

Regional Transportation Authority of Central Oklahoma

# RTA West and Airport Corridors: RTA Board Update

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

Prepared by Kimley-Horn and Associates

December 6, 2023

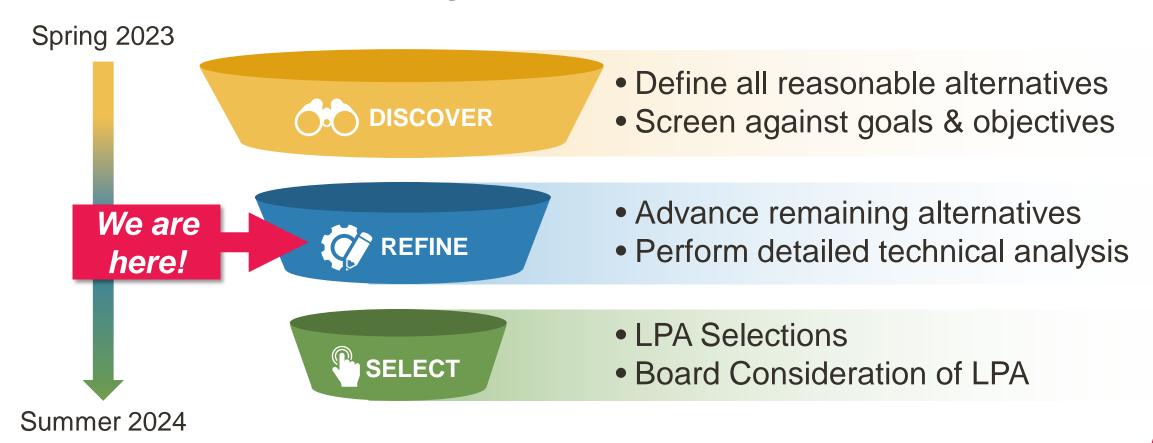


# Agenda

- October Board Meeting Recap
  - Corridor Travel Times
  - Corridor Guideway Widths
  - Evaluation Framework
- Initial Evaluation Results
- Engagement Updates



# **Alternatives Analysis Process**





# **Alternatives Analysis Process**

### October 💥



- Introduction Evaluation Framework
- Key metrics:
  - Guideway constraints
  - Corridor travel time

We are here!

### December 💒



- Initial evaluation results
- Summary of corridors

### February \*\*\*



- Refinement of **Alternatives**
- Engagement report out

**Technical** Work

# October Board Meeting Recap





### **Goals and Objectives**

# Mobility & Connectivity



Direct connection to Santa Fe Intermodal Hub



Serves major activity centers

Equity & Accessibility



Serves areas with high equity index



Serves areas of persistent poverty

Land Use & Economic Development



Serves areas with high activity index



Connects to areas with projected growth

# Sustainability & Viability



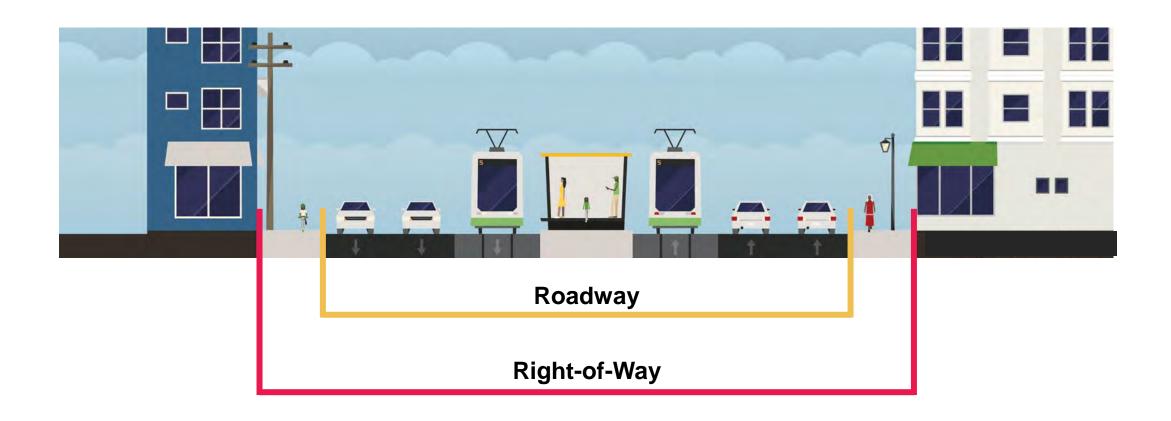
Serves areas with high transit propensity



