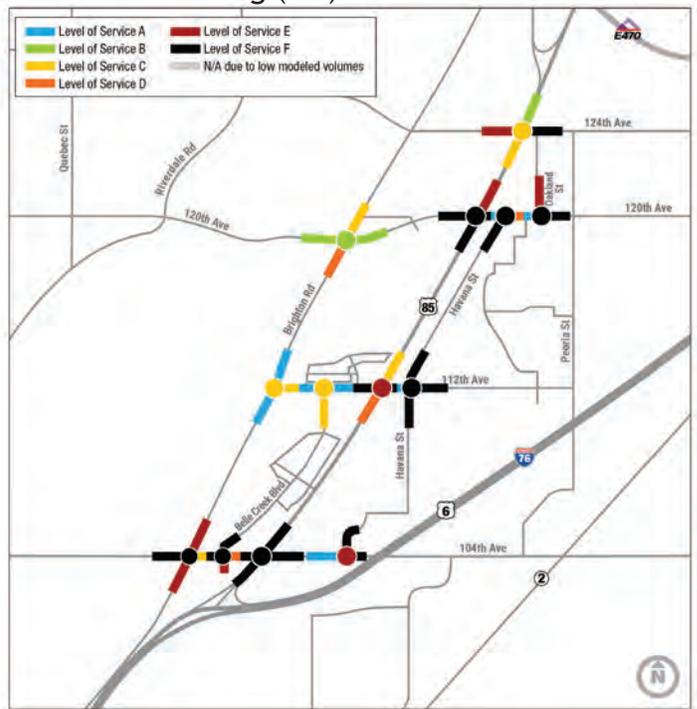


2040 No-Action

2040 No Action LOS Morning (AM)

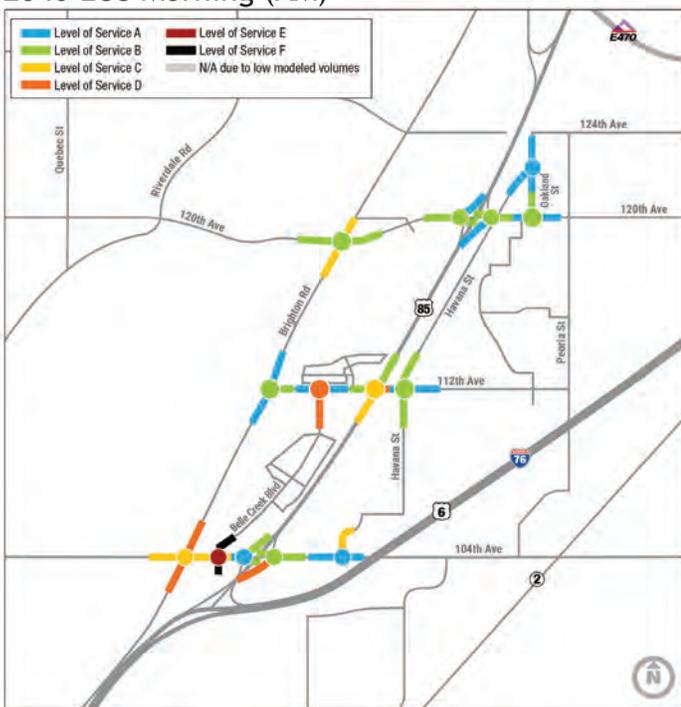


