

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.

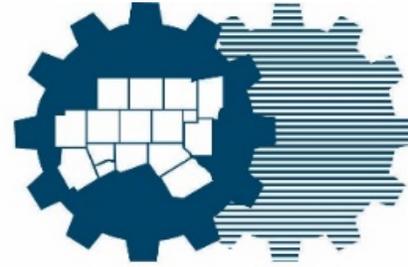


Thank you.



North Central Texas
Council of Governments





North Central Texas Council of Governments



FARMERS
BRANCH



Hebron



IRVING TO FRISCO PASSENGER RAIL CORRIDOR STUDY

Project Advisory Committee 8th Meeting

April 15, 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

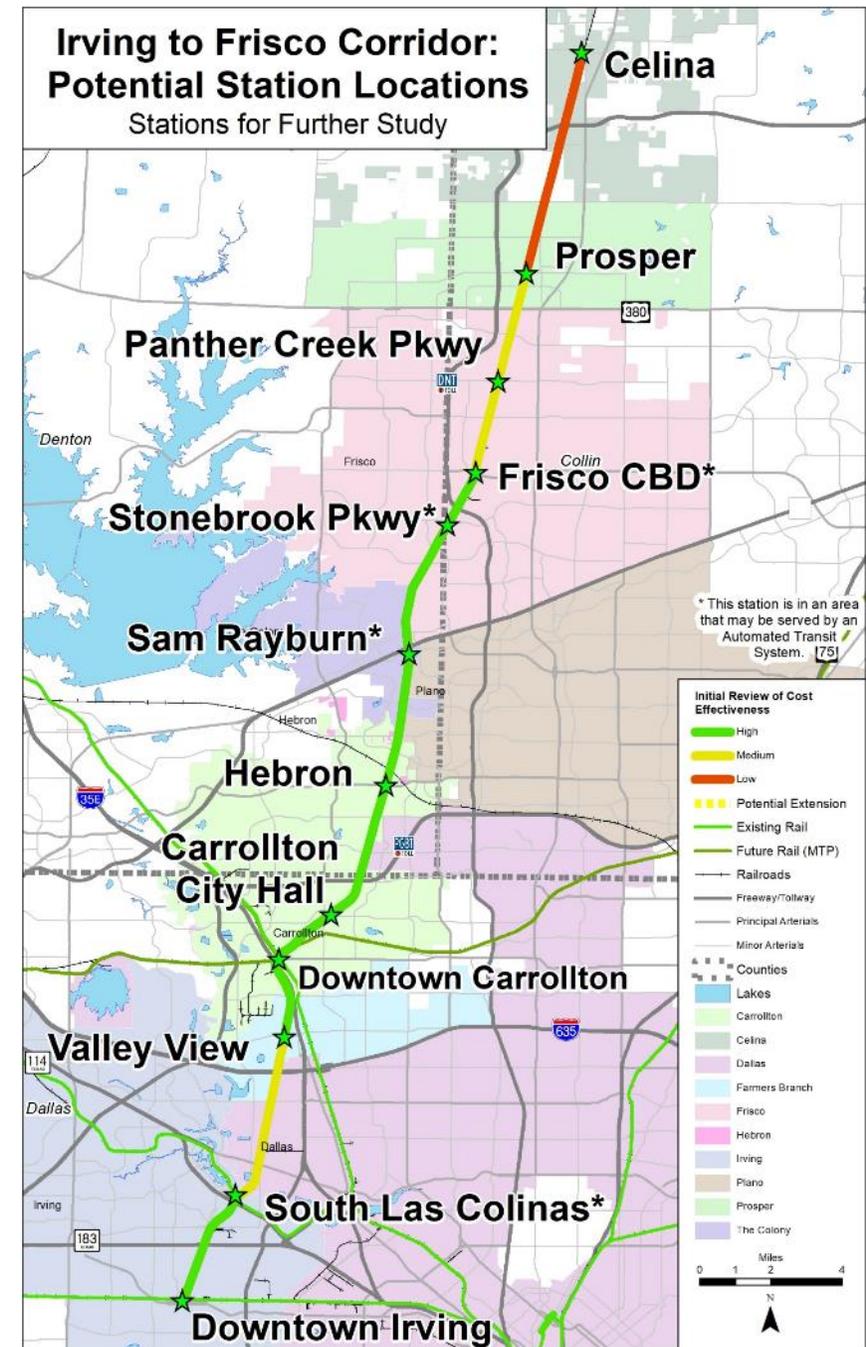


- If joining by phone, please hold your questions and comments until feedback is requested at specified times during presentation

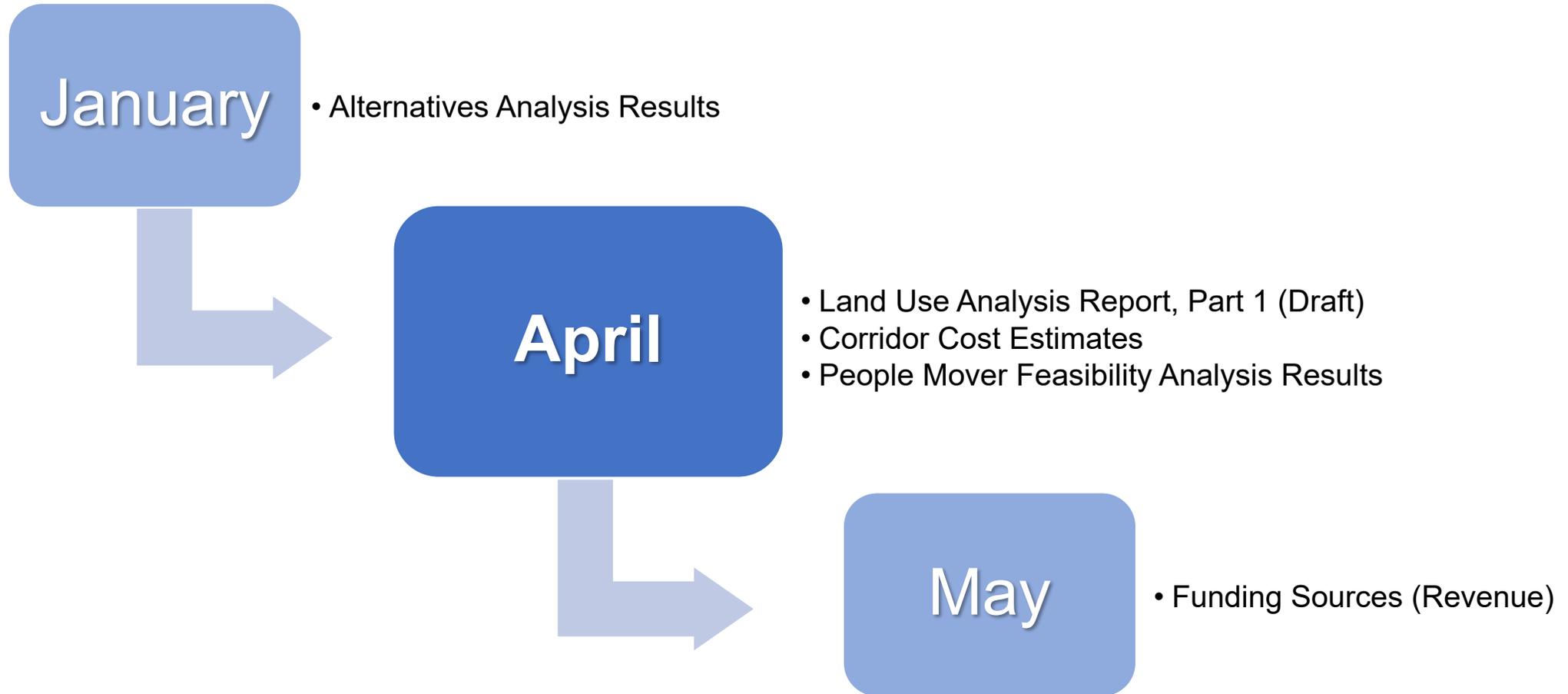
Agenda

- Study Milestones Schedule
- Land Use Analysis Report (Draft)
- Corridor Cost Estimates
 - Capital Costs
 - Operations & Maintenance Costs
- People Mover Feasibility Analysis Results
- Collin County Transit Study Update
- Questions & Discussion
- Next Steps

