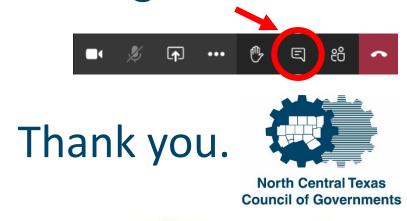
#### The Irving to Frisco Corridor Project Advisory Committee meeting will begin shortly.

Please mute your microphones and enter your name and organization in the chat box.



























































#### IRVING TO FRISCO PASSENGER RAIL CORRIDOR STUDY

**Project Advisory Committee** 6th Meeting

#### **Meeting Protocols**

#### **Meeting Protocols**

- Please keep your microphone muted unless speaking
- Please enter your name and organization into the Chat Box
- Please utilize the Raise your hand feature to ask a question or make a comment; you
  may also use the Chat Box for questions and comments



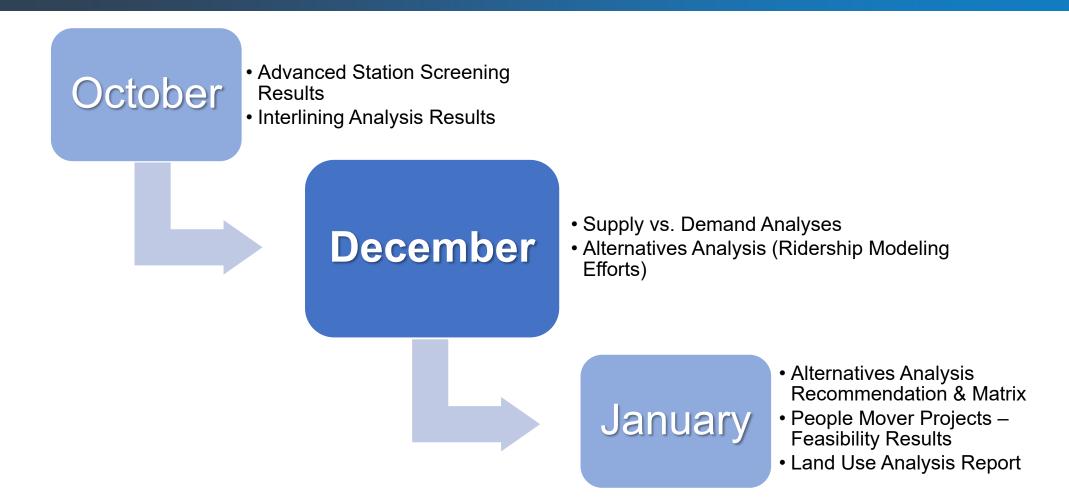
• If joining by phone, please hold your questions and comments until feedback is requested at specified times during presentation

#### Agenda

- Study Milestones Schedule
- People Mover Analysis Update
- Supply vs. Demand Analyses
- Alternative Demographics/Land
   Uses near Station Locations
- Alternative Analysis
  - Overview of Alternatives
  - Initial Modeling Results

- RTC Funding Options Workshop
   Debrief
- Collin County Transit Study
   Update
- Questions & Discussion
- Next Steps

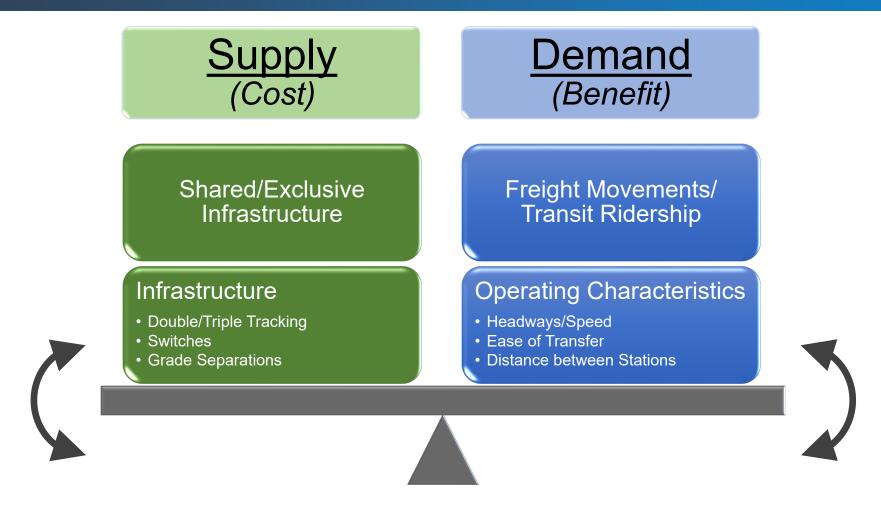
### Study Milestones Schedule



### People Mover Analysis Update

- Received Alternative Demographics and anticipated development patterns from cities
- Finalizing Feasibility Analysis and will begin providing results in January Advisory Committee Meeting
- Las Colinas People Mover Update

