

East Corridor Update



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


February 15, 2023

Prepared by Kimley-Horn and Associates



Agenda

- Alternatives Analysis Update
 - December Board Meeting Recap
- STOPS Modeling Overview
- Addressable Market Analysis
- Corridor Development Potential
 - February Technical Working Group Meeting Recap
- Next Steps



ALTERNATIVES ANALYSIS UPDATE

Alternative Analysis (AA) Process



1 DISCOVER

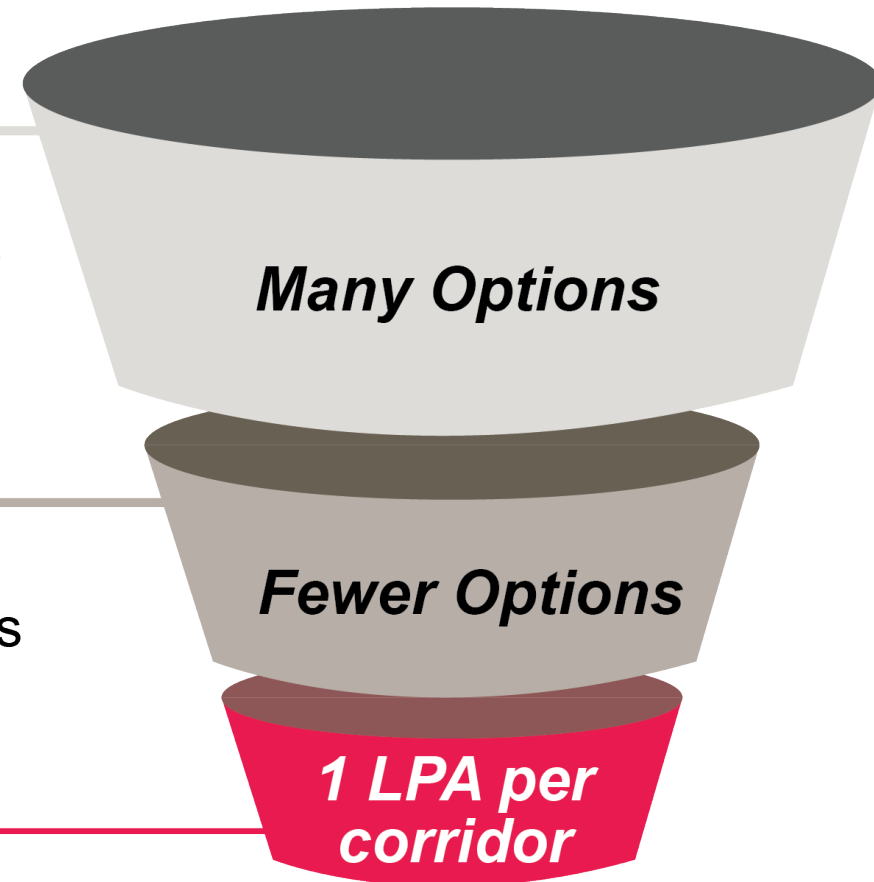
- Define all reasonable alternatives
- Screen against goals & objectives

2 REFINE

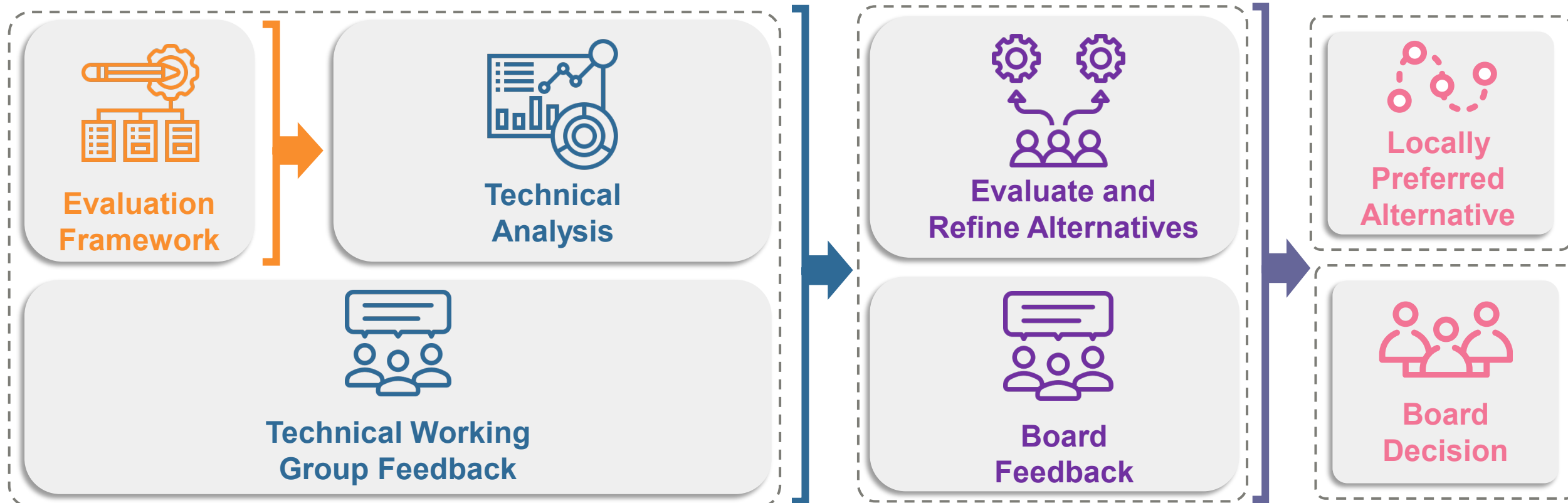
- Advance remaining alternatives
- Perform detailed technical analysis

