

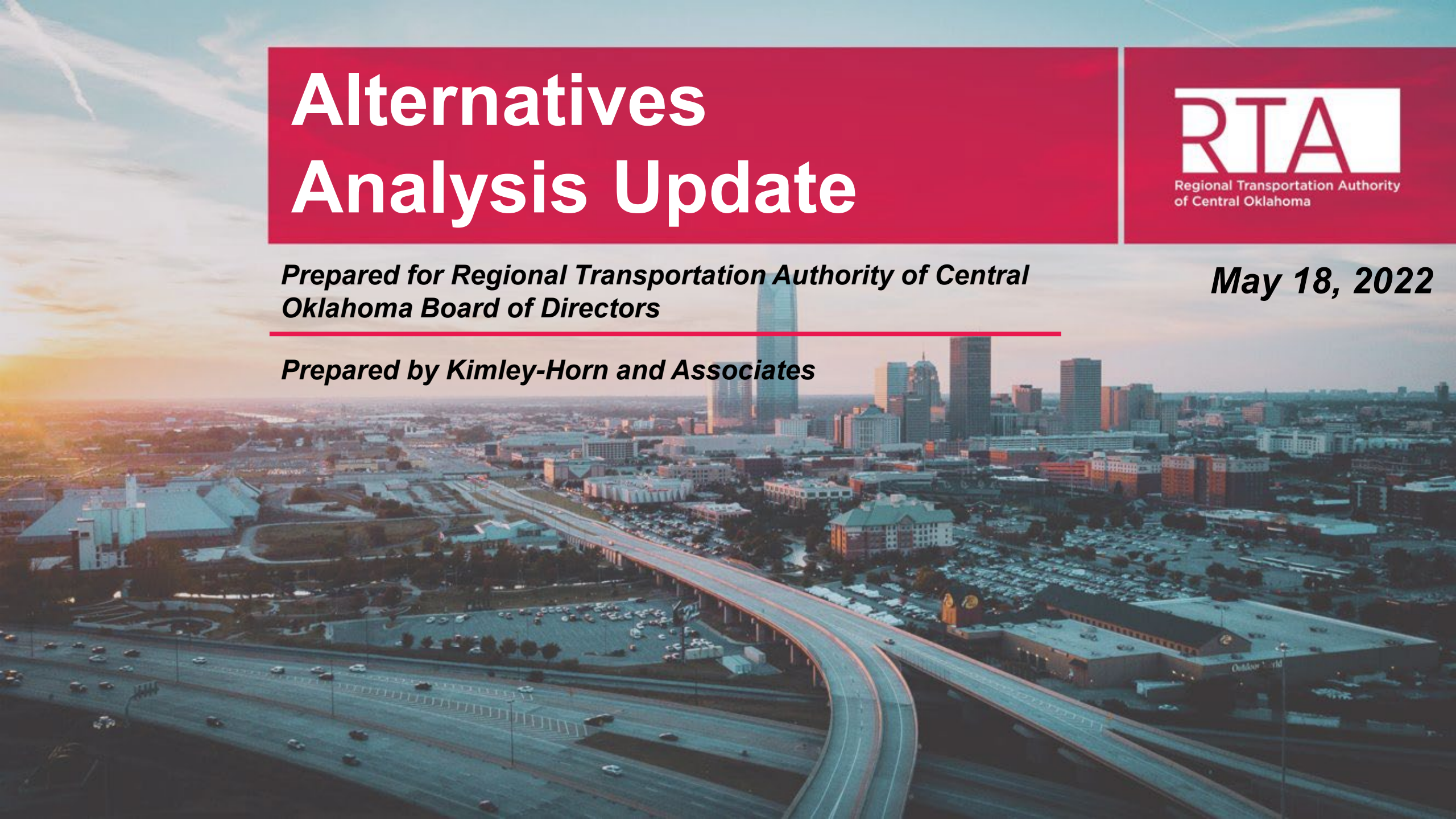
Alternatives Analysis Update



*Prepared for Regional Transportation Authority of Central
Oklahoma Board of Directors*

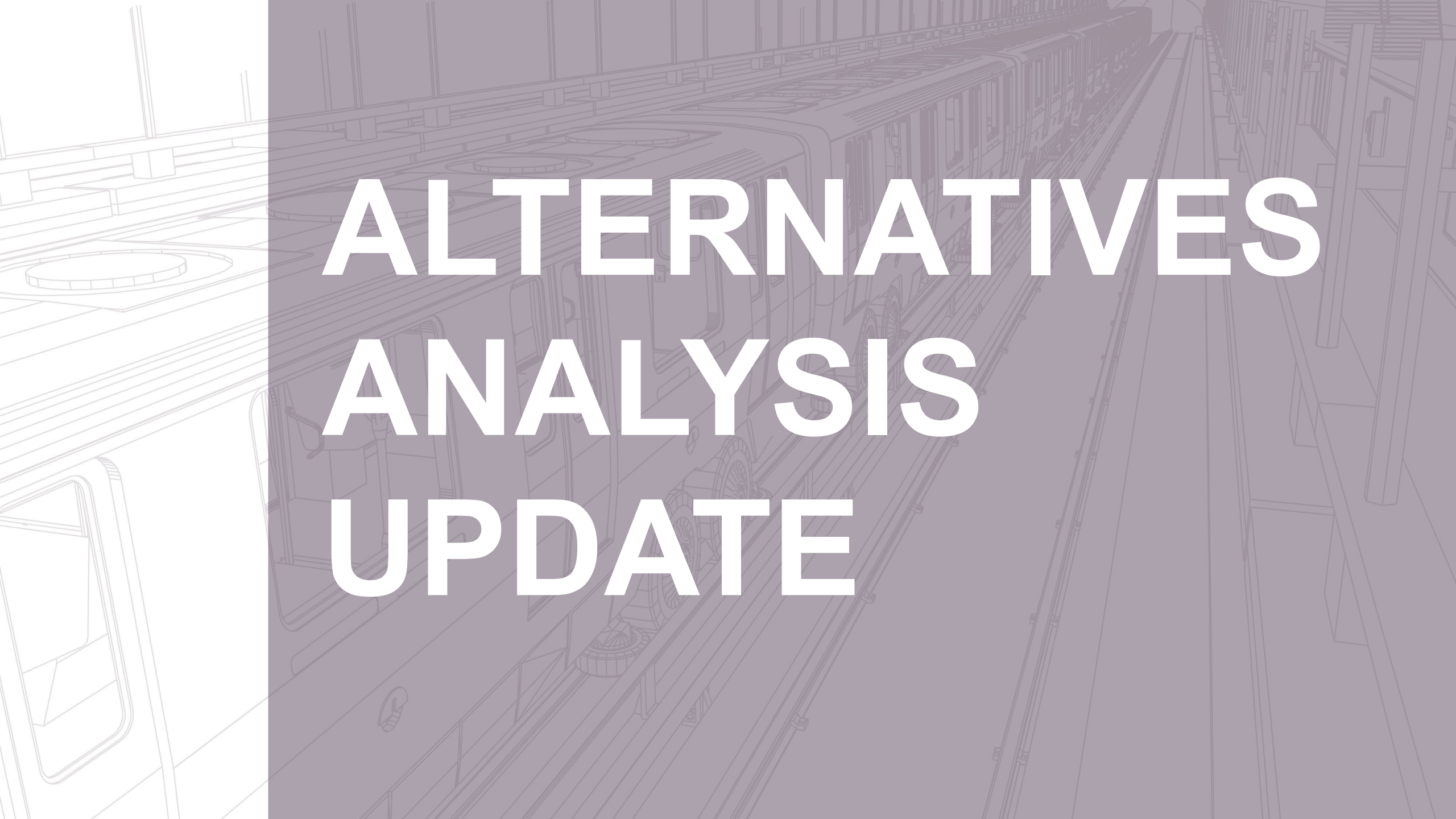
May 18, 2022

Prepared by Kimley-Horn and Associates



Agenda

- Alternatives Analysis Update
 - Recap Discovery Phase
 - Recent Updates
 - Revised High-Potential Alignments
- Cross-Section Analysis
- Next Steps

The background features a grayscale line-art illustration of a train station. A train is visible on the tracks, receding into the distance. On the left side, there is a white vertical line that separates a white area from a dark gray area. The text is centered in the dark gray area.

ALTERNATIVES ANALYSIS UPDATE

Alternative Analysis (AA) Process



1 DISCOVER

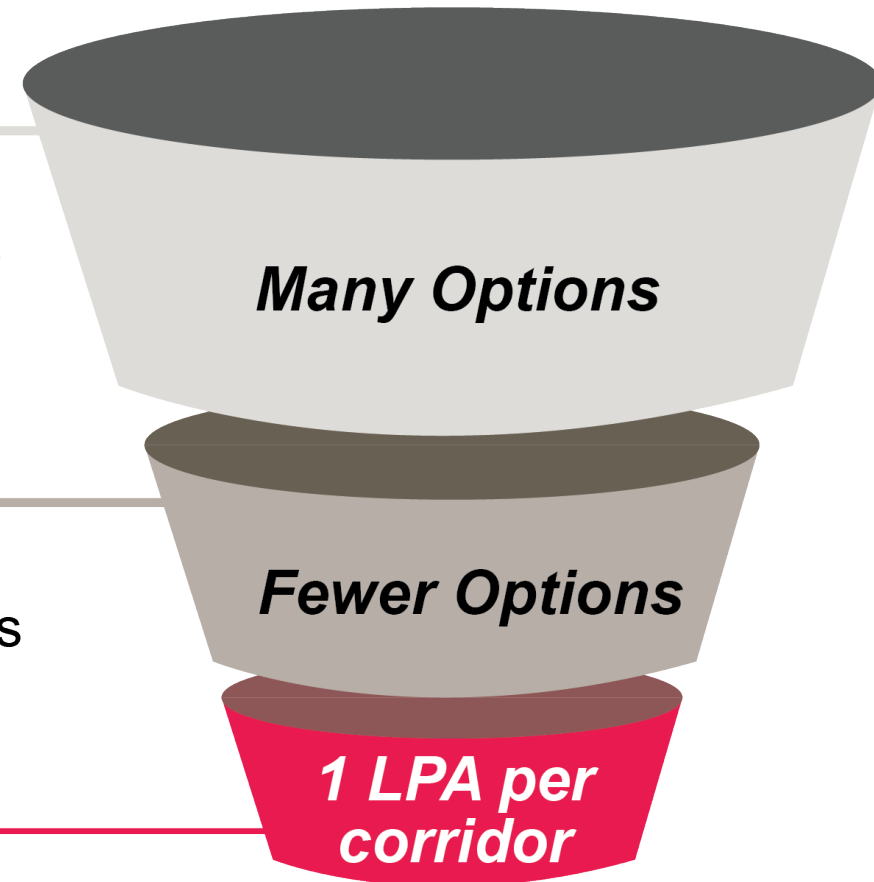
- Define all reasonable alternatives
- Screen against goals & objectives