## Supply vs. Demand Analyses



### Traditional vs. Collaborative Approach

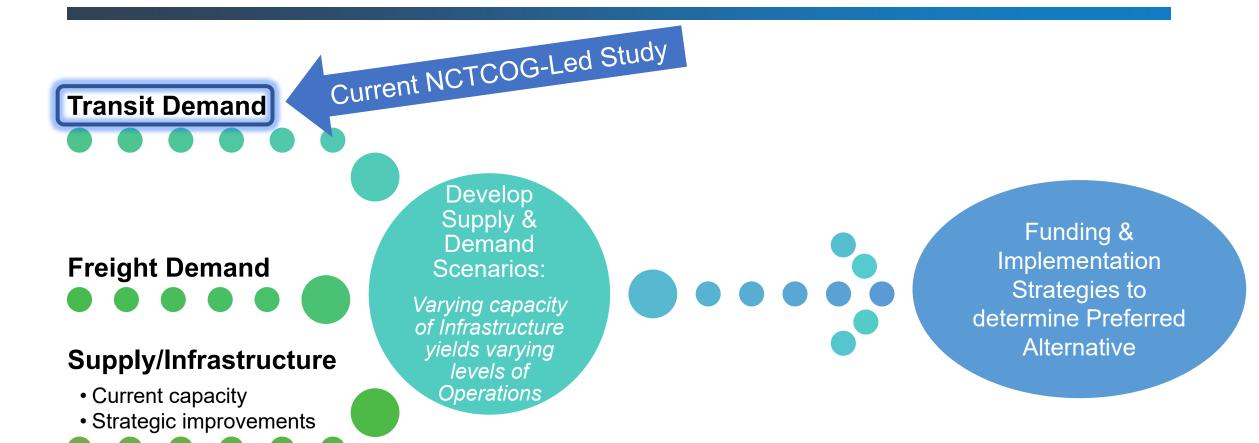
# Traditional Approach: Adjust Supply to Match Demand

- Forecast Transit & Freight Demand
- Quantify system supply (infrastructure) needs based on forecasted transit and freight demand
- Identify funding and implementation strategy

# Collaborative Approach: Strategically Match Demand with Supply

- Forecast Transit & Freight Demand
- Quantify strategic supply (infrastructure) improvements based on current and forecasted freight usage
- Develop levels of investment scenarios based on strategic supply improvements matched with transit and freight demand
- Identify funding and implementation strategy for preferred scenario (phased)

# Current Demand Study & Future Efforts



# Alternative Demographics/Land Uses Near Station Locations

 NCTCOG Regional Travel Demand Model to determine Ridership Potential

Includes elements such as roadway and transit networks, and population and employment data, to calculate the expected demand for transportation facilities.

• In those situations where "alternative scenarios" is of interest at potential station locations, post-processing evaluation can be conducted testing alternative demographics with higher/different growth rates and their effect on ridership.

# Alternative Demographics/Land Uses Near Station Locations

- For targeted stations, evaluate "impacts" of differing assumptions for population, employment, and land use growth over time
- Consultant team reviewed each city's policies, comprehensive plans, and redevelopment plans within a station's influence area
- Based on research, review of historical trends, and discussions with each city, identified a specific growth rate and change within a station "influence area"
- NCTCOG will then model the "change" in population, employment, and land use, along with it's determined "impact"

# Alternative Analysis Modeling: What do we Want to Know?

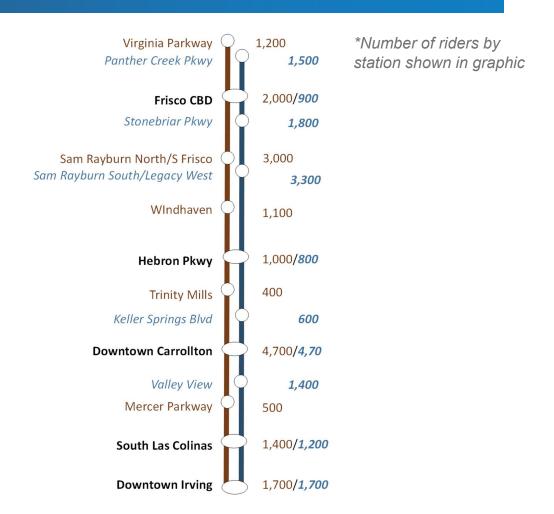
- Q1: What ridership do we expect with our updated station list and other changes?
- Q2: How much can we affect ridership with different development patterns (Alternative Demographics)?
- Q3: Should we extend the corridor to Celina?
- Q4: Should we continue to pursue the interlining opportunities we identified earlier in the study?
- Q5: If we want to defer some stations with lower ridership, what is the effect on the rest of the line?