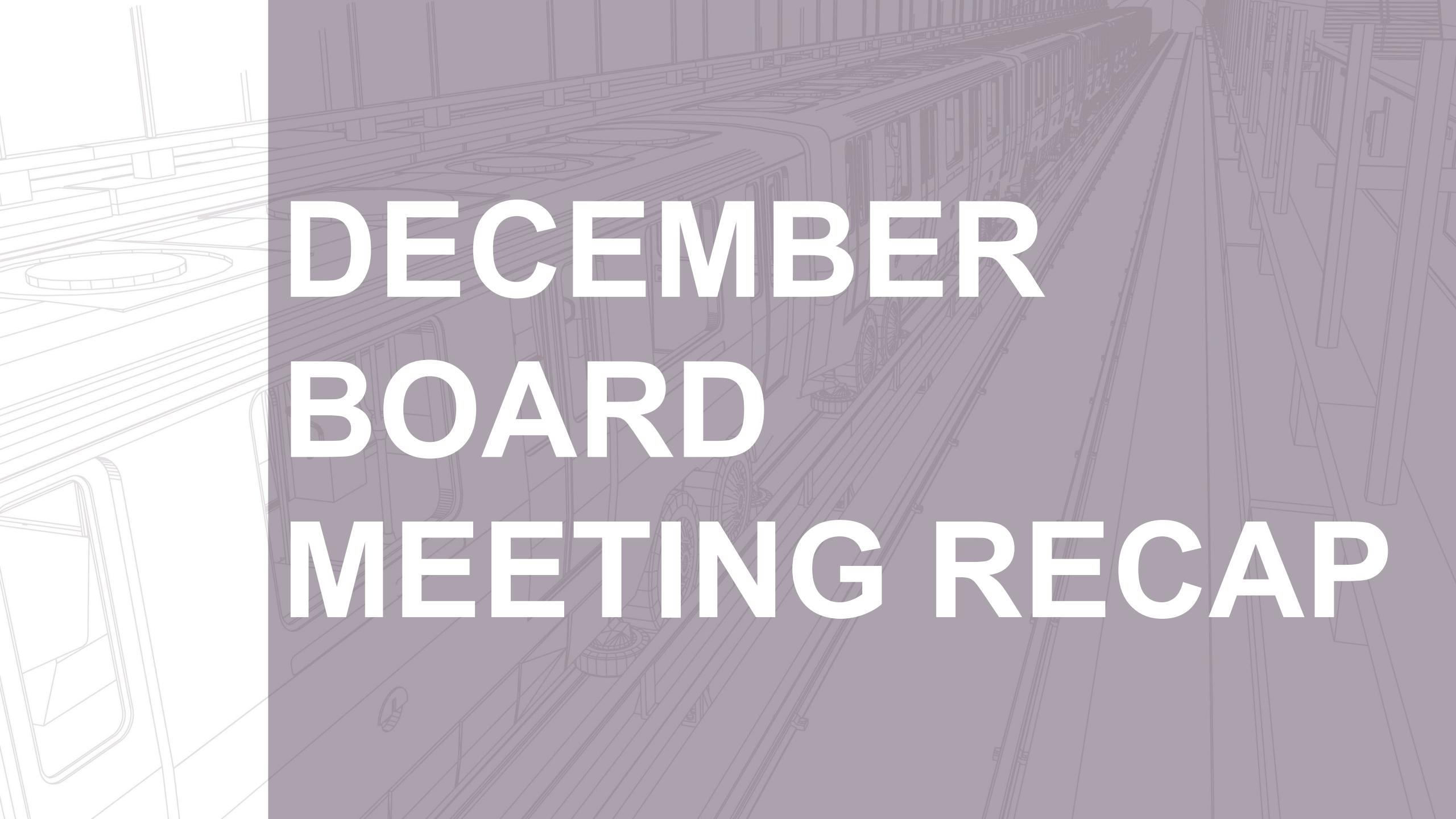
3 SELECT

- Board consideration of LPA



Refine and Select Phase Process



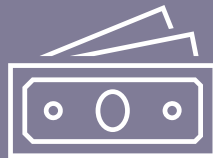


DECEMBER BOARD MEETING RECAP

December Board Meeting Summary



Recap of East Corridor Alternatives Analysis and key takeaways



Discussion of modal tradeoffs and cost considerations in a system-wide context

Alternatives Evaluation: Key Takeaways

RTA

Reno – Eastern
Mixed-Traffic

Reno – Eastern
*Dedicated
Guideway*

Shields – 29th
Mixed-Traffic

Shields – 29th
*Dedicated
Guideway*



Corridor Based Findings



Serves a diverse population



Serves a diverse population



Serves transit markets



Serves transit markets



Provides access to large future developments



Provides access to large future developments



Is cost effective



Quick travel times



Is cost effective



Quick travel times



Minimize impact to adjacent properties



Scalable service



Minimize impact to adjacent properties



Scalable service



Minimizes traffic operations impacts



Prepares corridor for LRT conversion



Minimizes traffic operations impacts



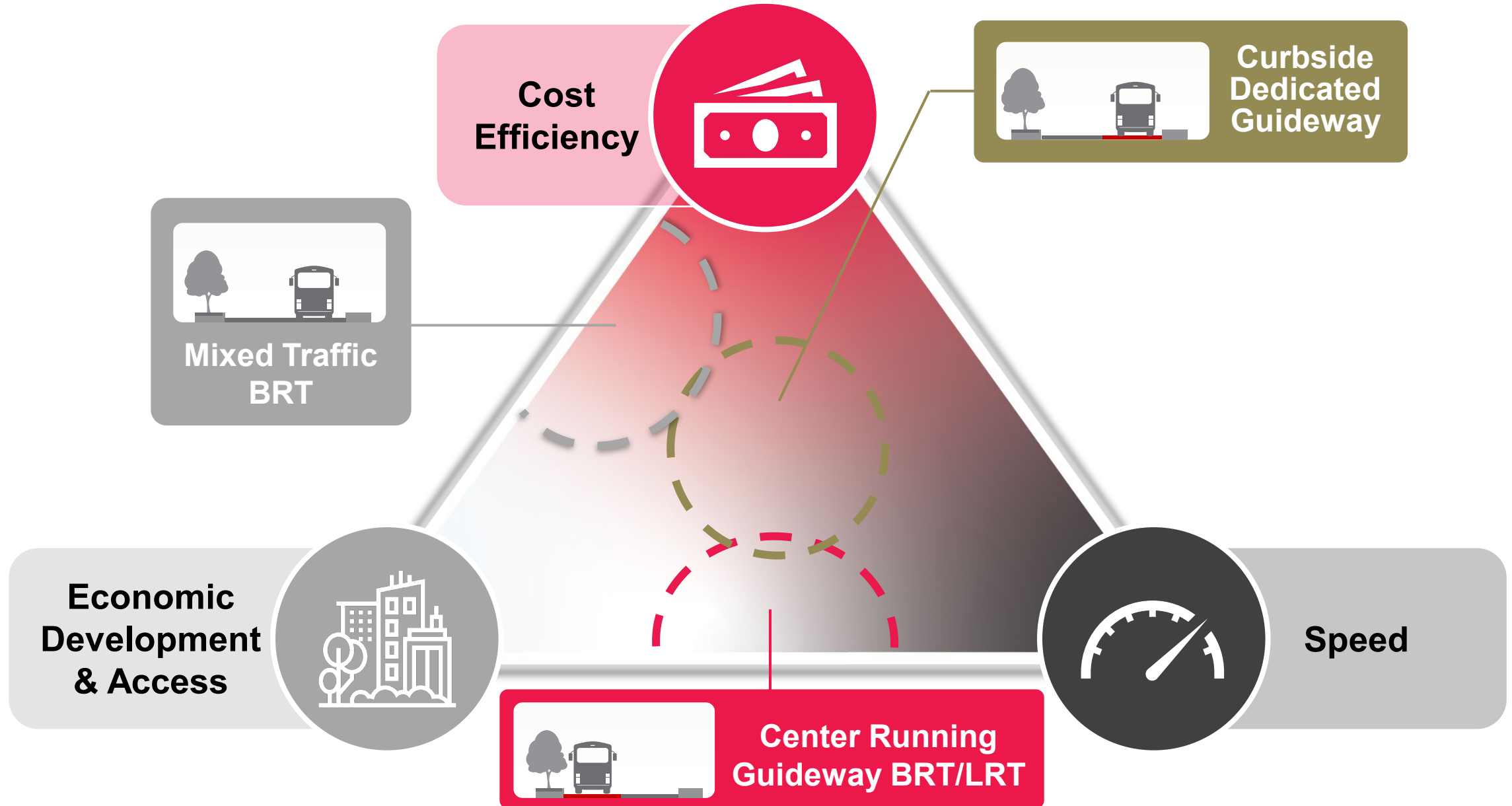
Prepares corridor for LRT conversion



Mode Based Findings

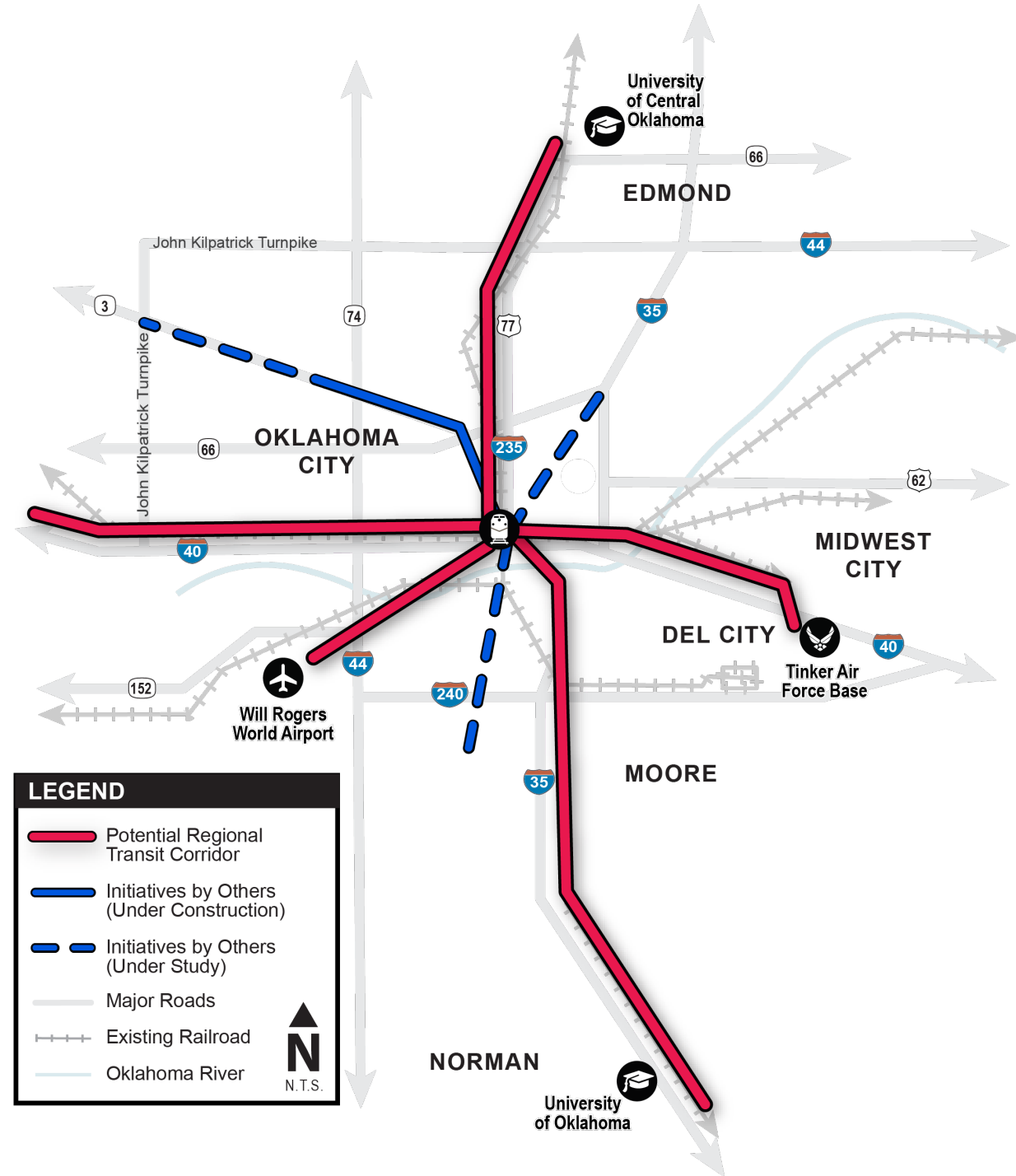
Transit Operating Tradeoffs

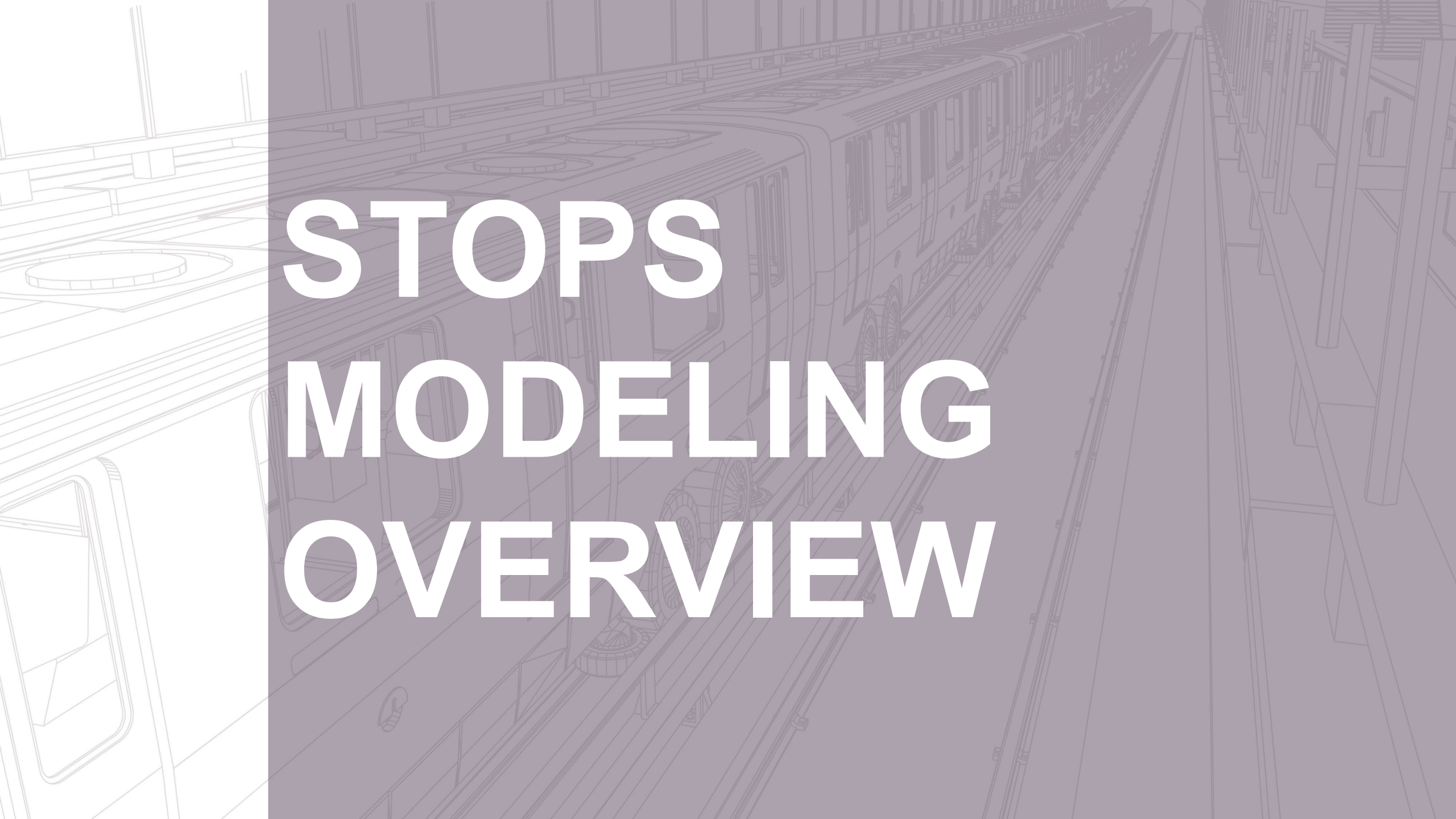
RTA



Regional Transit Network

- RTA System Plan
 - 1 commuter rail corridor (N/S)
 - 3 modes undecided (East, West, Airport)
- Initiatives by MAPS 4/EMBARK
 - 3 BRT corridors





STOPS MODELING OVERVIEW

STOPS Modeling – what it is and is not

- STOPS is:
 - A federally-compliant transit ridership model
 - Based on modelled population/employment growth through the RTP by ACOG
 - Incorporating broad existing travel times/patterns
- STOPS is not:
 - Accounting for specific development growth
 - A predictor of regional transit usage and travel patterns
 - Based on individual origin-destination pairs



Ridership: What can we control?



Outside RTA's Sphere of Influence

This is the context in which you operate



Existing Population and Jobs



Land Use and Development



Roadway Congestion



Downtown Parking Rates



Within RTA's Sphere of Influence

These are the levers you can control



Service Type: Frequency and Pattern



Travel Time (Competitiveness with Auto)



Station Access



Fares



TOD Policy



Ridership: What can we control?



Outside RTA's Sphere of Influence

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Land Use and Development



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Within RTA's Sphere of Influence

These are the levers you can control



Service Type: Frequency and Pattern



Travel Time (Competitiveness with Auto)



