

Alternatives Analysis Update



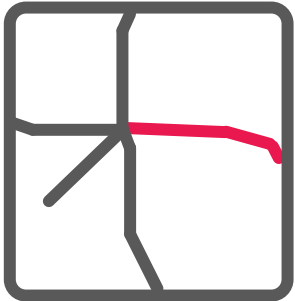
*Prepared for the Regional Transportation Authority
of Central Oklahoma Board of Directors*

May 17, 2023

Prepared by Kimley-Horn and Associates

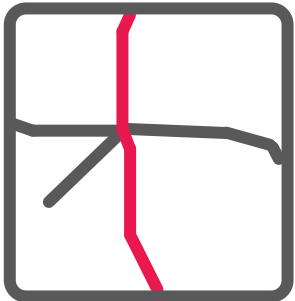


Agenda



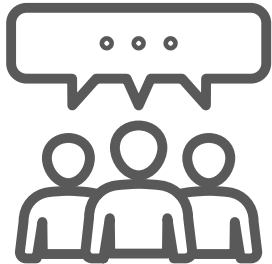
East Corridor Updates

Findings Recap
LPA Recommendation



North/South Corridor Updates

Corridor Update
LPA Recommendation



Project Updates

LPA Engagement Campaign
Next Steps

Transit System Plan 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 and sustainable system that invests resources responsibly.



Alternative Analysis (AA) Process



1 DISCOVER

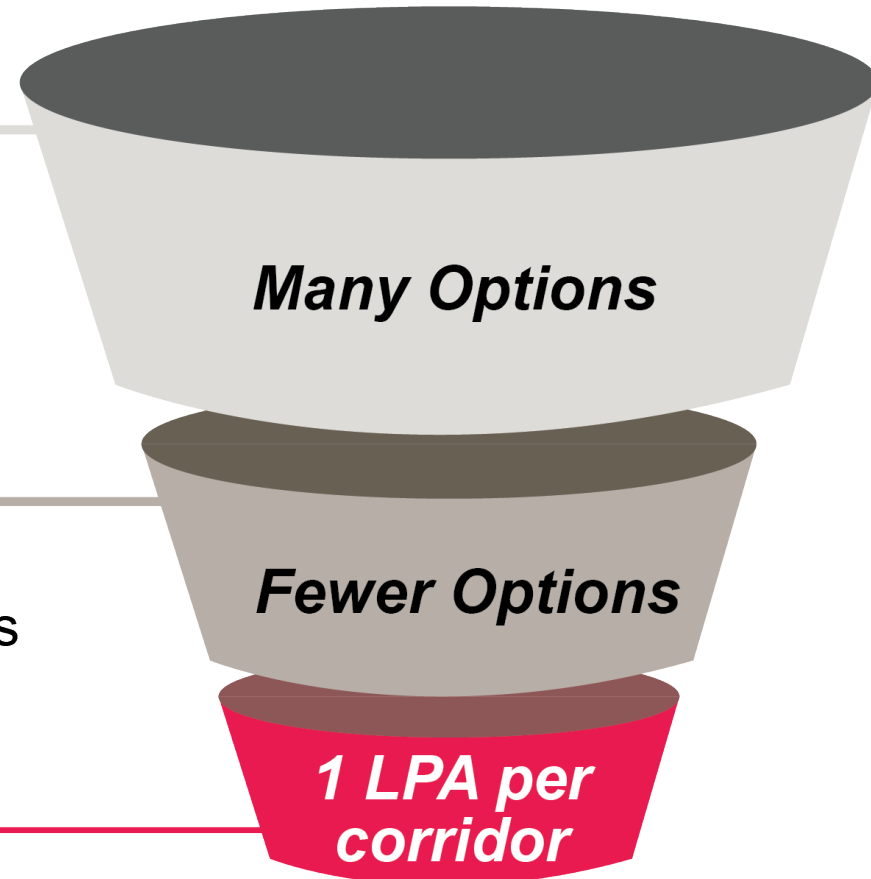
- Define all reasonable alternatives
- Screen against goals & objectives

2 REFINE

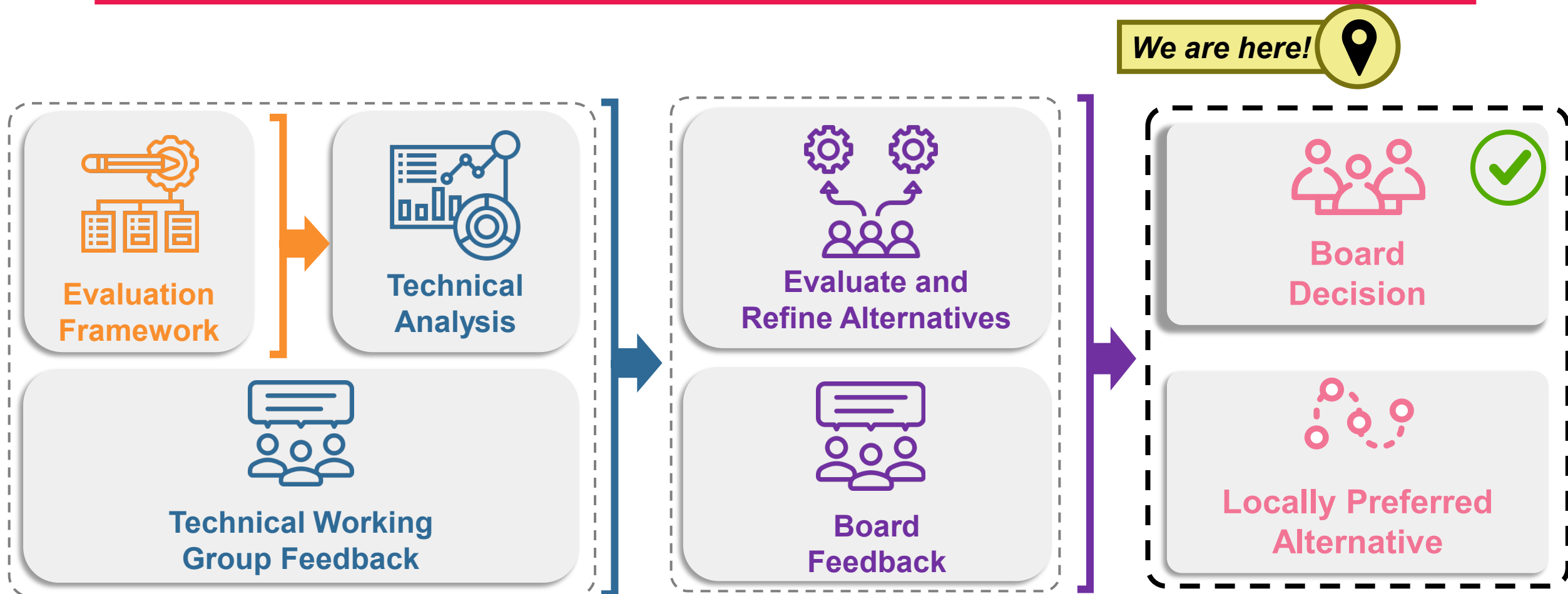
- Advance remaining alternatives
- Perform detailed technical analysis