#### Overview of Alternatives

<b>Scenario Family</b>	Name	Description
Baseline	<b>B</b> 1a	Service from Irving to Frisco; updated stations; Mobility 2045 Demographics
	B1b	Service from Irving to Frisco; updated stations; Alternative Demographics
Extension	E1a	Service from Irving to Celina; updated stations; Mobility 2045 Demographics
	₹1b	Service from Irving to Celina; updated stations; Alternative Demographics
Interlining	<b>1</b> 1a	"Max": Service from Celina to T&P, Celina to Union, and T&P to Union (TRE);
		Mobility 2045 Demographics
	d1b	"Max": Service from Celina to T&P, Celina to Union, and T&P to Union (TRE);
		Alternative Demographics
	12	Service from Celina to T&P, South Irving to Union; Demographics TBD
Phasing	P1	Service from Irving to Frisco, Prosper or Celina; omit one or more low-ridership
		stations; Demographics TBD
	P2	Service from Irving to Frisco, Prosper, or Celina; omit one or more low-ridership
		stations; Demographics TBD
	Р3	Service limits TBD; Demographics TBD; consolidated recommendations for
		"phased" implementation based on P1 and P2

## Q1: Ridership with Updated Stations

- Baseline run (B1a; in blue) compared to Mobility 2045 model run in brown
- New and updated stations
- Total Ridership:
  - Mobility 2045: 17,000
  - New Baseline: 17,800



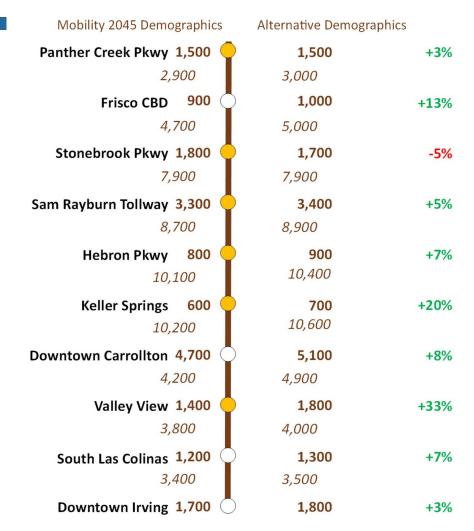
# Q1: Segment Volumes with Updated Stations

- Baseline run (B1a; in blue) compared to Mobility 2045 model run in brown
- Same general pattern of volumes
  - Highest ridership between Sam Rayburn and Downtown Carrollton
  - Lower volumes south of Carrollton



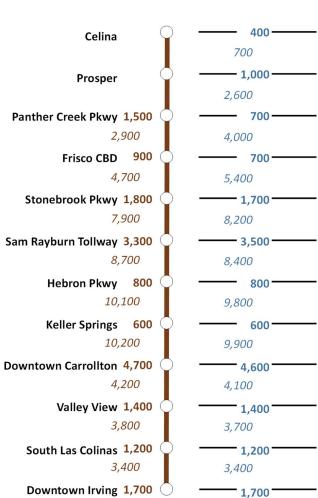
# Q2: Effects of Alternative Demographics

- Model scenarios B1a and B1b
- Ridership:
  - B1a (Mob45 Demographics): 17,800
  - B1b (Alt Demographics): 19,200
- Gold dots indicate stations with modified demographics
- Substantial increase to population and employment around specified stations
  - Relatively few new transit trips
  - More roadway and intrazonal (local) trips



## Q3: Effects of Extending to Celina

- Model scenarios B1a and E1a
- Ridership (Mob45 Demographics):
  - Baseline (B1a): 17,800
  - Extension (E1a): 18,200
- Activity diverted from Panther Creek to Prosper and Celina



Extension to Celina (E1a)

New Baseline (B1a)

### Q3: Effects of Extending to Celina

- Model scenarios E1a and E1b
- Ridership (Irving to Celina):
  - E1a (Mob45 Demographics): 18,200
  - E1b (Alt Demographics): 19,700
- Alternative Demographics do not provide significant contribution to ridership on Celina extension