2 REFINE

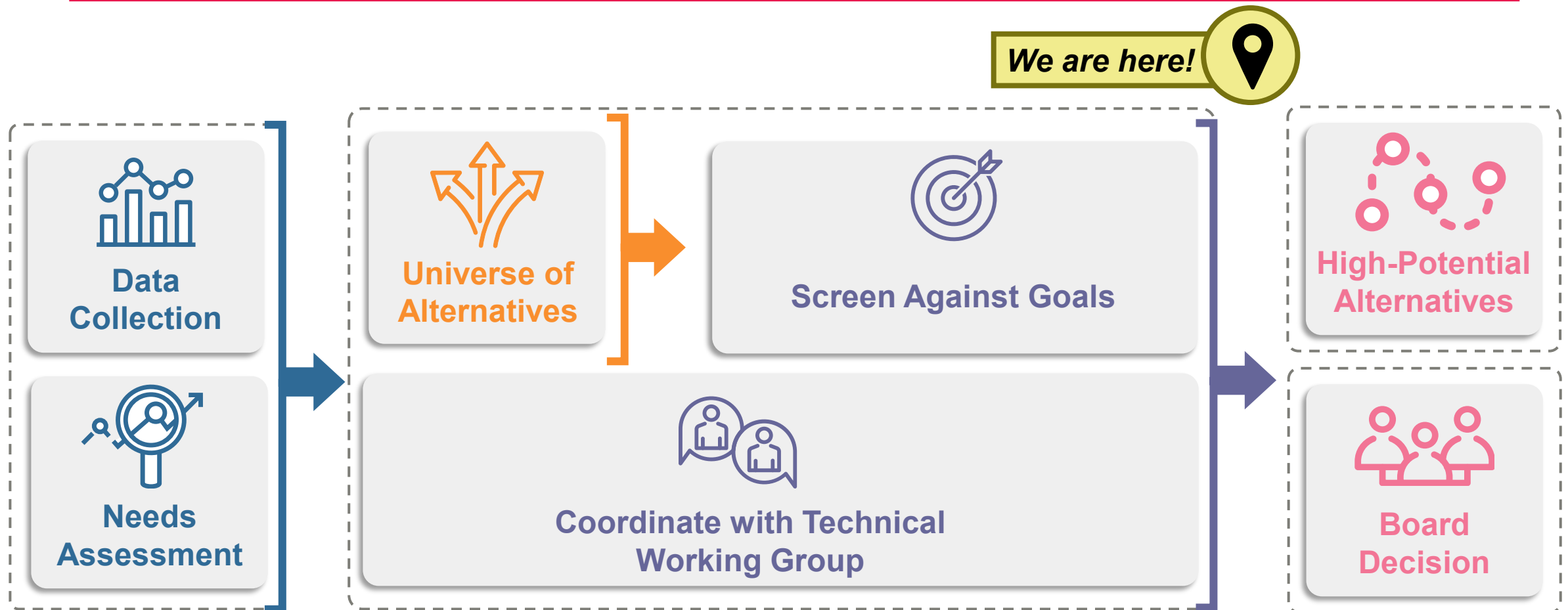
- Advance remaining alternatives
- Perform detailed technical analysis

3 SELECT

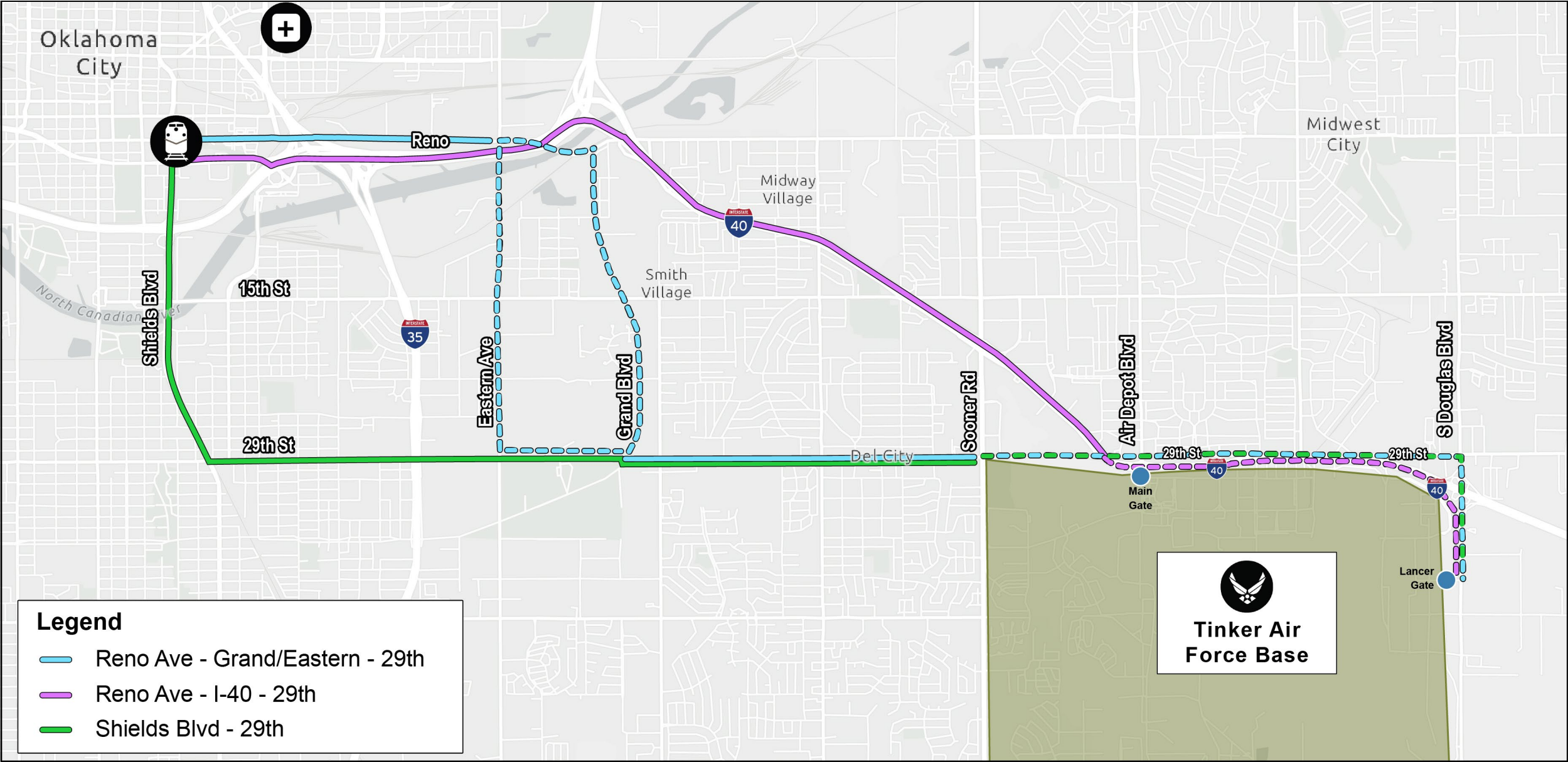
- Board consideration of LPA



Discover Phase Process



Current High-Potential Alignments



Recent Analysis Updates



Eastern Ave redevelopment opportunity



Tinker AFB Update:

- Transportation Master Plan
- End-of-Line Facility



Engineering constraints on Reno Ave and Grand Ave

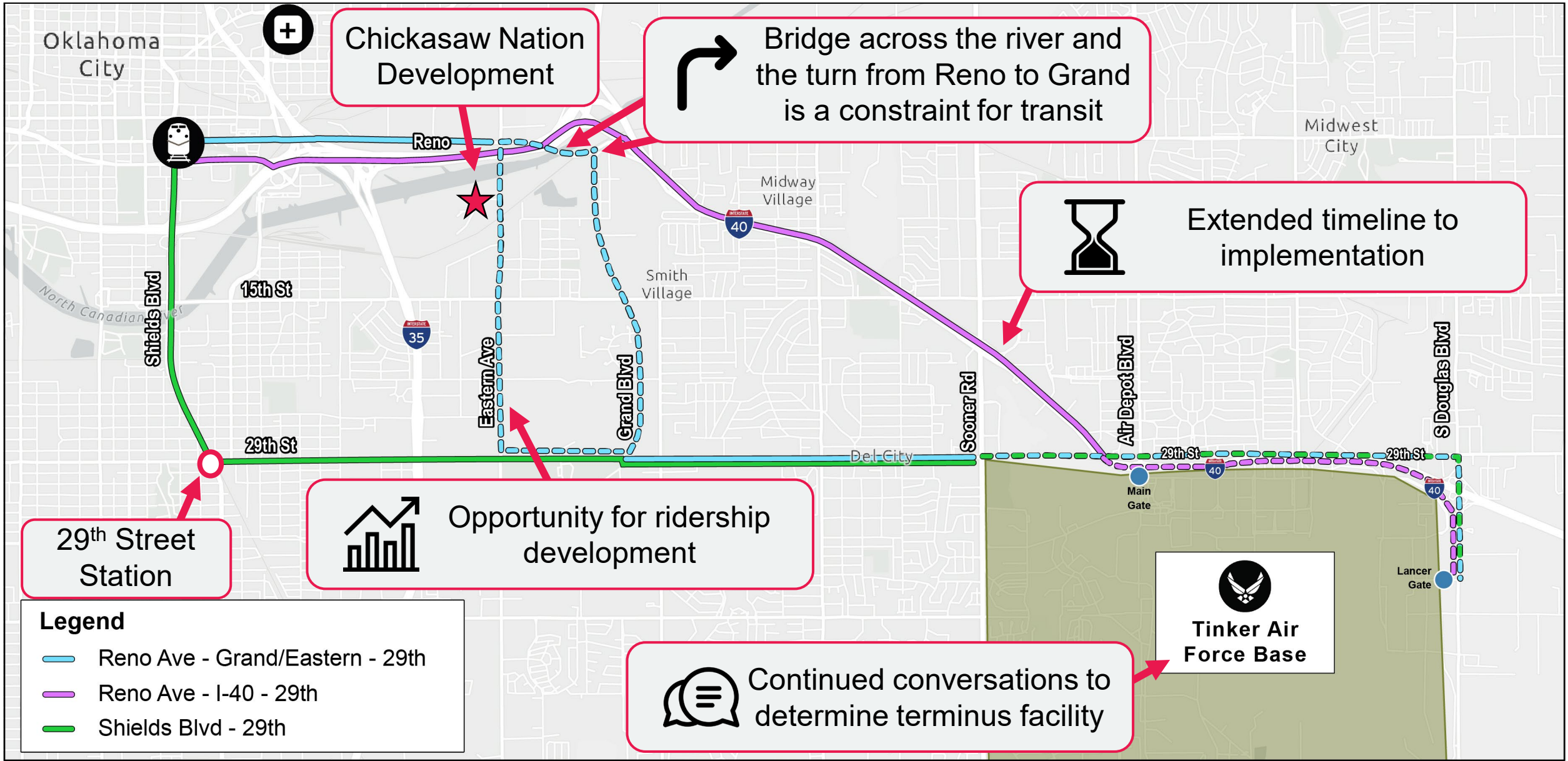


29th Street Station Opportunity



Alignment widths
(discussed later in this presentation)