3 SELECT

- Board consideration of LPA



Refine and Select Phase Process





EAST CORRIDOR UPDATE

Reno-Eastern



Serves a diverse population



Provides access to large planned developments

- Chickasaw Nation Development
- Development pressure from Bricktown moving east

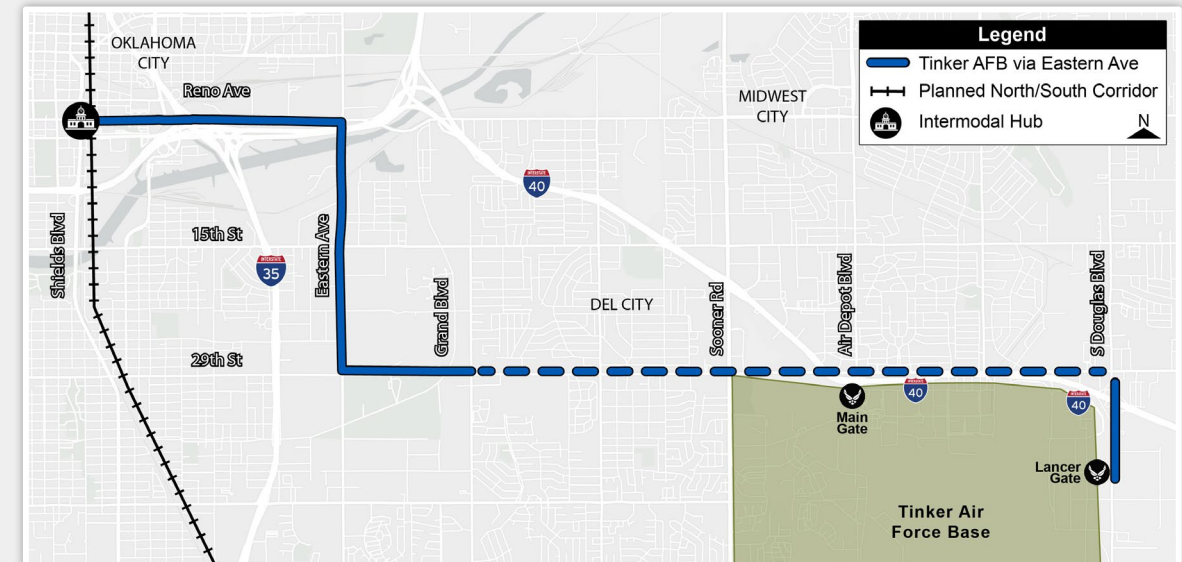


Room for growth - large future market potential



High capacity for TOD

- Large vacant parcels available for development
- Underutilized industrial land adjacent to corridor



Shields-29th



Serves existing transit markets

- Slightly higher ridership projections



Challenges to TOD

- Smaller parcels discourage vertical development
- Fragmented ownership
- Fewer catalytic sites

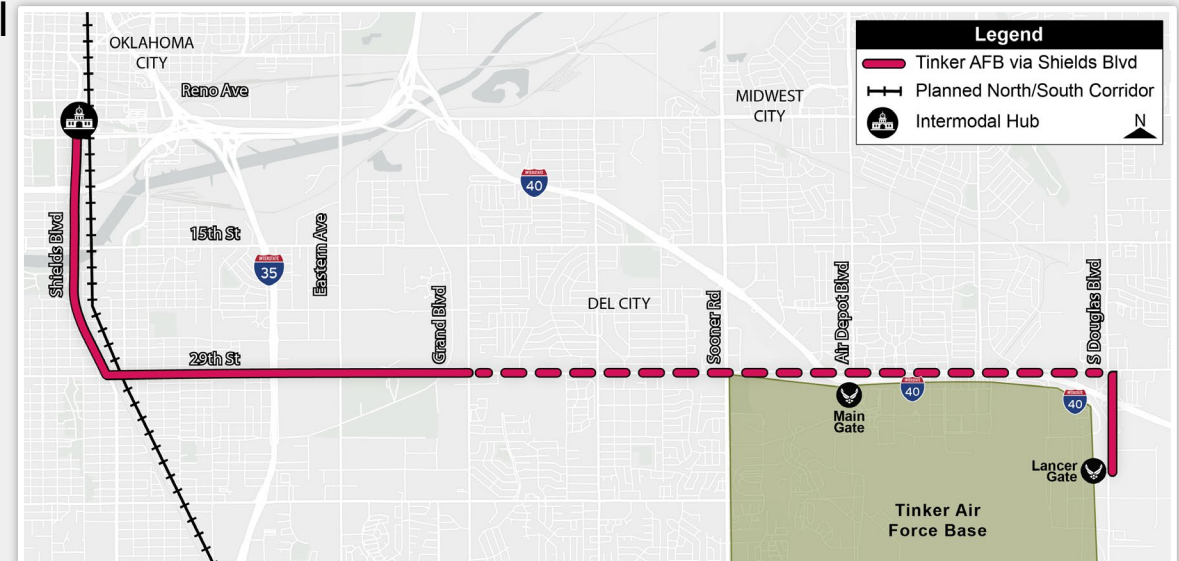


Mix of existing land uses

- Residential, commercial, and light industrial



Potential overlap with MAPS 4 BRT Project



Alignment Comparison

Reno-Eastern



Access to planned developments



High capacity for TOD



Room for growth - large future market potential

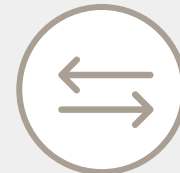
Shields-29th



Serves existing transit markets



Challenges to TOD



Potential overlap with MAPS 4

Mixed Traffic BRT



Less than 50% Dedicated ROW



Center-Running Dedicated Guideway BRT



More than 50% Dedicated ROW



LRT



100% Dedicated ROW



Key Findings: Light Rail



Low Ridership

- Existing and future ridership market would be below peers



Cost

- Light rail presents significantly higher cost



Lack of Available ROW

- Midwest and Del City right of ways present challenges to construction of LRT



Recommendation:

- Proceed with BRT alternatives





EAST CORRIDOR LPA RECOMMENDATION

What is a Locally Preferred Alternative?