Meeting Context



Study Milestones Schedule



Land Use Analysis Report Update

- Objective: Provide recommendations that facilitate structured and systematic growth of transit supportive land uses at station locations
- Progress:
 - In development alongside “Best practices for transit-supportive economic development” report
 - Leveraging prior *Station Area Alternative Demographics* analysis
 - Draft document to PAC for review/comment

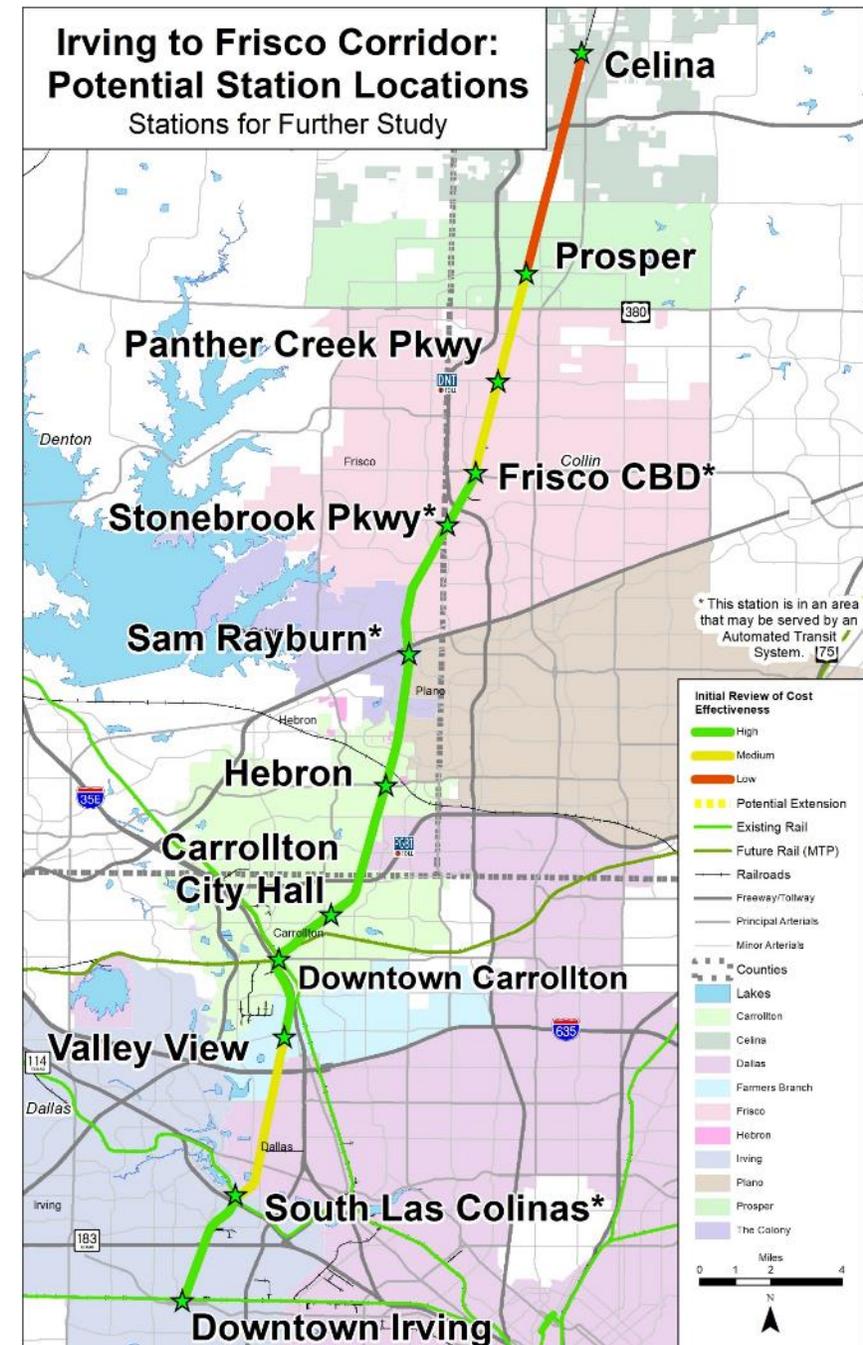


Source: <http://www.houstontomorrow.org/livability/story/dallas-looking-at-transit-oriented-development-for-medical-district/>

Capital Cost Estimates

- Grading, Drainage, Bridge Structures, Retaining Walls
- Double Track Guideway
- Passenger Station Platforms w/ Amenities
- Parking Facilities (where appropriate)
- Systems Elements including Positive Train Control (PTC), Communications, Signaling, & Street Crossing Protection
- Vehicles (Modern DMU Regional Standard)
- Maintenance Facility

April 15, 2021



Capital Cost Estimates

Alt.	Limits	Length (Miles)	No. of Station Stops	No. of Vehicles	Total Project Implementation Cost (Year 2021 \$M)	Cost/Mile (\$M)
1	Downtown Irving to Downtown Celina	37.4	12	10	\$1,553.0	\$41.52
2	Downtown Irving to Downtown Prosper	31.0	11	8	\$1,324.4	\$42.72
3	Downtown Irving to Panther Creek Parkway in Frisco	27.9	10	7	\$1,206.0	\$43.26

Capital Cost Allocation by City

City Name	Alternative #1		Alternative #2		Alternative #3	
	Percentage of Trip Origins	Capital Cost Allocation by City	Percentage of Trip Origins*	Capital Cost Allocation by City	Percentage of Trip Origins*	Capital Cost Allocation by City
Carrollton	7.8%	\$121,091,000	7.9%	\$104,266,000	8.2%	\$98,486,000
Celina	5.0%	\$76,977,000	4.0%	\$53,499,000	3.2%	\$38,459,000
Dallas	6.0%	\$92,638,000	6.0%	\$79,767,000	6.2%	\$75,345,000
Farmers Branch	0.7%	\$11,247,000	0.7%	\$9,684,000	0.8%	\$9,147,000
Frisco	36.4%	\$564,890,000	36.7%	\$486,405,000	38.1%	\$459,438,000
Irving	14.3%	\$221,679,000	14.4%	\$190,879,000	14.9%	\$180,297,000
Plano	12.5%	\$194,173,000	12.6%	\$167,195,000	13.1%	\$157,926,000
The Colony	10.8%	\$168,078,000	10.9%	\$144,726,000	11.3%	\$136,702,000
Prosper	6.6%	\$102,197,000	6.6%	\$87,998,000	4.2%	\$51,060,000
Totals	100.0%	\$1,552,970,000	100.0%	\$1,324,419,000	100.0%	\$1,206,860,000

Operations & Maintenance Cost Estimates

- Labor – Train Operations Manager, Dispatcher, Engineer, Conductor
- Maintenance of Way – PTC Manager & Supervisor, Signals & Comms Manager, ROW Manager & Supervisor, Track & Structures Inspector, Vegetation, Equipment Operator
- Vehicle Maintenance – Mechanical Manager and Supervisor, Vehicle Cleaner, Parts Clerk
- Propulsion Fuel & Utilities – Diesel Fuel, Station Utilities, Shop Utilities
- General & Administrative – General Manager, Environmental Compliance Manager, Safety Manager