Utilizes existing infrastructure



# Roadway vs. Right-of-Way





### **Travel Times**

### Estimating travel times allow for a comparison between transit and driving for all high potential alternatives

### **Driving Time Estimates Assumptions**



PM Peak Travel Times

### **Transit Travel Time Estimates Assumptions**



PM Peak Travel Times



**Station Dwell Time** 



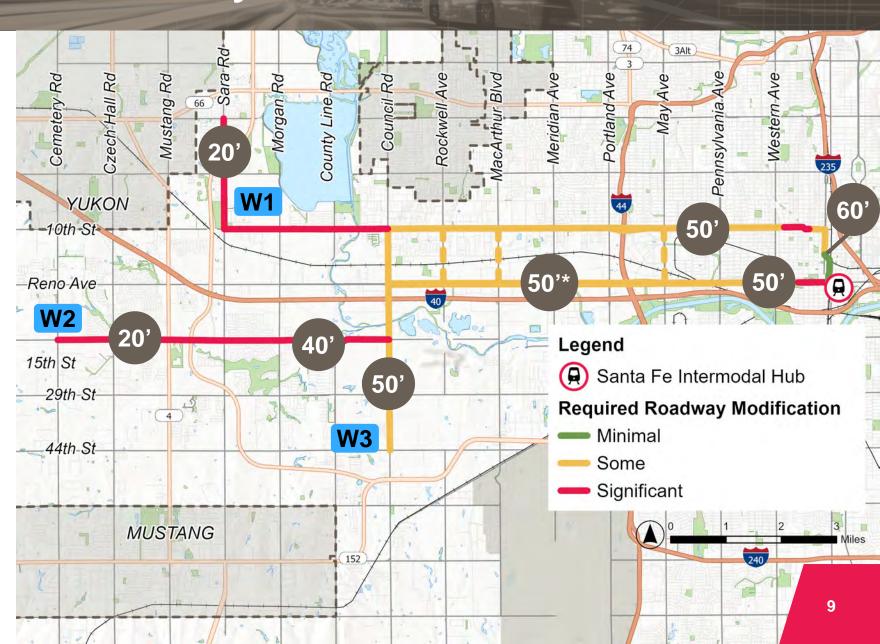
Signal Delay



### West Corridor Roadway Widths

Street	Roadway Width		
10 <sup>th</sup> St.	50'		
Reno Ave.	50'*		
15 <sup>th</sup> St.	20' – 40'		
Sara Rd.	20'		
N Council Rd.	50'		
N Broadway Ave.	60'		

<sup>\*</sup>Portions of Reno Avenue contain a ~70' drainage feature that is not included in roadway width





### **West Guideway Takeaways**



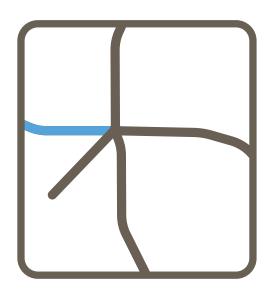
All West alternatives would require some level of roadway expansion or travel lane conversion for LRT or BRT



Segments of Alternatives 1 and 2 would require significant roadway expansion for LRT or BRT



Segments of 10<sup>th</sup> Street and Reno Ave are highly constrained





### **West Alternative Travel Times – PM Peak**

Alternative	Estimated Driving Time	Estimated Transit Travel Time		
West 1 – 10 <sup>th</sup>	20-25 min.	30-35 min.		
West 1 – Reno	25-30 min.	25-30 min.		
West 2 – 10 <sup>th</sup>	35-40 min.	35-40 min.		
West 2 – Reno	25-30 min.	30-35 min.		
West 3 – 10 <sup>th</sup>	25-30 min.	30-35 min.		
West 3 – Reno	25-30 min.	25-30 min.		