Community's preferred mode and alignment that meets identified goals and objectives

LPA identifies:

- ✓ Feasible alignment
- ✓ Mode
- ✓ Planning level information (i.e., cost and ridership estimates)

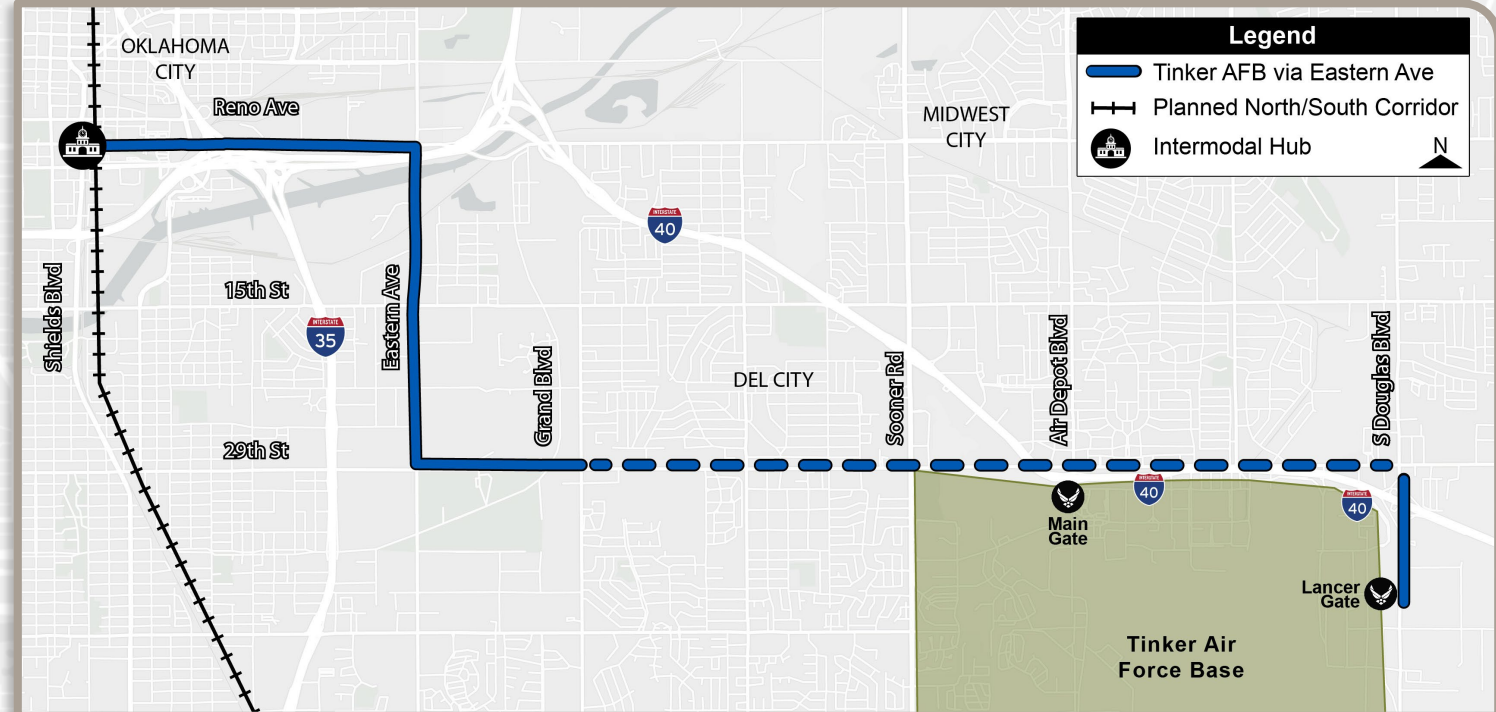
LPA does not:

- ✓ Result in a fully designed system
- ✓ Preclude modifications to alignments, modes, and stations

East Corridor LPA Recommendation

RTA

Bus
Rapid
Transit



Recommended Alternative

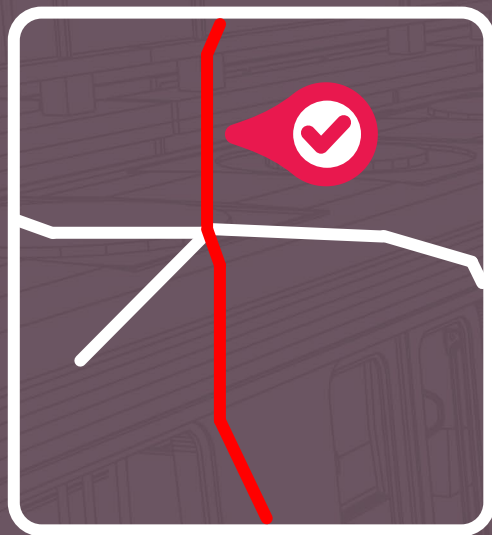
Mode: *Bus Rapid Transit*

Alignment: *Santa Fe Depot with Lancer Gate via Reno Avenue, Eastern Avenue, 29th Street, and Douglas Boulevard*