Annual Operating & Maintenance Cost Estimates

Alt.	Limits	Length (Miles)	No. of Station Stops	No. of Vehicles	Total Annual Operating & Maintenance Cost
1	Downtown Irving to Downtown Celina	37.4	12	10	\$24,251,000
2	Downtown Irving to Downtown Prosper	31.0	11	8	\$20,101,100
3	Downtown Irving to Panther Creek Parkway in Frisco	27.9	10	7	\$18,090,900

O&M Cost Allocation by City

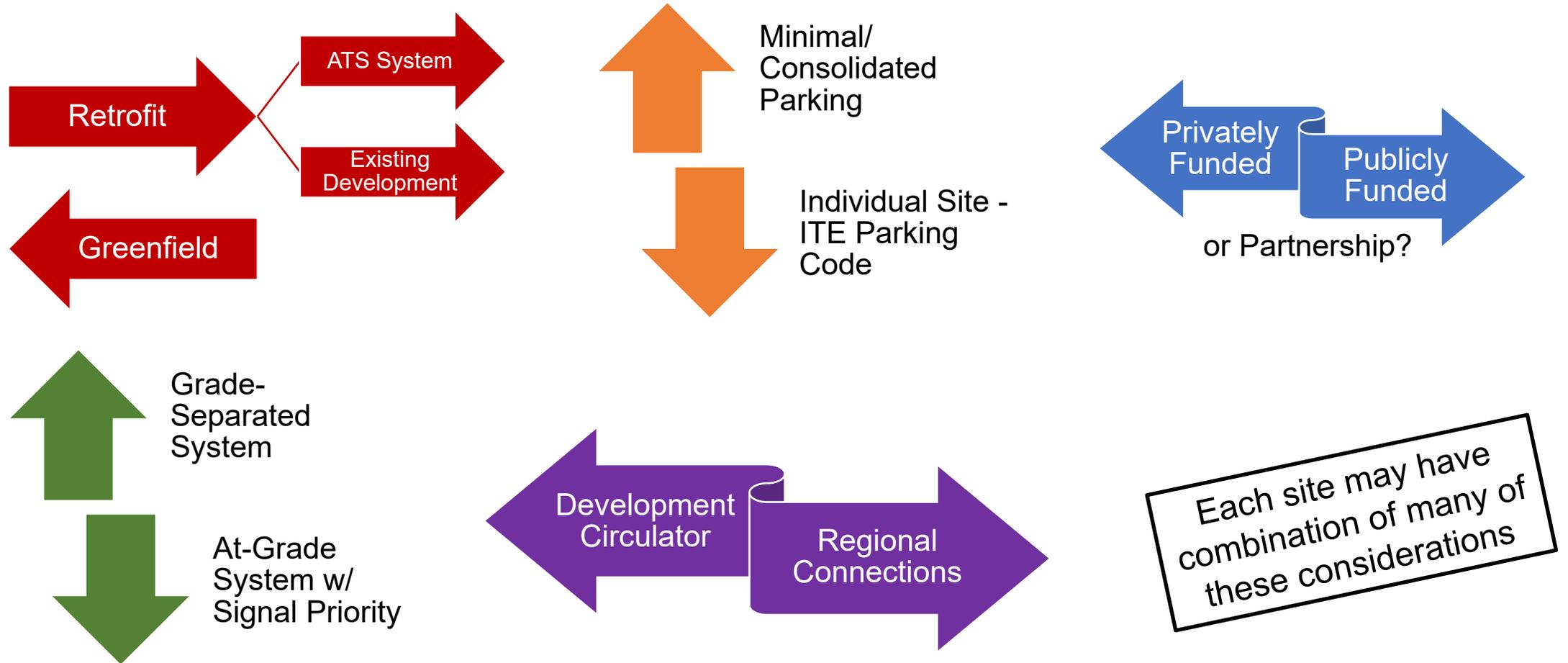
City Name	Alternative #1		Alternative #2		Alternative #3	
	Percentage of Trip Origins	O&M Cost Allocation by City	Percentage of Trip Origins*	O&M Cost Allocation by City	Percentage of Trip Origins*	O&M Cost Allocation by City
Carrollton	7.8%	\$1,890,900	7.9%	\$1,582,500	8.2%	\$1,476,300
Celina	5.0%	\$1,202,100	4.0%	\$812,000	3.2%	\$576,500
Dallas	6.0%	\$1,446,600	6.0%	\$1,210,600	6.2%	\$1,129,400
Farmers Branch	0.7%	\$175,600	0.7%	\$147,000	0.8%	\$137,100
Frisco	36.4%	\$8,821,300	36.7%	\$7,382,300	38.1%	\$6,887,000
Irving	14.3%	\$3,461,700	14.4%	\$2,897,000	14.9%	\$2,702,700
Plano	12.5%	\$3,032,200	12.6%	\$2,537,600	13.1%	\$2,367,300
The Colony	10.8%	\$2,624,700	10.9%	\$2,196,500	11.3%	\$2,049,200
Prosper	6.6%	\$1,595,900	6.6%	\$1,335,600	4.2%	\$765,400
Totals	100.0%	\$24,251,000	100.0%	\$20,101,100	100.0%	\$18,090,900

People Mover Components

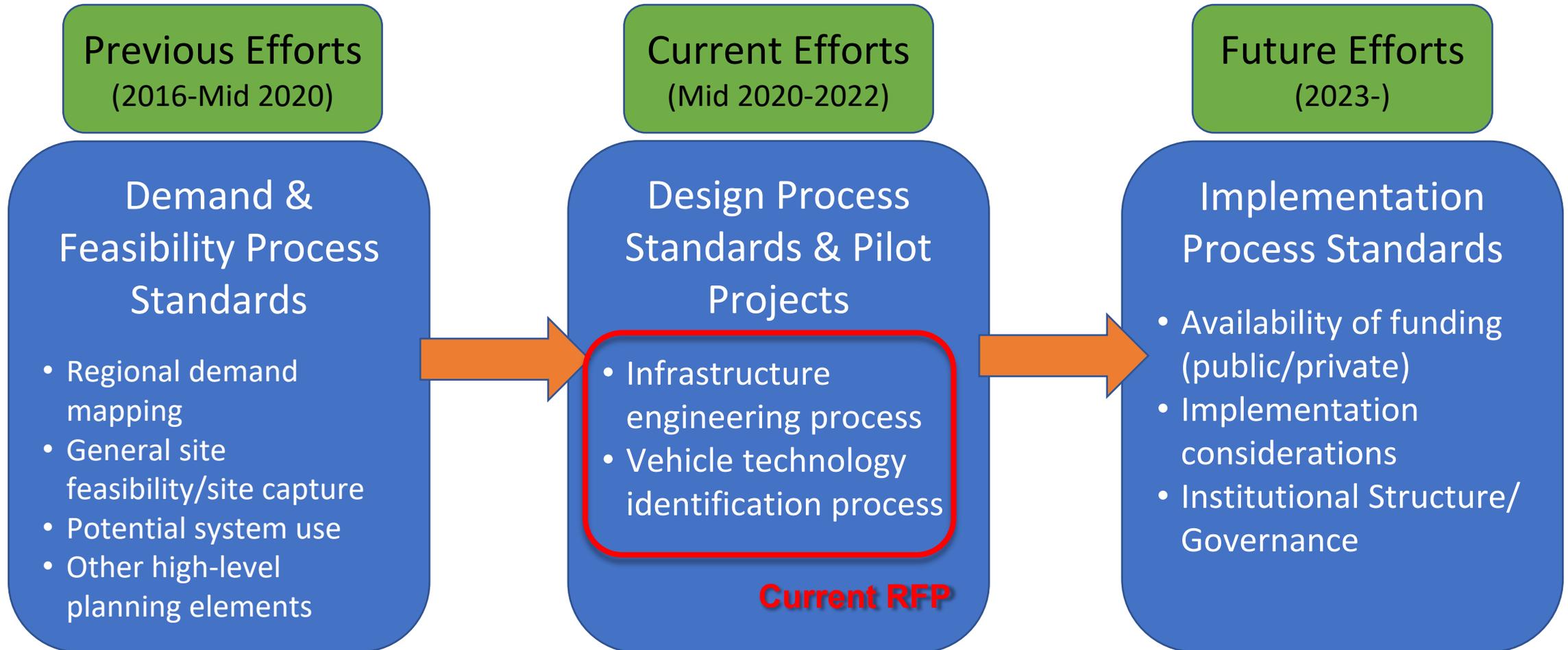
Automated Transportation System (ATS)