## **Takeaways**



All alternatives competitive with driving



10<sup>th</sup> Street alternatives generally slower than Reno Ave alternatives



West 1-Reno and West 3-Reno have the fastest average speed



### **Airport Corridor Roadway Widths**

Street	Roadway Width
Reno Ave.	50'*
29 <sup>th</sup> St.	40'
Meridian Ave.	60'
Pennsylvania Ave.	50'
Western Ave.	40'
Terminal Dr.	40'



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\*Portions of Reno Avenue contain a ~70' drainage feature that is not included in roadway width



### **Airport Guideway Takeaways**



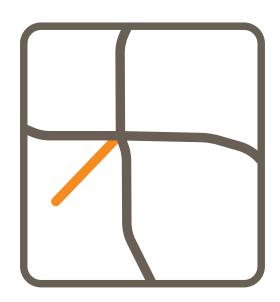
All Airport Corridor alternatives would require some level of roadway expansion or travel lane conversion for LRT or BRT



All Airport Corridor alternatives have sharp turns and bridges



Significant roadway widening would be required to reach FAA Complex





### **Airport Alternative Travel Times**

Alternative	Estimated Driving Time	Estimated Transit Travel Time
Airport 1	20-25 min.	20-25 min.
Airport 3	20-25 min.	20-25 min.
Airport 4	20-25 min.	20-25 min.

# **Takeaways**



All alternatives competitive with driving



All alternatives competitive with one another



Serving FAA Complex would add an additional 5-10 min.

# Evaluation – Initial Results





### Stakeholder Coordination

**OKC Outlets** 

OKC Housing Authority

**OKC Fairgrounds** 

Visit OKC

**OSU-OKC** 



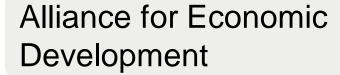








Stockyards City





OKC Chamber of Commerce

FAA Aeronautical Center









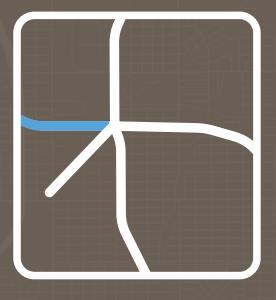




### **Detailed Evaluation Framework**

Project Goal	Criteria	W1	W2	W3	A1	A2	A3
	Connections to planned and existing bike infrastructure						
Mobility and	Connections to existing transit network						
Connectivity	Estimated end-to-end travel time						
	Existing trips between station areas						
	Persons with disabilities + over 65 population						
	Non-white or Hispanic Population						
Equity and	Households below poverty line						
Accessibility	Zero-car households						
	Number of OCHA Properties						
	Number of activity centers served						
	Ongoing and planned developments						
Land Use and	Acreage of undeveloped and underdeveloped land						
Economic Development	Projected population growth through 2035 according to ACOG's regional model						
	Projected employment growth through 2035 according to ACOG's regional model						
Sustainability and Viability	Ability to accommodate increases in ridership						
	Estimated capital costs						
	Estimated operations and maintenance cost						
	ROW requirements and acquisition costs						
	Traffic implications on existing roadways						
	Feasibility of full guideway dedication						

# West Corridor







# West Alt. 1 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

# West Alt. 2 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

# West Alt. 3 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

# W2 W3 W3

# West Alt. 1 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

# West Alt. 2 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

### West Alt. 3 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway



# West Alt. 1 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

# West Alt. 2 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

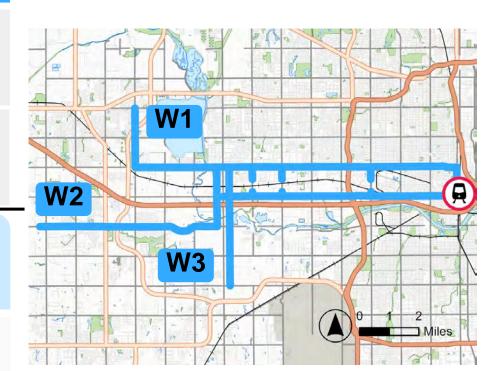
# West Alt. 3 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions



West Alt. 1 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

### West Alt. 2 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

# West Alt. 3 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway



### West Alt. 1 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

### West Alt. 2 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions

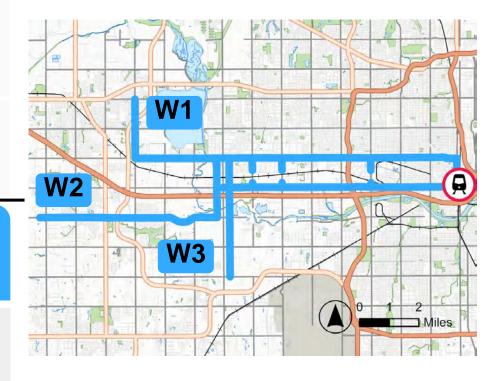
# West Alt. 3 – 10<sup>th</sup> Street



Serves a diverse population



Minimizes traffic disruptions



# West Alt. 1 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

# West Alt. 2 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway

# West Alt. 3 – Reno Avenue



Serves major activity centers



Most opportunity for dedicated guideway





Explore balancing equity communities along 10<sup>th</sup> Street with major activity centers along Reno Avenue