Next Steps











**Refine Assumptions for
Guideway and Operating Plan**

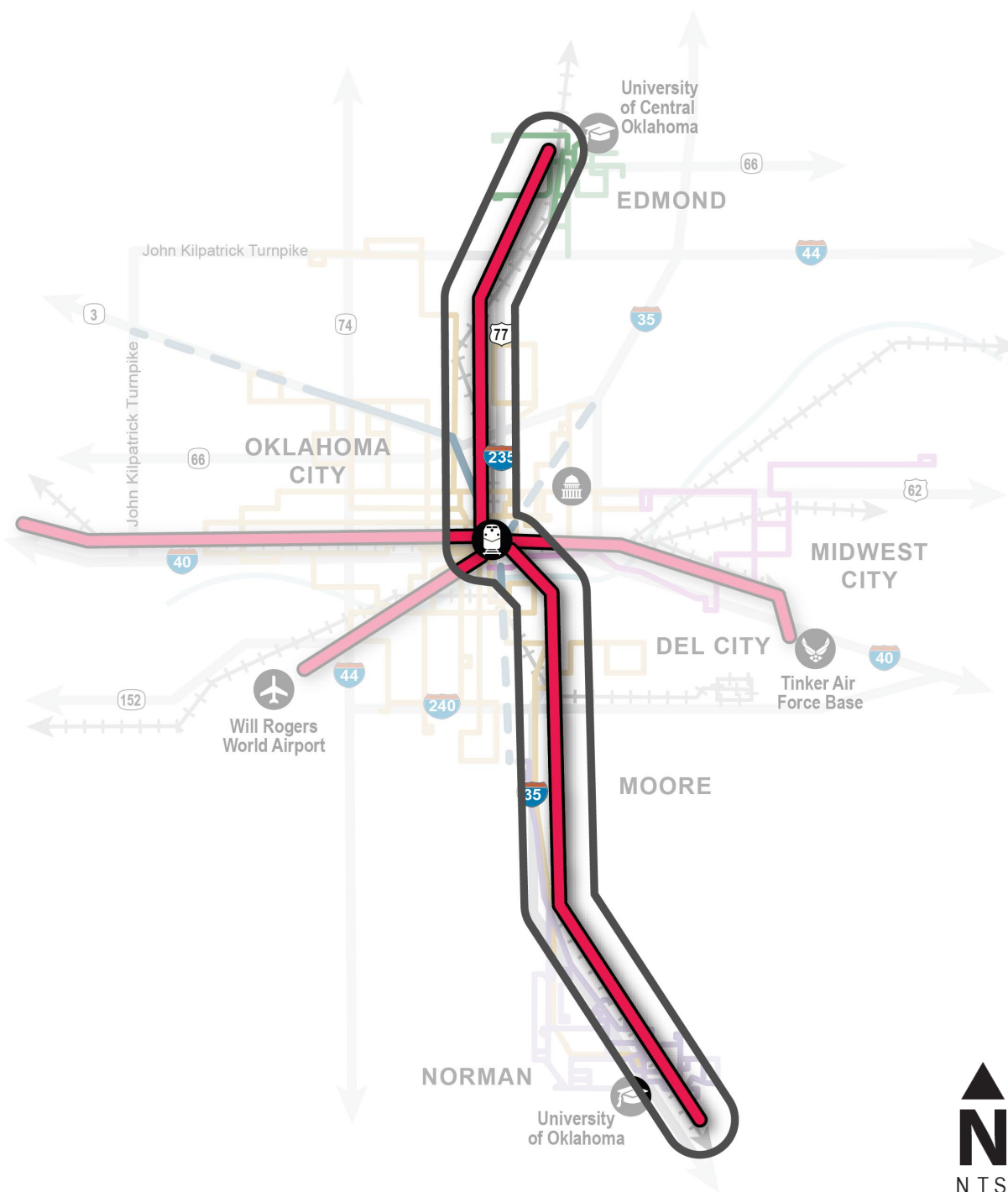




NORTH/SOUTH CORRIDOR UPDATE

LEGEND

-  Potential Regional Transit Corridor
-  Initiatives by Others (Under Design)
-  Initiatives by Others (Under Study)
-  Edmond Existing Fixed-Route Bus System
-  OKC Existing Fixed-Route Bus System
-  Midwest City Existing Fixed-Route Bus System
-  Norman Existing Fixed-Route Bus System
-  Major Roads
-  Existing Railroad
-  Oklahoma River



North/South Corridor

- Identified in previous study
- Significant analysis completed previously
- Previous analysis still applicable



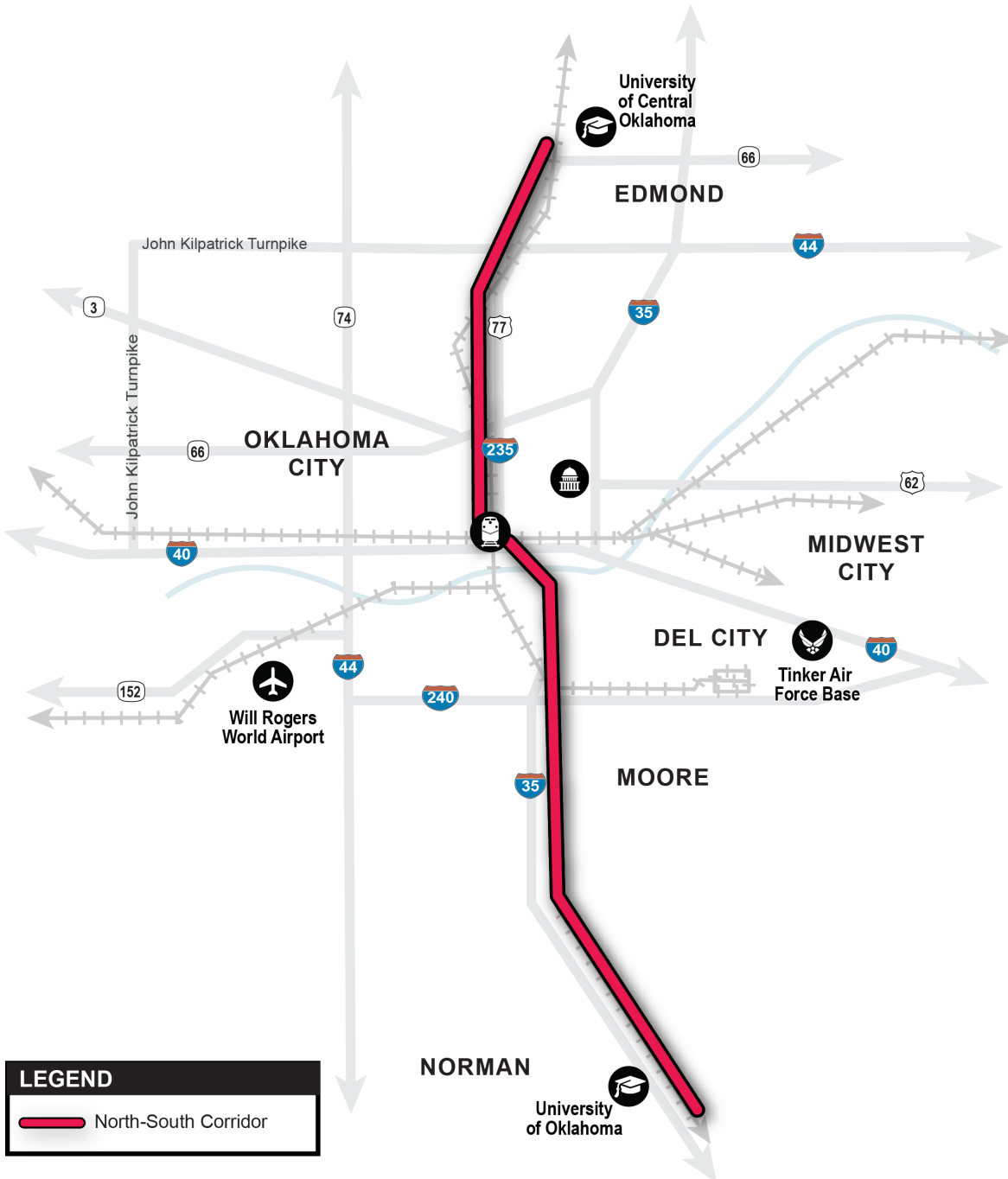
Consultant Recommendation:

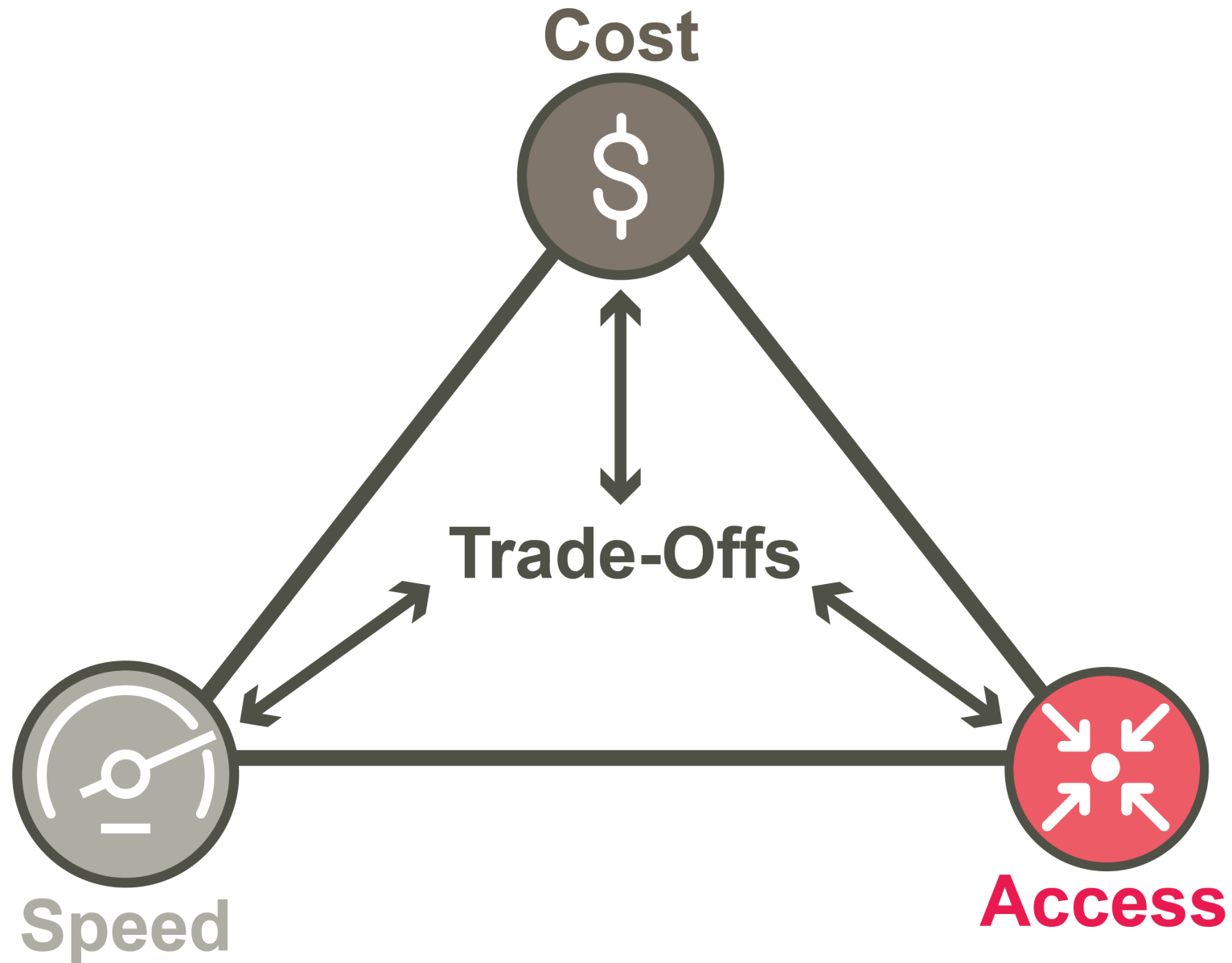
Leverage past study
conclusions
Advance to service and
operations analysis

What is being studied?



Commuter Rail Service & Operations



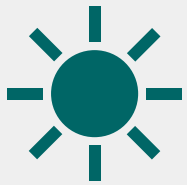


Where does ridership come from?