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

People Mover Considerations

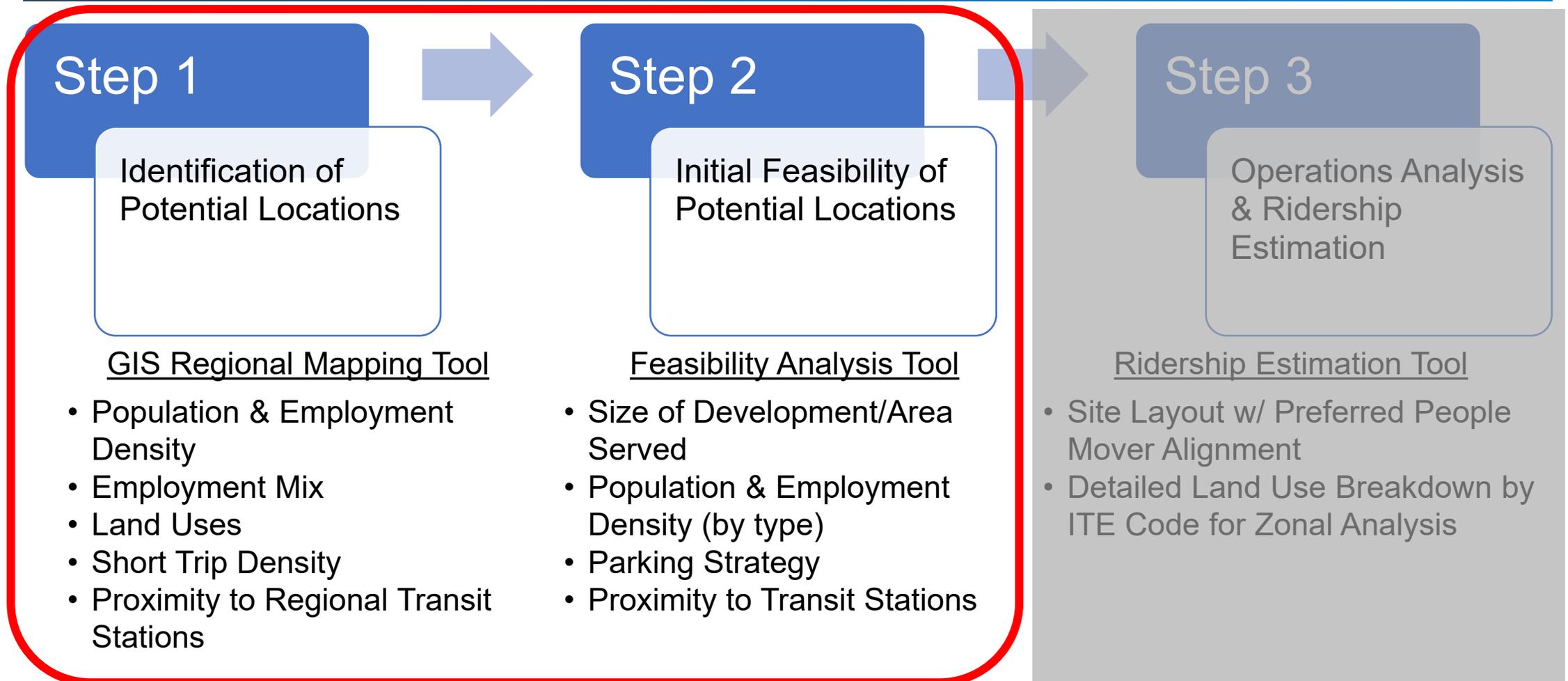


Concurrent Efforts

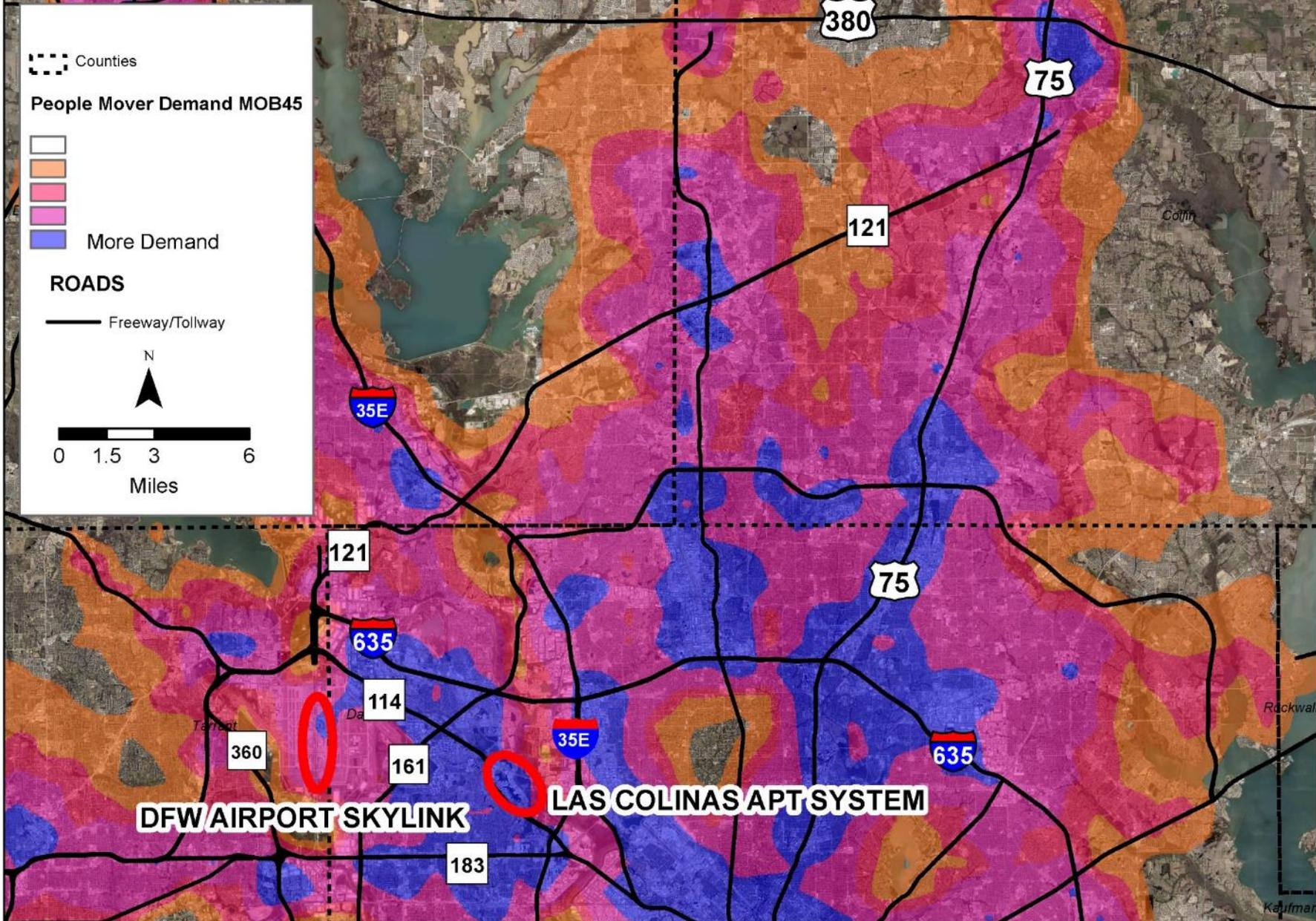


Collin County Transit Planning Study

People Mover – Planning Process



Mobility 2045 – Areas of Potential Demand for People Movers



Modified Areas of Potential Demand for People Movers

People Mover Demand

