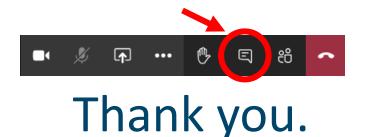
The Collin County Transit Study Project Advisory Committee meeting will begin shortly.

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











COLLIN COUNTY TRANSIT PLANNING STUDY

Project Advisory Committee
8th Meeting

Agenda

- Meeting Protocols
- Meeting Context
- Study Milestones Schedule
- Transit Service Needs and Market Analysis Technical Report
- Transit Scenario Development Recap

- Transit Scenario Costs
- People Mover Feasibility Analysis Results
- Irving to Frisco Rail Corridor Update
- Questions & Open Discussion
- Next Steps

April 1, 2021

Meeting Protocols

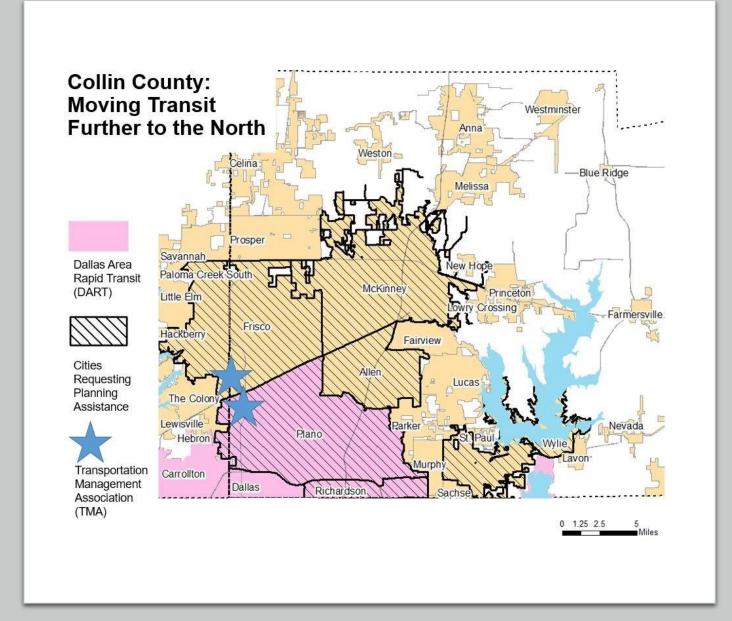
Meeting Protocols

- 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

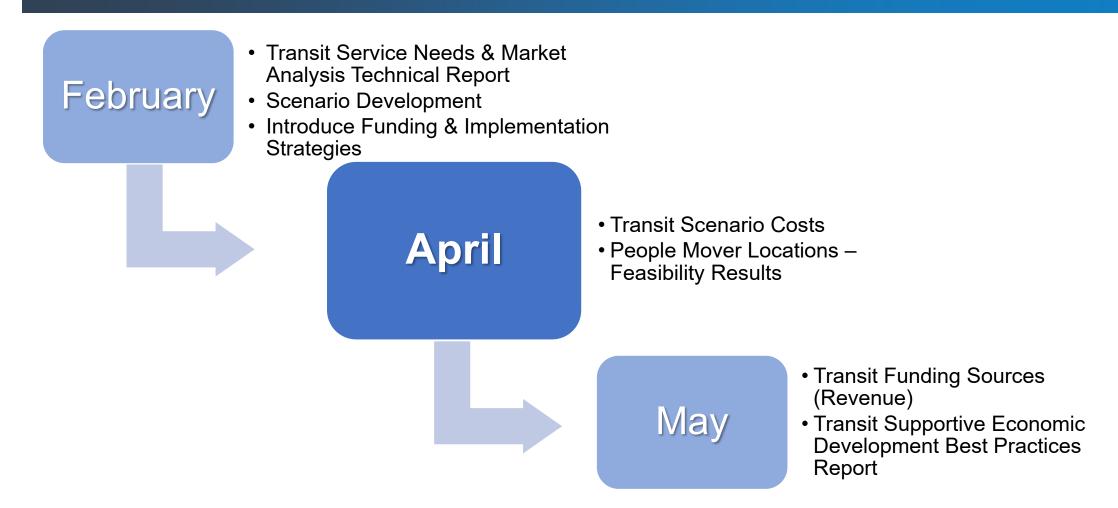


 If joining by phone, please hold your questions and comments until specified times during presentation

Meeting Context



Study Milestones Schedule



Transit Service Needs and Market Analysis Update

Objective: Identify Existing and Trending

- Transit Markets
- Service Gaps
- Underserved Corridors/Areas;
- First/Last Mile Service Deficiencies

Progress:

- Building Off Transit Propensity Analysis
- Completing Draft Market Analysis and Maps of Market Conditions
- Developing Best Practices for Transit-Supportive Economic Development



Source: http://www.houstontomorrow.org/livability/story/dallas-looking-at-transit-oriented-development-for-medical-district/

Five Keys to Preparing for Transit



April 1, 2021

Scenario Development- Approach



Jurisdictional Focus

- Basic Mobility
- Emerging & High Growth
- Developed & Maturing
- DART Member Cities



- Near-Term (1-5 Years)
- Mid-Term (5-10 Years)
- Long-Term (10+ Years)