Traditional 9-5 Commuters:

- Downtown oriented
- Peak hours (5am-9am & 3pm-7pm)
- Peak direction oriented
- Weekday



All Day Travelers:

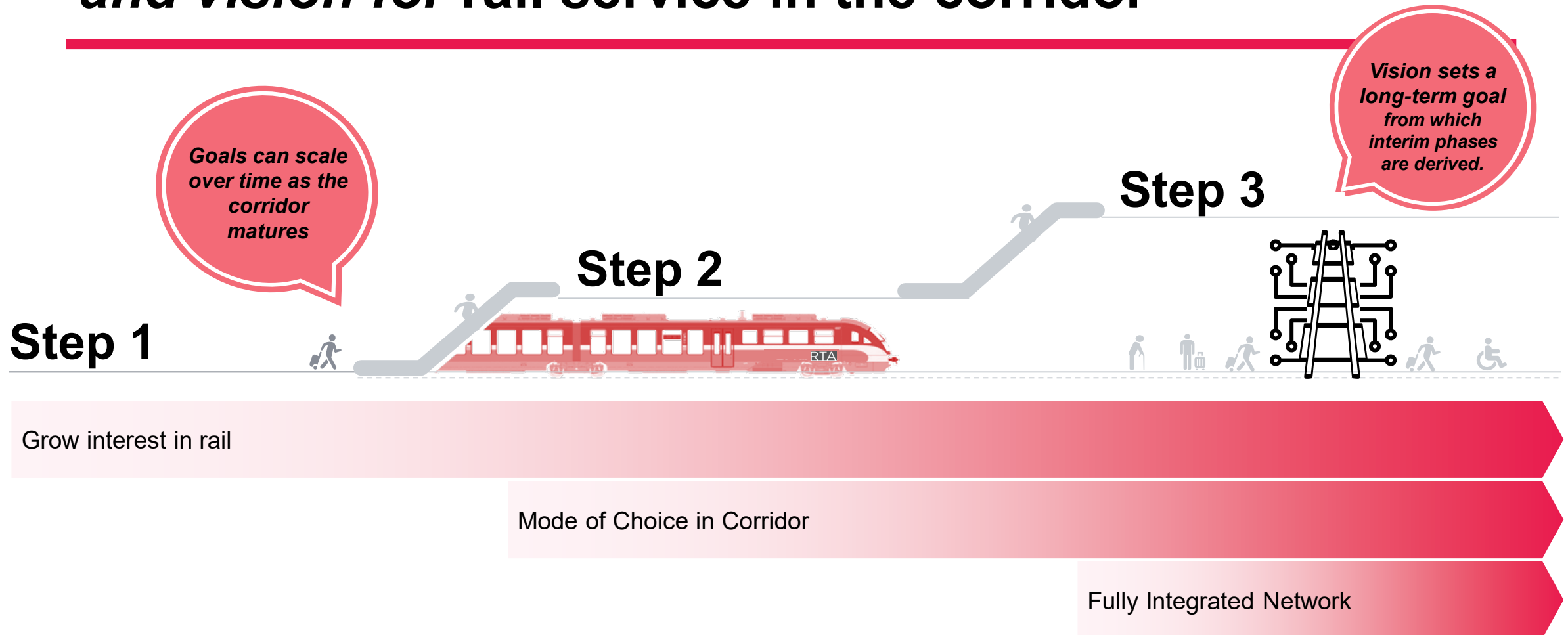
- Many origins & destinations
- Frequent all day service for flexible travel
- Bi-directional service
- Weekdays & weekends



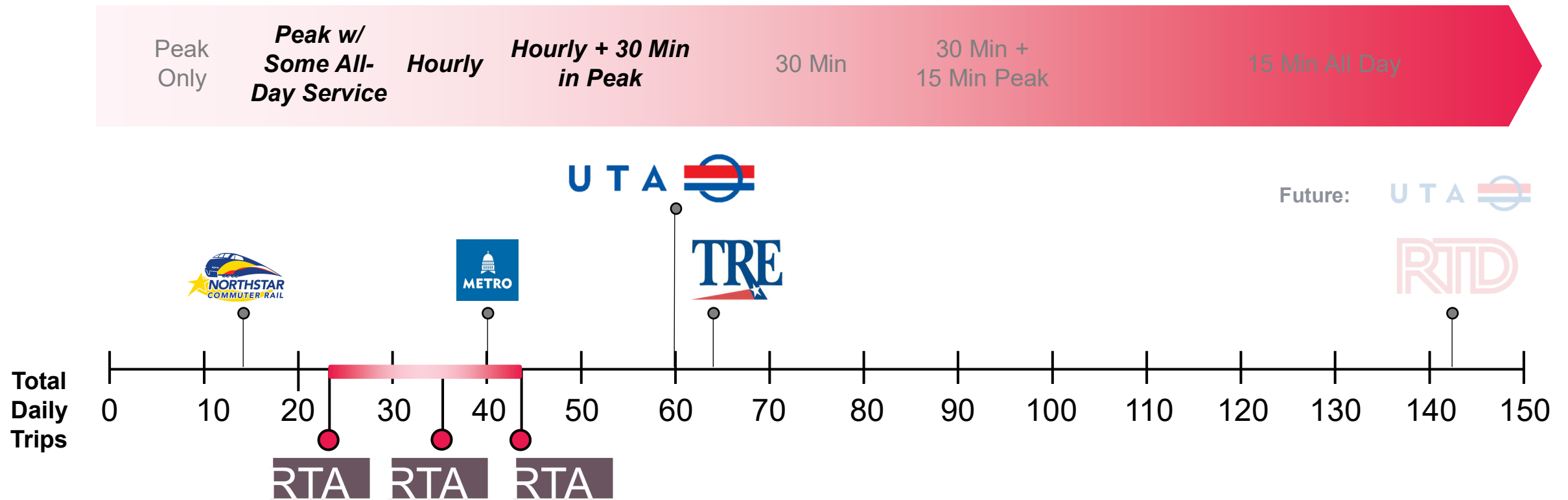
Special Event Attendees:

- To and from major stadiums, arenas, venues
- Pre- and post-event travel
- Evenings and weekends

The RTA Board determines the *strategic policy goals and vision* for rail service in the corridor



RTA Vision for Service



Preparing for Service

RTA



**Negotiate BNSF Access
Agreements and Fees**



**Station Selection and
Development**



**Develop Capital Infrastructure
Program based on BNSF RTC
Modeling**



Timetable Development



Equipment Maintenance Plan



Service Initiation



**Fare Structure/
Customer's Payment**



**Governance structure to
oversee operations**

Plan for Vision with Ability to Scale Over Time

What Can the RTA Influence?