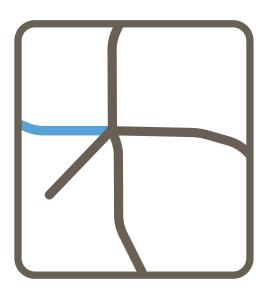
How best to serve lower-density residential growth in West Oklahoma City



Understanding tradeoffs of travel times vs. serving communities closer to Downtown Oklahoma City

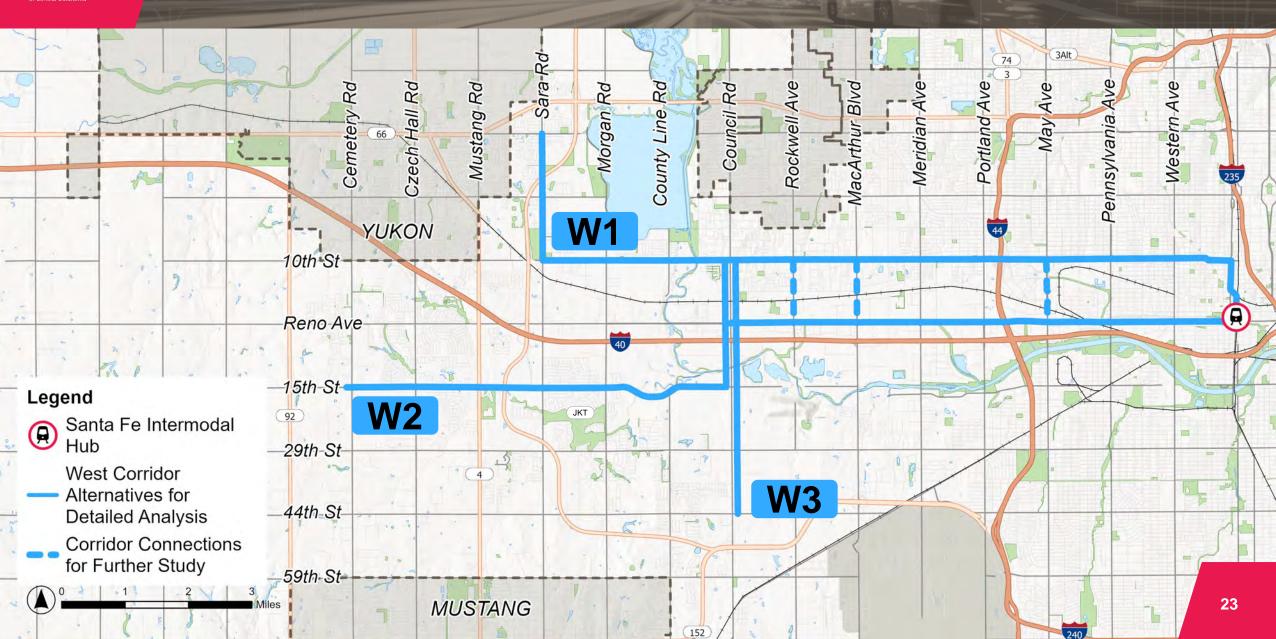


Exploring end-of-line locations for all alternatives

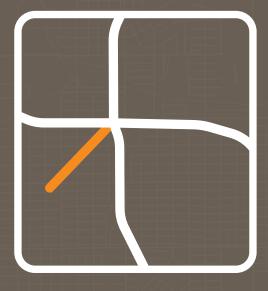




### West Corridor Alternatives for Refine Phase



# Airport Corridor







### **Airport Corridor – Initial Evaluation Summary**

# Airport Alternative 1 Reno to Meridian



Serves existing trips



Serves major activity centers



Serves areas with high projected employment growth



Most opportunity for dedicated guideway

Airport Alternative 3
Western to 29th to Meridian



Serves equity populations



Serves public housing units



Access to residential development

Airport Alternative 4
Pennsylvania to
Stockyards City to 29th



Serves equity populations



Minimizes traffic disruptions





### **Airport Corridor – Initial Evaluation Summary**



Explore trade-off of serving existing travel markets vs more access to equity populations