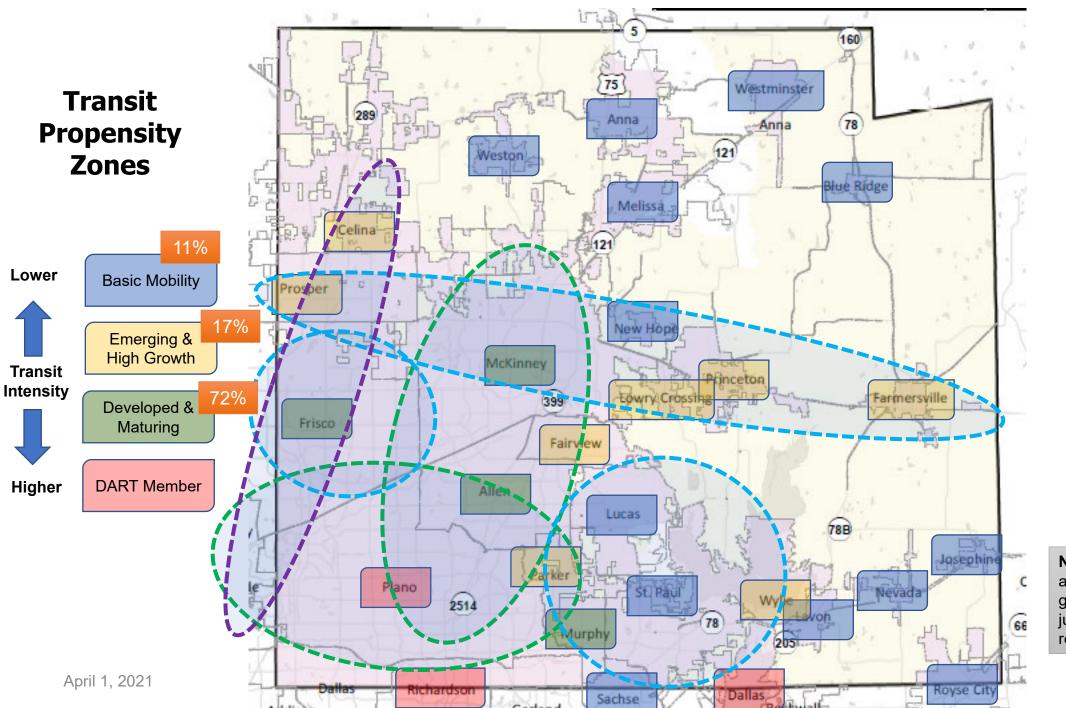


Transit Service

Fixed-RouteDemand-

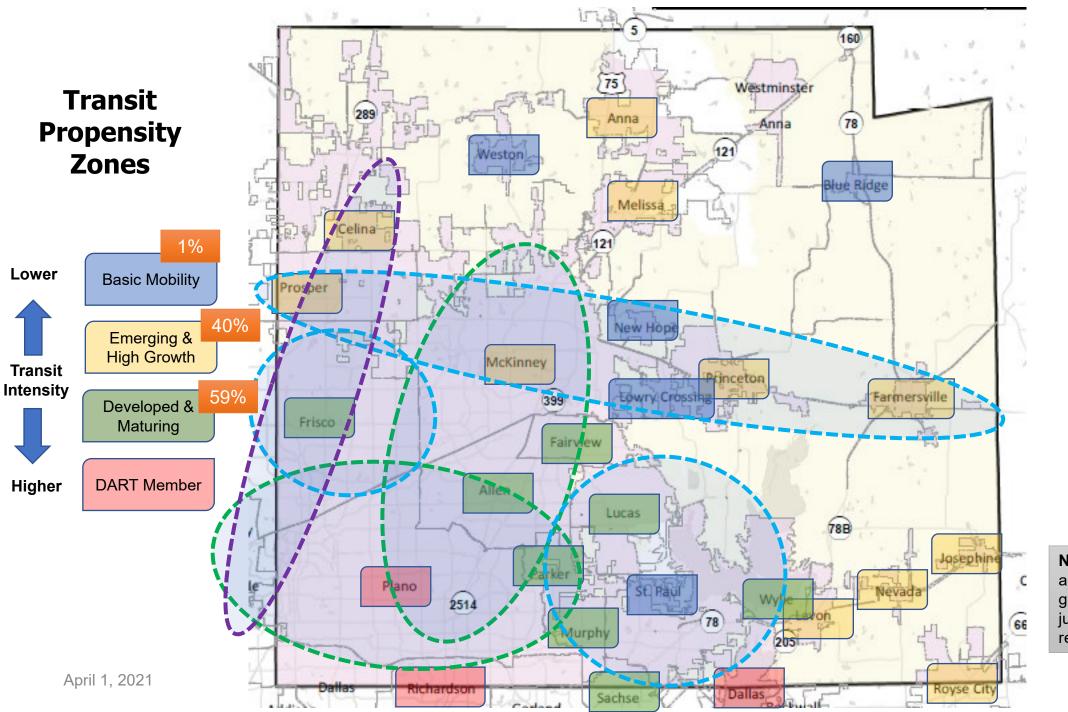
- Responsive
- Autonomous Shuttle
- People-Mover
- Vanpool
- High-Intensity Bus
- Regional Rail

Phasing Component



Original Version

NOTE: Classifications are for general guidance, individual jurisdictions may recommend changes.

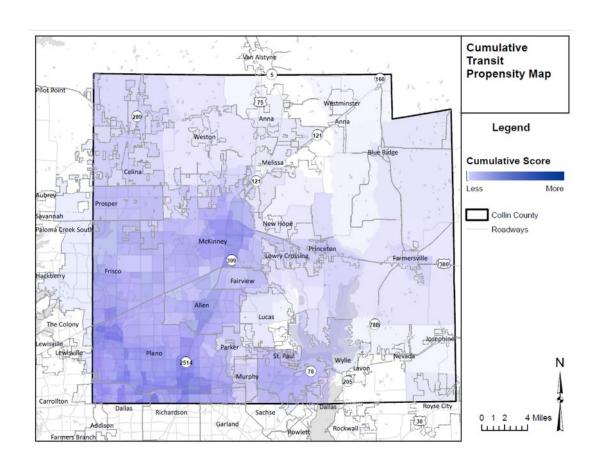


Revised Version

(based on Collin County feedback)

NOTE: Classifications are for general guidance, individual jurisdictions may recommend changes.

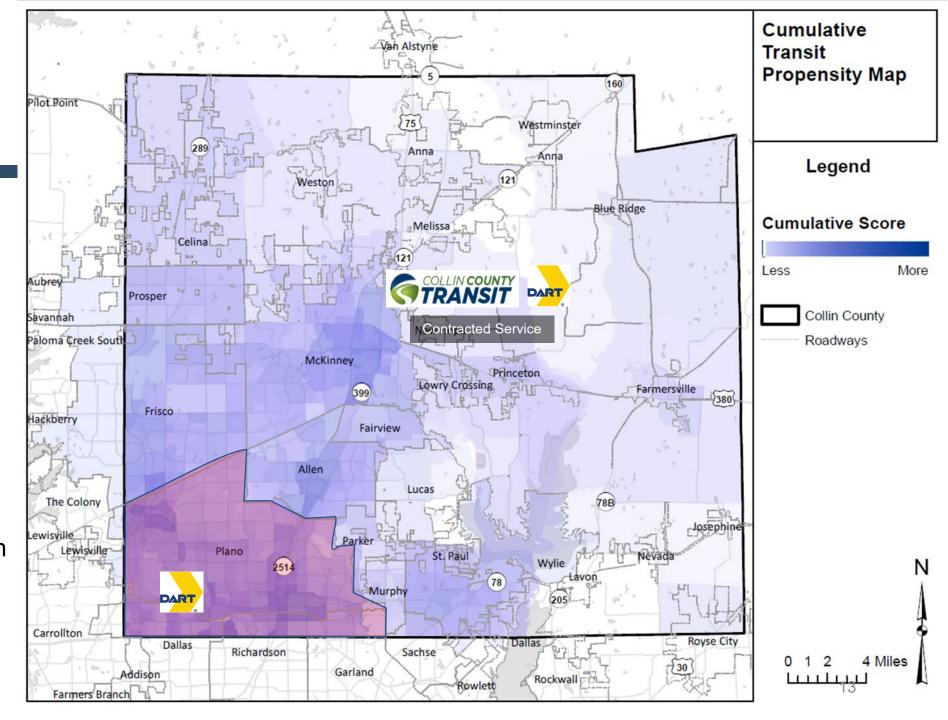
Low Transit Intensity Scenario



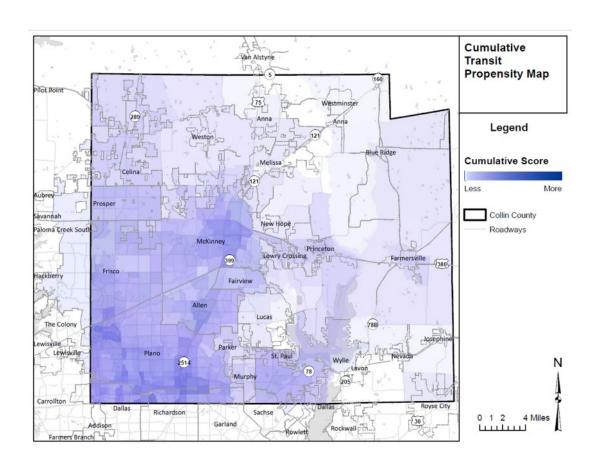
- Emphasis on basic mobility services
- Largely a continuation of current transit services
- Few new agreements or partnerships
- Beyond DART service area unlikely to attract new riders