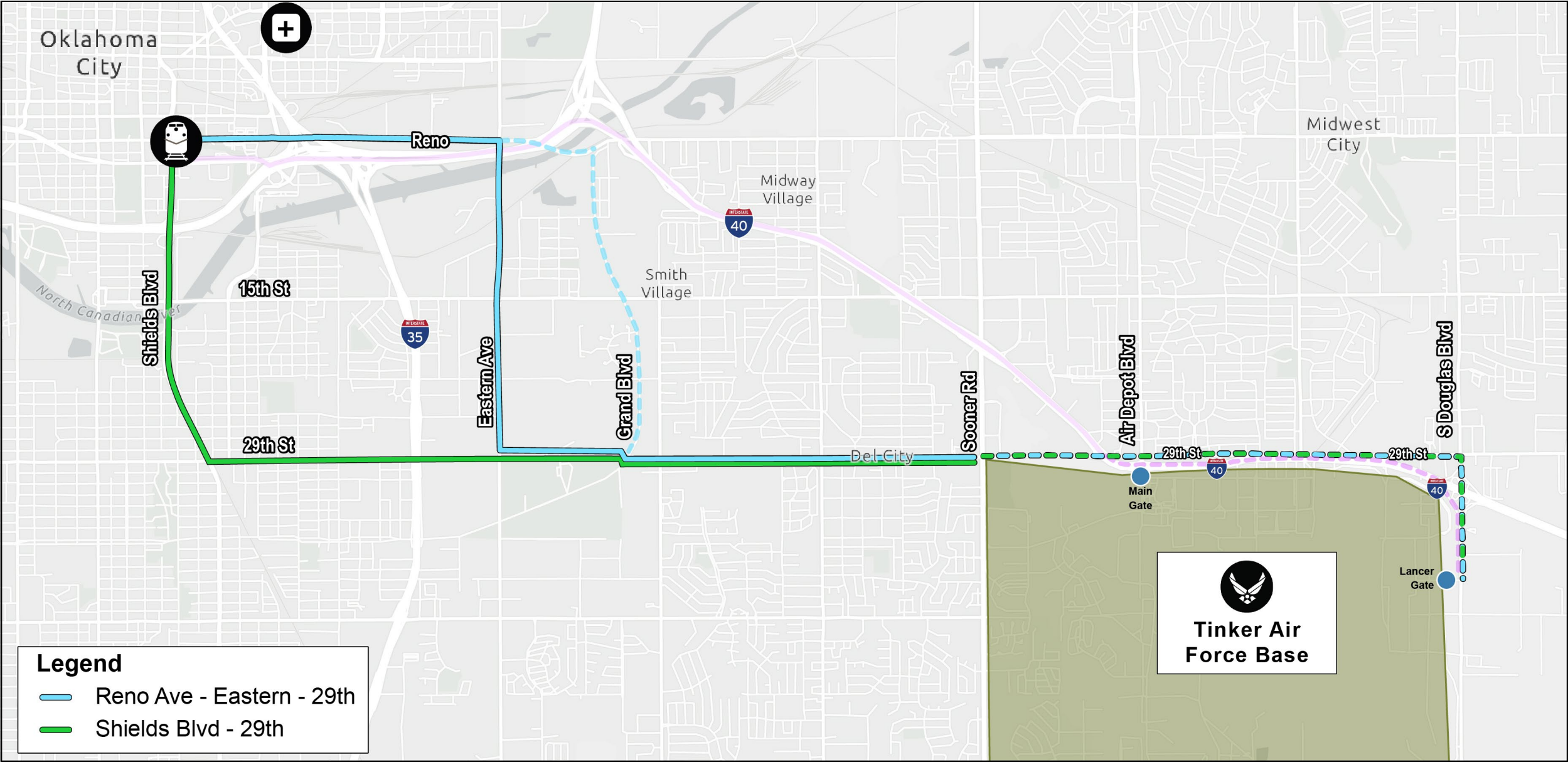
Current High-Potential Alignments

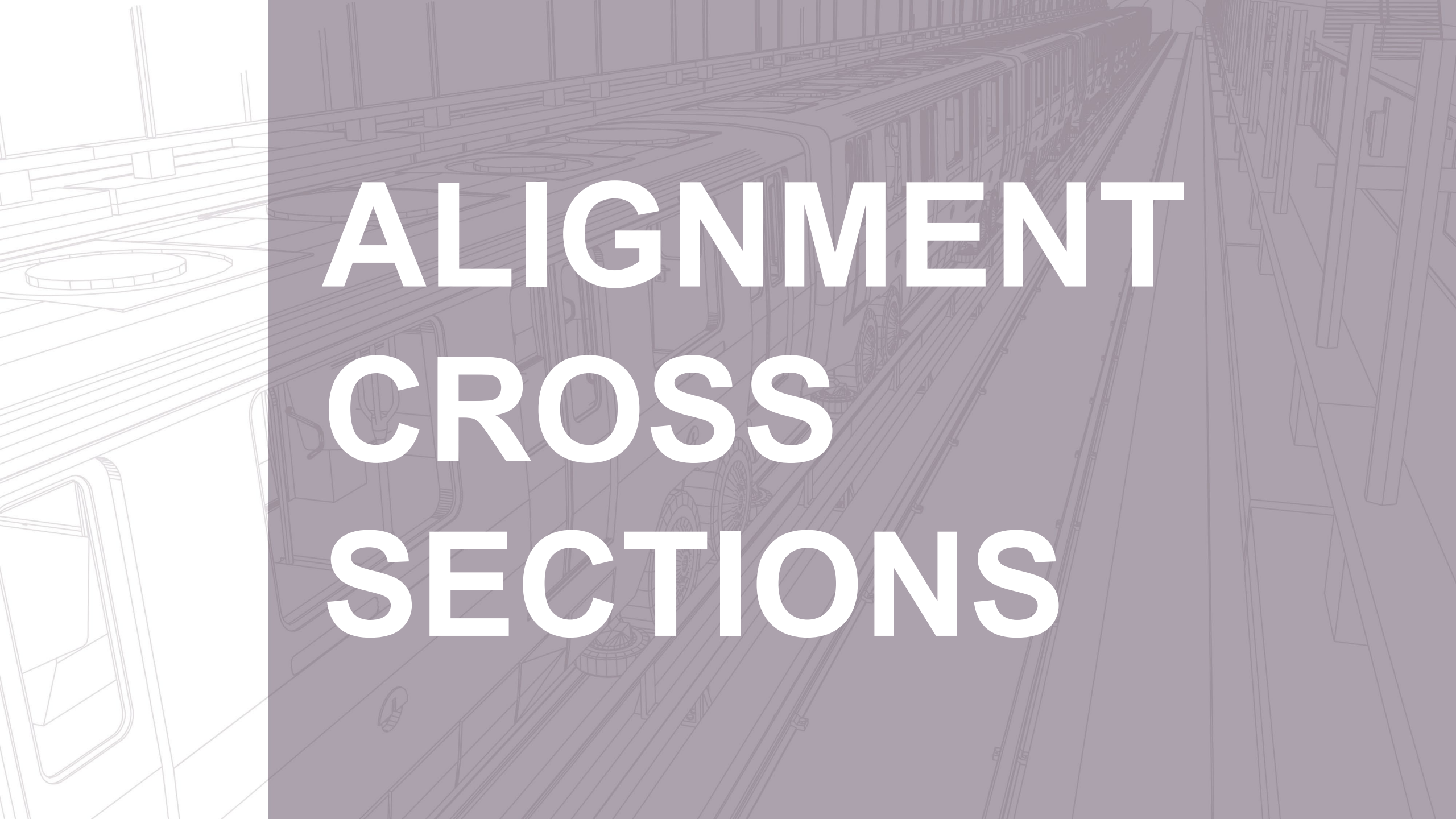


RTA



Updated High-Potential Alignments

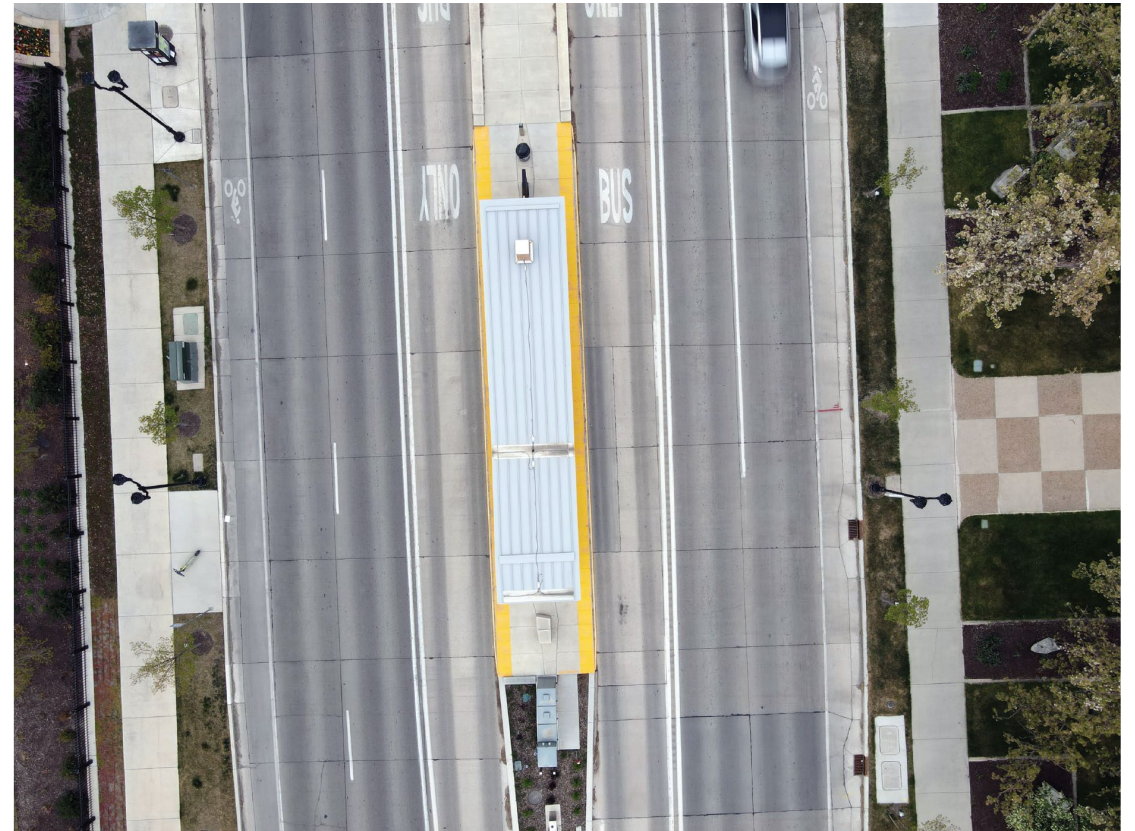


The background features a detailed line drawing of a train. On the left, a white line-art illustration shows a cross-section of a train car, revealing internal components like windows, doors, and structural elements. On the right, a grey-toned illustration shows a perspective view of a train traveling along tracks, with overhead power lines and support structures visible. The text is centered over the grey section of the image.

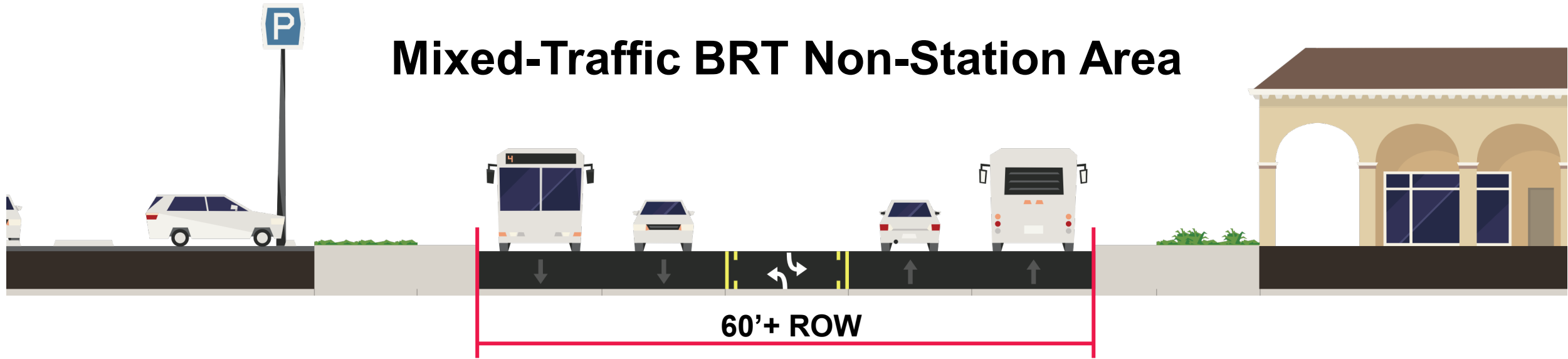
ALIGNMENT CROSS SECTIONS

Cross Section Examples

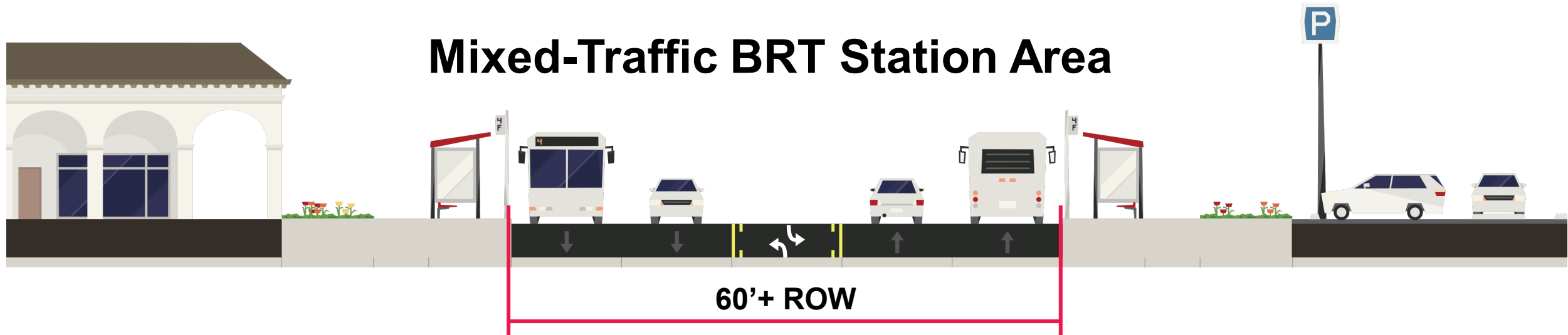
124' wide from back of sidewalk



Mixed-Traffic BRT Non-Station Area



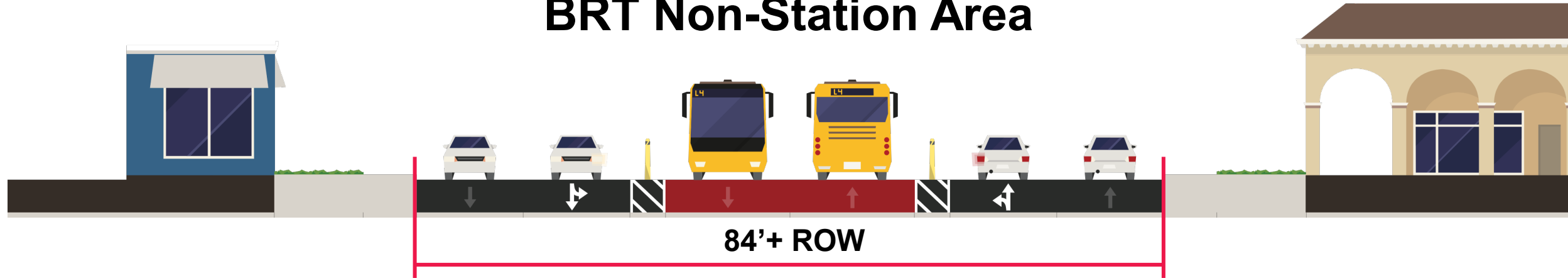
Mixed-Traffic BRT Station Area



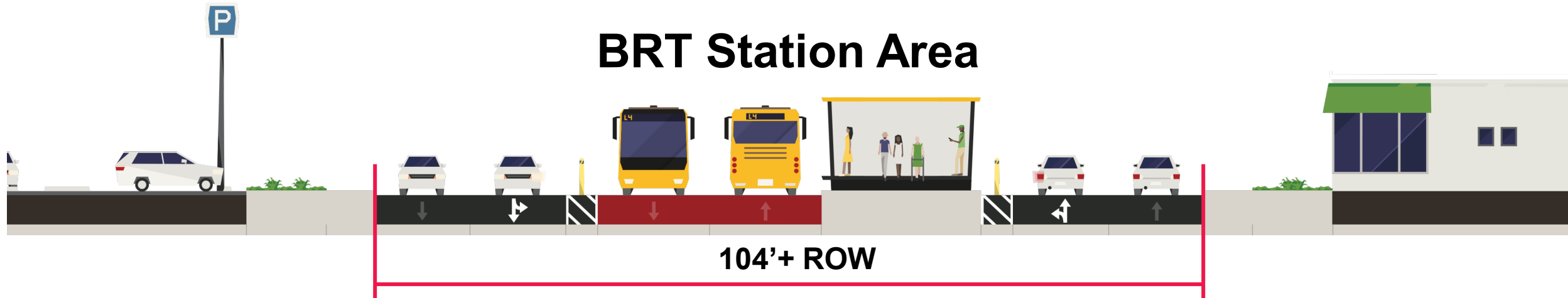
Fixed Guideway BRT Cross Section (Example)