2040 LOS Evening (PM)

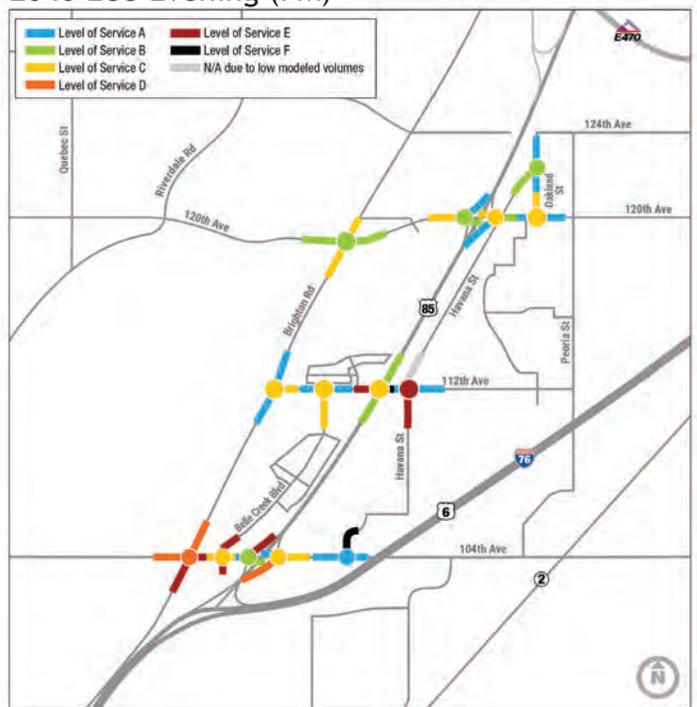


Proposed Action

2040 LOS Morning (AM)

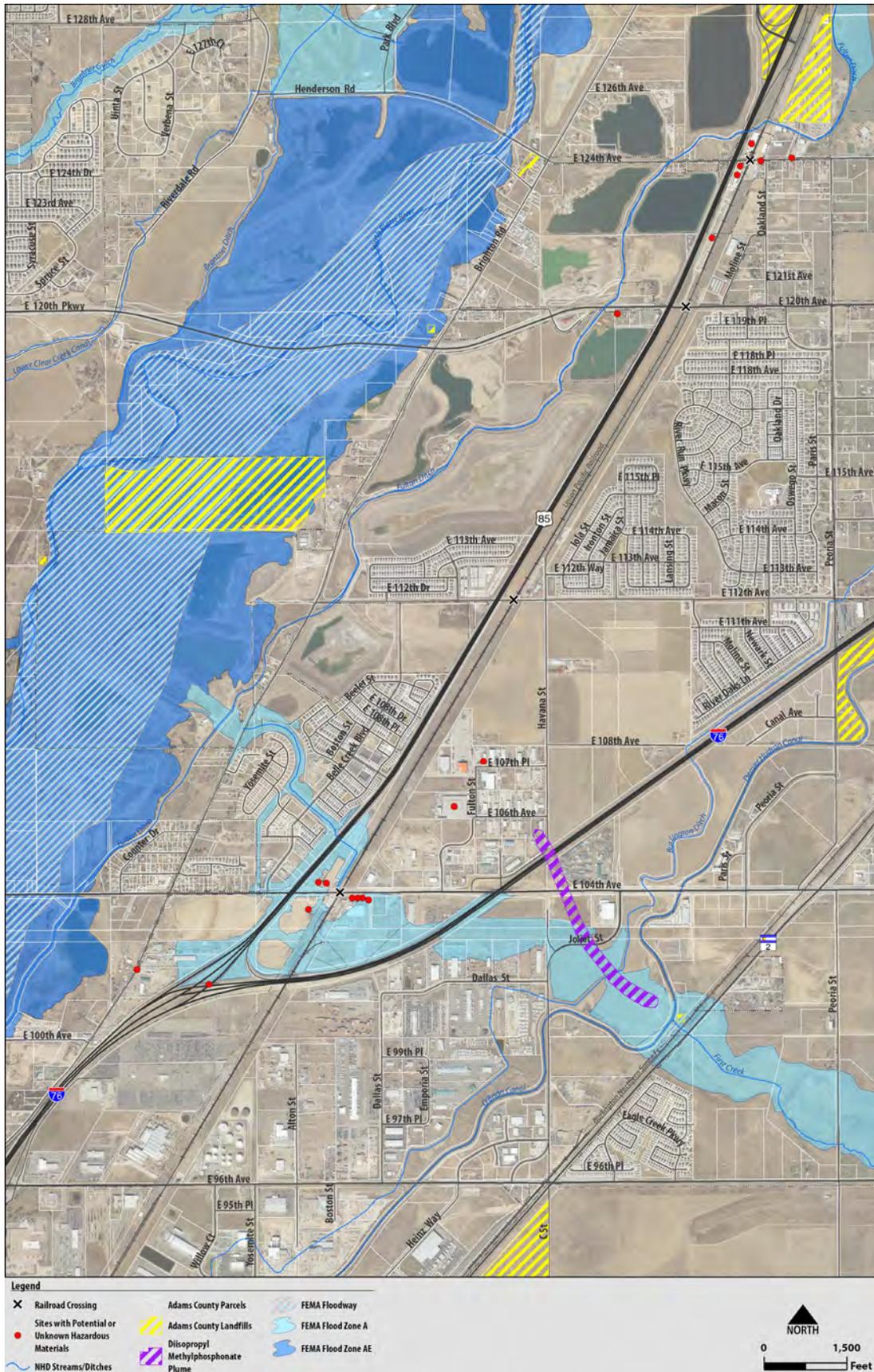


