

Alternatives Analysis Update



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

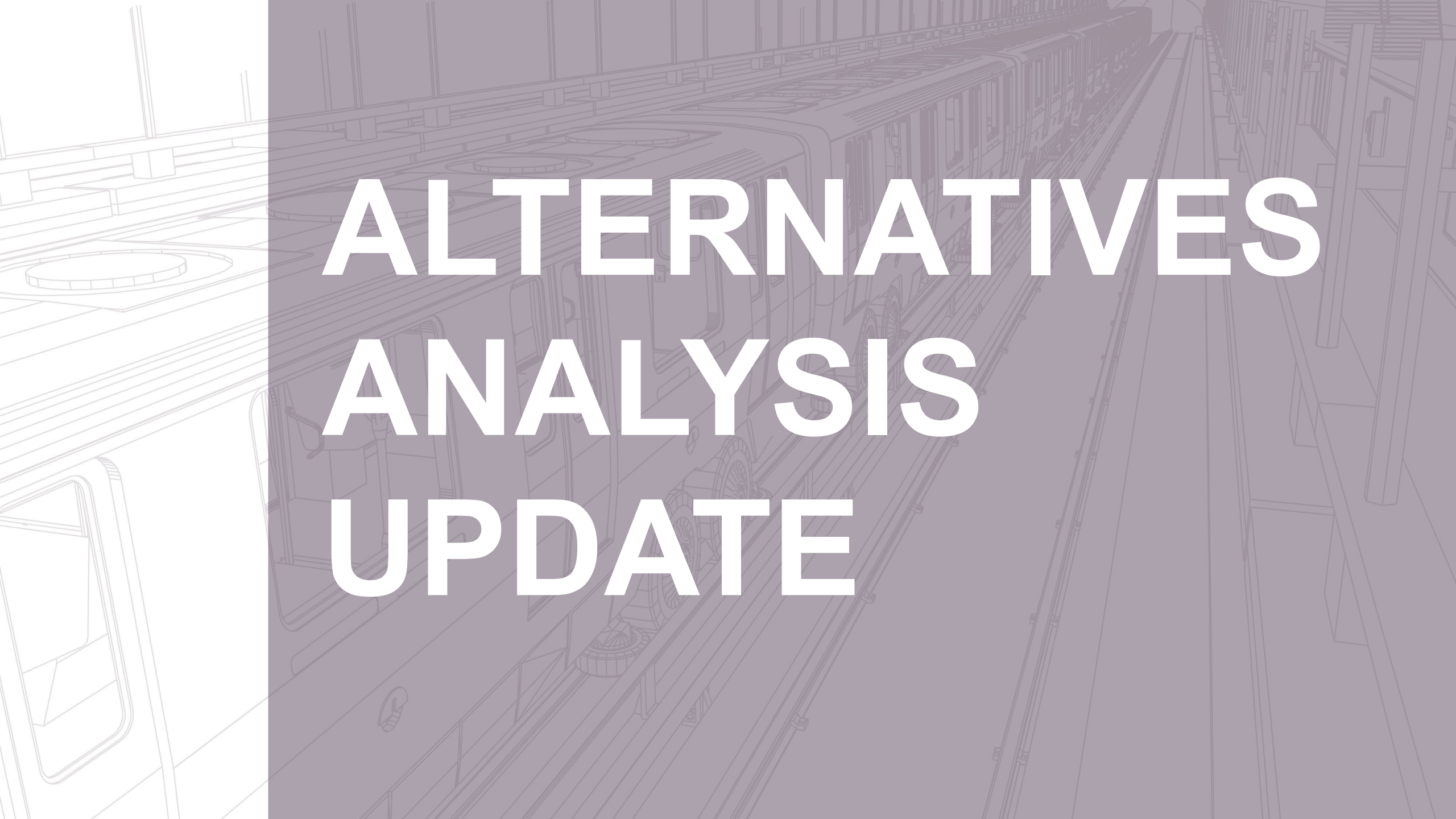
September 15, 2022

Prepared by Kimley-Horn and Associates



Agenda

- East Corridor Alternatives Analysis Update
 - Detailed Analysis Criteria and Methodology
 - East Corridor Station Locations Methodology
 - Next Steps
- Community Engagement