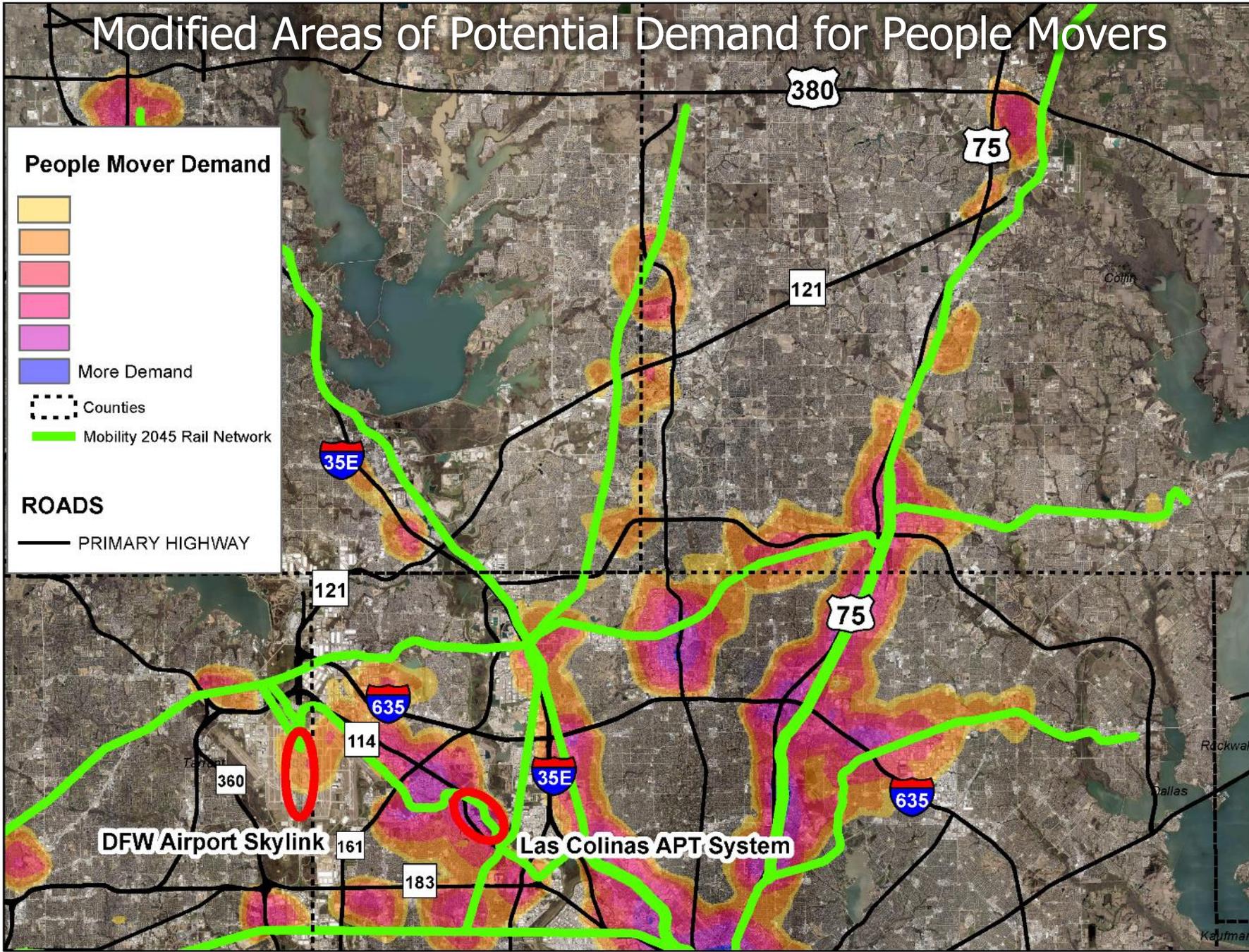
- Yellow
- Orange
- Red
- Pink
- Purple
- Blue: More Demand

Counties (dashed line)

Mobility 2045 Rail Network (green line)

ROADS

PRIMARY HIGHWAY (black line)



Modified Areas of Potential Demand for People Movers

People Mover Demand

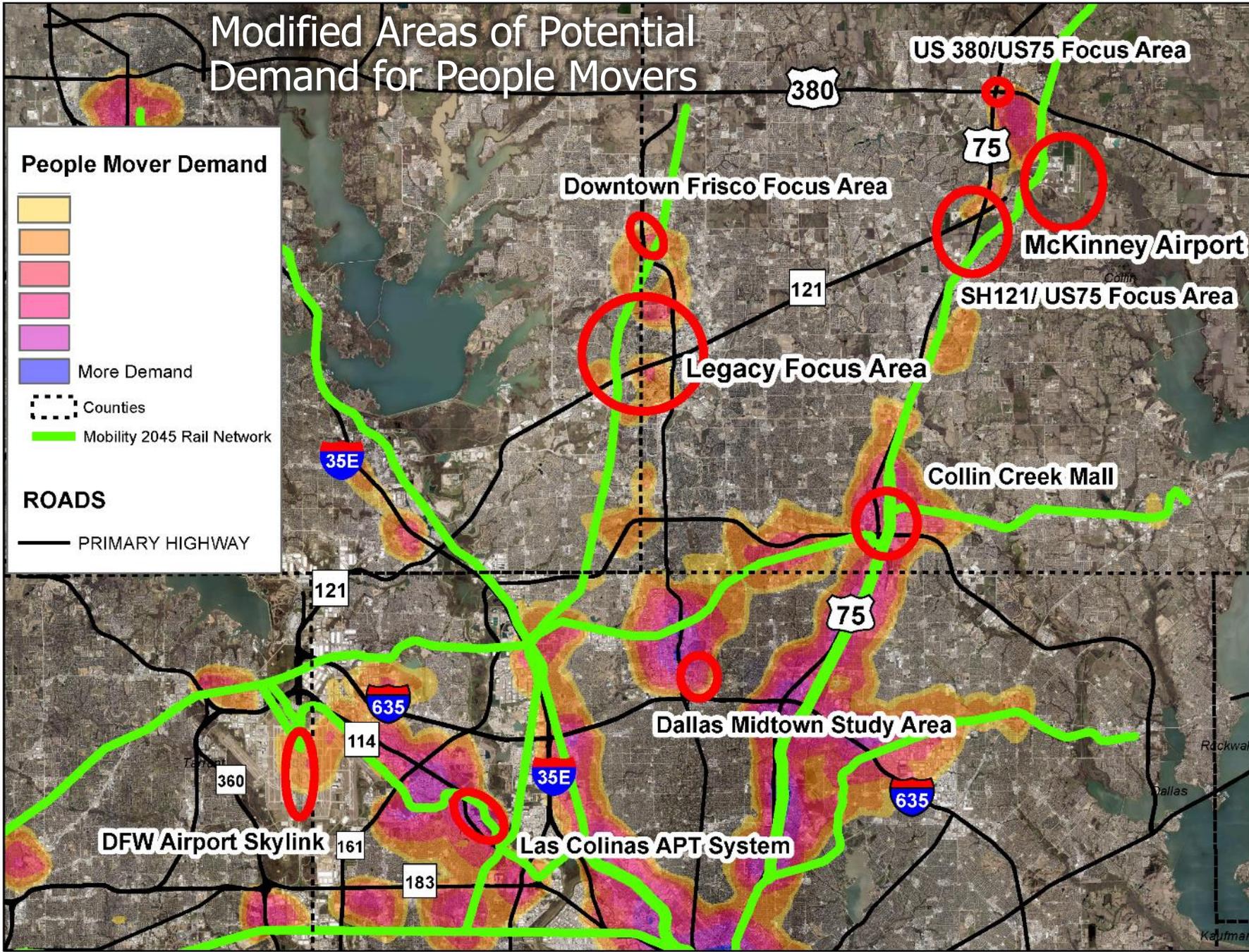
- Yellow
- Orange
- Red
- Pink
- Purple
- Blue: More Demand