Outside RTA's Sphere of Influence

This is the context in which you operate



Population



Population Density



Weekday Addressable Market



Rail Corridor Mileage



Highway Congestion



Within RTA's Sphere of Influence

These are the levers you can control



Average fares



Service Type: Frequency and Pattern



Travel Time (Competitiveness with auto)



Metro Area Transit Mode Share



Special attractions / Major Events



Influence Transit Oriented Development Policy

Cost Estimating Components

CAPITAL COSTS, FINANCING, AND FEES



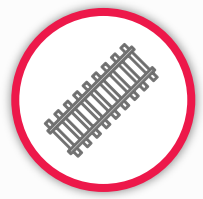
**Equipment and
Facilities**



Financing



Infrastructure



Access Fees

OPERATIONS AND MAINTENANCE COSTS



**Station
Maintenance**



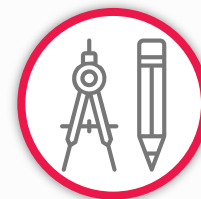
**Transportation
Operations**



**Equipment
Maintenance**



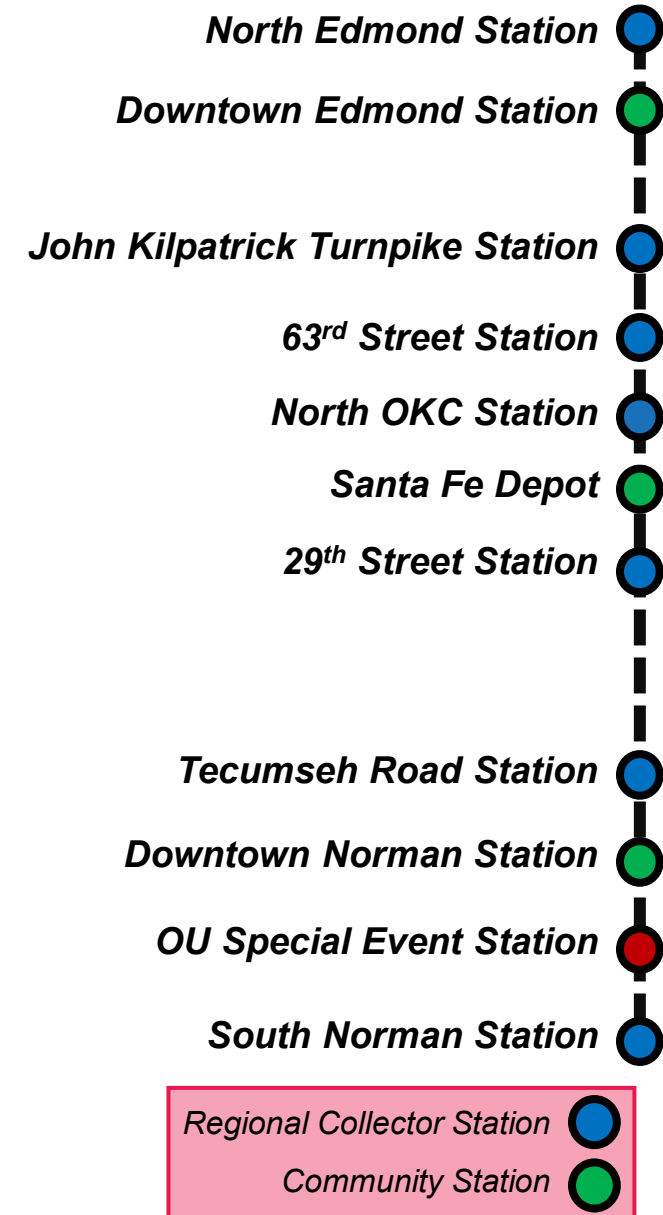
**Maintenance of
Right-of-Way**



**General and
Administrative**

Stations

- Identified 11 stations (including 1 special event only)
- Station facility elements include:
 - Platforms
 - Bus loops
 - Parking
 - Development potential



Station Typology



Regional Collector Station:

- Access priority for personal vehicles
- Located with 2 miles of significant residential development and/or adjacent to a major roadway corridor
- Substantial Park & Ride lot
- EV charging, vanpool, and Kiss & Ride amenities
- Larger station footprint



Community Station:

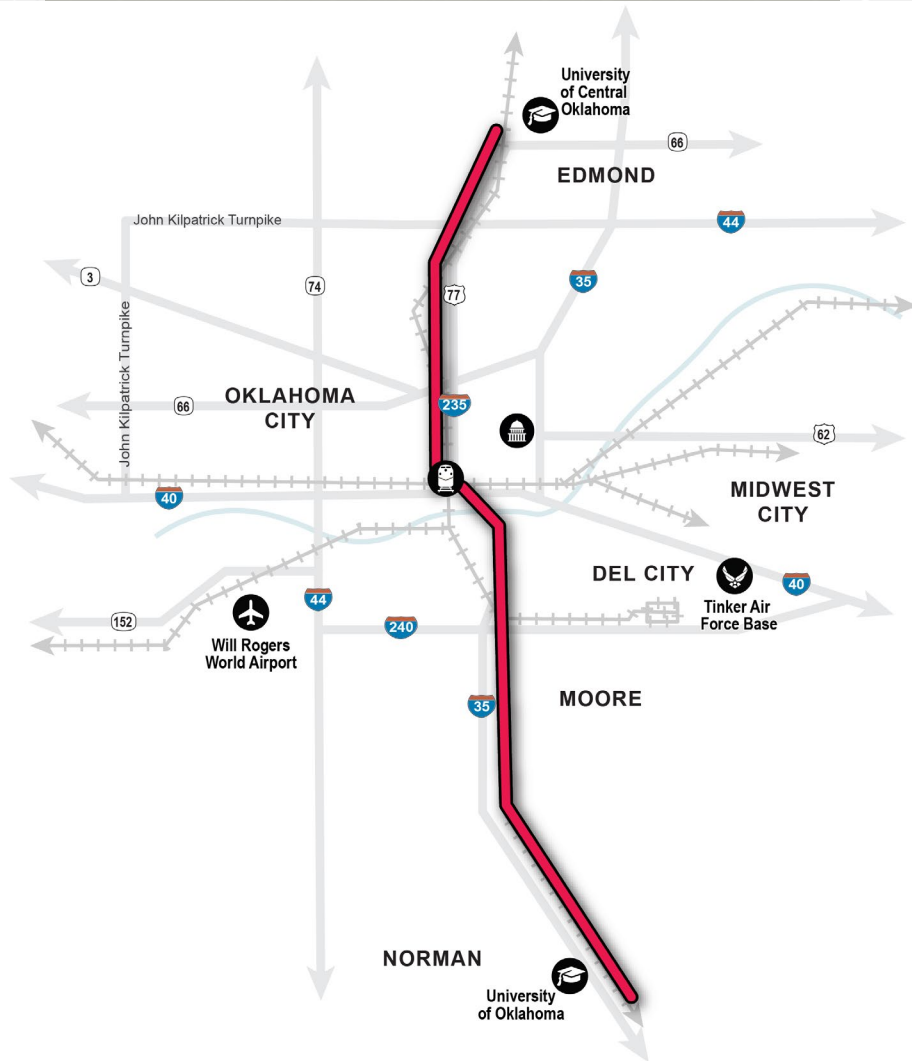
- Access priority for bikes and pedestrians
- Located within walking distance of transit supportive land uses
- Limited/no Park & Ride lot
- Bus transfer facilities
- Smaller station footprint