ALTERNATIVES ANALYSIS UPDATE

Alternative Analysis (AA) Process



1 DISCOVER

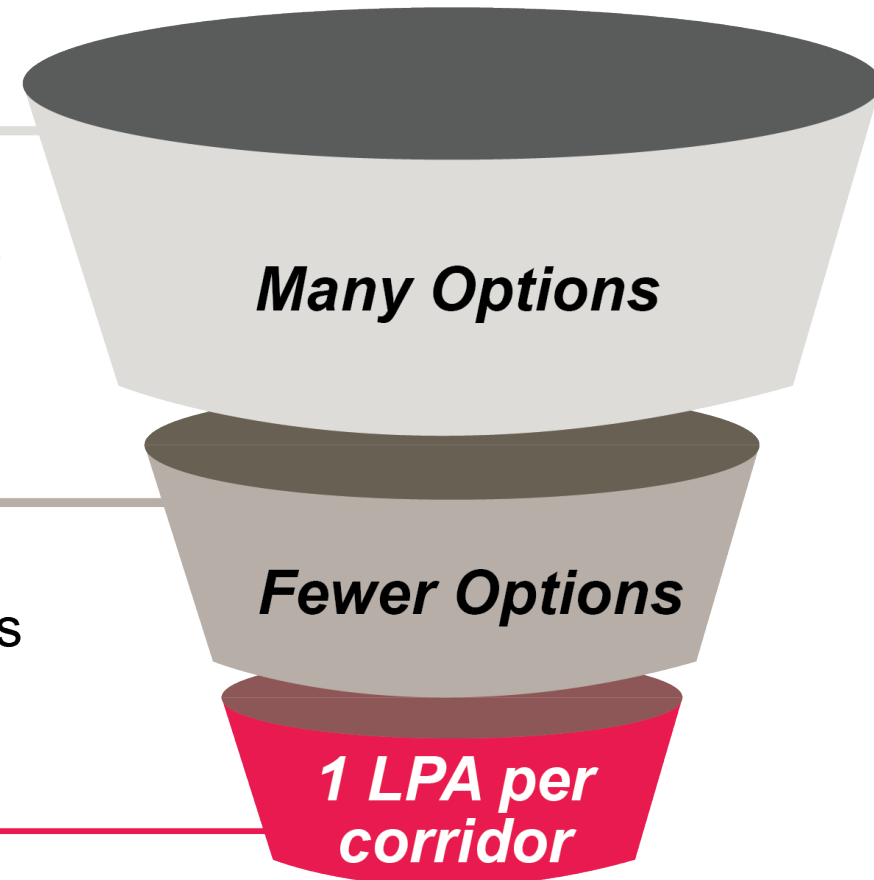
- Define all reasonable alternatives
- Screen against goals & objectives

2 REFINE

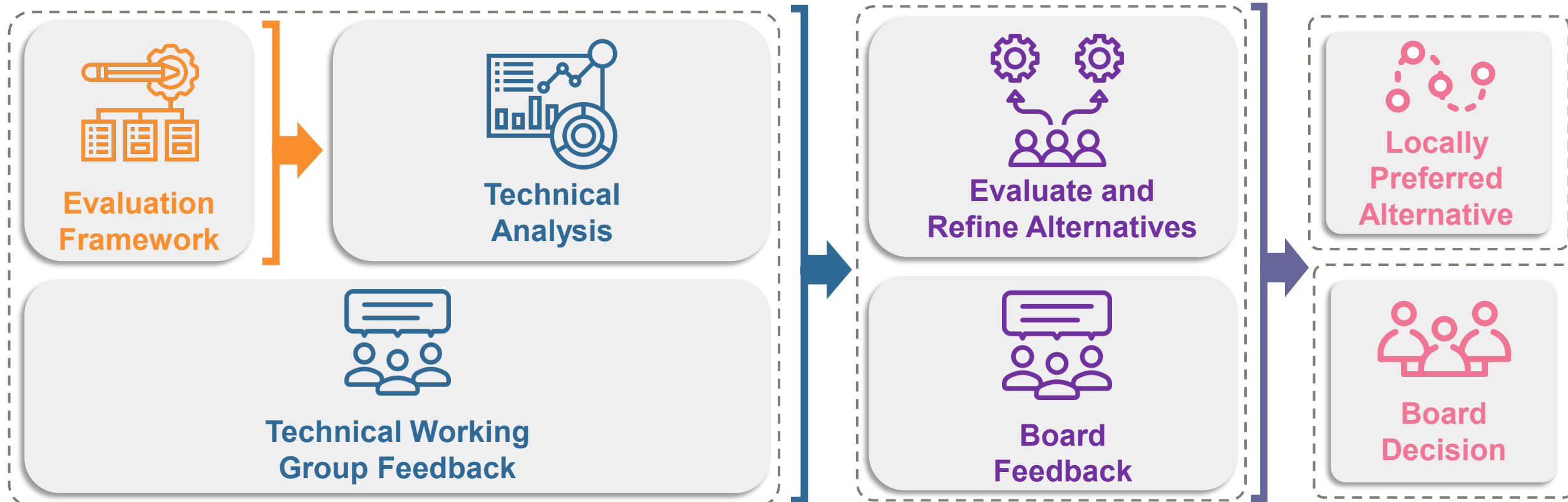
- Advance remaining alternatives
- Perform detailed technical analysis