Low Transit Intensity Scenario

- DART service area maintains current approach
- Collin County Transit service continues
- Balance of county gradually adds ondemand (subsidized taxi or equivalent) via contract
- Longer term transition to AV shuttles
- No new rail or highintensity bus



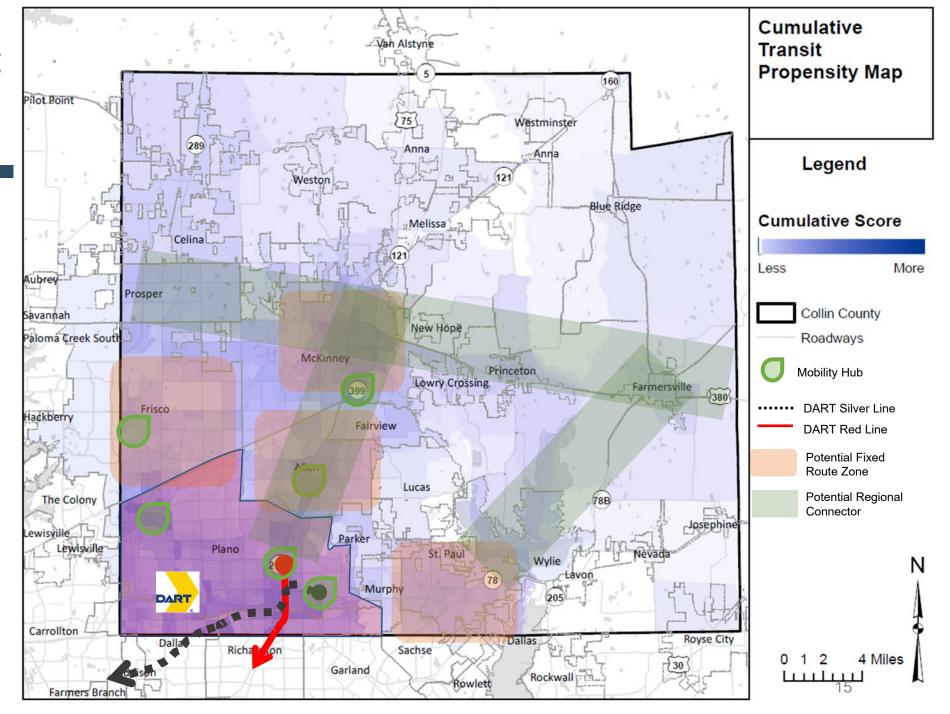
Medium Transit Intensity Scenario



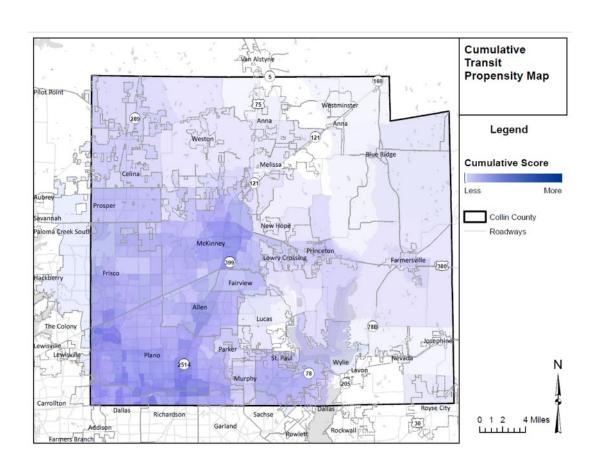
- Emphasis on areas with high transit propensity, population concentration, and activity centers
- Requires new governance and financial arrangements to implement
- Balance of meeting basic mobility needs and more robust transit in select areas
- No regional rail or high-intensity bus

Medium Transit Intensity Scenario

- Four zones with potential for fixedroute transit
- Three regional corridors with potential for connector routes
- Mobility hub development to provide multimodal connectivity



High Transit Intensity Scenario

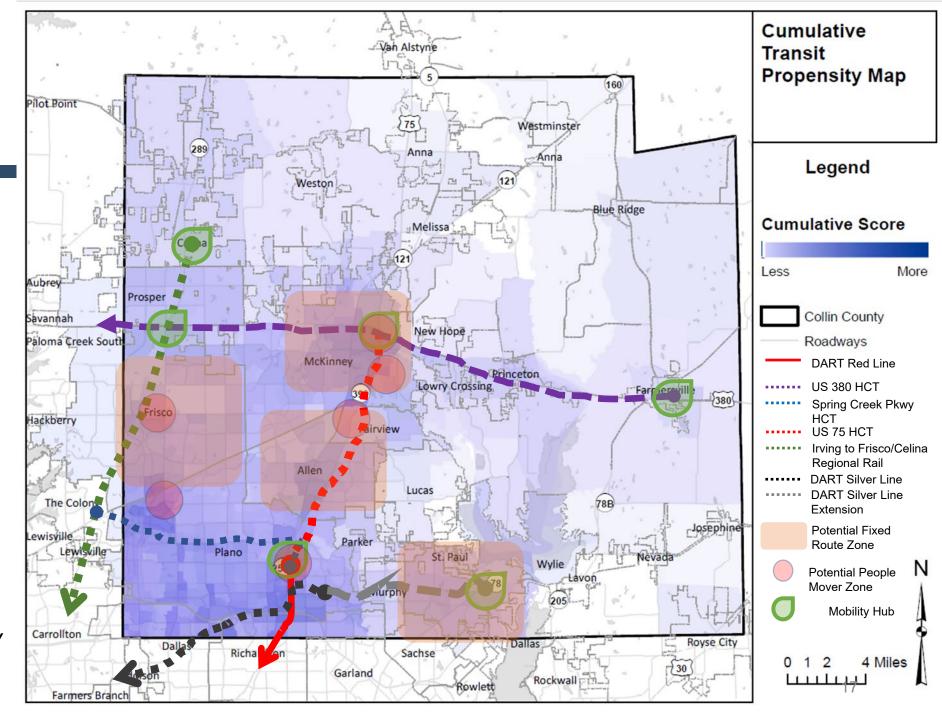


- Substantial commitment to multimodal system built on transit 'backbone'
- Mix of transit services and facilities with transit-supportive economic development
- Coordination of governance and funding <u>essential</u> ingredient (LGC, etc.)
- Supports high level of connectivity to greater DFW region

High Transit Intensity Scenario

- Development of a regional transit "backbone"
 - Regional Rail
 - High-Capacity Transit
- Multimodal hubs provide connectivity
- Additional services:
 - Local Bus
 - Micromobility
 - Express Bus
 - Vanpool
 - People Movers
- Only alternative capable of transformative mobility shifts

April 1, 2021



Transit Service by City Propensity Type

- Basic Mobility
 - Demand Response
- Emerging & High Growth
 - Demand Response
 - Fixed Route
- Developed & Mature
 - Demand Response
 - Fixed Route
 - Premium Bus
- Tier 2 for each category

Cities by Transit Propensity

City Type	Basic Mobility	Emerging & High Growth	Developed & Mature
City Names	Blue Ridge Lowry Crossing New Hope St. Paul Weston*	Anna Celina Farmersville* Josephine* Lavon* McKinney Melissa Nevada* Princeton Prosper Royse City	Allen Fairview* Frisco Lucas* Murphy Parker* Sachse Wyle

*Tier 2 Cities

April 1, 2021

City Type	Demand Response	Fixed Route	Premium Bus
Basic Mobility			
Emerging & High Growth			
Developed & Mature			

Approximate Annual Operating Costs

City Type	Demand Response Tier 1	Demand Response Tier 2	Fixed Route Tier 1	Fixed Route Tier 2	Premium Bus Tier 1	Premium Bus Tier 2	TOTAL COST (EST) TIER 1	Total Cost (Est) Tier 2
Basic Mobility	\$ 1,882,200	\$ 941,100	-	-	-	-	\$ 1,882,200	\$ 941,100
Emerging & High Growth	\$ 1,882,200	-	\$ 1,994,000	\$ 997,000	-	-	\$ 3,876,200	\$ 2,879,200
Developed & Mature	\$ 1,882,200	-	\$ 1,994,000	\$ 997,000	\$ 1,329,800	\$ 664,900	\$ 5,206,000	\$3,544,100

McKinney Line Regional Rail

- Regional rail line connecting McKinney to DART Red Line in downtown Plano
- 18 Miles
- \$700M \$900M

High-level ridership analysis to follow in next PAC meeting.