2040 LOS Evening (PM)



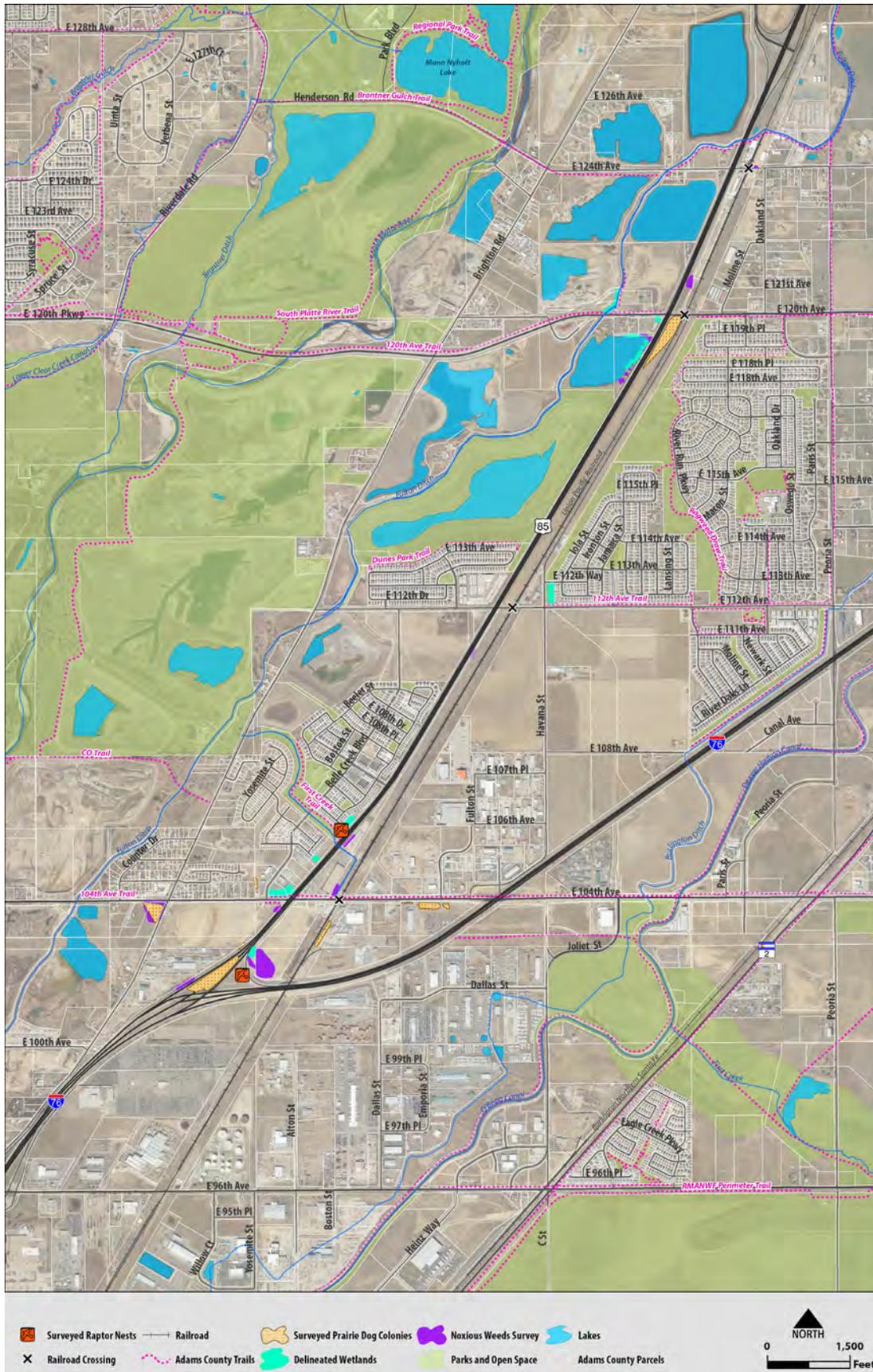


Environmental Resources



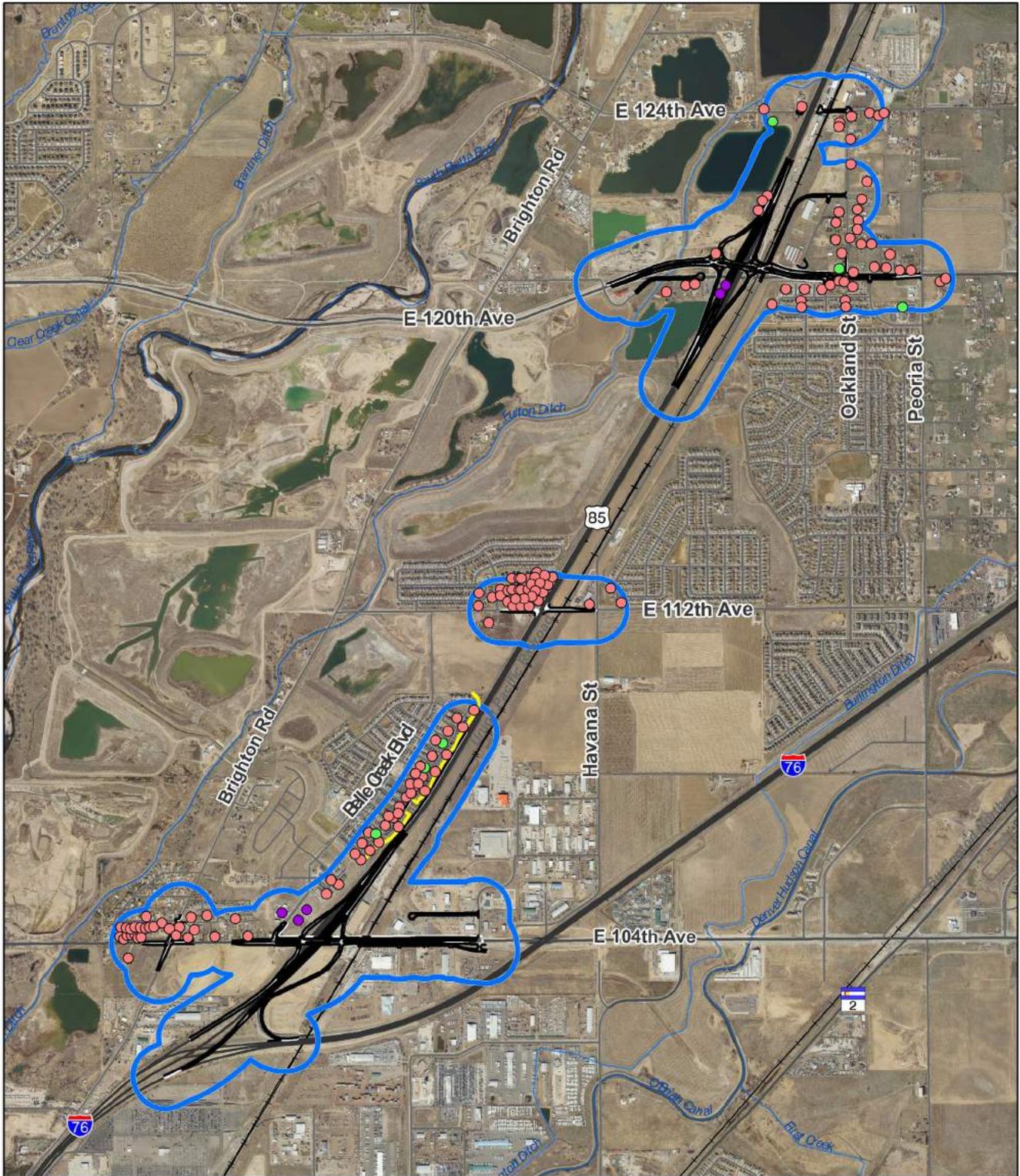