3 SELECT

- Board consideration of LPA



Year 3 – Refine and Select Phase Process





DETAILED EVALUATION FRAMEWORK

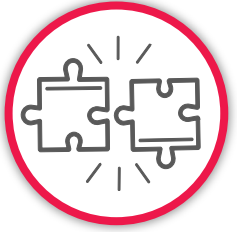
Initial Criteria

Refinement Process

RTA



Connections and Mobility



Local Plans



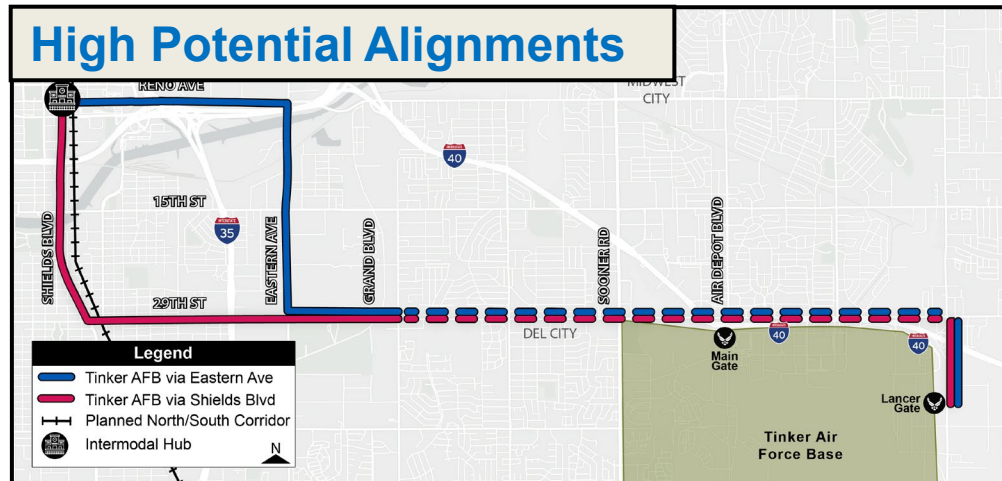
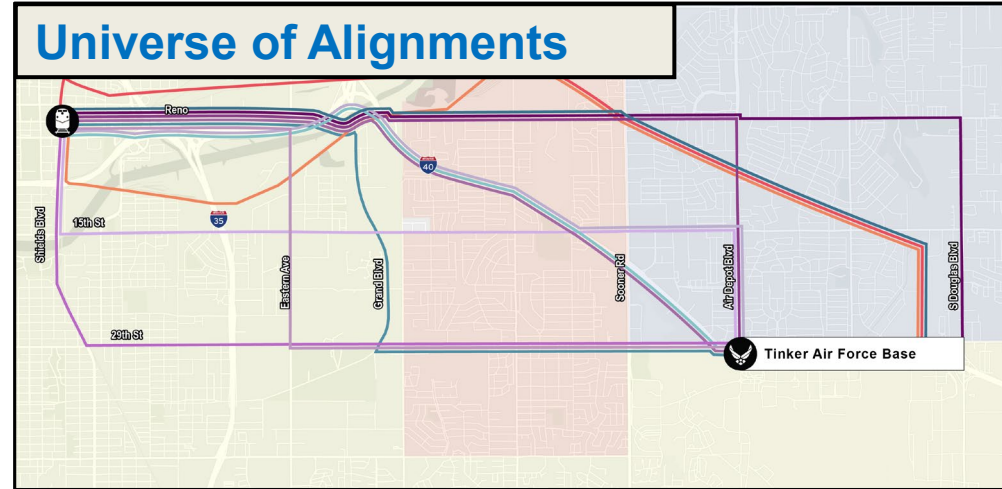
Access