Collin County Roadway Investments

Per NCTCOG's Transportation Improvement Program (TIP), the following are programmed <u>roadway</u> improvement funds for Collin County:

2002 – 2020

Total: \$2,300M

Avg. Annual: \$121M

Local transportation investments in Collin County not included in the TIP:

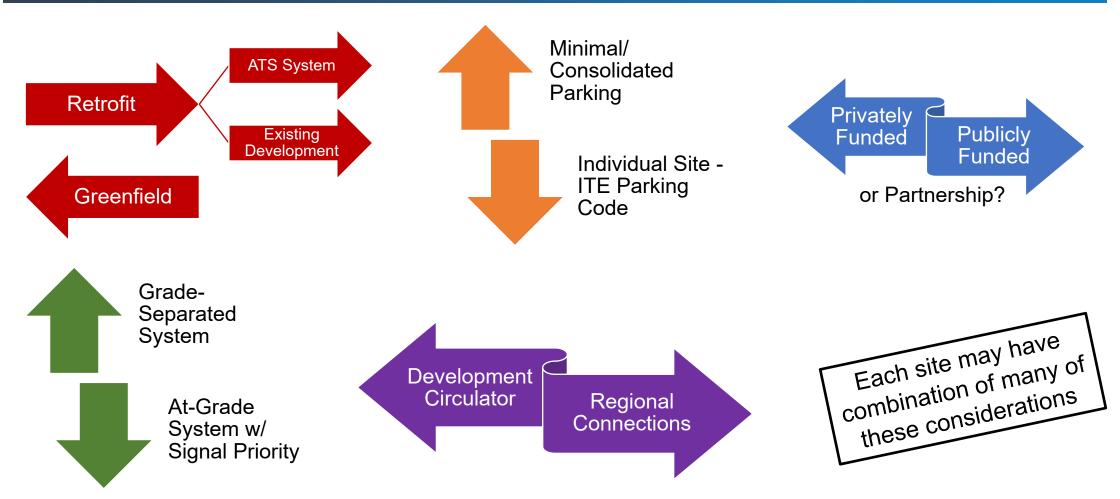
Avg. Annual: \$35M - \$40M

People Mover Components

Automated Transportation System (ATS)

- Smart Vehicle (Group-Rapid Transit)
 - Autonomous
 - Rubber-Tire'd
- "Dumb" Guideway
 - Paved
 - Grade-Separated

People Mover Considerations



Concurrent Efforts

Previous Efforts (2016-Mid 2020)

Demand & Feasibility Process Standards

- Regional demand mapping
- General site feasibility/site capture
- Potential system use
- Other high-level planning elements

Current Efforts (Mid 2020–2022)

Design Process
Standards & Pilot
Projects

- Infrastructure engineering process
- Vehicle technology identification process

Current RFP

Future Efforts (2023–)

Implementation Process Standards

- Availability of funding (public/private)
- Implementation considerations
- Institutional Structure/
 Governance

Collin County Transit Planning Study People Mover – Planning Process

Step 1

Identification of Potential Locations

GIS Regional Mapping Tool

- Population & Employment Density
- Employment Mix
- Land Uses
- Short Trip Density
- Proximity to Regional Transit Stations

Step 2

Initial Feasibility of Potential Locations

Feasibility Analysis Tool

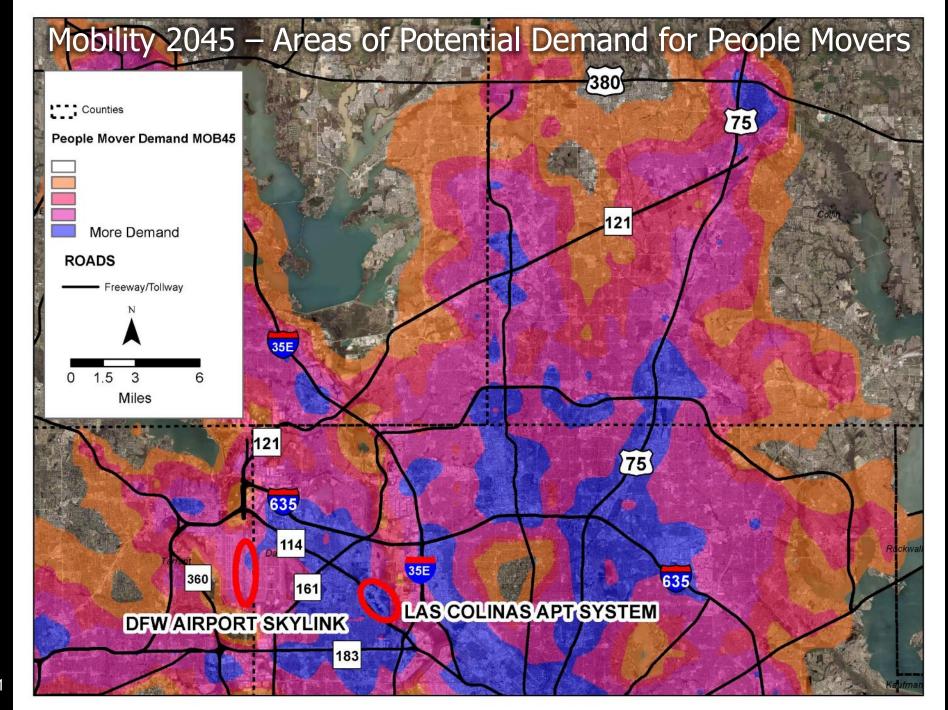
- Size of Development/Area
 Served
- Population & Employment Density (by type)
- Parking Strategy
- Proximity to Transit Stations