RTA

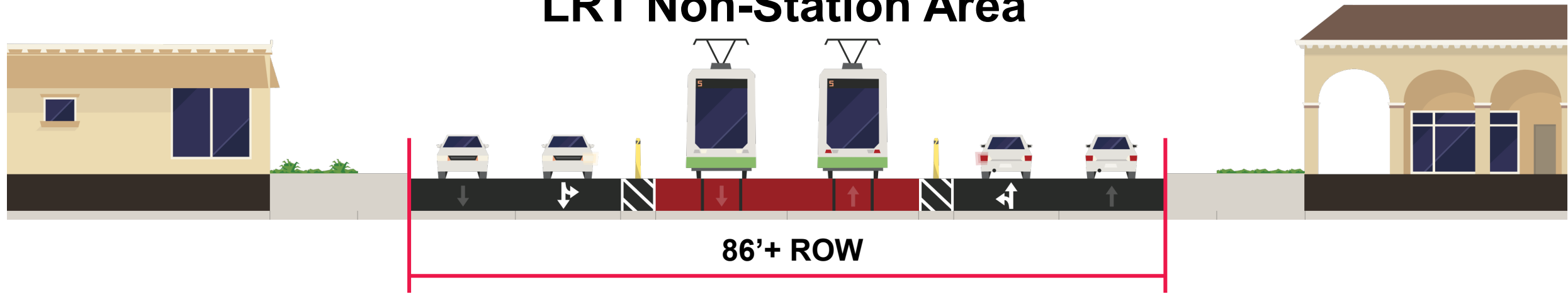
BRT Non-Station Area



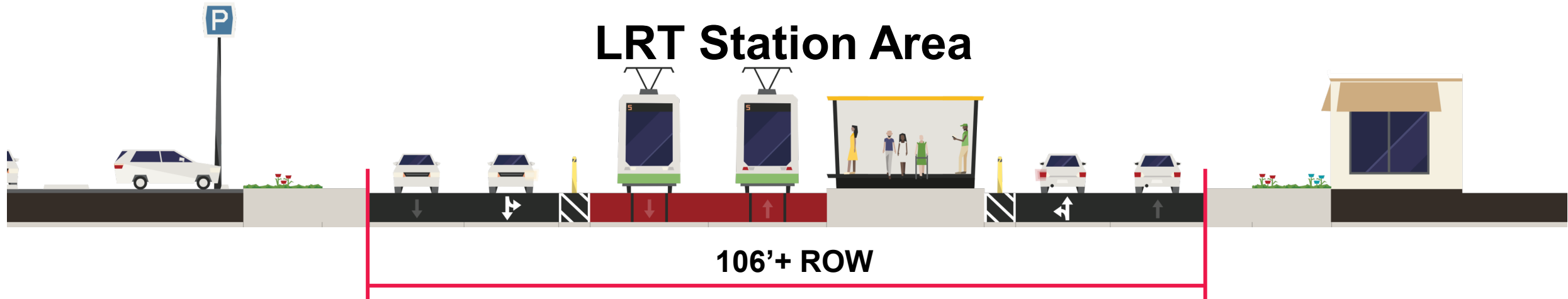
BRT Station Area



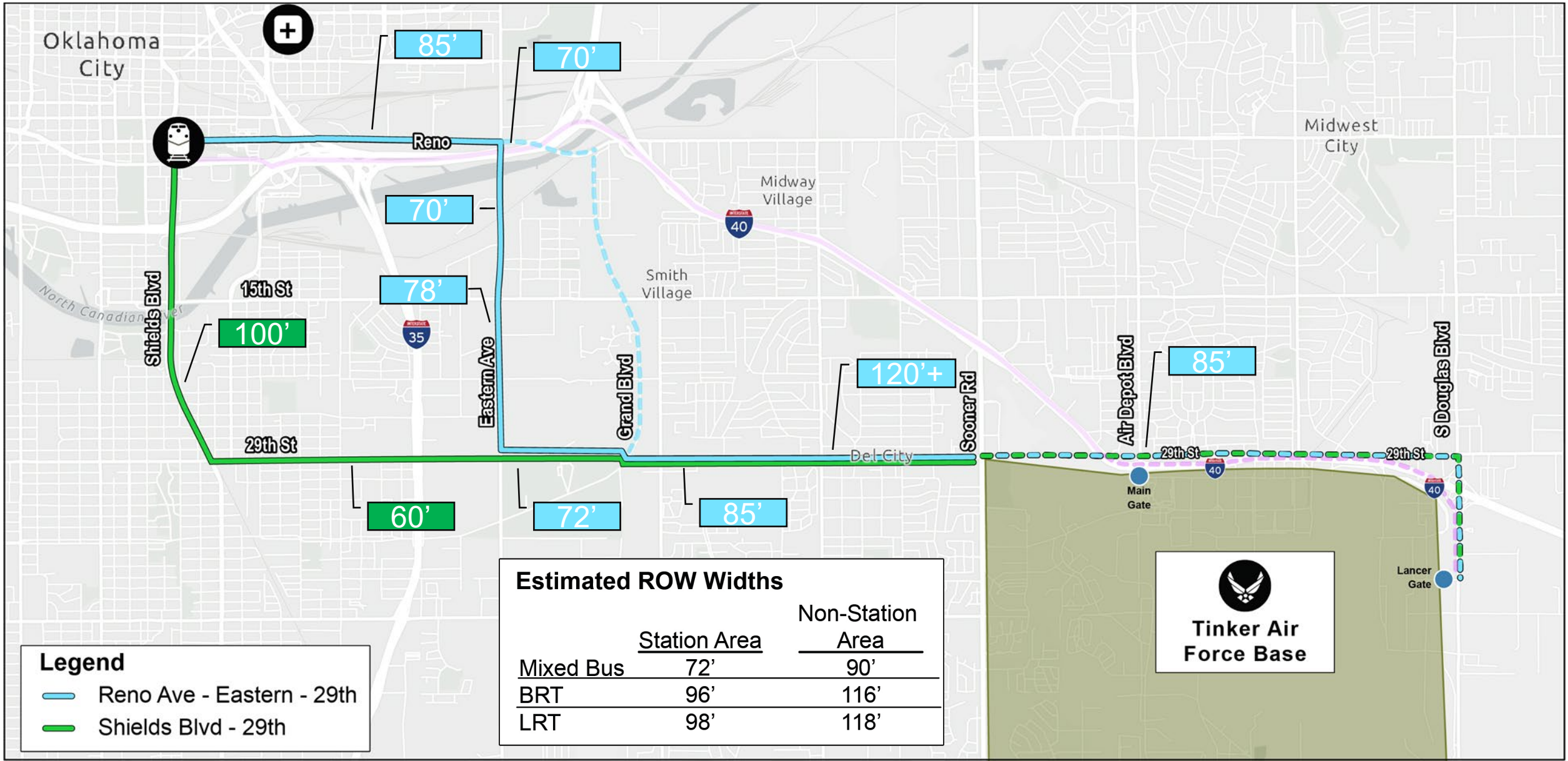
LRT Non-Station Area



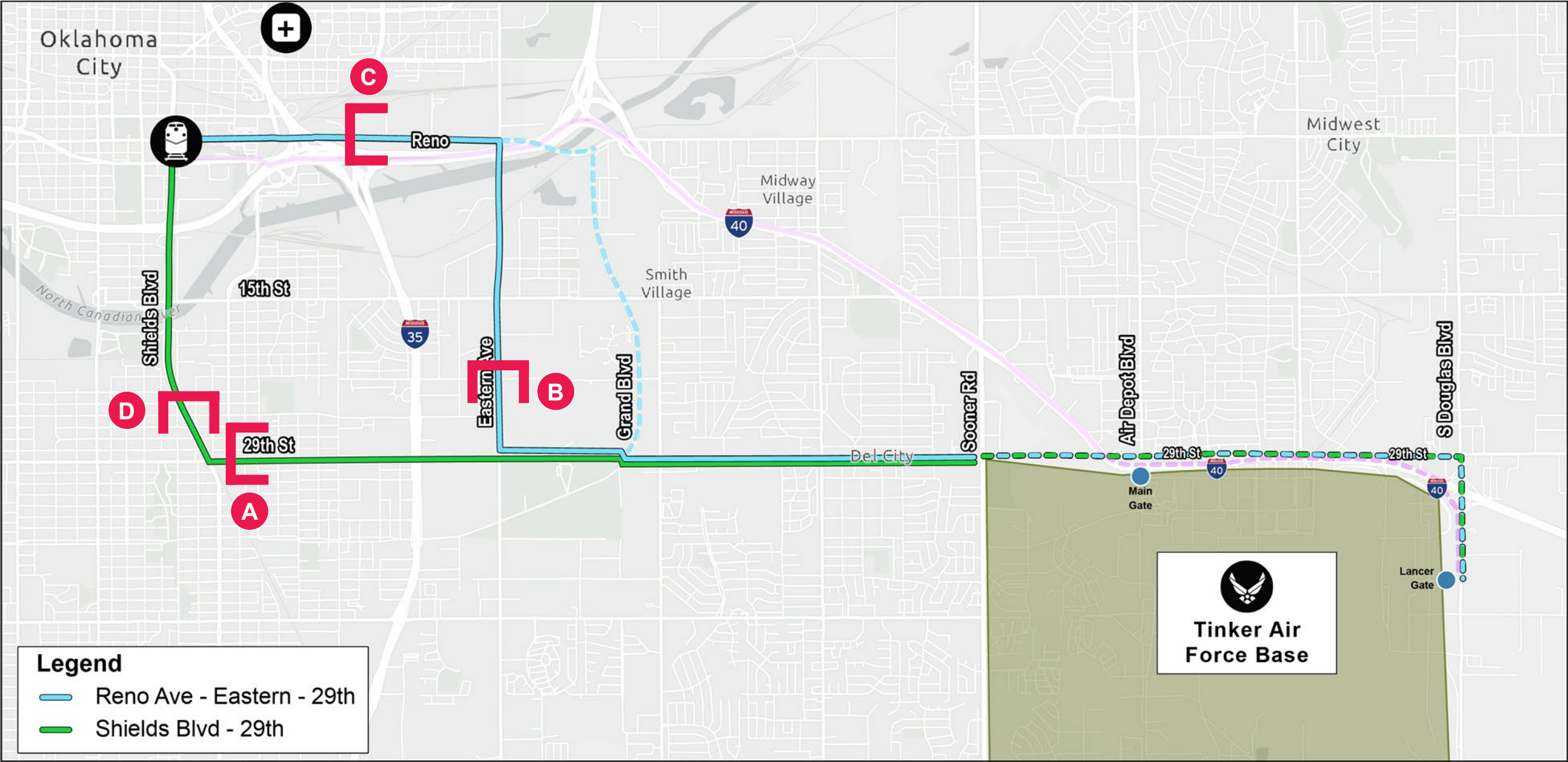
LRT Station Area



Dedicated Guideways vs. Mixed Traffic

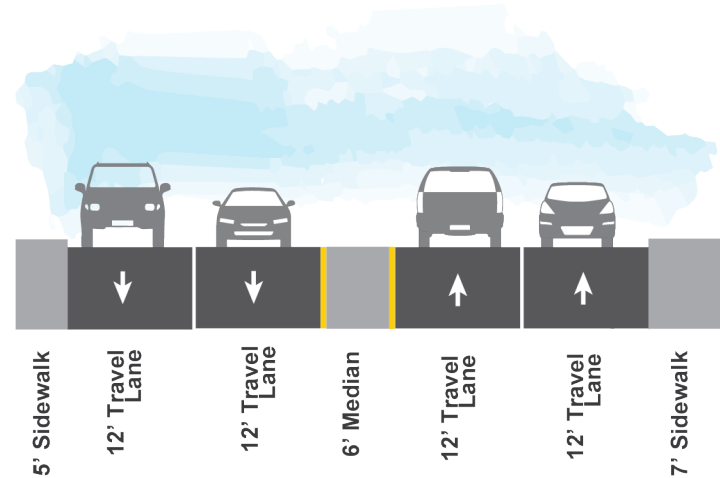


Cross Section Analysis

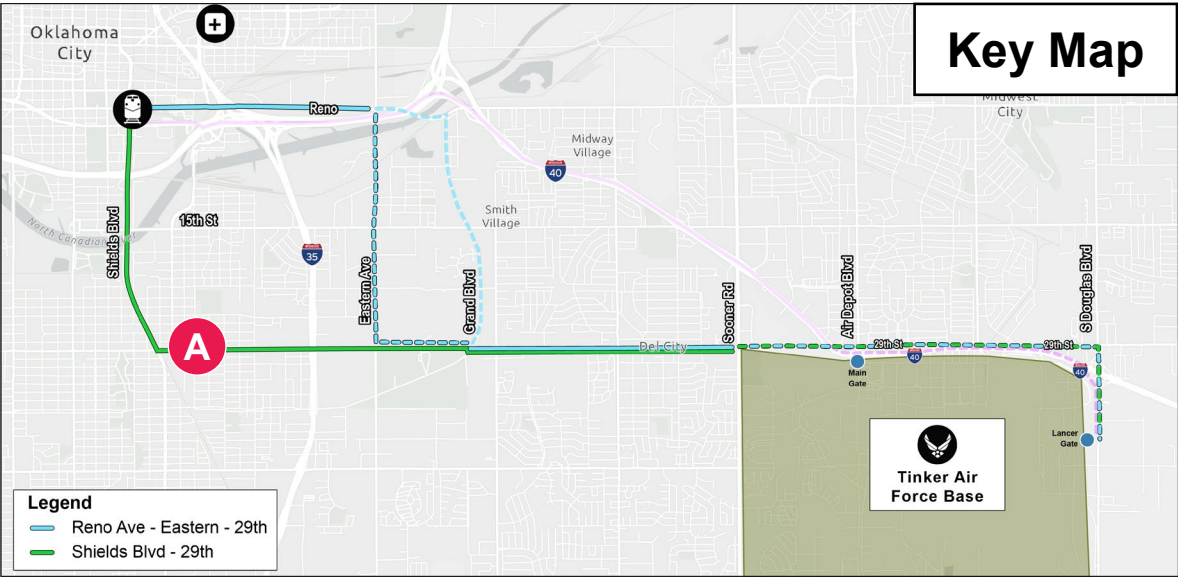