Cost Elements

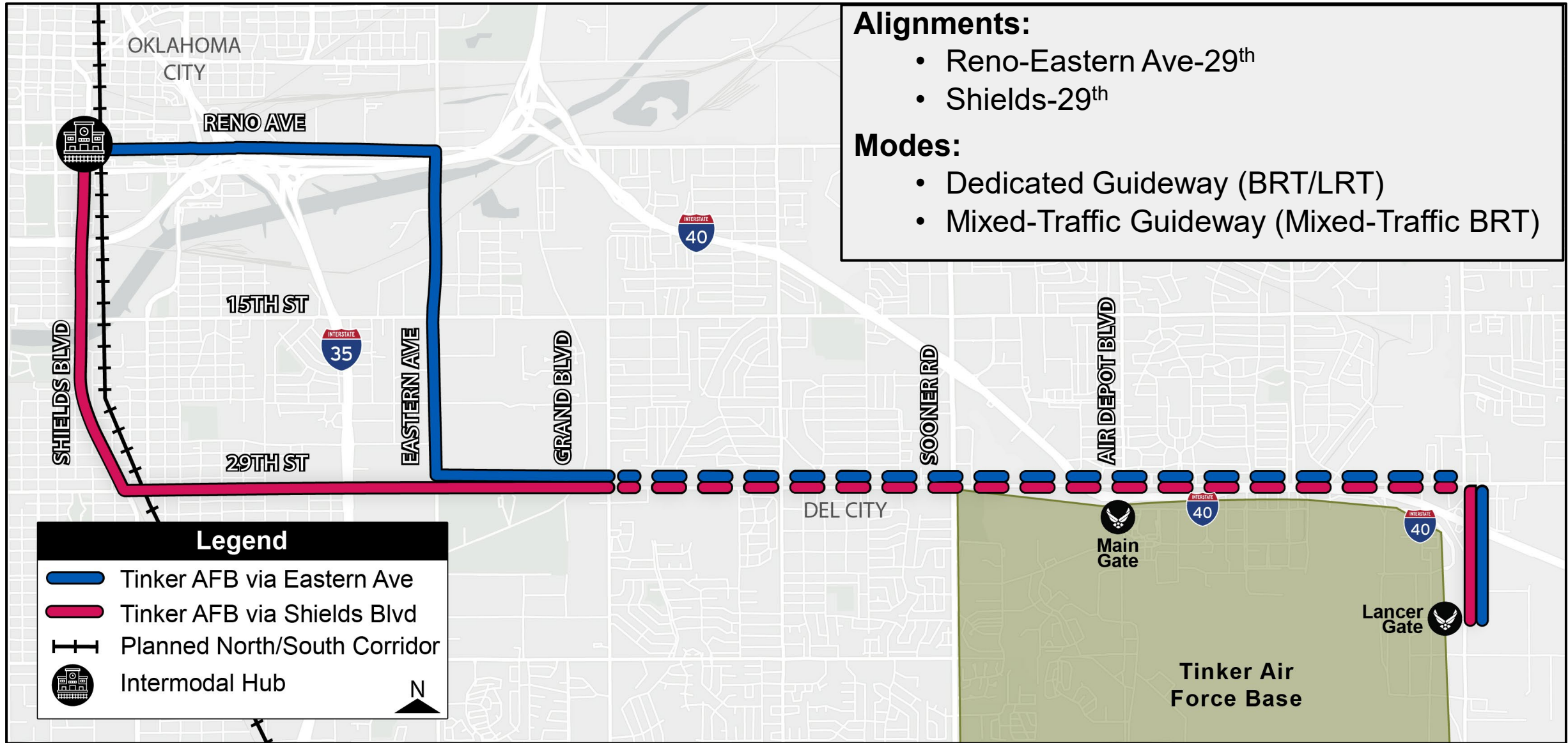


Economic Development



Technical Working Group Feedback

Defining the Alignments



Defining Potential Modes

RTA

Dedicated Guideway



Mixed-Traffic



Goals & Objectives

Mobility & Connectivity

Objective:

Increase regional transportation choices by connecting activity centers with high-capacity transit that is fast and reliable.



Equity & Accessibility

Objective:

Implement a safe and accessible system for all people that creates a community with options.



Land Use & Economic Development

Objective:

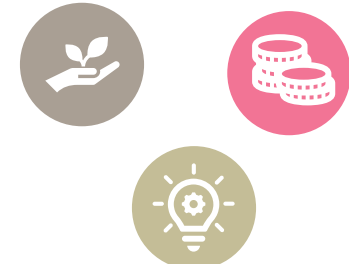
Develop a transit system that inspires economic development to promote growth in the region and national competitiveness.