Environmental Resources



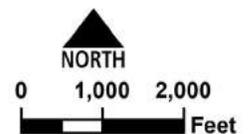


Environmental Resources



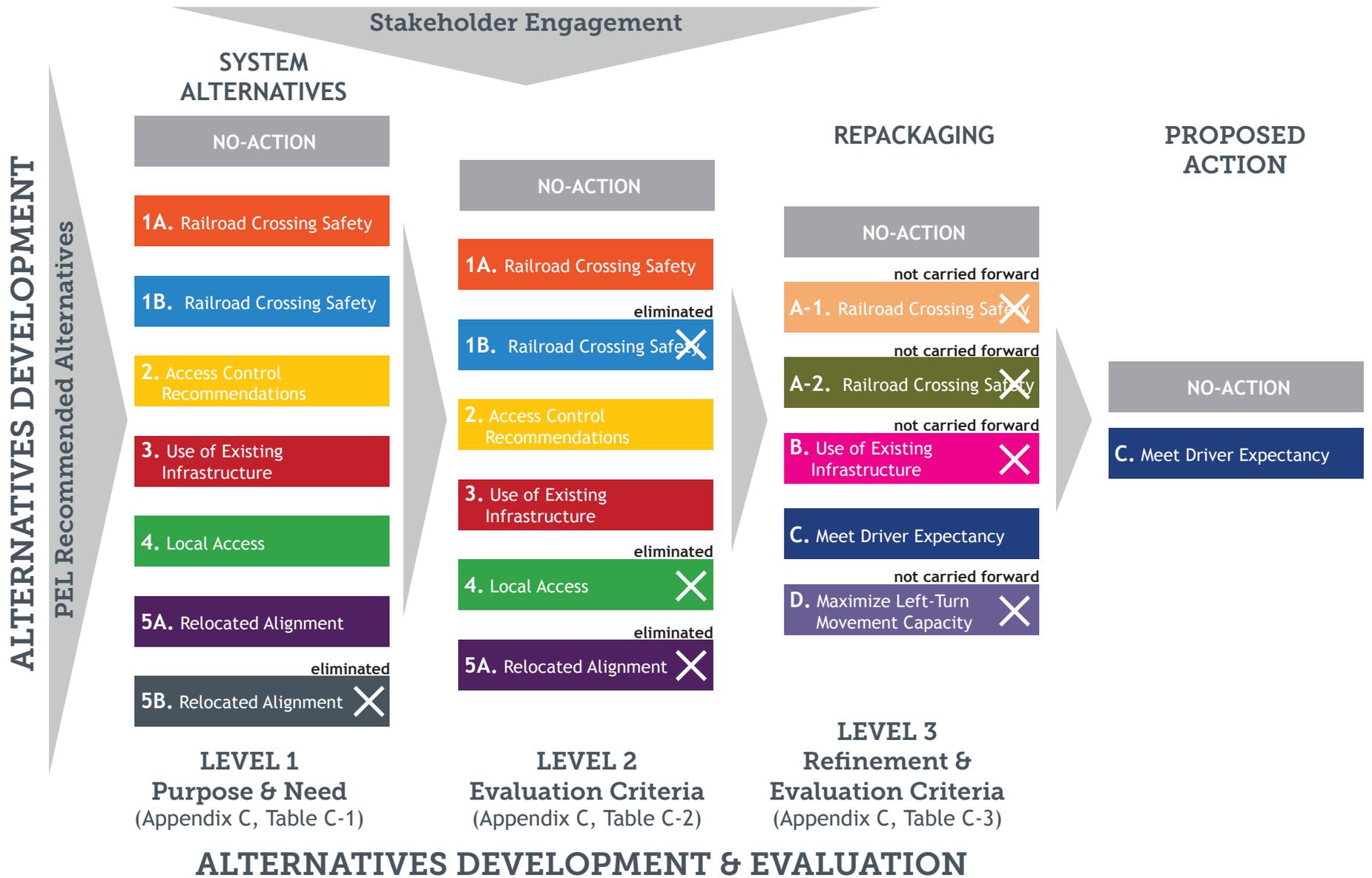
Legend

- Category B / Home
- Category C / Park or Church
- Category E / Cafe
- Proposed Design
- Existing Noise Wall
- Noise Study Zone