Station Access



Fares



TOD Policy

STOPS does not
account for these
items

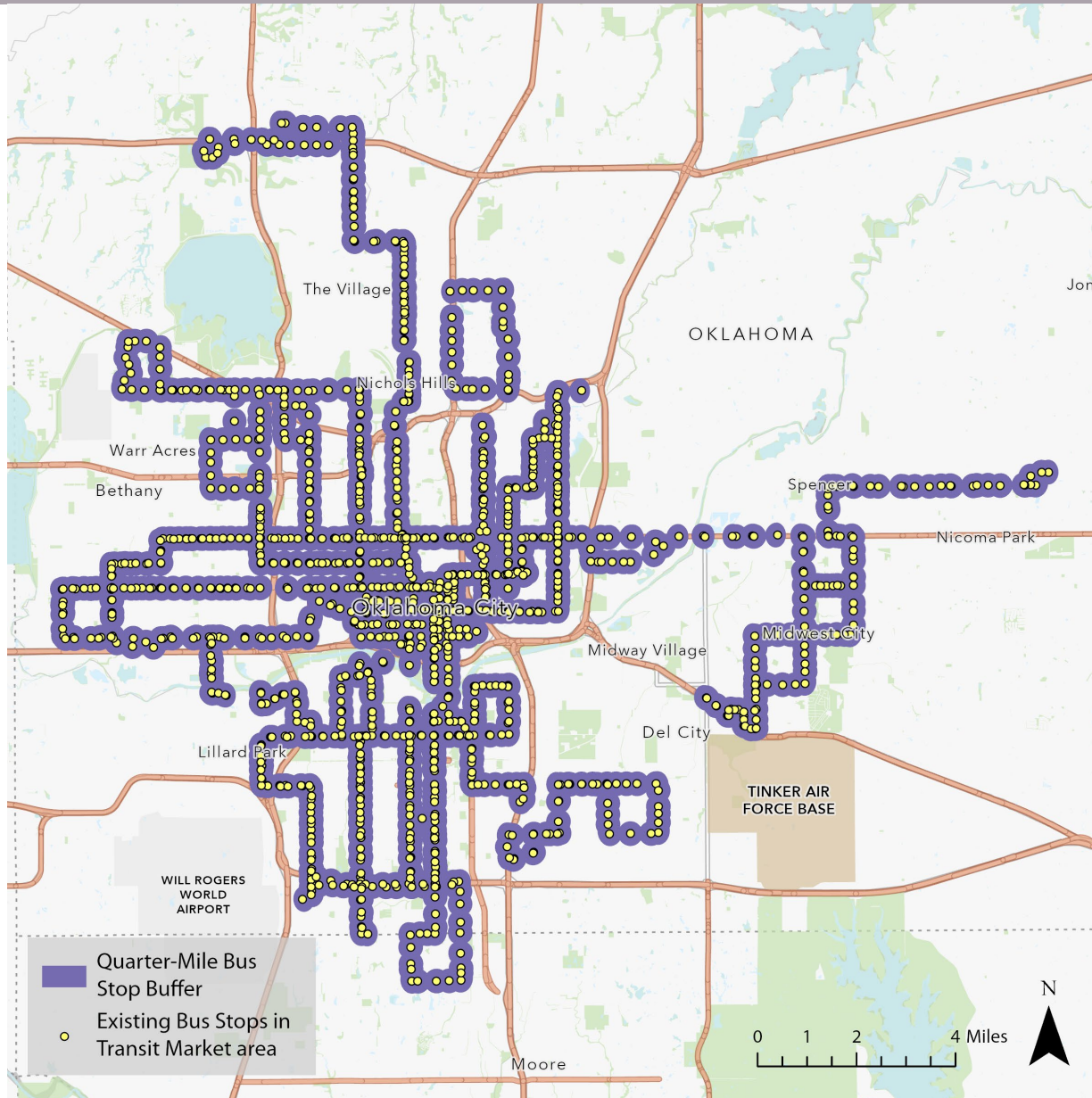
The background features a detailed line-art illustration of a train station. A train is positioned on the tracks, receding into the distance. The left side of the image is separated from the rest by a vertical white line. The right side has a light purple overlay. The text is centered across this boundary.

ADDRESSABLE MARKET ANALYSIS

Why an addressable market analysis?

- An analysis of how many trips could be served by transit along the East Corridor
- Accounts for things not included in the STOPS model
 - TOD and land use policies
- Uses existing transit ridership and development density to estimate weekday boardings

Existing EMBARK Service Overview



- **Modes:** Streetcar, Local Bus
- **Total weekday boardings:** ~9,000¹
- **Transit Modeshare in the Region:** 0.5%²
- **Population within ¼ mile:** 240,000³
- **Average weekday boardings per 100 residents:** 4

¹Source: EMBARK Automated Passenger Counter Data, September 2019

²Source: 2019 American Community Survey, 5-year Estimates

³Source: 2019 American Community Survey, 5-year Estimates

BRT Ridership Premium

- **Ridership increase after service upgrade:**
~50%¹
- **Estimated RTA weekday boardings per 100 residents:** ~6²

¹Source: Peer transit agency research

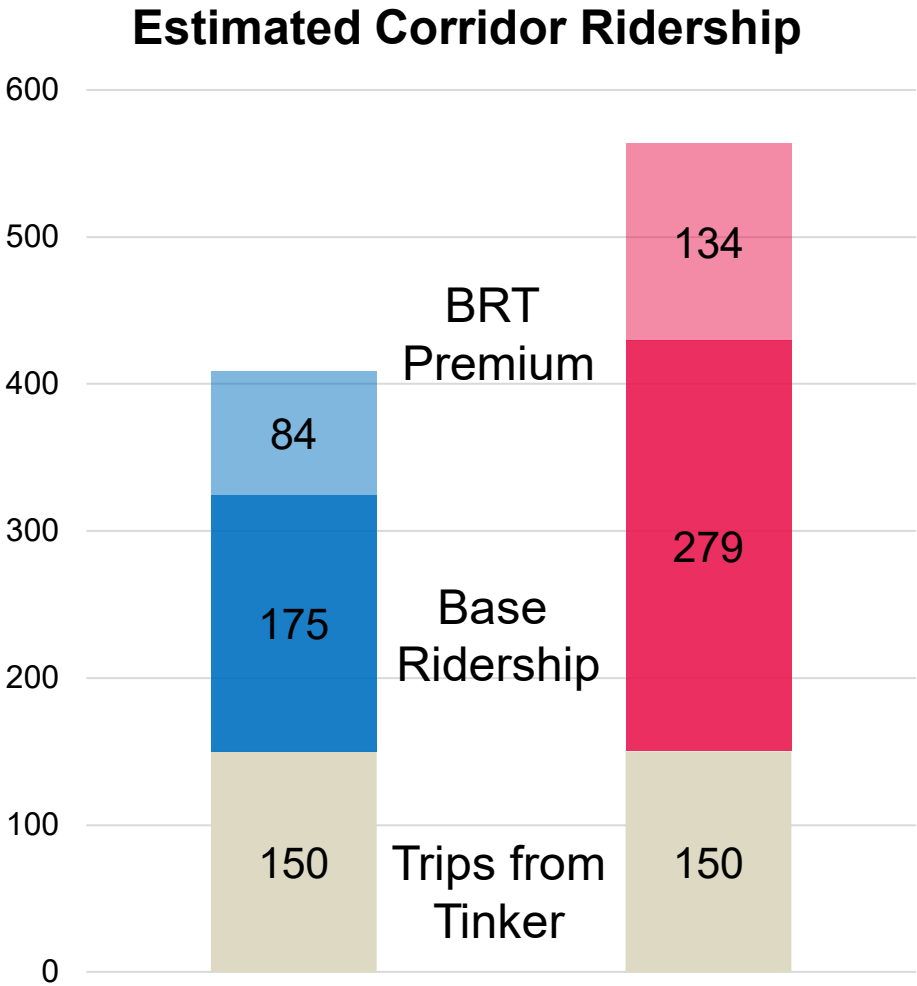
²Existing Average Weekday Boardings per 100 Residents * BRT Ridership Premium

Regional Trips to Tinker AFB

- More Civilian trips than Military trips
- 13,200 trips to/from TAFB near Regional Transit
- 2% market capture = ~300 Trips
 - Based on implementation of regional transit network

Estimated Weekday Boardings

	Half-Mile Buffer Population	Estimated Weekday Boardings per 100 Residents	Estimated Tinker Ridership	Estimated Boardings	Estimated Boardings per Station
Reno-Eastern	4,652	5.6	150	409	32
Shields-29 th	7,441	5.6	150	564	59



*Estimated Boardings = (Half-Mile Buffer Population / 100) * Estimated Boardings per 100 Residents*

Mode	Service	Average Weekday Boardings	Average Weekday Boardings/Station
Mixed-Guideway BRT	Metro Transit A Line	6,000	300
	CapMetro Pleasant Valley BRT	4,200	221
	CapMetro Route 801	10,000	345
Dedicated Guideway BRT	IndyGo Red Line	7,500	268
	Omaha Metro BRT	1,600	114
	UTA Utah Valley Express	12,500	833
Light Rail	DART Red Line	25,000	1,000
	UTA Blue Line	18,000	720
	Metro Transit Blue Line	33,000	1,435