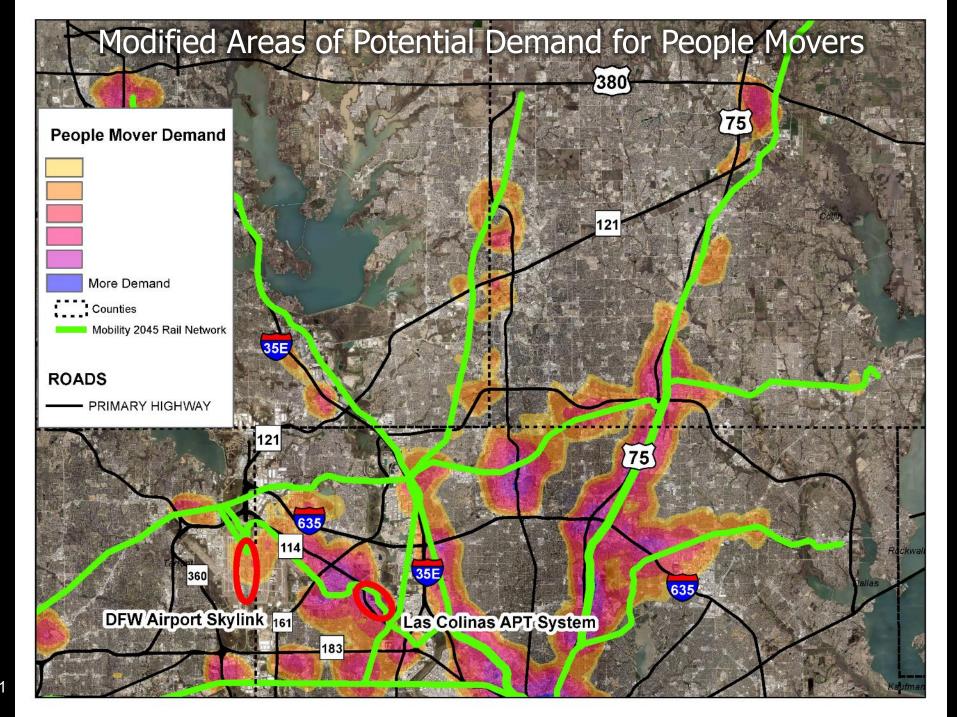
Step 3

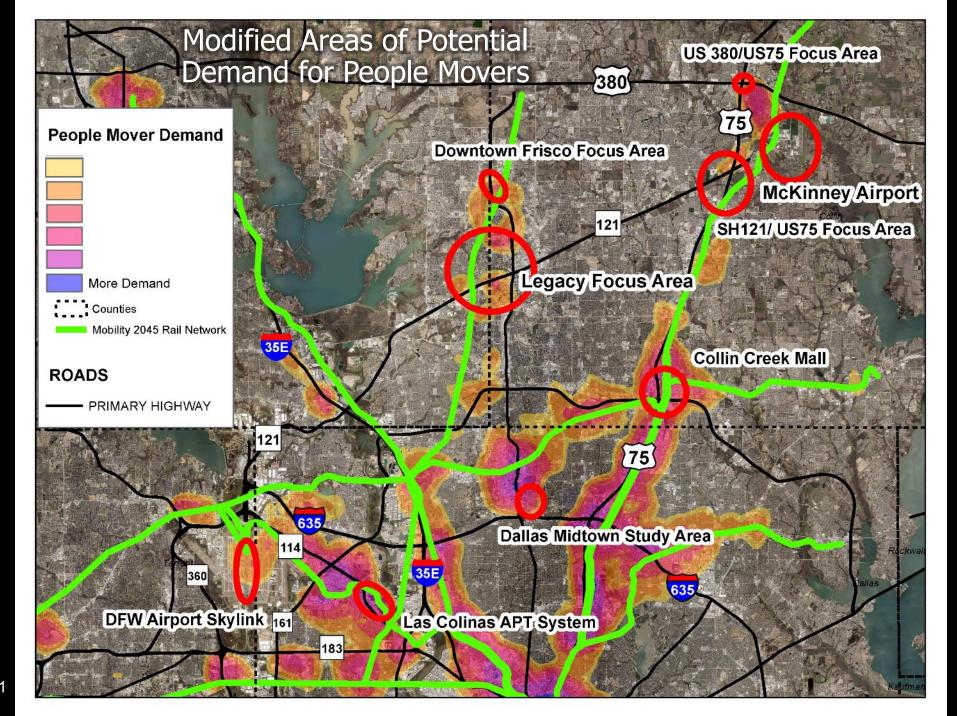
Operations Analysis & Ridership Estimation

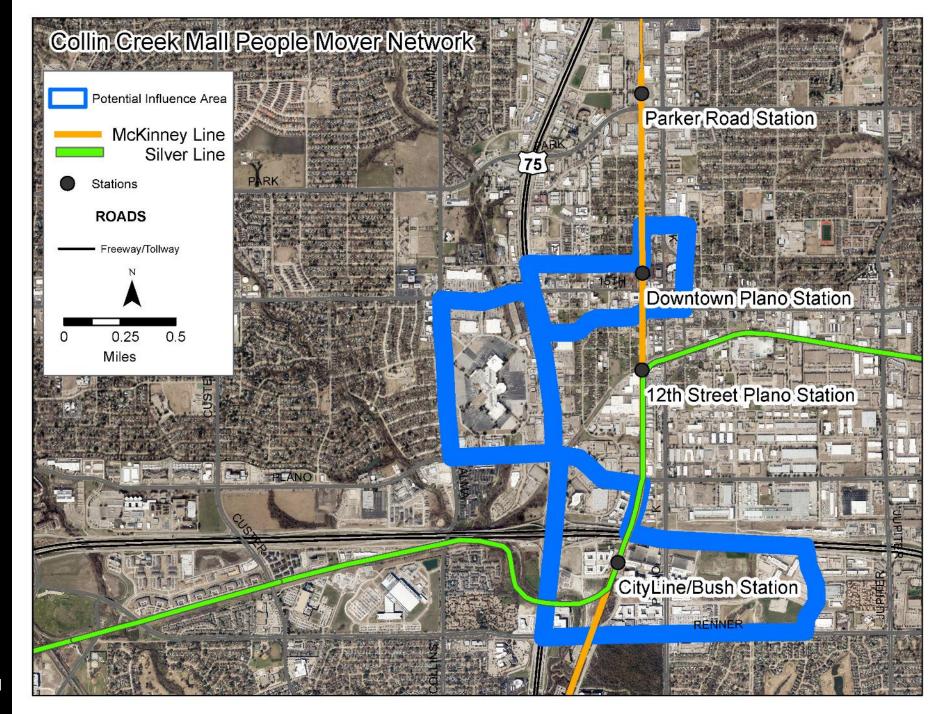
Ridership Estimation Tool

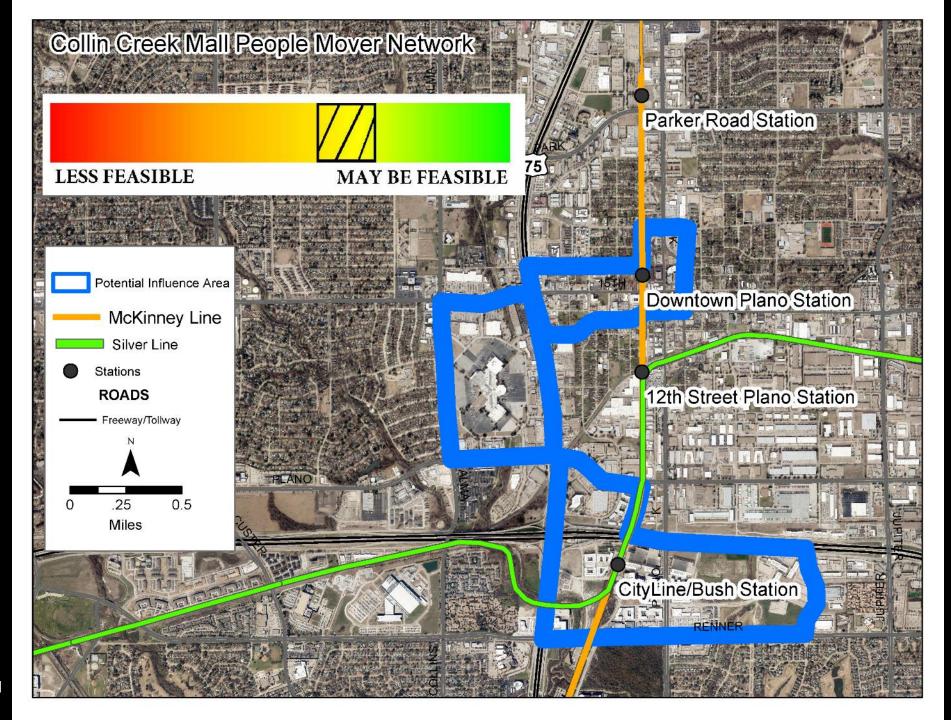
- Site Layout w/ Preferred People Mover Alignment
- Detailed Land Use Breakdown by ITE Code for Zonal Analysis