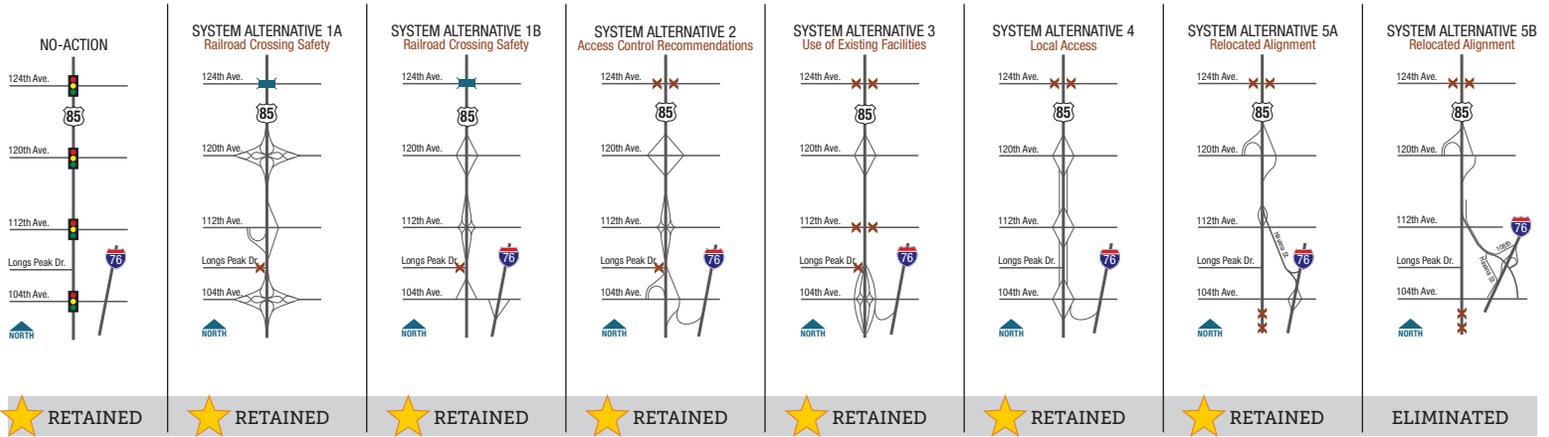


Alternatives Development and Evaluation Process

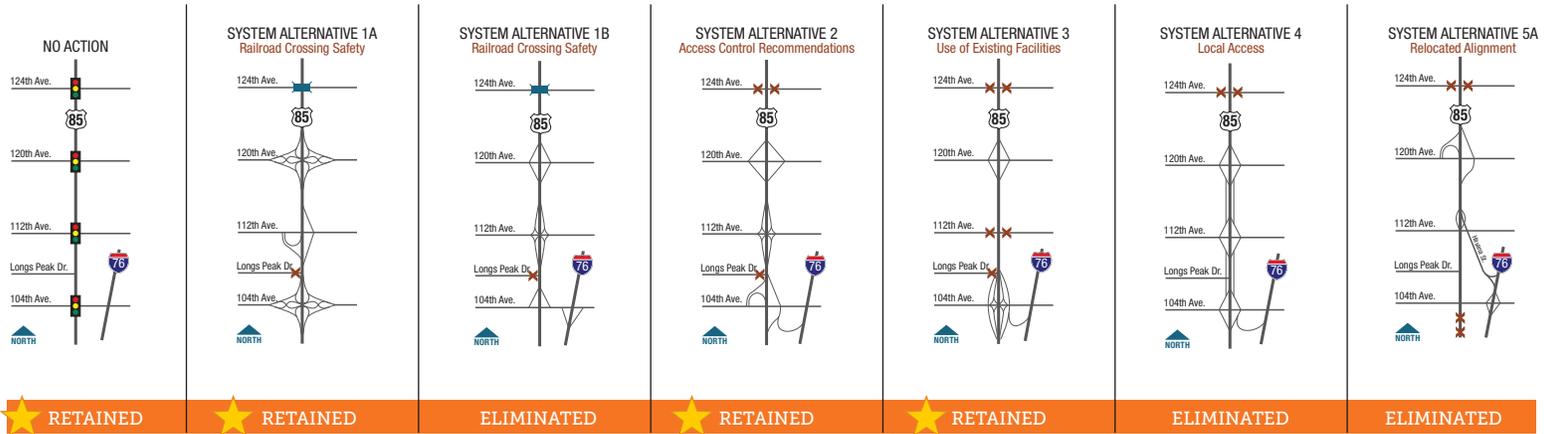




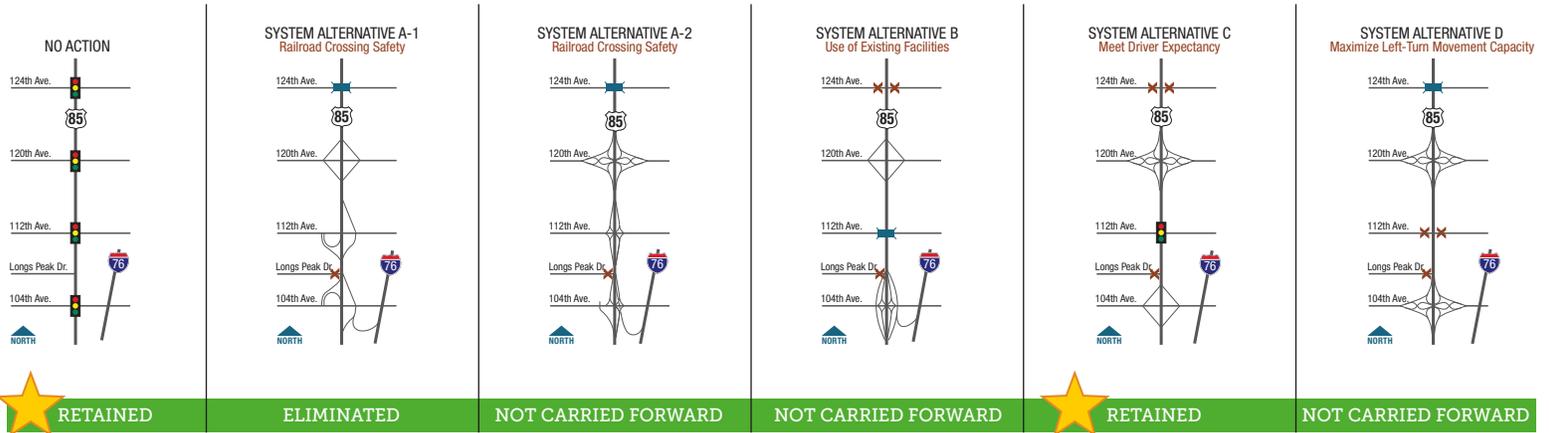
LEVEL 1 EVALUATION



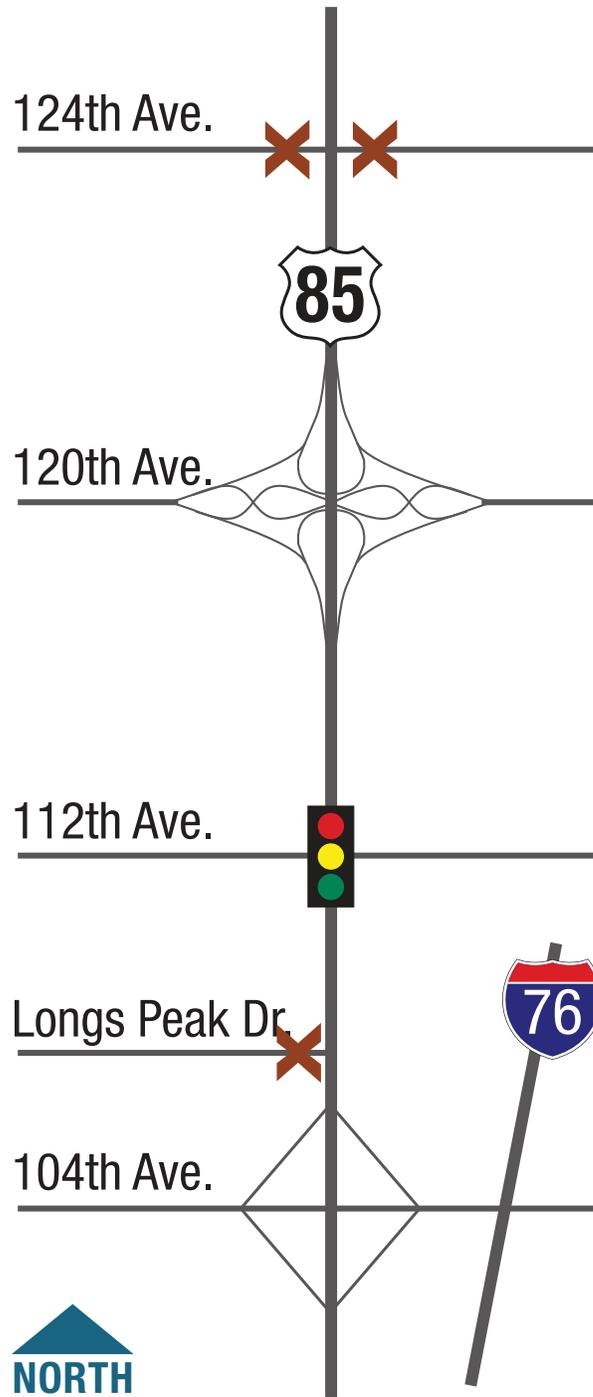