Sustainability & Viability

Objective:

Provide a cost-effective sustainable system that invests resources responsibly.



| Goal | Reno-Eastern Mixed-Traffic | Reno-Eastern Dedicated Guideway | Shields-29th Mixed-Traffic | Shields-29th Dedicated Guideway |
|----------------------------------|-------------------------------|------------------------------------|-------------------------------|------------------------------------|
| Mobility & Connectivity | | | | |
| Equity & Accessibility | | | | |
| Economic & Workforce Development | | | | |
| Sustainability & Viability | | | | |



| Goal | Objective | Criteria |
|-------------------------|---|--|
| Mobility & Connectivity | Increase regional transportation choices by connecting activity centers with high-capacity transit that is fast and reliable. | Connections to existing transit routes |
| | | Existing pedestrian crash history along corridor |
| | | Connections to existing and planned active transportation network |
| | | Connections to existing intersections |
| | | Estimated end-to-end travel time |
| | | Existing trips between station areas (origin-destination analysis) |



| Goal | Objective | Criteria |
|------------------------|--|--|
| Equity & Accessibility | Implement a safe and accessible system for all people that creates a community with options. | Persons with disabilities within service area |
| | | Existing jobs within service area (2020) |
| | | Future jobs within service area (2040) |
| | | Resources and trip generators within service area |
| | | Persons with limited mobility within service area |
| | | Connections created across ACOG active transportation barriers |



| Goal | Objective | Criteria |
|---|--|--|
| Economic & Workforce Development | Develop a transit system that inspires economic development to promote growth in the region and national competitiveness. | Ongoing and planned development projects within service area |
| | | Acreage of developable land within service area |
| | | Projected population growth through 2040 within service area |
| | | Projected employment growth through 2040 within service area |
| | | Acreage of land where land value exceeds building value |



| Goal | Objective | Criteria |
|-------------------------------|---|---|
| Sustainability & Viability | Provide a cost-effective sustainable system that invests resources responsibly. | Ability of service to handle ridership increase without additional investment |
| | | Ridership estimate |
| | | Estimated capital construction cost |
| | | Estimated operations and maintenance cost |
| | | ROW requirements and acquisition costs |
| | | Traffic impacts on existing roadways |

Scoring Methodology

- Scoring is designed to facilitate decision making and establish **relative differences** between alternatives
- **Quantitative and qualitative** metrics will be scored on a 5-point scale



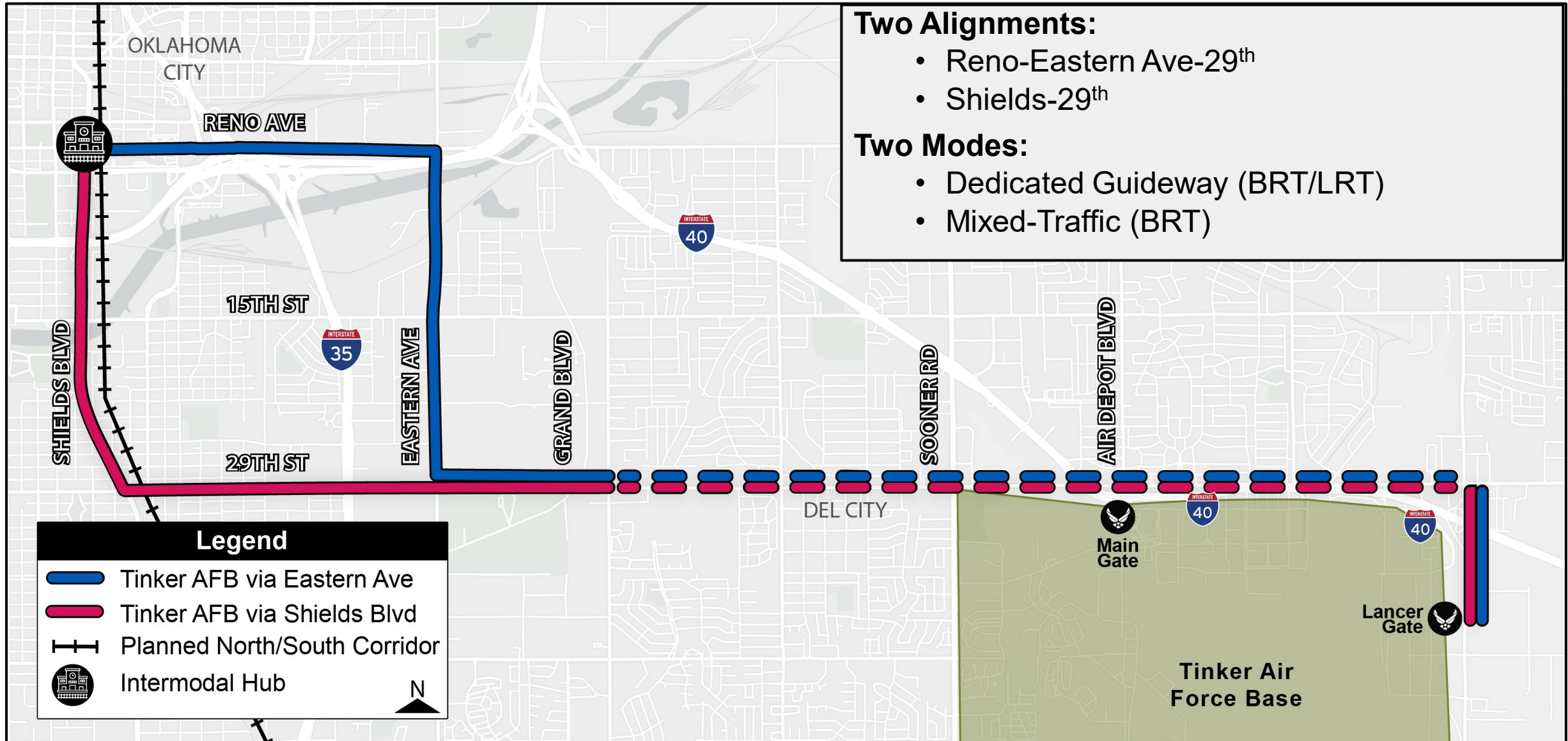
The background features a detailed line drawing of a train in a station. The train is positioned on tracks, with its side profile clearly visible. The station's architecture, including overhead beams and support structures, is also depicted with fine lines. The entire scene is rendered in a monochromatic style, with the left side being white and the right side being a dark purple. The word "DISCUSSION" is prominently displayed in the center in a large, white, sans-serif font.