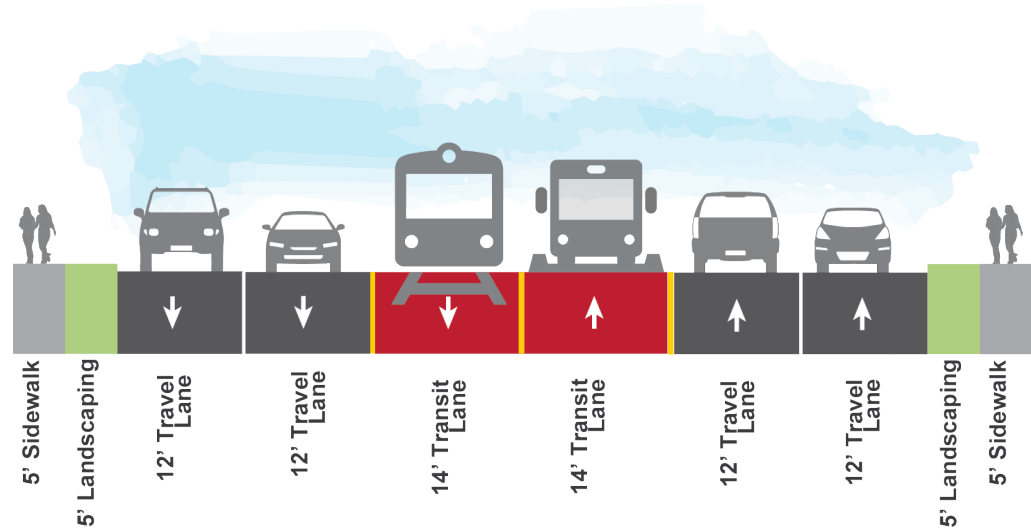


29th Street between Shields and Central

Existing Travelway: 66'



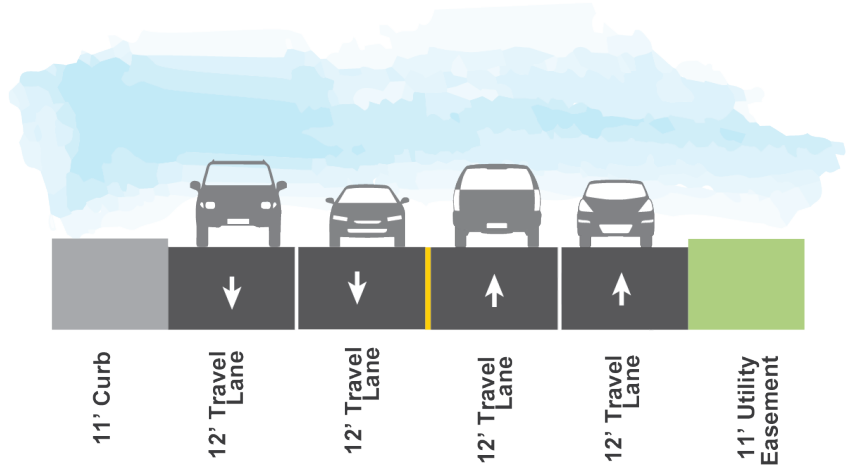
Potential Travelway: 96'



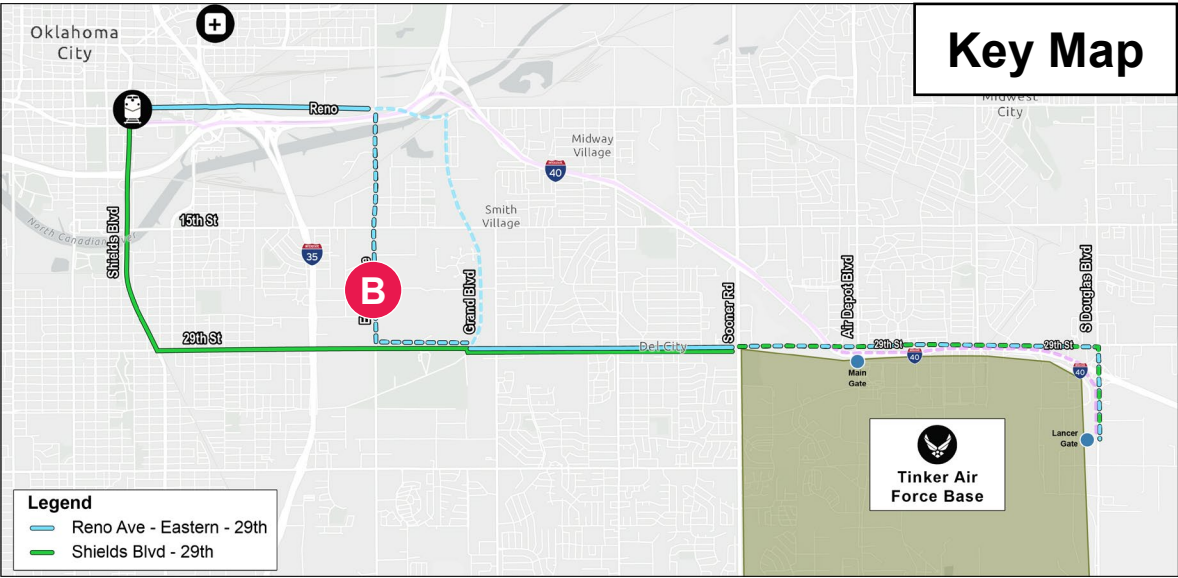
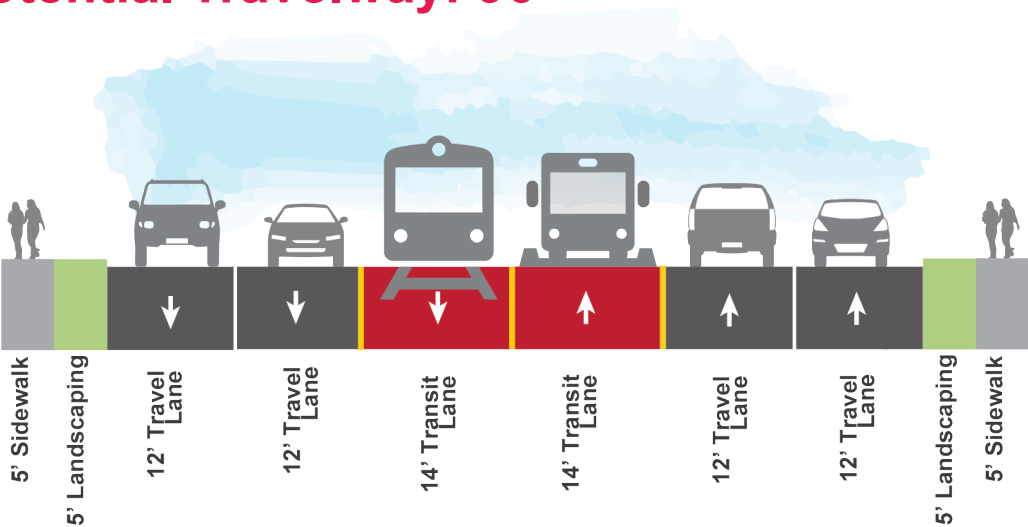
Initial Finding:
The potential design would require an additional minimum 30' of travelway

Eastern Avenue at 22nd Street

Existing Travelway: 70'