LEVEL 2 EVALUATION



LEVEL 3 EVALUATION - REPACKAGED



PROPOSED ACTION



US 85/120th Avenue:
Diverging Diamond Interchange

US 85/112th Avenue
At-Grade Improvements

US 85/124th Avenue:
Closure

US 85/104th Avenue:
Standard Diamond Interchange



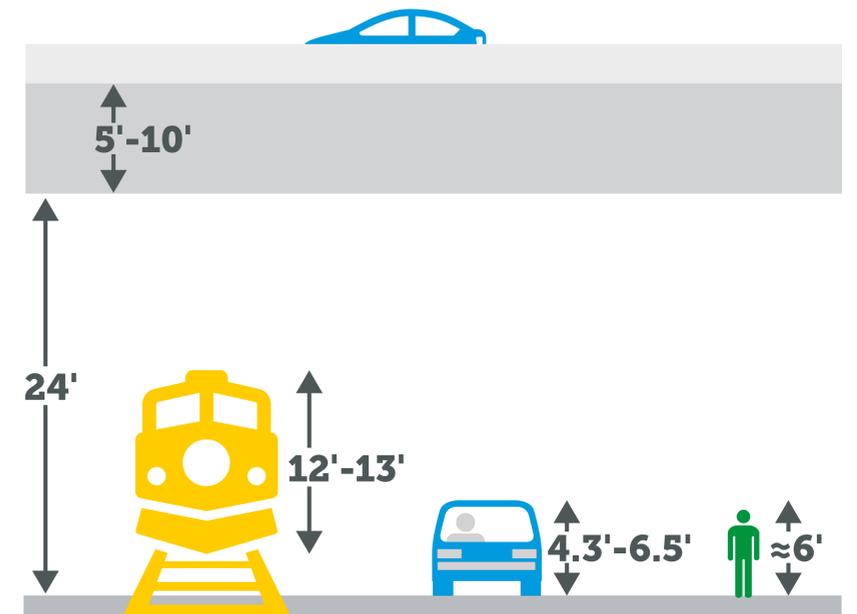
Plan View



Perspective



Proposed
Bridge
Height







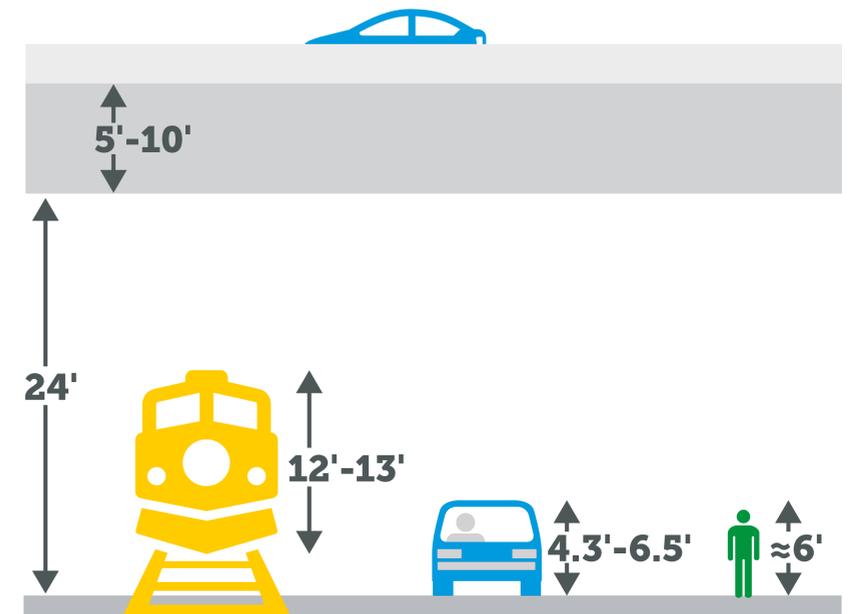
Plan View



Perspective



Proposed
Bridge
Height





US 85/120th Avenue Diverging Diamond Interchange