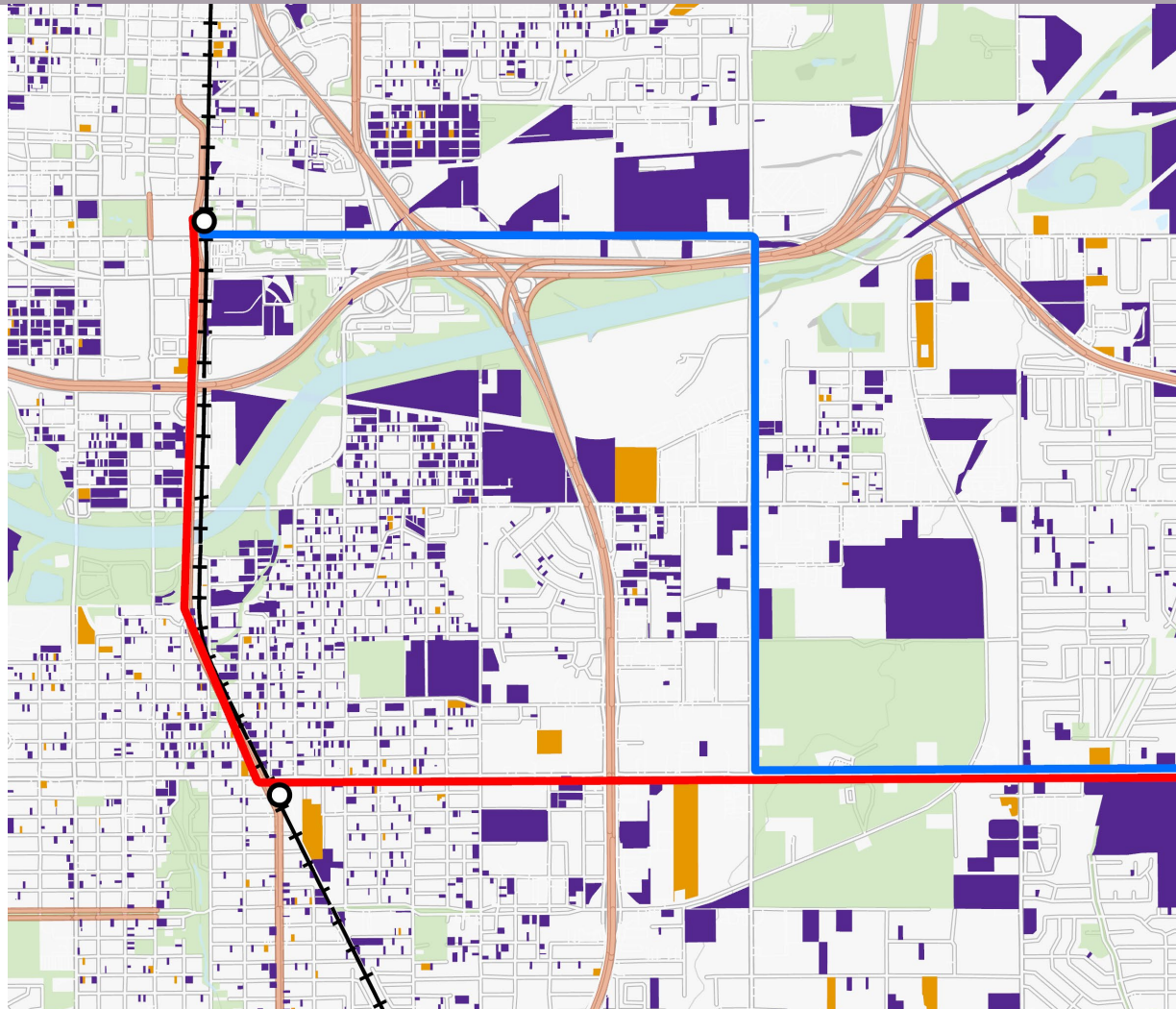
How to grow ridership?

- Estimated RTA East Corridor boardings well below peers on all modes
 - Exploring ways to increase ridership on East Corridor
 - West Corridor
 - Potential partnerships
 - TOD growth around stations
- Ridership growth will increase through:
 - Targeted TOD in and around station areas
 - Improved transit service and amenities

The background features a detailed line drawing of a train corridor. A train is visible on the tracks, receding into the distance. The scene is overlaid with a semi-transparent purple rectangle that serves as a backdrop for the text. On the left side, outside the purple area, there are additional line drawings of circular structures, possibly platforms or stations.

CORRIDOR DEVELOPMENT POTENTIAL

Where might growth occur?



- Tinker via Eastern
- Tinker via Shields
- + Planned N/S Commuter Corridor
- N/S Commuter Corridor Stations
- Undeveloped Parcels
- Underdeveloped Parcels