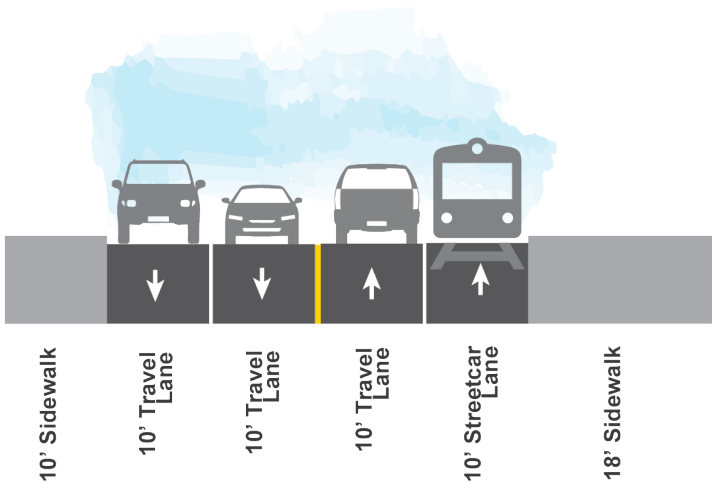
Potential Travelway: 96'



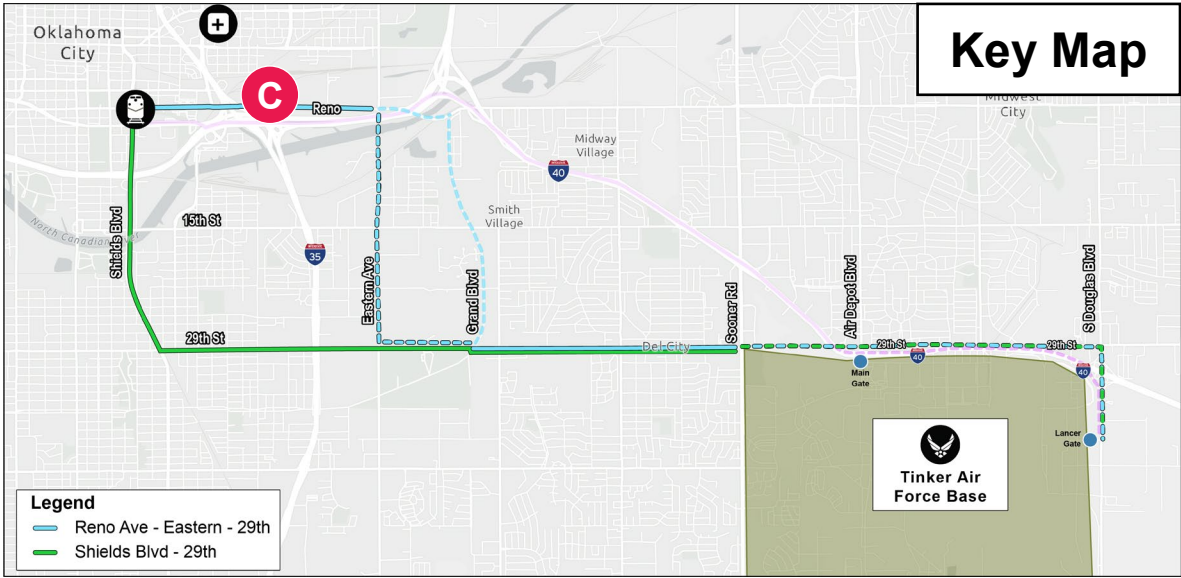
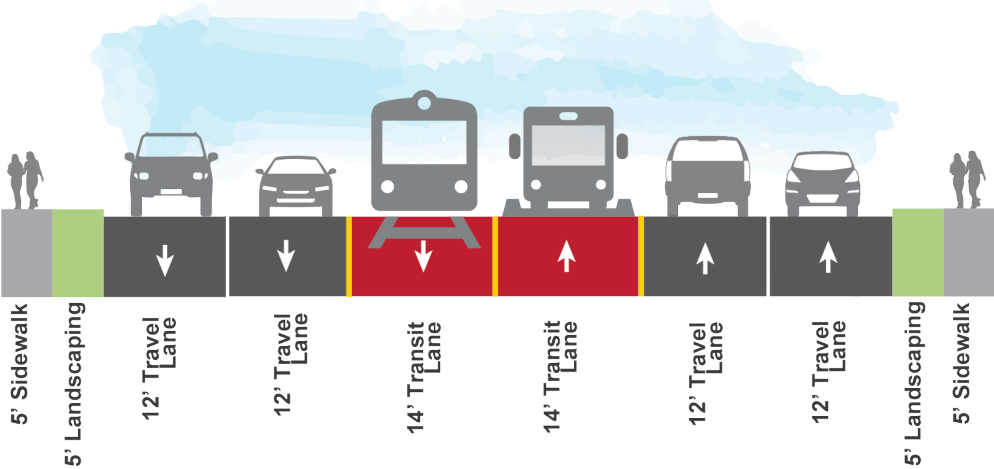
Initial Finding:
The potential design would require an additional minimum 26' of travelway

Reno Avenue at Oklahoma Avenue

Existing Travelway: 68'



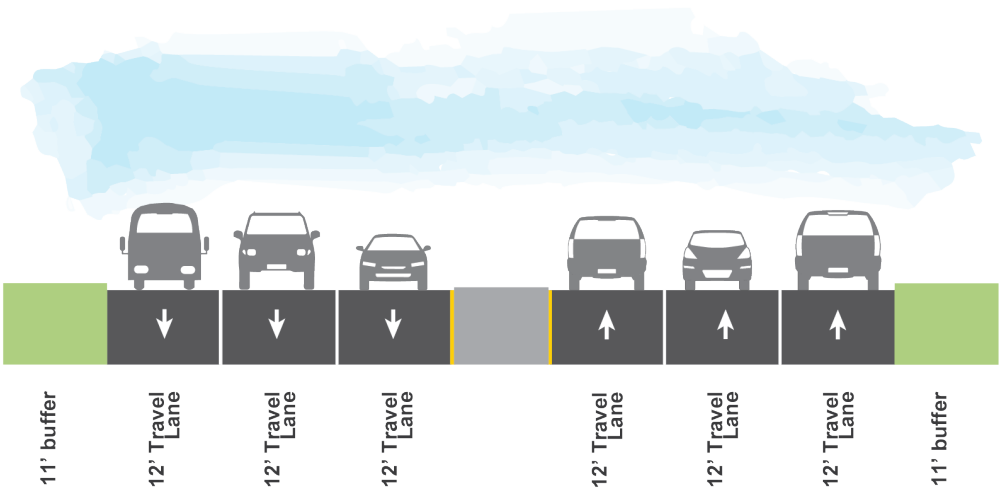
Potential Travelway: 96'



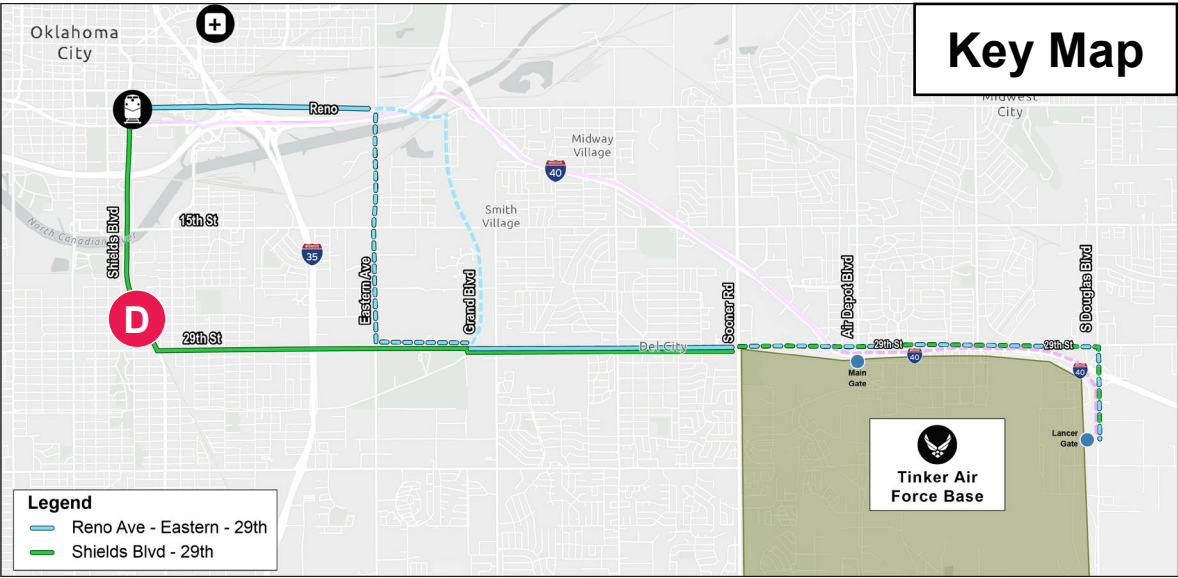
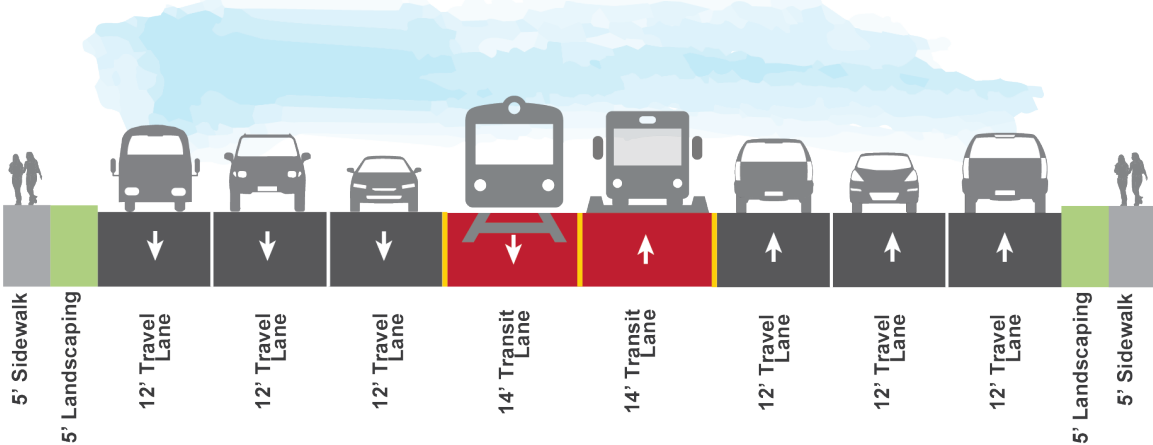
Initial Finding:
The potential design would require an additional minimum 28' of travelway