DISCUSSION

The background is a detailed line drawing of a train station. A train is stopped at a platform on the left. Tracks extend into the distance on the right. The entire scene is rendered in a light purple or grey tone, serving as a backdrop for the white text.

STATION LOCATION CONSIDERATIONS

Defining the Alternatives



Station Location Indicators

- What today and, in the future, will drive the need to have a station?

1. Placement Indicators:



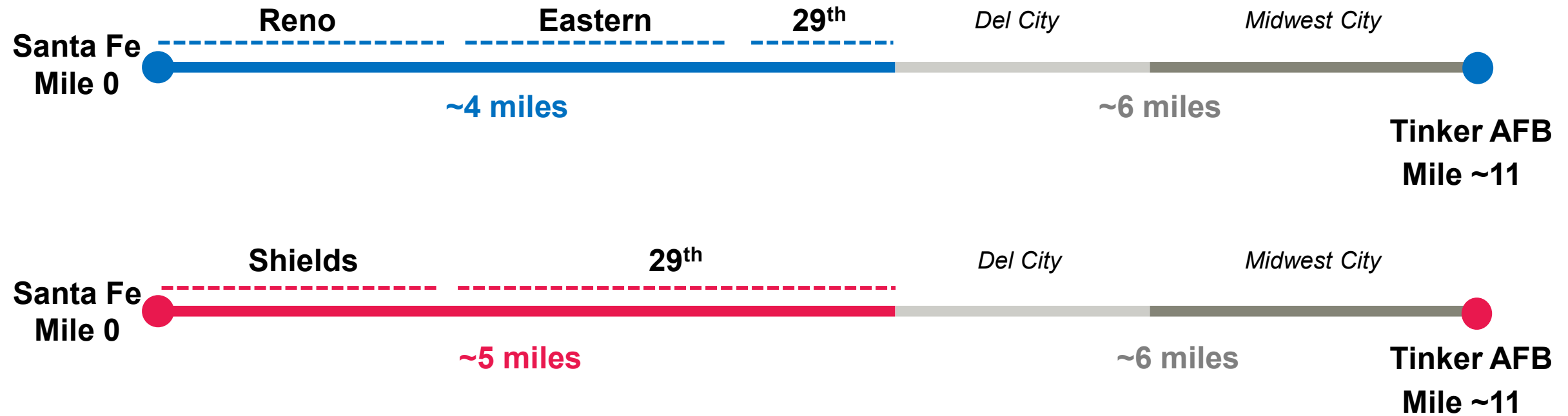
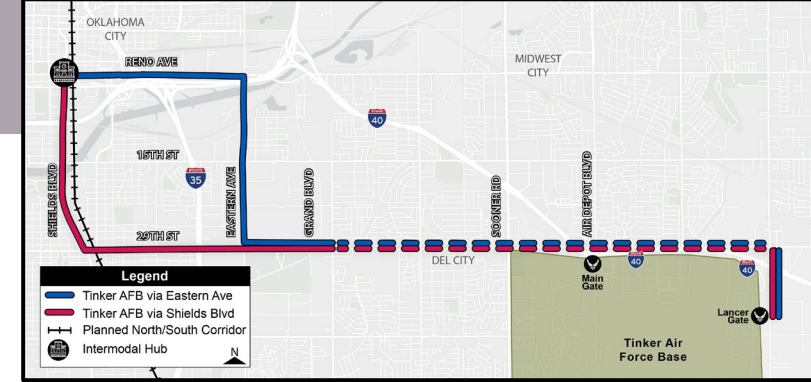
- Existing trips (Origin-Destination)
- Demand Drivers (Job density, population density, commercial areas, etc.)
- Future economic development and areas of high projected job/population growth