Counties (dashed line)

Mobility 2045 Rail Network (green line)

ROADS

PRIMARY HIGHWAY (black line)



Las Colinas People Mover Network

Existing Stations

Mode

- Commuter Rail
- Commuter Rail/Light Rail
- Light Rail
- Light Rail/People Mover
- People Mover
- Streetcar

— Irving to Frisco Line

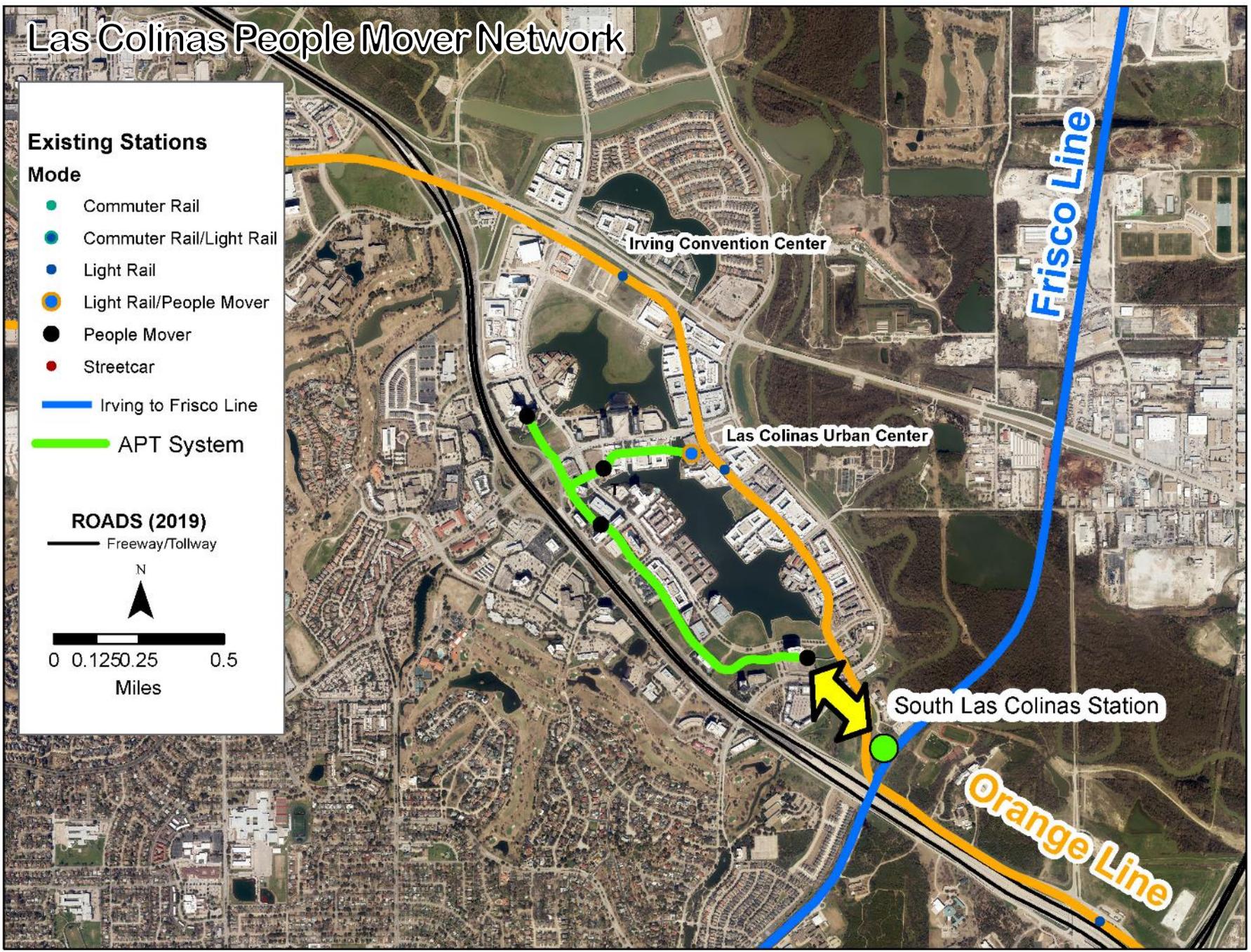
— APT System

ROADS (2019)

— Freeway/Tollway

N

0 0.125 0.25 0.5 Miles



SRT Legacy Area People Mover Network

Legend

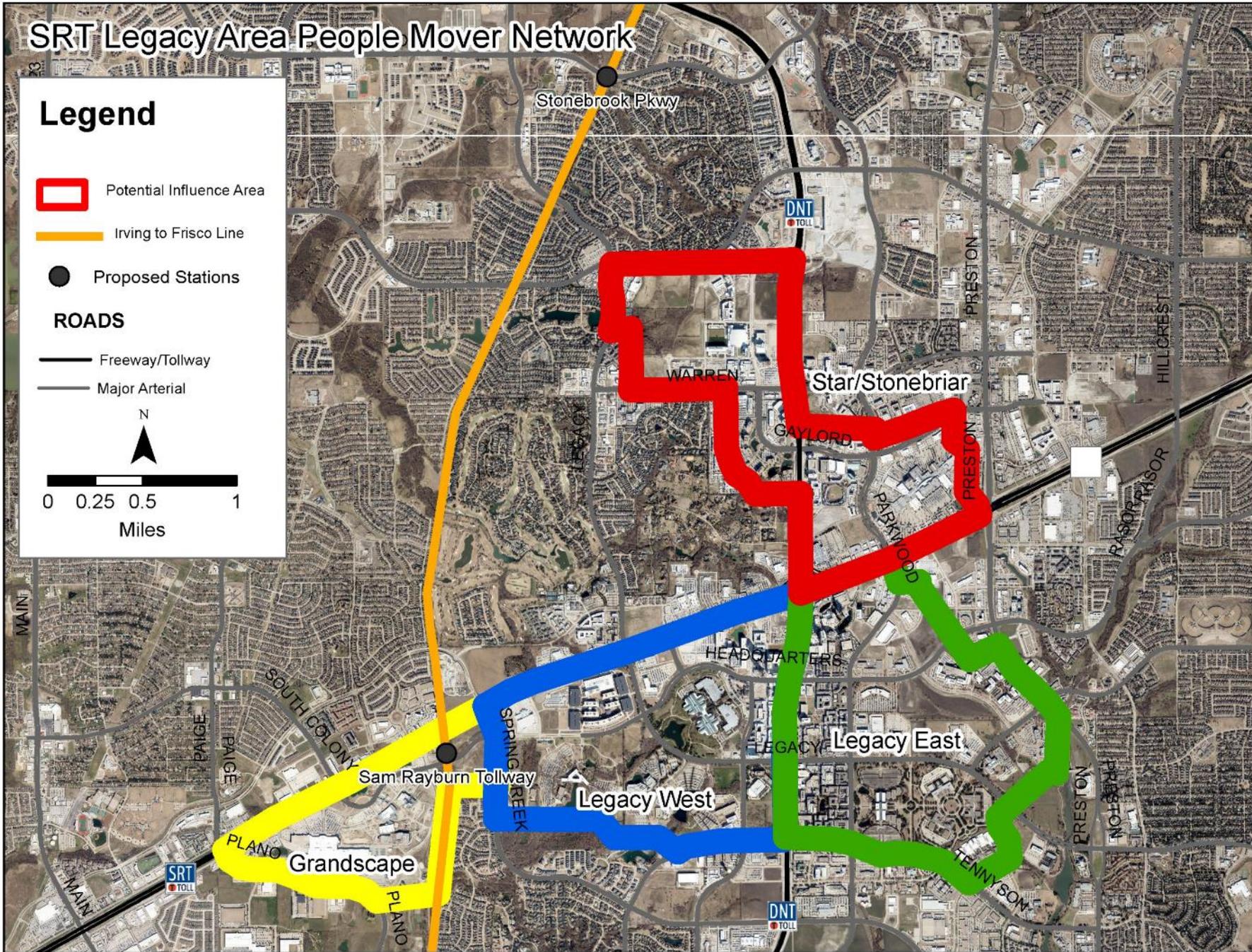
-  Potential Influence Area
-  Irving to Frisco Line
-  Proposed Stations