Shields Boulevard at 25th Street

Existing Travelway: 120'



Potential Travelway: 120'

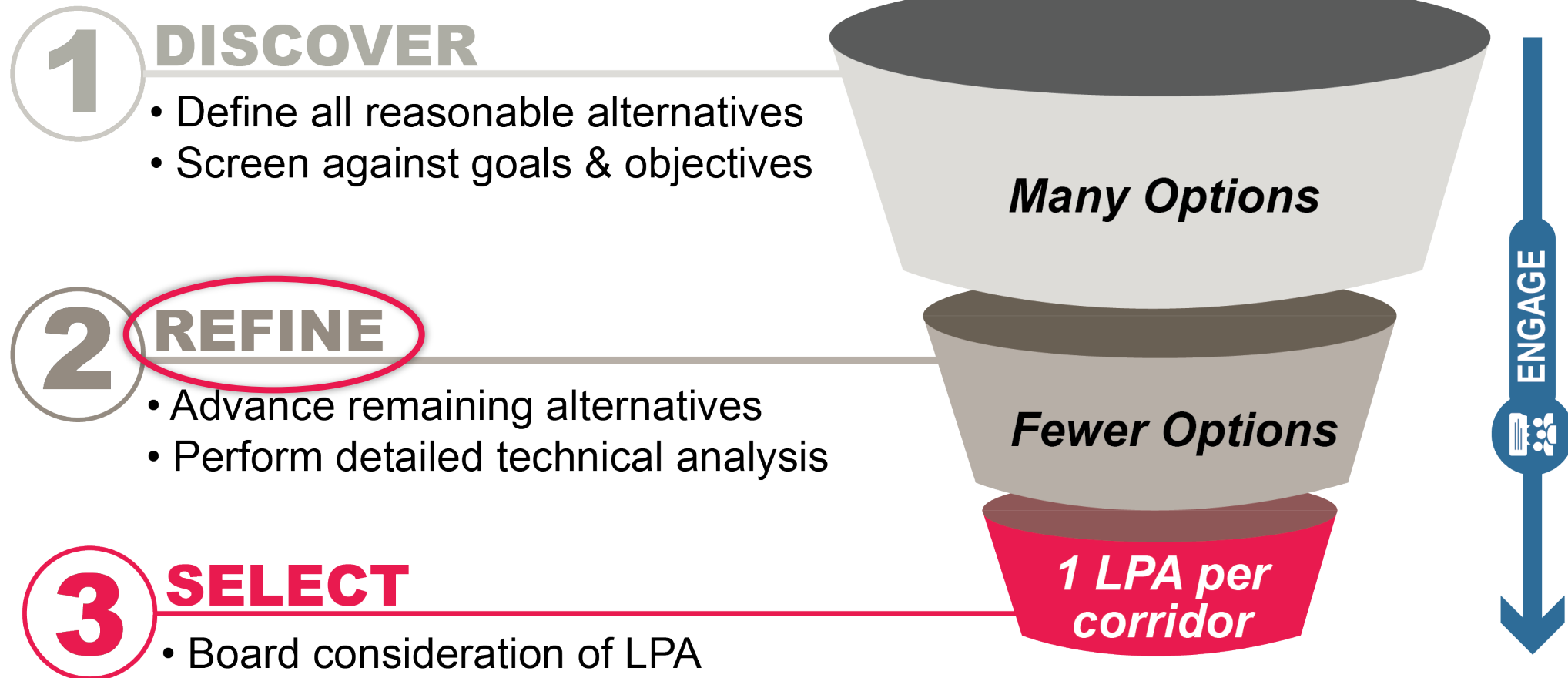


Initial Finding:
The potential design would require an additional minimum 20' of travelway

The background is a detailed line drawing of a train station. A train is stopped at the platform, and the tracks recede into the distance. The drawing is in a light, sketchy style. Overlaid on the right side of the image is a dark, semi-transparent rectangular area. The word "DISCUSSION" is written in large, white, bold, sans-serif capital letters across the center of this dark area.

DISCUSSION

Alternative Analysis (AA) Process



Future Detailed Analysis Components



Improves Connections

Connect Activity Centers

- Number of Activity Centers/Corridors
- Access to community facilities

Provide Access to Limited Mobility Populations

- Low Income
- Zero-Car Households
- Senior Communities

Connect to Central OKC and Regional Destinations

- Station potential for Central OKC, Tinker AFB, etc.



Economic Development

Land Use Compatibility

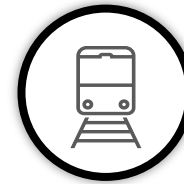
- Compatibility with current and future plans

Population and Employment Density

- Corridor and station-area current and projected

Redevelopment

- Corridor and station-area development potential



Service and System

Ridership Potential

- Estimated ridership threshold analysis

Multimodal Connections

- Connections to pedestrian and bike facilities/trails
- Connections to Highways/Arterials

Reliability, Convenience, and Frequency

- Dedicated ROW quantity
- Vehicle capacity and quantity



Feasibility

Capital and Operating Cost

- Per mile cost analysis
- Cost element analysis

Engineering Constraints

- ROW and acquisition
- Major utilities
- Parking/Traffic operations

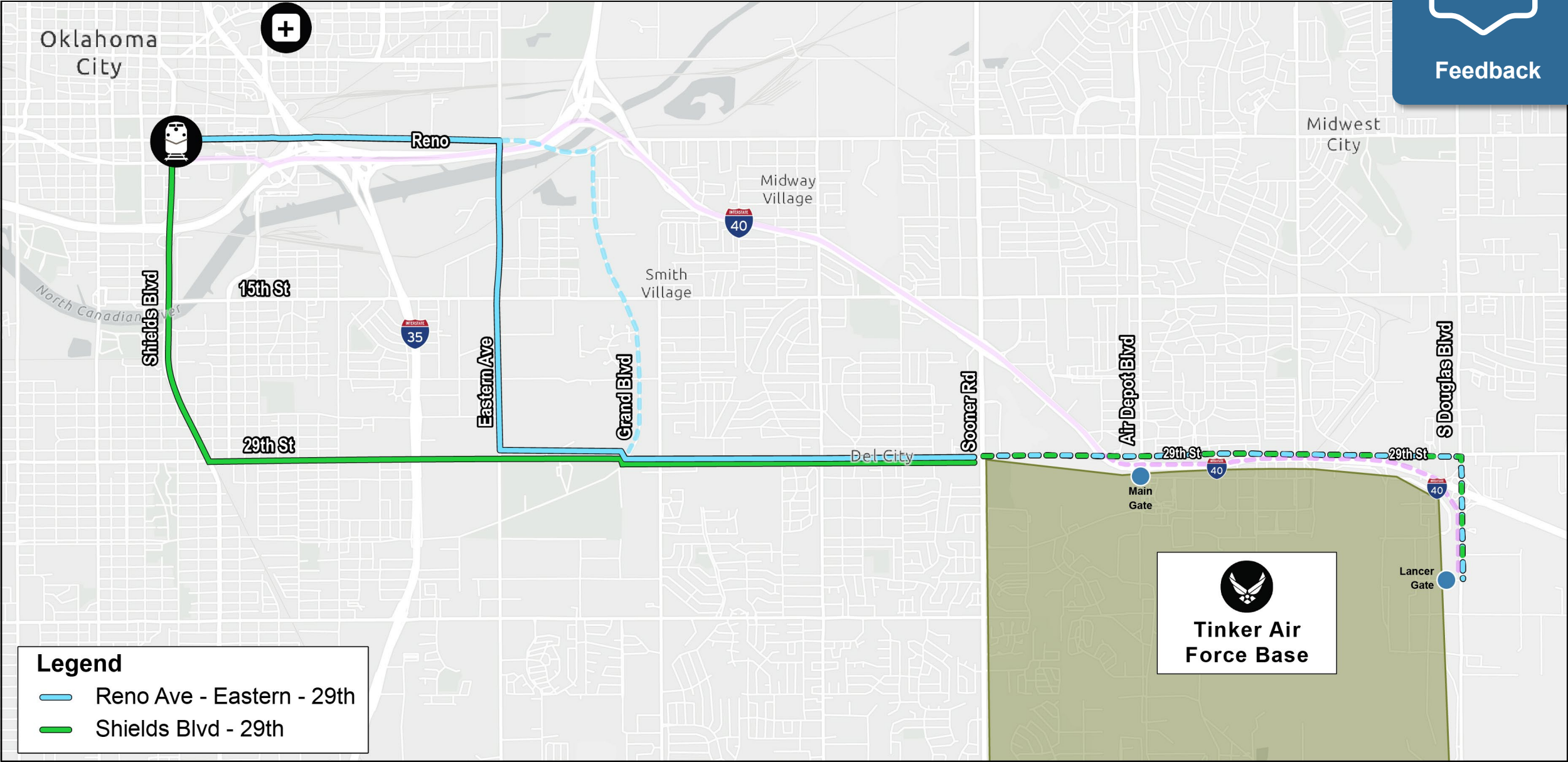
Environmental and Social Justice

- Historic, Hazardous, Floodplains, Air Quality, Noise and Vibrations
- EJ block groups

Updated High-Potential Alignments



Feedback



Fly-Through Video

- Salt Lake City
 - Utah Valley Express (UVX) Line (BRT)
 - TRAX Line (LRT)
 - Frontrunner Line (Commuter Rail)

The background features a detailed line-art illustration of a train station. A train is shown on the tracks, moving towards the right. The station has a high ceiling with structural beams and tracks that recede into the distance. On the left side of the image, there is a vertical white band containing a simplified line-art drawing of a train's side profile, including a window and door. Overlaid on the center of the image is the text "NEXT STEPS" in a large, white, sans-serif font.

NEXT STEPS



May



TECHNICAL WORKING GROUP MEETING



BOARD: ALTERNATIVES ANALYSIS UPDATE: EAST CORRIDOR

June



PUBLIC ENGAGEMENT: N/S AND EAST CORRIDORS



BOARD ACTION: EAST CORRIDOR ALIGNMENT LPA

July



BOARD: ALTERNATIVES ANALYSIS UPDATE: N/S AND EAST CORRIDORS



START FY2023 WORK PLAN