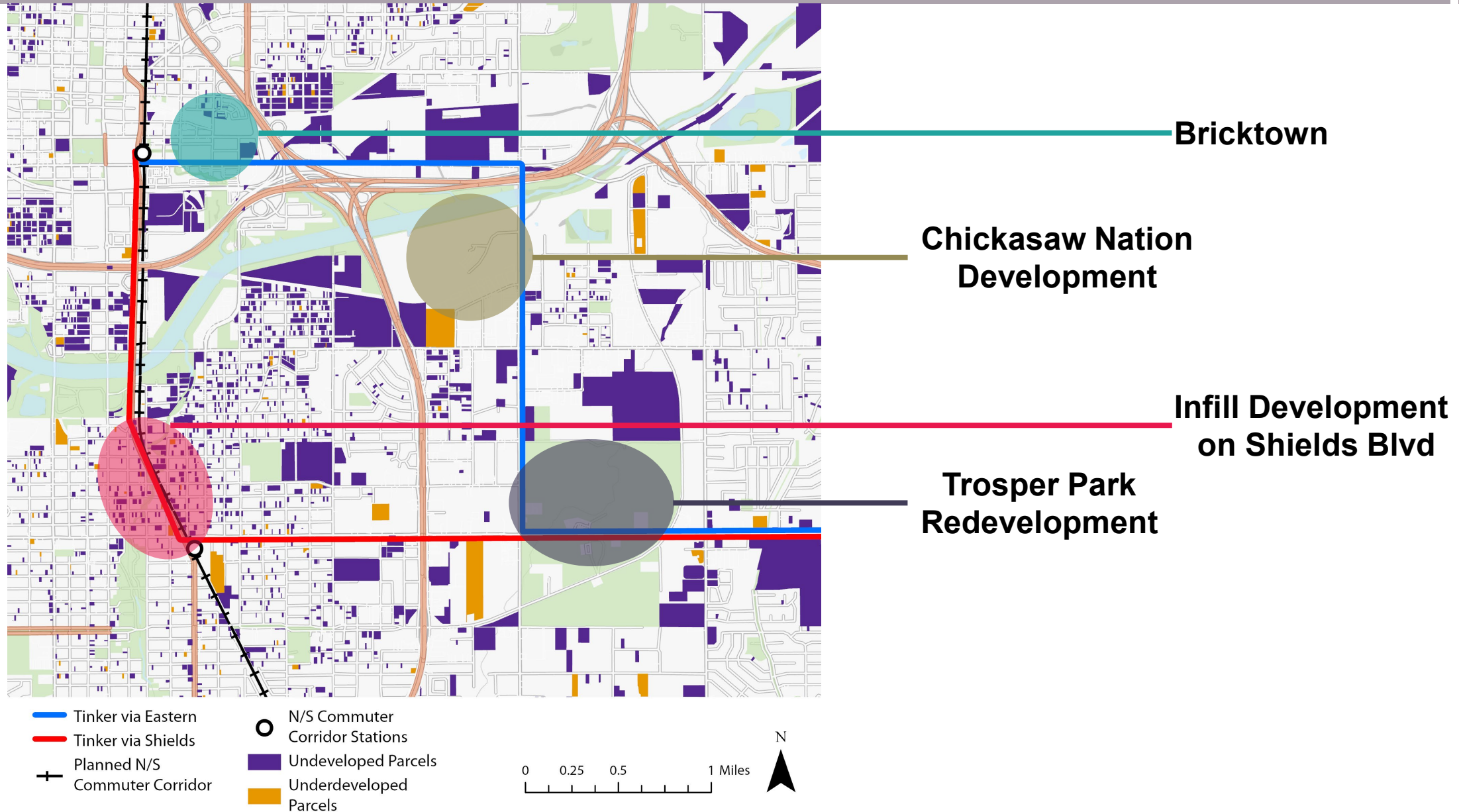
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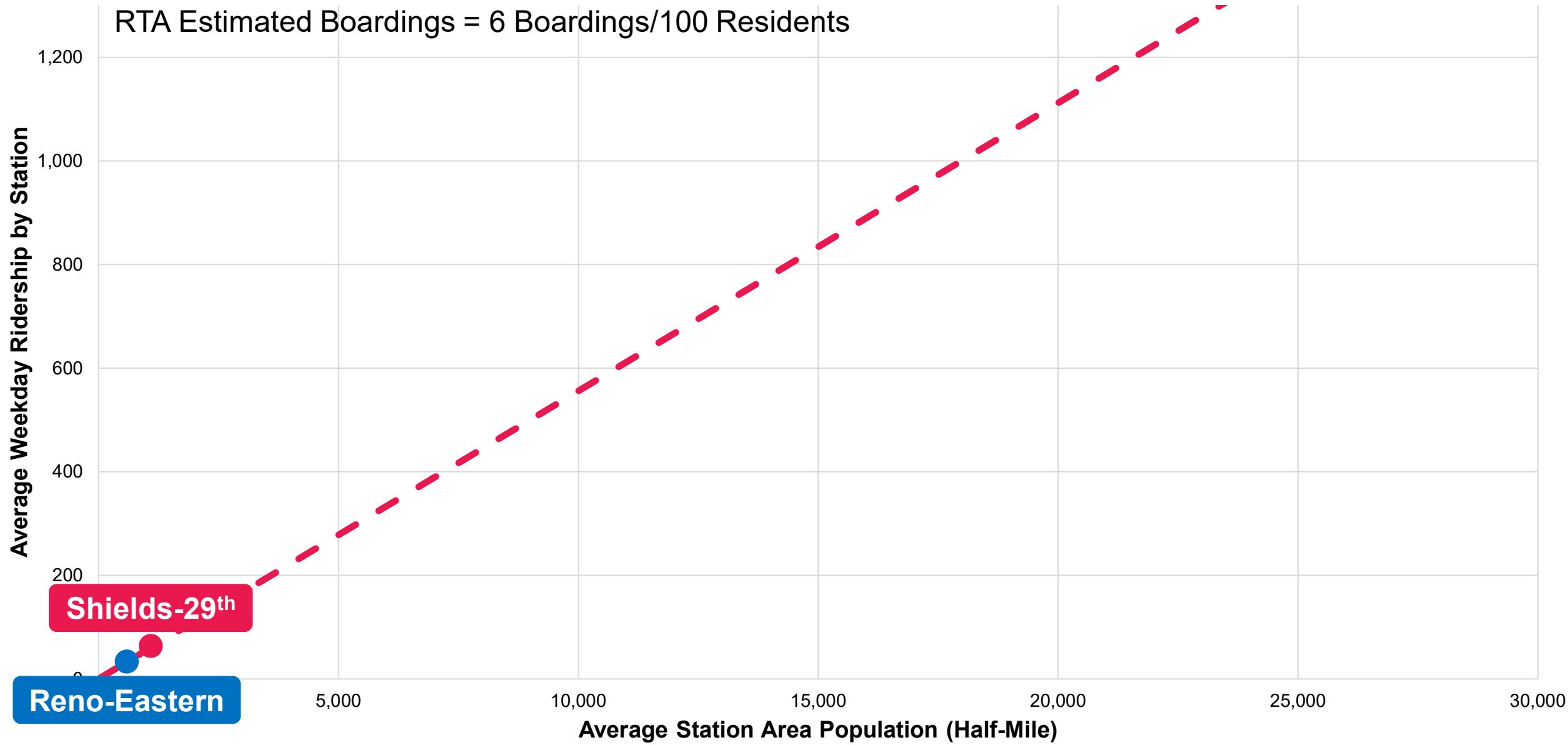


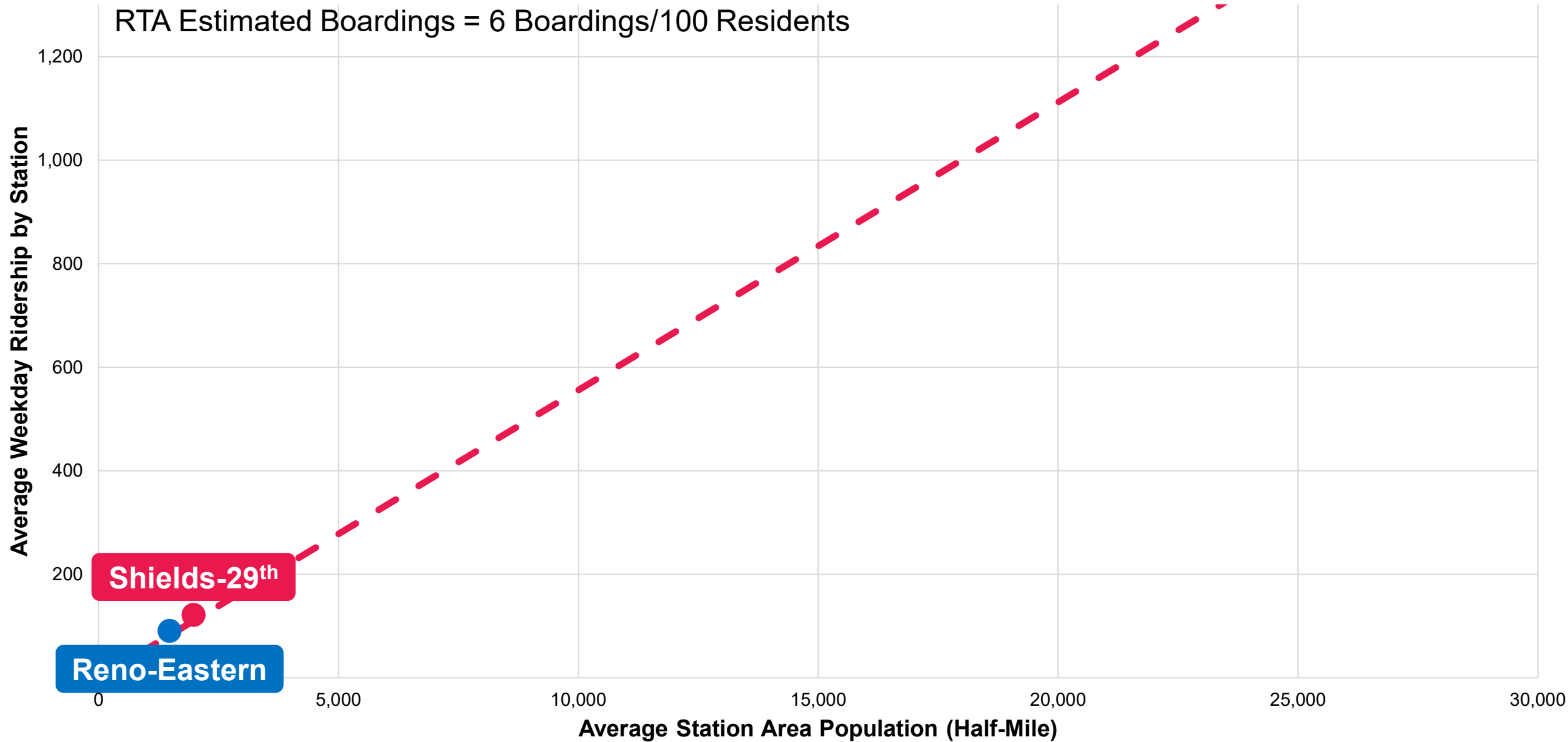
- Undeveloped Land – Parcels with no building value
- Underdeveloped Land – Parcels where land value exceeds building value
- **Identified Parcels¹ ~500 Acres**