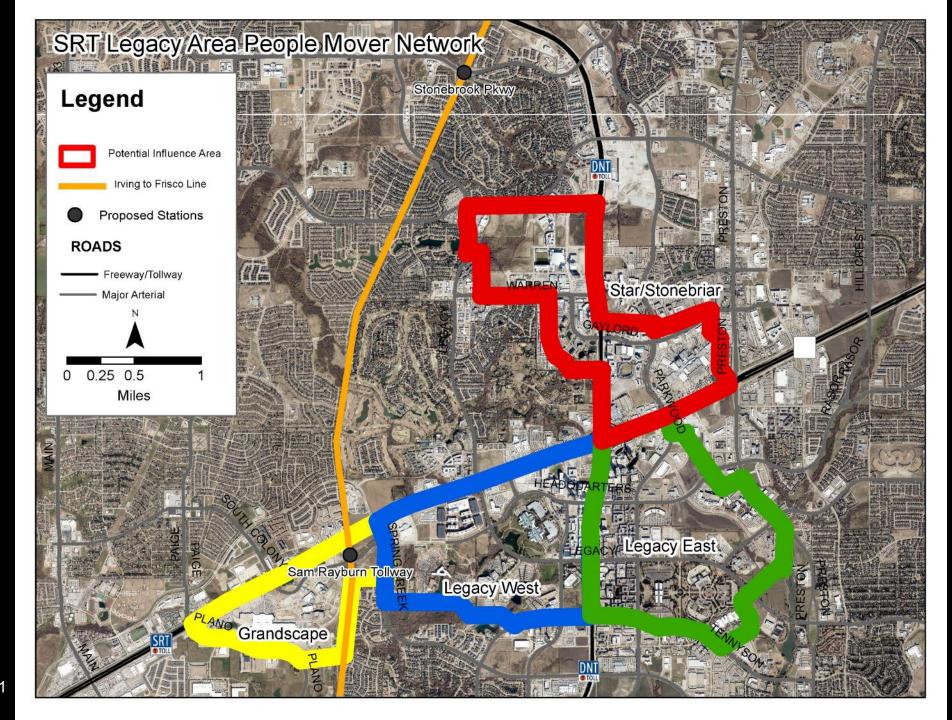


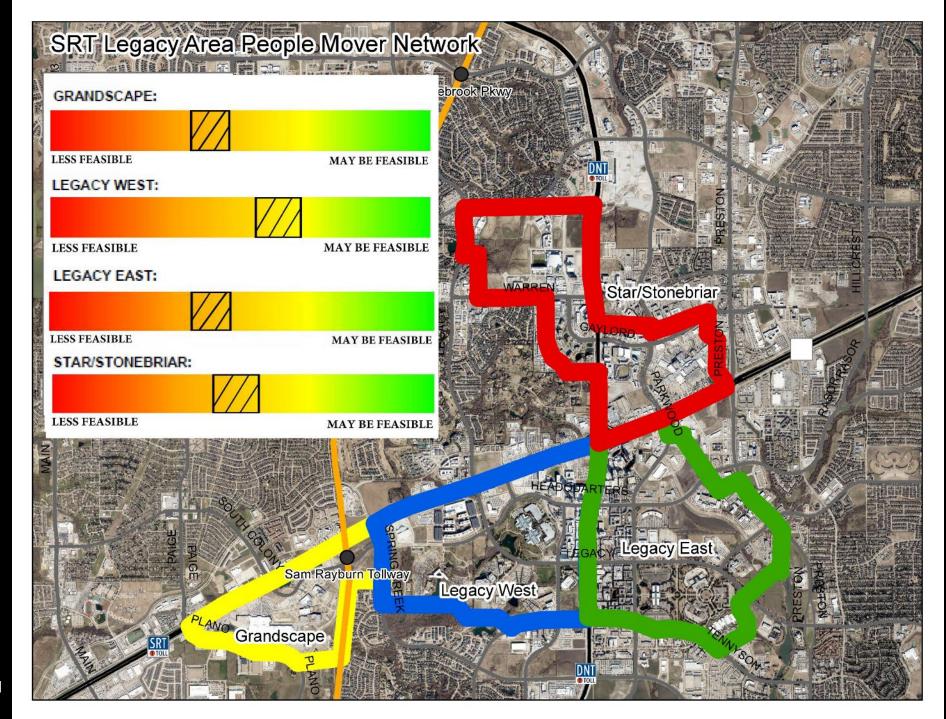


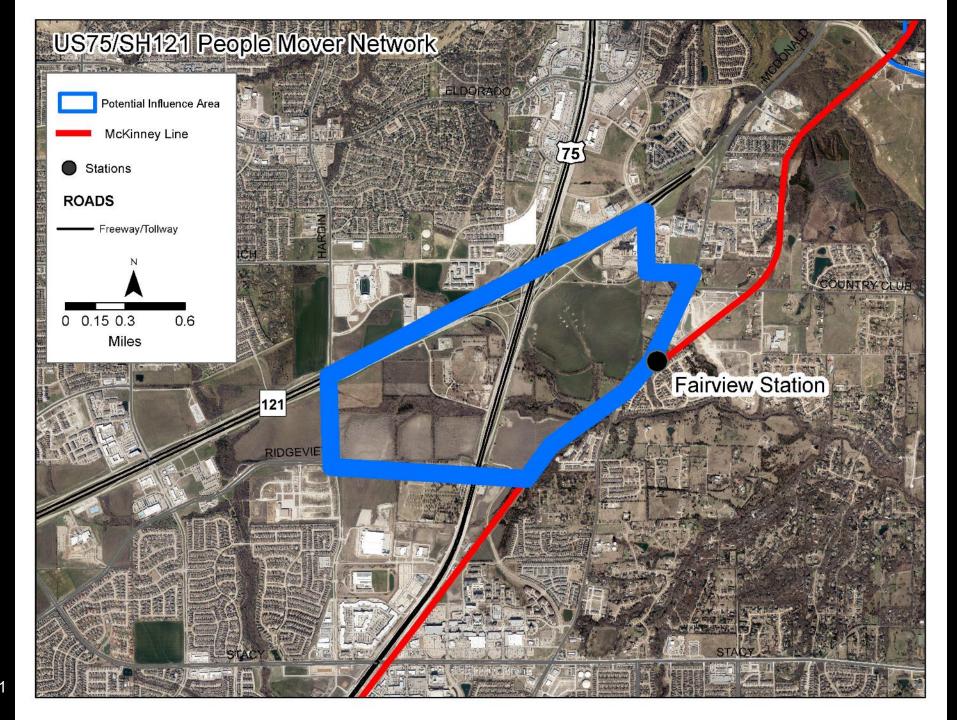


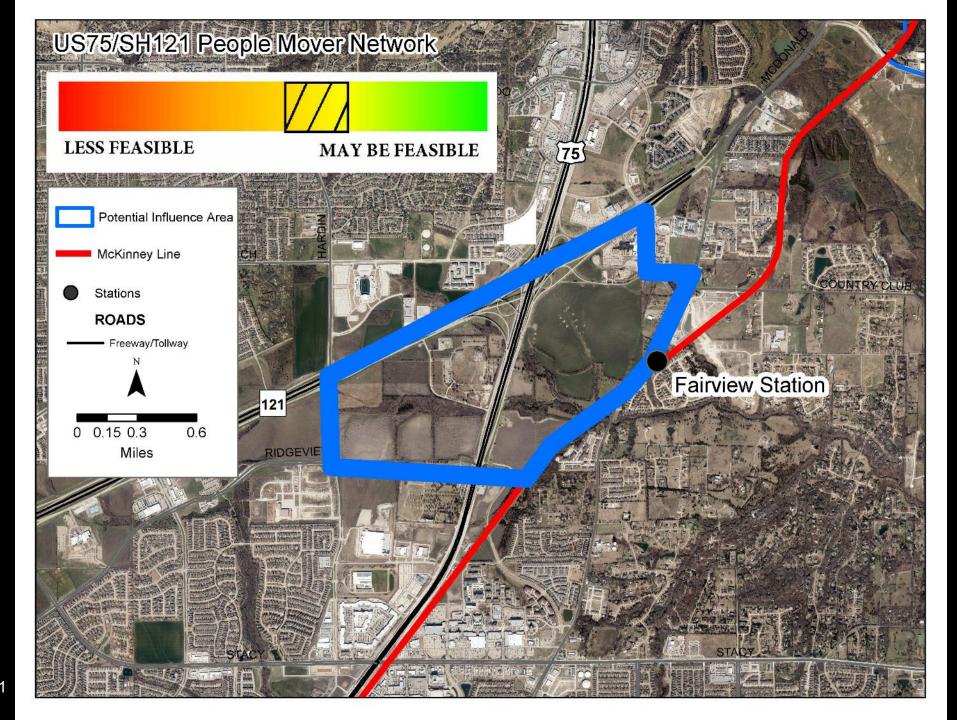


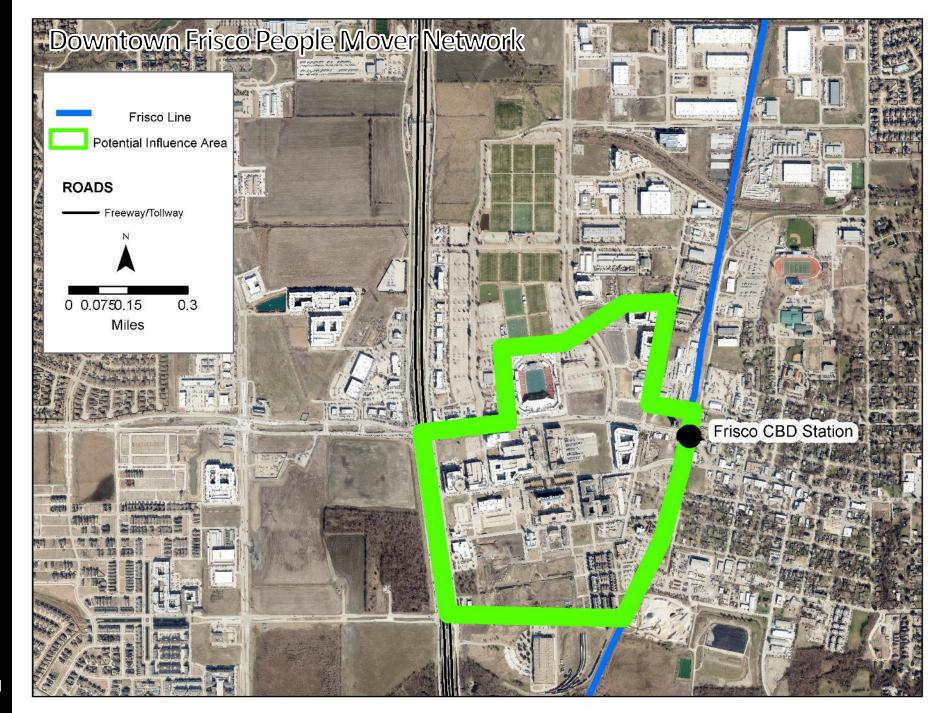


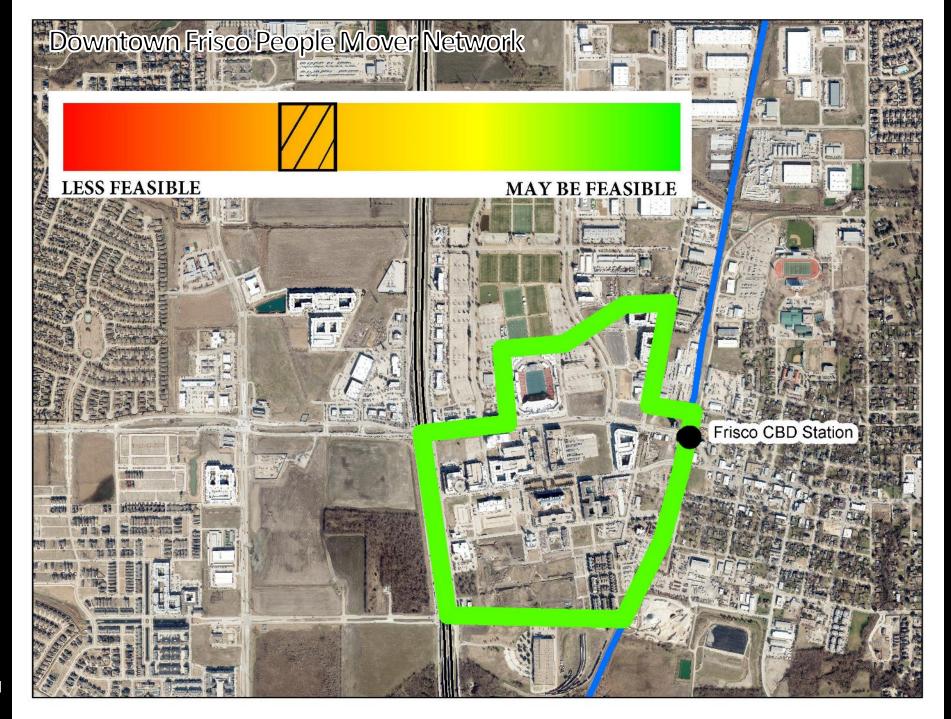


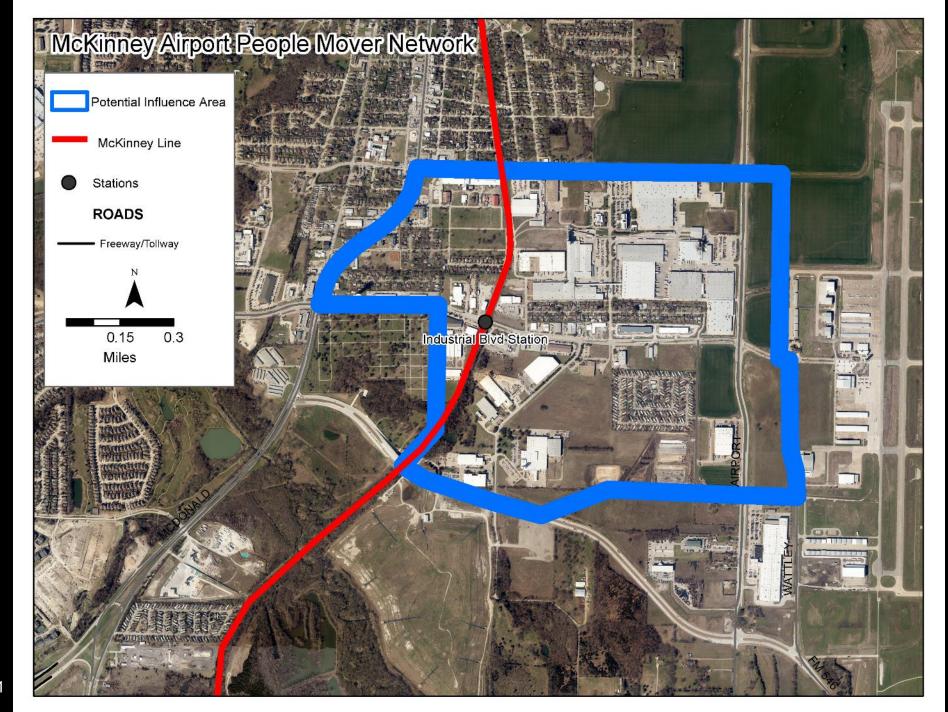


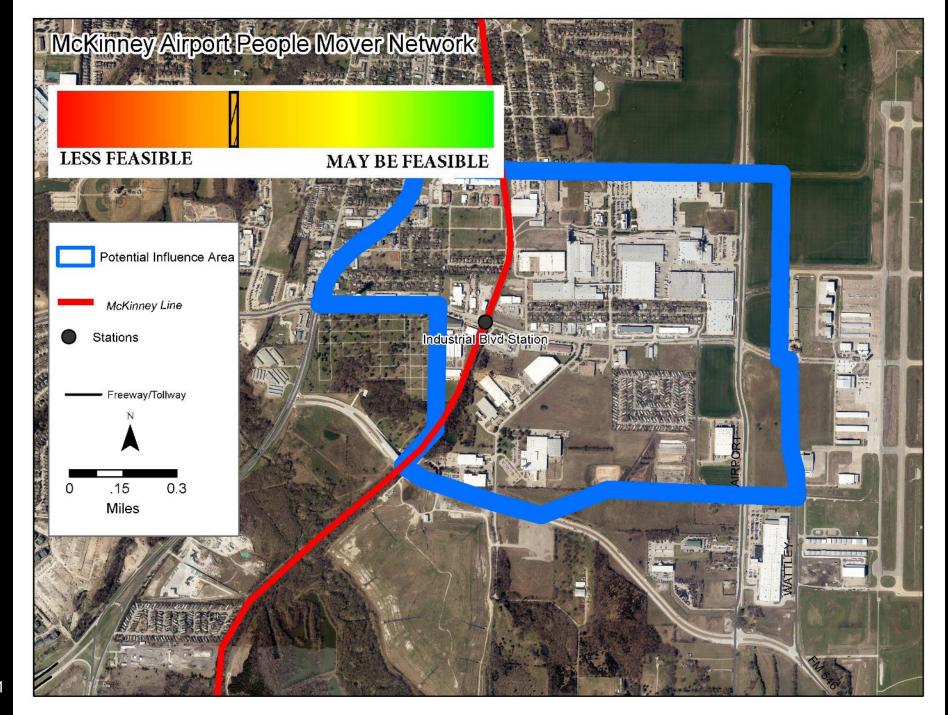




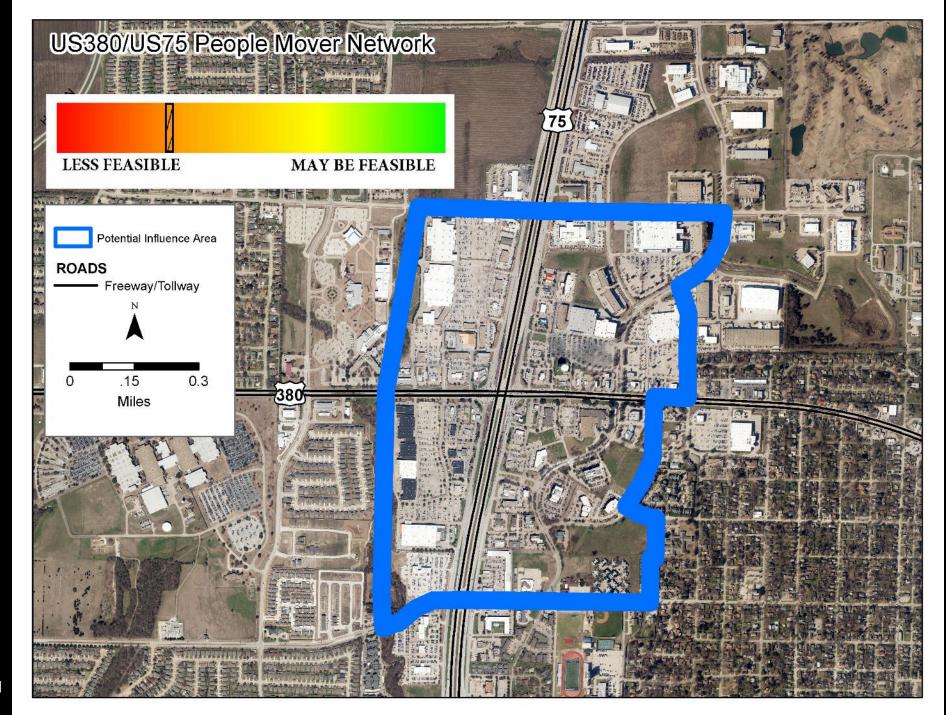












People Mover Feasibility Analysis Summary

HIGHER FEASIBILITY LOCATIONS	LOWER FEASIBILITY LOCATIONS
Collin Creek Mall	Downtown Frisco
Legacy West	Legacy East
SH 121/US 75	Grandscape
The Star/Stonebriar Center	McKinney Airport Connection
	US 380/US 75

- Development-based analysis
- Capital/operating costs not considered
- Grade-separated ATS focused analysis
- System phasing/ridership generation
- Variability in analysis results based on input assumptions

Irving to Frisco Rail Corridor Update

- Rail Coordination Efforts with BNSF
 - Continued coordination assessing supply side with demand side
- Capital Cost Estimates
 Development of Capital Cost Estimates
- Ridership Modeling Efforts:
 Trip Origins and Trip Destinations

- Revenue & Funding Opportunities
 - Identifying & Assessing Accountable Funding Options
- People Mover Connections Evaluations
 - Opportunities for Station Connections
- Public Involvement
 Presentations to City Councils

Questions & Open Discussion

- Study Milestones Schedule
- Scenario Development
- Scenario Costs
- Other

Next Steps

- Please review Draft Transit Service Needs & Market Analysis Technical Report and provide comments by April 30.
- Prepare accountable Funding Sources (revenues) to pair with Transit Costs.
- Develop Scenario Action Plans connected with Funding & Implementation Strategies

Next scheduled meeting is May 6 at 10:30 am

NCTCOG Team Contacts

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