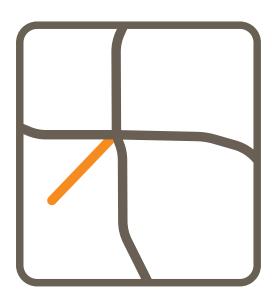
Continued examination of corridor right-of-way constraints to adding dedicated guideway



Continue coordination with Airport Trust and FAA

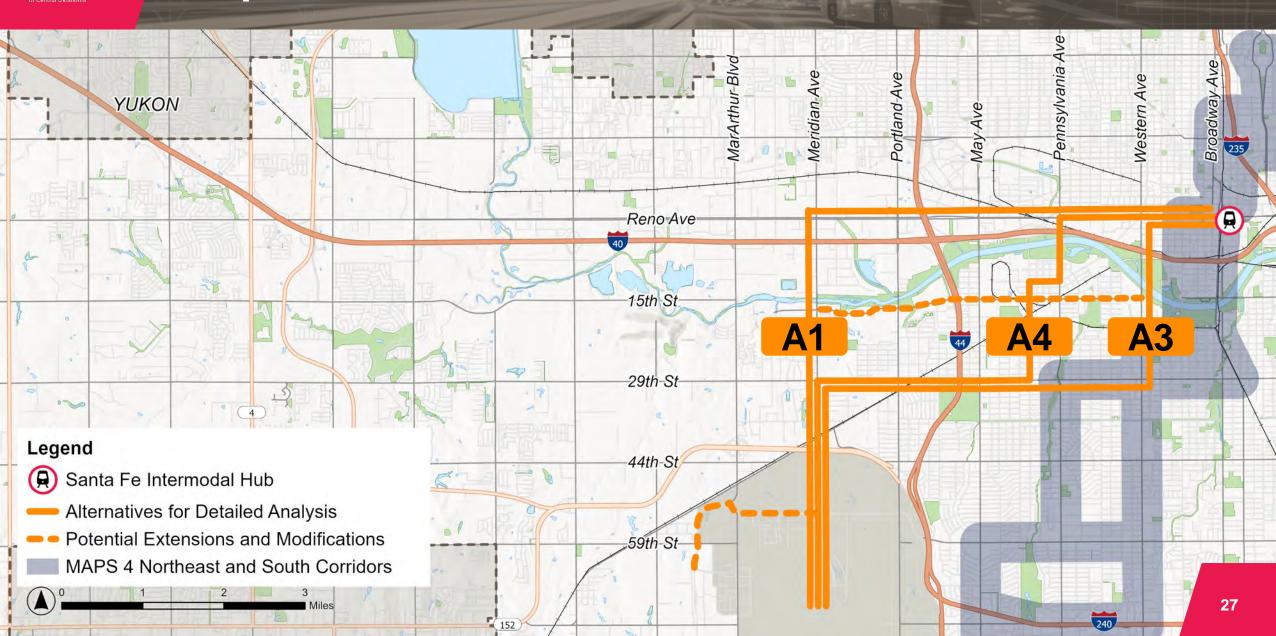


Monitor overlap with MAPS 4 BRT improvements





### Airport Corridor Alternatives for Refine Phase



# Engagement Updates





# Ongoing Stakeholder Engagement

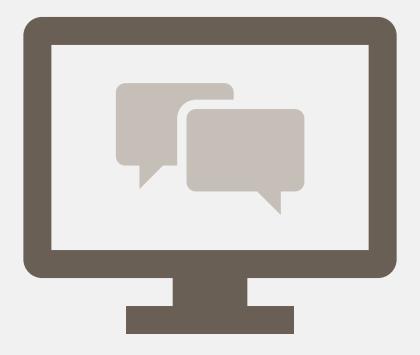
- Ongoing Coordination With:
  - Will Rodgers World Airport Trust
  - Greater OKC Chamber of Commerce
  - Mike Monroney Aeronautical Complex





# **January Town Hall**

- Planned for January 18
- Virtual Format
- Goals
  - Deliver project updates and analysis
  - Introduce high-potential alignments
  - Gauge public sentiment alongside full evaluation of alternatives





### **Upcoming Virtual Town Hall**

- Attend the RTA's Virtual Town Hall January 18 from 5:30 – 7:00pm!
- Follow the RTA on Social Media for project updates
- Visit the RTAMoves.com website for more project information









# Next Steps





### **Project Schedule**





Refine Phase

Select Phase





Online Survey



Targeted Stakeholder Engagement



Open House & Town Halls

# Thank You