¹Source: ACOG Parcel Database

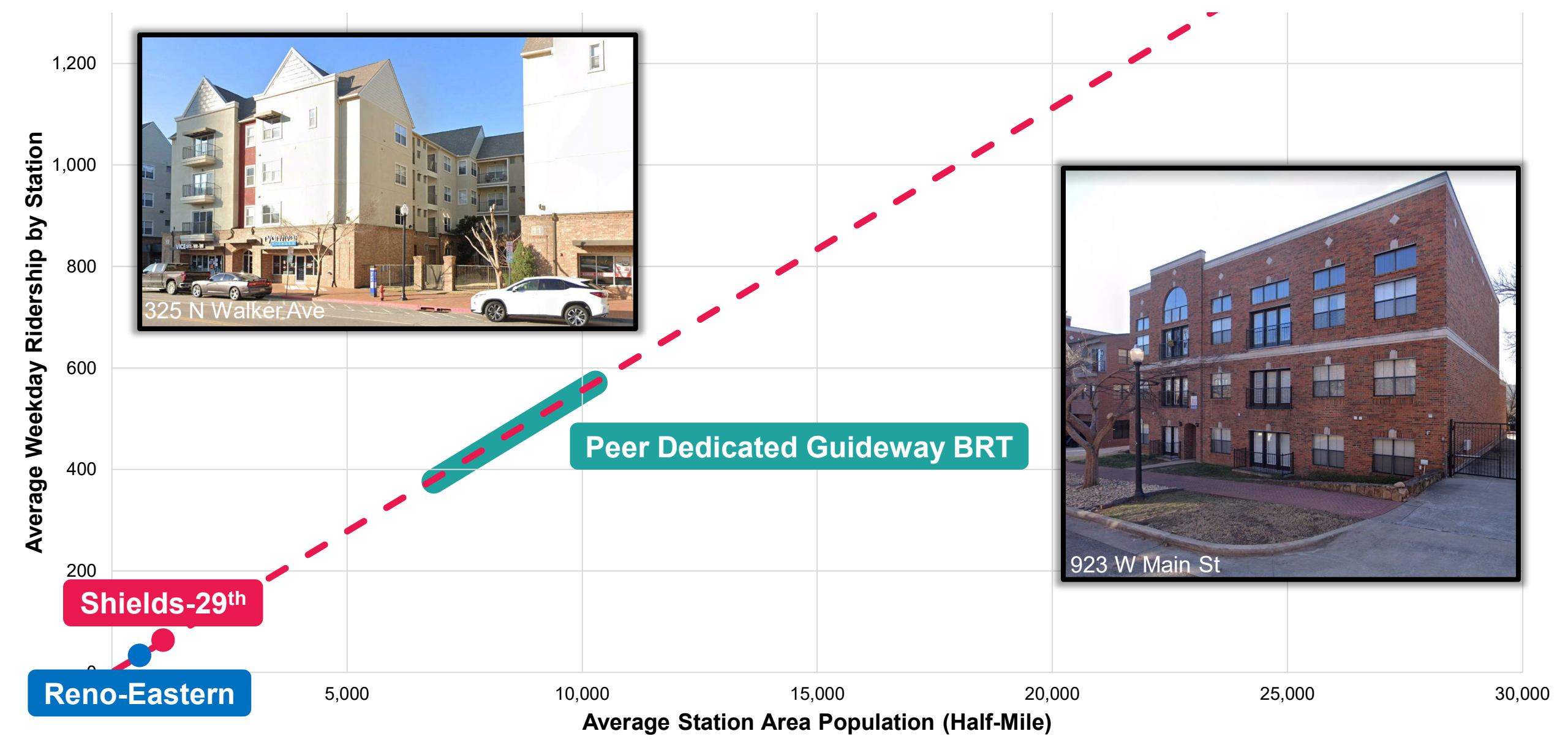
Existing Hubs of Development











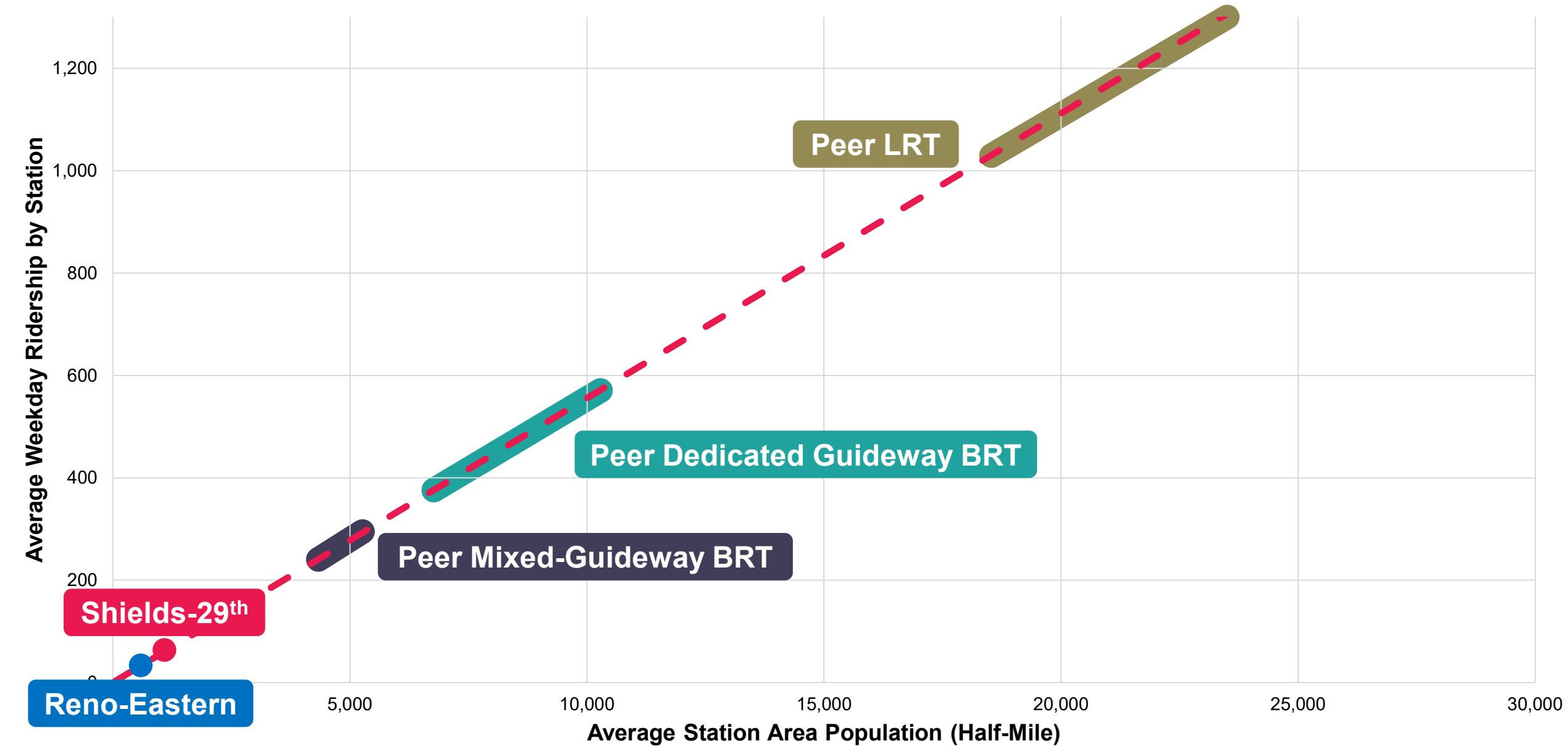
Growth Required for LRT

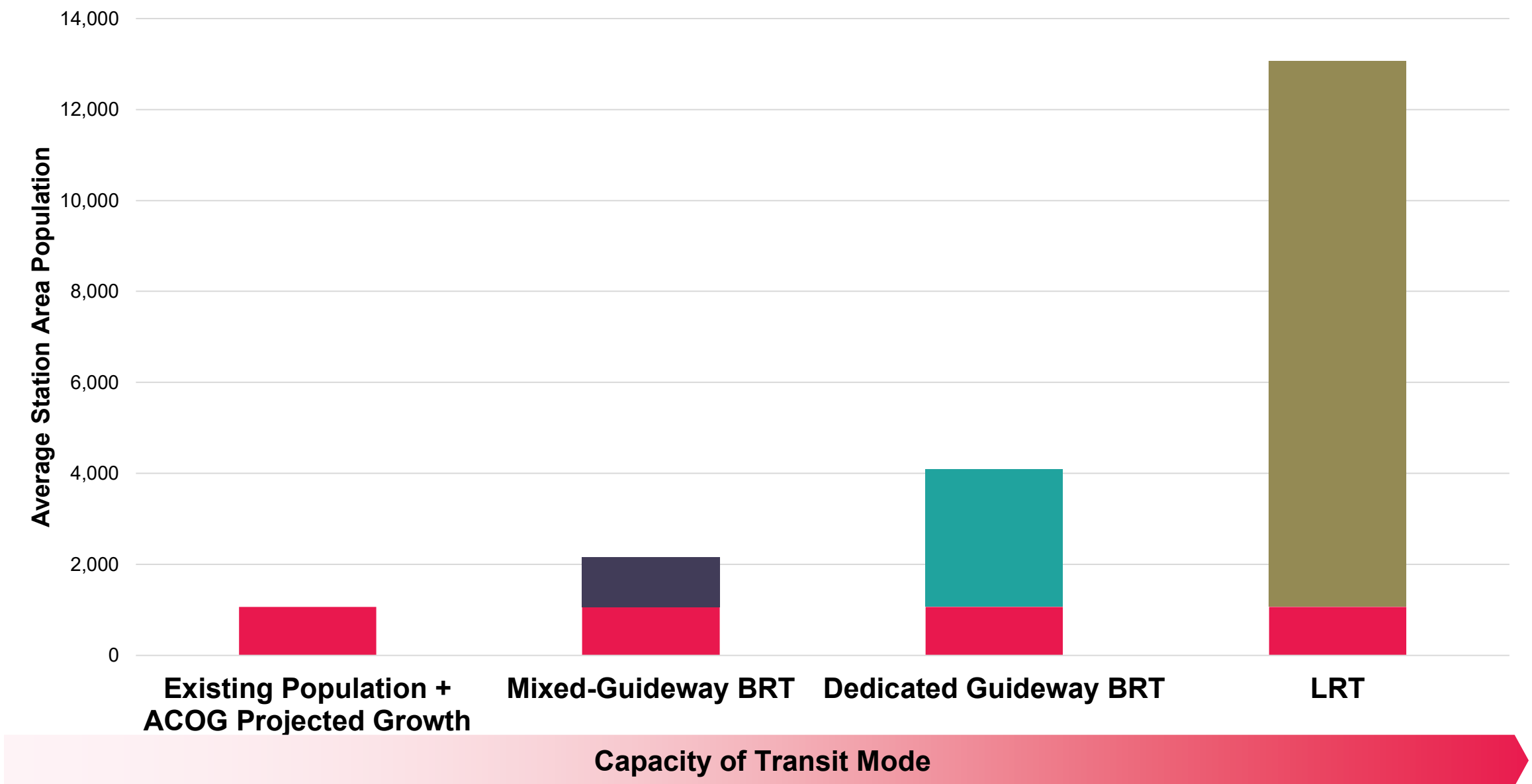
RTA

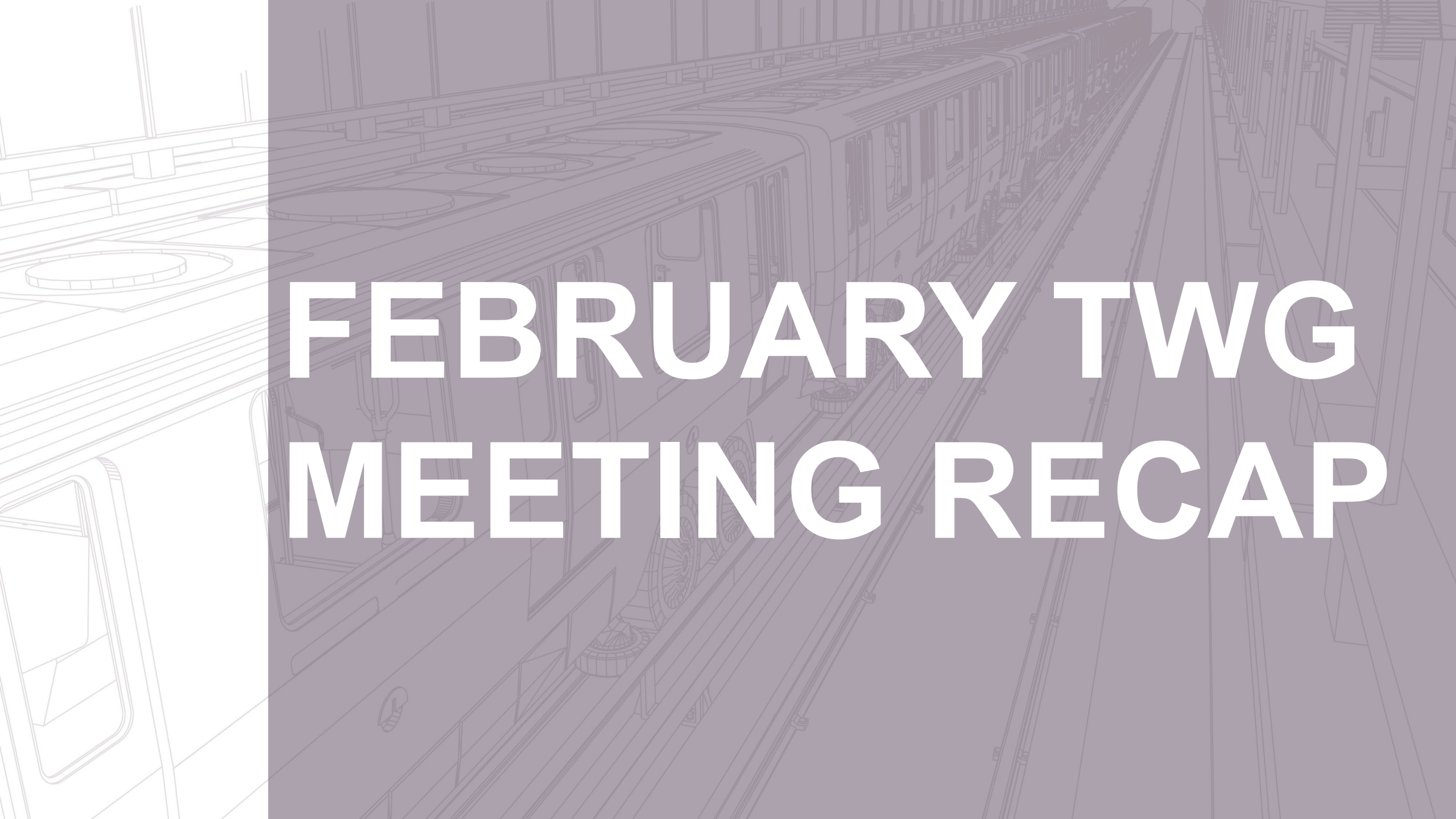


Peer Ridership Comparison

RTA





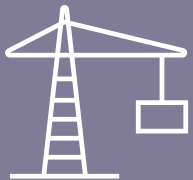


FEBRUARY TWG MEETING RECAP

February TWG Meeting Summary



Discussed the relationship between development and ridership



Identified where growth could occur near each alternative



February TWG Meeting Summary

Reno-Eastern

- Existing heavy industrial uses
- Higher potential for TOD:
 - Large vacant parcels
 - Development pressure from Bricktown moving east
 - Chickasaw Nation Development

Shields-29th

- Existing residential, commercial, and light industrial uses
- Challenges to TOD
 - Smaller parcels discourages vertical development
 - Fragmented ownership
 - Fewer catalytic sites

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 semi-transparent purple rectangle. The word "SUMMARY" is written in large, white, bold, sans-serif capital letters across the center of this rectangle.

SUMMARY

Key Takeaways

- New development is crucial to achieving ridership goals
- Local zoning needs to be updated to encourage development in station areas



NEXT STEPS



**Feb
2023**



ADDRESSABLE MARKET ANALYSIS

**March
2023**



STOPS MODELING AND OPERATION PLAN DEVELOPMENT

**May
2023**



INTRODUCTION OF LPA RECOMMENDATION

**June
2023**



BOARD SELECTION OF LPA

The background features a detailed line drawing of a train and its tracks. On the left, a white line-art illustration shows a close-up of a train's side, including a window and a door. The rest of the image is a dark purple overlay containing a lighter purple line-art illustration of a train traveling along tracks that recede into the distance.

DISCUSSION