2. Spacing Indicators:

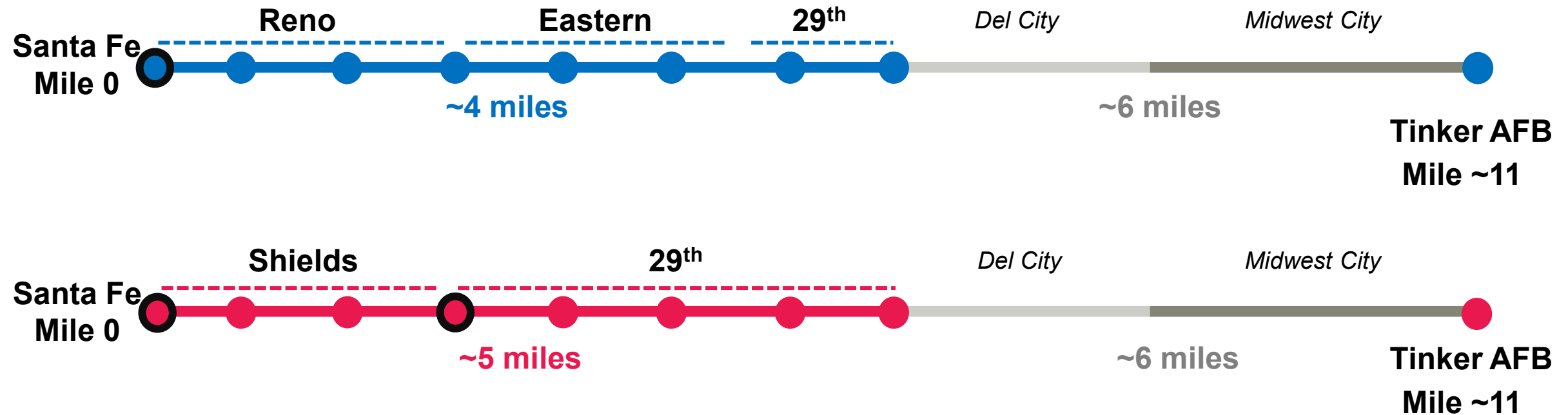


- Speed of trip
- Cost of investment

Defining the Alternatives

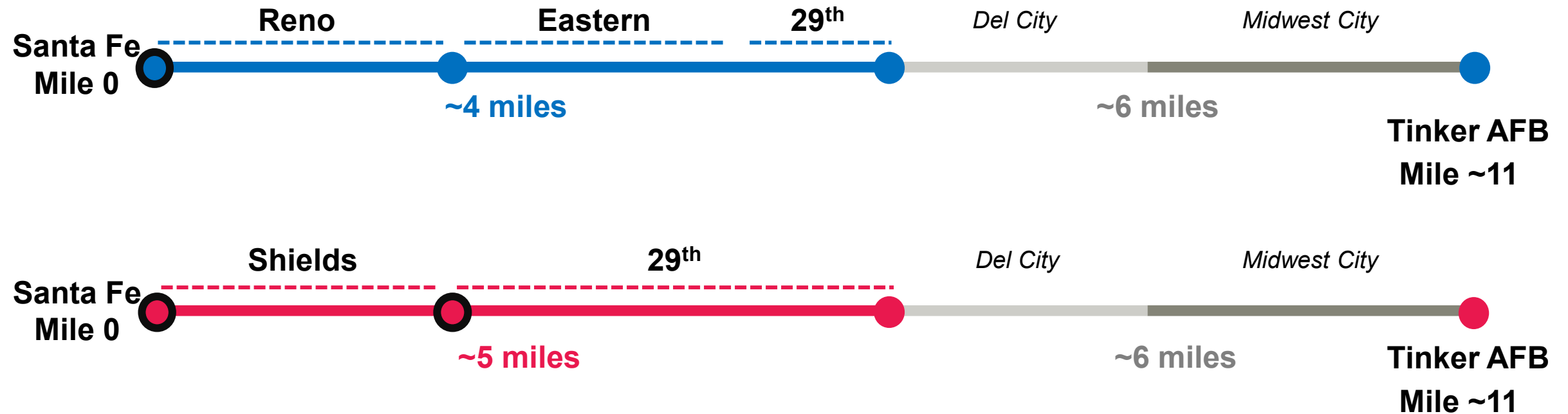


Increased Access, Lower Speeds



 Potential N/S Corridor Connection

Limited Access, Higher Speeds



 Potential N/S Corridor Connection

More Stations

- More community access
- More development opportunity

Range of Options

Fewer Stations

- Faster travel time
- Lower costs

Connection to Detailed Evaluation

- Assumption for station location is connected to majority of the Evaluation Criteria
- The location and number of stations can be adjusted based on detailed evaluation findings

The background is a dark purple gradient with a white line-art illustration of a train and a ship. The train is on the right, moving towards the left, and the ship is on the left, moving towards the right. The word "DISCUSSION" is written in large, white, sans-serif capital letters across the center of the image.

DISCUSSION



COMMUNITY ENGAGEMENT

September Engagement Campaign

- Major Campaign intended to:
 - Educate stakeholders
 - Collect feedback from the community
- 14 in-person events from September 21st – October 1st
- Attending community events:
 - Live Q&A with project team
 - Interactive maps and activities
 - User preference surveys
 - Educational materials

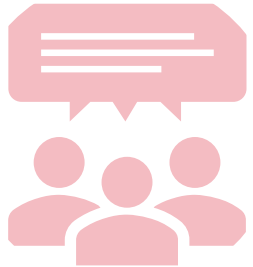
Engagement Events

RTA

| Date | Name/Location of Event | Time |
|----------------|---|--------------------------------------|
| September 21st | Oklahoma City Community College | 9:00 a.m. – 2:00 p.m. |
| | Tinker Air Force Base | 2:00 p.m. - 3:30 p.m. |
| September 22nd | University of Central Oklahoma | 10:00 a.m. - 2:00 p.m. |