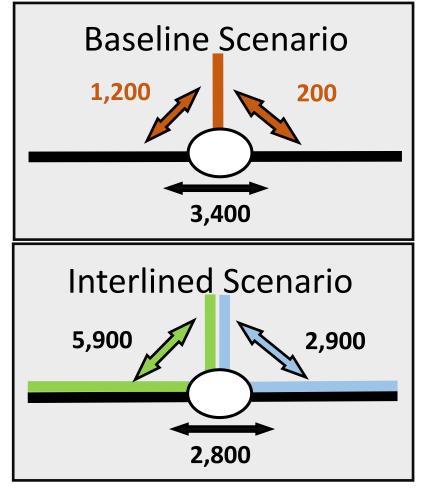
# Q4: Effects of Interlining

- Model scenarios I1a and I1b
- Includes separate lines from:
  - Celina to T&P
  - Celina to Union
  - T&P to Union (TRE)
- Effective headways
  - 10-minute peak
  - 30-minute off-peak
- Ridership (Irving to Celina):
  - I1a (Mob45 Demographics): 28,400
  - I1b (Alt Demographics): 30,500
- Higher segment volumes from Irving to Carrollton
- No significant effects from Alternative Demographics



# Q4: Trips That Benefit from Interlining

- Baseline scenario requires transfer to move between TRE corridor and Irving-to-Frisco corridor
- No transfers required in Interlining scenario
- Strongest desire for trips between North (Irving/Frisco) and West (Fort Worth) legs



#### Q5: Effects of Deferred Stations

- What stations might we need to defer?
  - Lowest ridership?
  - Proximity to other stations?
- "Not now" does not necessarily mean "not ever"
- May revisit as new demographics become available
- Will present results at future PAC meeting

## Modeling Questions Revisited

Q1: What ridership do we expect with our updated station list and other changes?

Answer: The new baseline shows a modest increase in overall activity (compared to Mobility network) with about 17,800 riders. No significant change.

Q2: How much can we affect ridership with different development patterns (Alternative Demographics)?

Answer: Alternative demographics have less effect than anticipated

- Alternative Demographics yielded increases in shorter trips (i.e. bicycle/pedestrian) around stations even as line ridership received minimal increase in new riders
- Rail helps support development patterns that accommodate shorter trips

#### Modeling Questions Revisited

Q3: Should we extend the corridor to Celina?

Answer: Low ridership experienced at Celina station; extension may be cost prohibitive

- Ridership experienced at Prosper may warrant extension; further analysis required
- Q4: Should we continue to pursue the interlining opportunities we identified earlier in the study?

Answer: Interlining with TRE corridor still merits study

- Strong desire for movement between western TRE corridor and Irving-to-Frisco corridor strengthens case for Irving-to-Carrollton segment
- Next step: test scenario with more realistic headway (I2)

Q5: If we want to defer some stations with lower ridership, what is the effect on the rest of the line?

Answer: Modeling for deferred stations to be presented at future PAC meeting

### RTC Workshop Overview

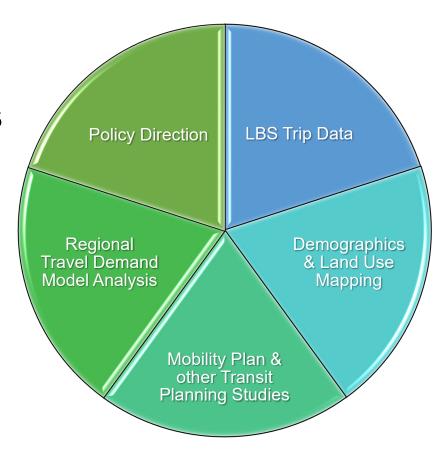
Approved RTC Legislative Program for the 87th Texas Legislature

#### Transit Funding Related Topics Include:

- Adequately Fund Transportation and Utilize Tools Identify additional revenue for all modes of transportation
- Expand Transportation Options in Mega-Metropolitan Regions Plan, fund, and support the implementation of all modes of transportation, including transit

#### Collin County Transit Study Update

- Transit Propensity
- Potential Scenario Framework
- Initiated Modeling of Service Scenarios
- Initiated Exploration of Investment/ Governance Options



#### Questions & Open Discussion

- Study Milestones Schedule
- Supply vs. Demand Analyses
- Land Uses near Station Locations
- Alternative Analysis
- Funding Options Discussion

#### **Next Steps**

- Continue modeling alternatives to determine:
  - Preferred alternative with best-performing stations
  - Merits of interlining with TRE
  - Northern limits of corridor
  - Station phasing recommendations
- Land use analysis
- Prepare results of People Mover Locations Feasibility Analysis
   Next scheduled meeting is <u>January 21</u>

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