ROADS

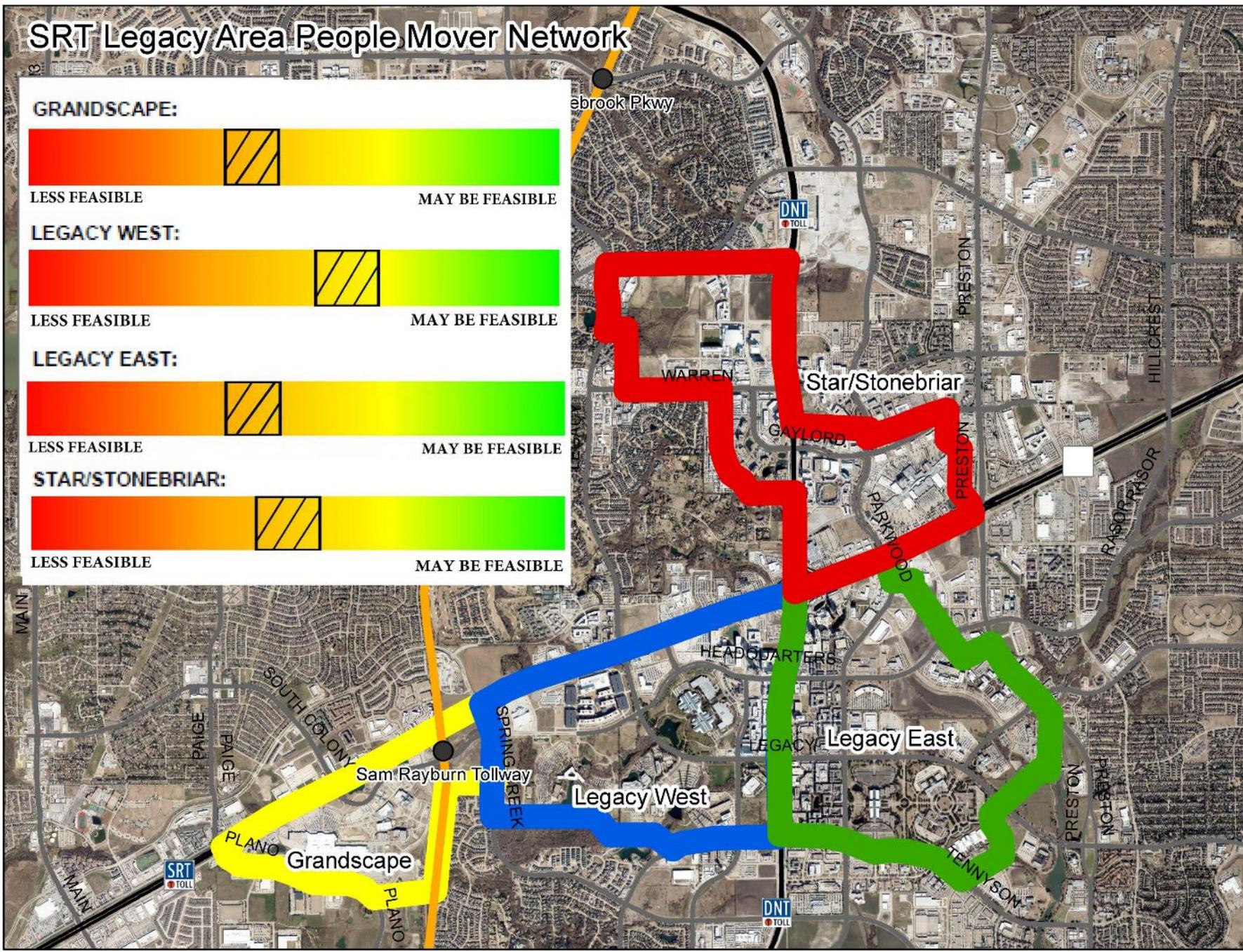
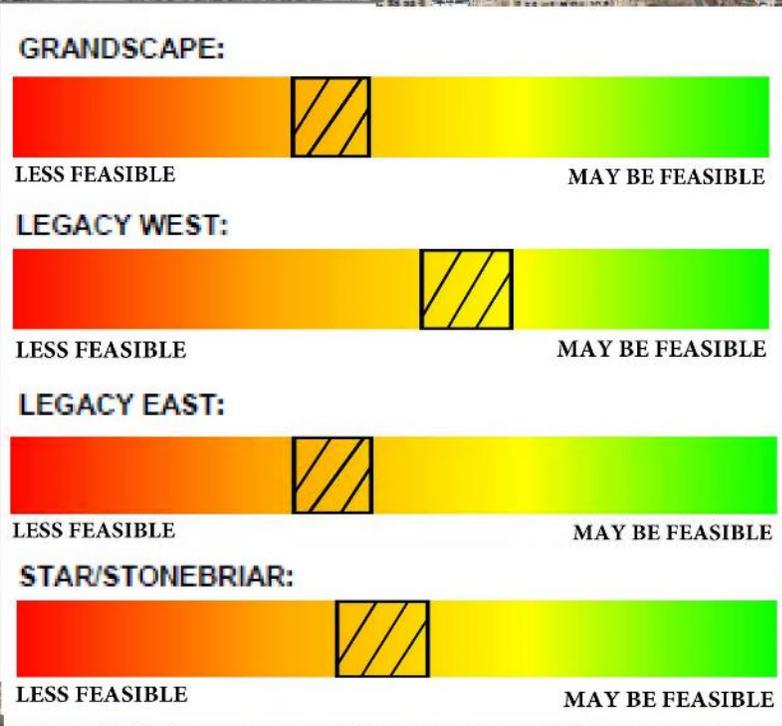
-  Freeway/Tollway
-  Major Arterial