| | Transit Rides/Stations Visit | 3:00 p.m.- 6:00 p.m. |
| September 23rd | OU Student Union | 9:00 a.m. - 2:00 p.m. |
| | Transit Rides/Stations Visit | 2:00 p.m. - 4:00 p.m. |
| | Edmond North HS | 5:30 p.m. - 7:30 p.m. |
| September 24th | Norman Farmers Market | 7:00 a.m. - 12:00 p.m. |
| | OU/KState Tailgate/Gameday | 12:00 p.m. - 5:00 p.m. (Kickoff TBD) |
| September 26th | Moore Norman Tech | 9:00 a.m. - 2:00 p.m. |
| | Transit Rides/Stations Visit | TBD |
| September 27th | Transit Rides/Stations Visit | TBD |
| | Edmond Shift Public Open House | TBD |
| October 1st | Fiestas de las Americas (Capitol Hill Neighborhood) | 10:00 a.m. - 8:00 p.m. |

RTAMoves.com

Visit the project website, www.rtamoves.com for the following:



Learn More!

Project summary information and FAQs are provided on the website.



We want to hear from you!

Share your feedback by participating in our survey and interactive map.

The background of the slide features a photograph of a train at a station platform, viewed from a low angle looking down the tracks. A semi-transparent purple overlay covers the right two-thirds of the image. On the left, there is a white line-art illustration of a train car and platform details, which blends into the purple overlay. Centered over the purple area is the text "NEXT STEPS" in a large, white, bold, sans-serif font.

NEXT STEPS

Technical Working Group - Work Plan



Sept



BOARD MEETING: ALTERNATIVES ANALYSIS UPDATE



CONTINUE ALTERNATIVES ANALYSIS DETAILED EVALUATION FRAMEWORK



CONDUCT SCORING ON METRICS

Oct/Nov



TECHNICAL WORKING GROUP MEETING – ANALYSIS UPDATE

Nov



BOARD MEETING: DETAILED EVALUATION FRAMEWORK UPDATE