NORTH/SOUTH CORRIDOR LPA RECOMMENDATION

North/South Corridor LPA Recommendation

RTA



Commuter
Rail



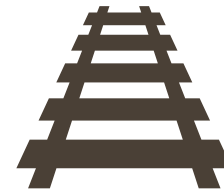
Recommended Alternative

Mode: *Commuter Rail*

Alignment: *Santa Fe Depot with North Edmond and South Norman via the BNSF Corridor*

Next Steps

**Continued Coordination with
BNSF on Infrastructure
Investment Package**





PROJECT UPDATES

Virtual Town Hall Engagement



65

Live Zoom
Participants



95

Facebook Live
Views



50

Questions & Comments

March 2021

In-Person Community Engagement



580

Total Engagements



18

Events Attended



92

Survey Responses

September 2022

June 2022

Virtual Town Hall Engagement



242

Live Zoom
Participants



976

Facebook Live
Views



50

Social Media
Posts



35

Town Hall Views
at RTAMoves.com*



Online Engagement at RTAMoves.com

6,619

Total Visits



1,685

Unique Users

**Town Hall recording posted only for June meeting*

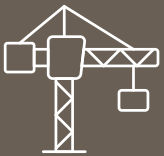
Key Takeaways



Community partners (Tinker AFB, Norman, Edmond, OKC) are excited about regional transit solutions



Professors and students at universities are interested in more educational outreach efforts



Growth and change in Central Oklahoma is driving interest in regional transportation

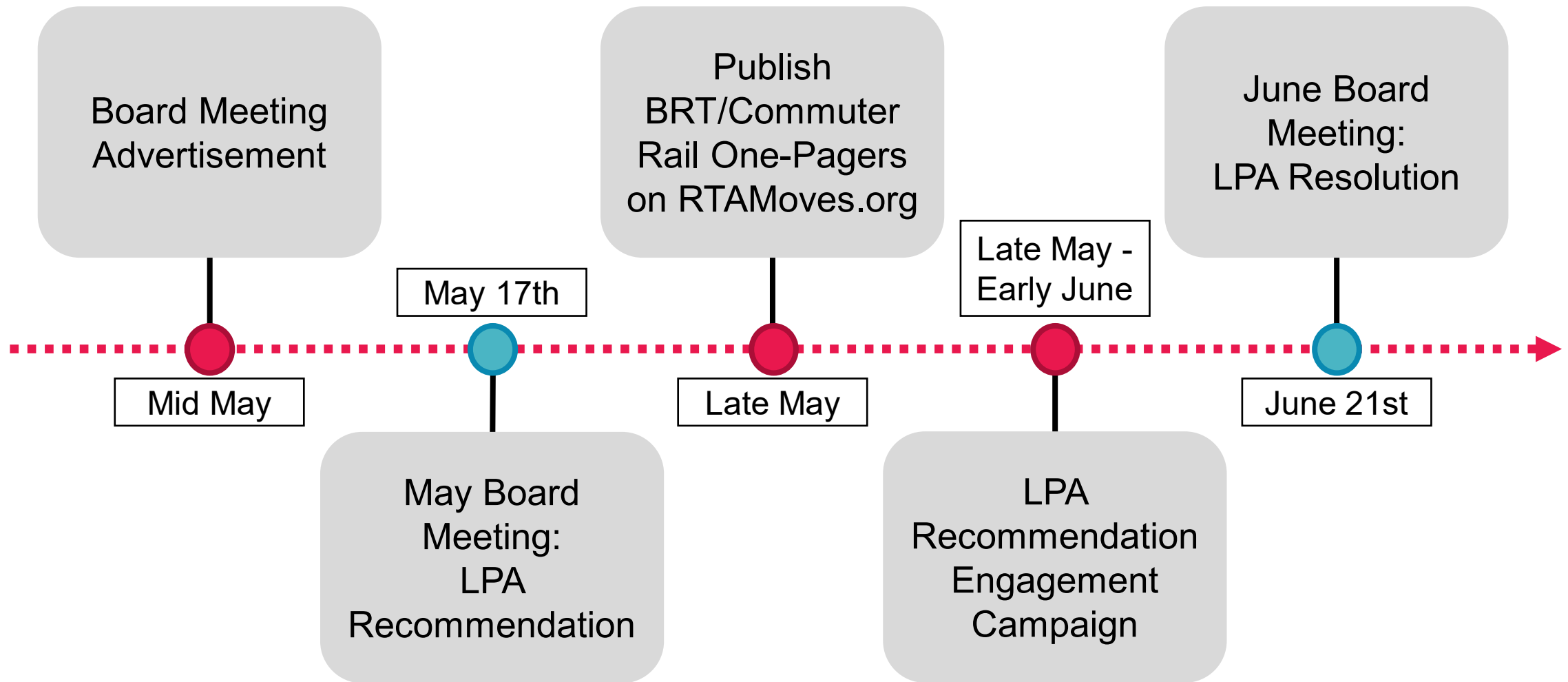


Park-and-ride facilities and real-time passenger information most preferred amenities among respondents



Virtual Engagement Timeline

RTA





NEXT STEPS



May
2023



DISCUSSION OF LOCALLY PREFERRED ALTERNATIVES
RECOMMENDATION FOR NORTH/SOUTH AND EAST CORRIDORS

June
2023



*BOARD RESOLUTION OF LOCALLY PREFERRED ALTERNATIVES FOR
NORTH/SOUTH AND EAST CORRIDORS*

July
2023



COMMENCE TASK ORDER 4

EAST CORRIDOR

DETERMINE GUIDEWAY CONFIGURATION AND
OPERATING PLAN

NORTH/SOUTH CORRIDOR

CONTINUED COORDINATION WITH BNSF



THANK YOU