 N

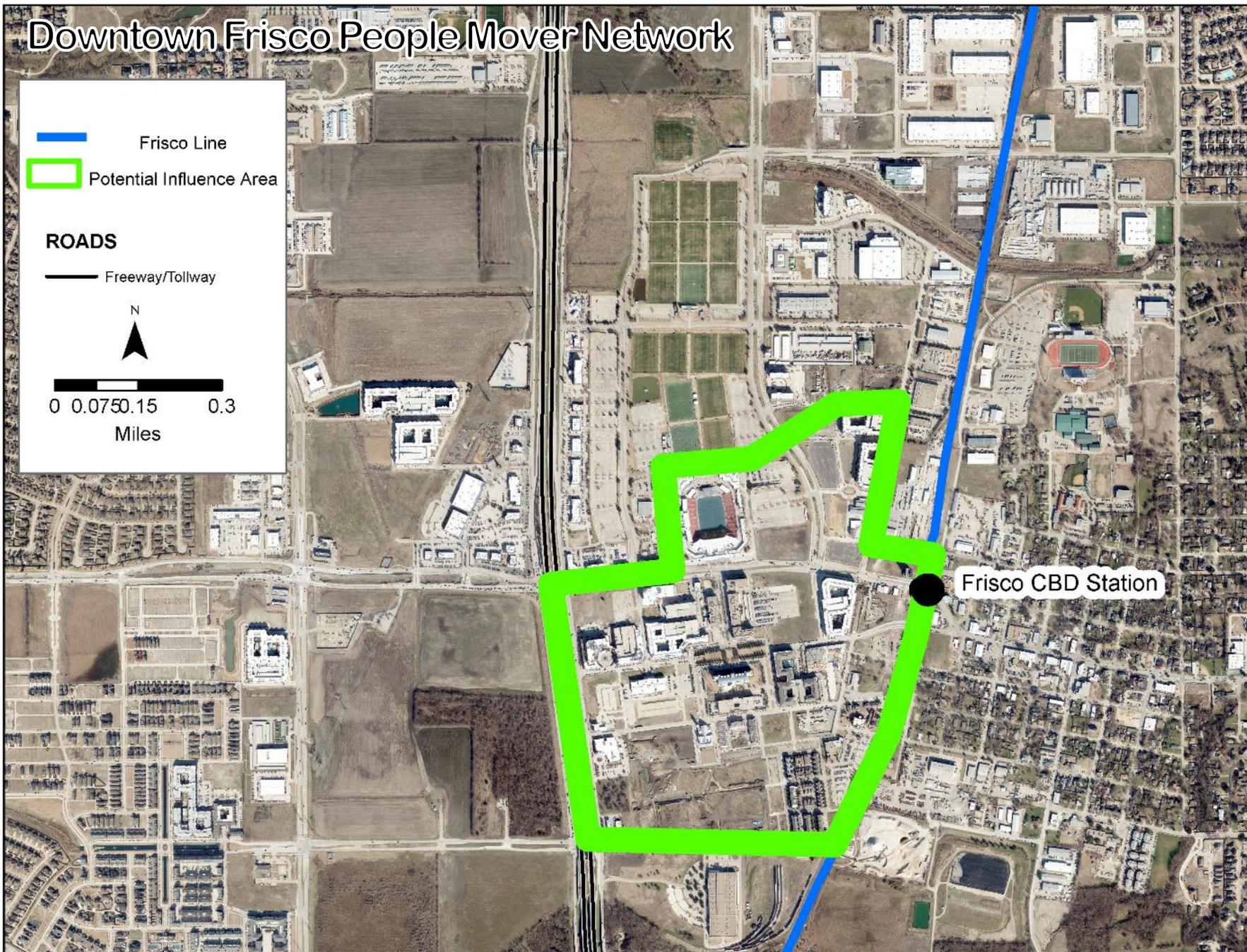
 0 0.25 0.5 1
Miles



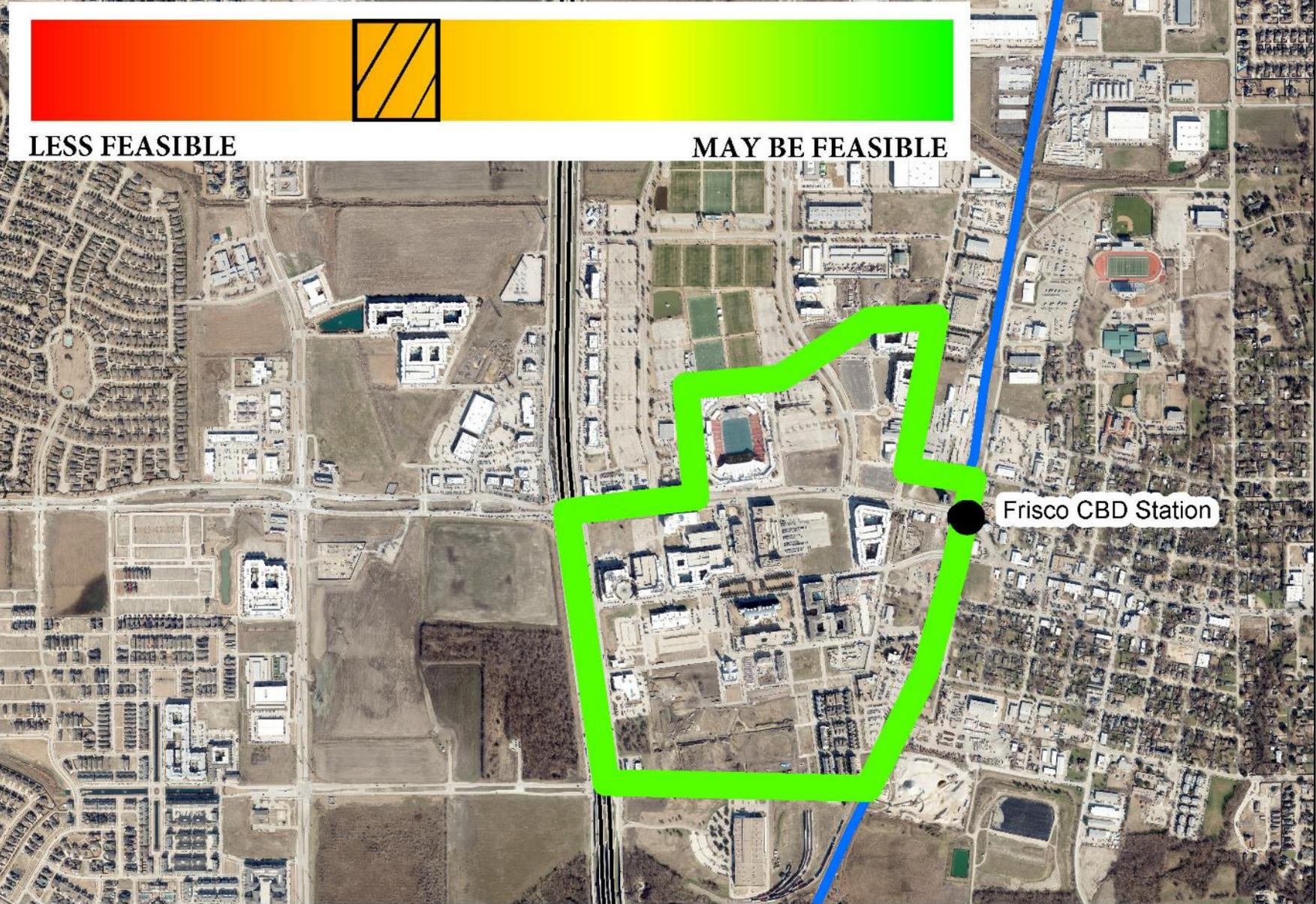
SRT Legacy Area People Mover Network



Downtown Frisco People Mover Network



Downtown Frisco People Mover Network



People Mover Feasibility Analysis Summary

HIGHER FEASIBILITY LOCATIONS	LOWER FEASIBILITY LOCATIONS
Las Colinas	Downtown Frisco
Legacy West	Legacy East
The Star/Stonebriar Center	Grandscape

- 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

Collin County Transit Study Update

- Transit Service Needs and Market Analysis
- Transit Service Development Opportunities
- Transit Scenario Costs
 - Development of Annual Operating & Maintenance Costs for each Service Scenario
- People Mover Connections Evaluations
- Initiated Development of Investment/Governance Options

Questions & Open Discussion

- Study Milestones Schedule
- Land Uses Analysis Report
- Corridor Cost Estimates
- People Mover Feasibility Analysis Results

Next Steps

- Draft Land Use Analysis Report (Part 2) to Committee
- Summarize Funding/Implementation/Governance Considerations
- Prepare Draft Final Report

Next scheduled meeting is **May 20**

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