



North Central Texas
Council of Governments



Tarrant County Transit Study

Public Meeting
March 25, 2021



North Central Texas
Council of Governments



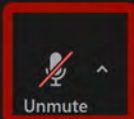
Tarrant County Transit Study

Public Meeting
March 25, 2021

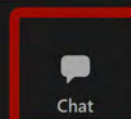
Welcome.

Please enter your name and organization in the Chat box.

Please mute your microphone.



Unmute



Chat



North Central Texas
Council of Governments

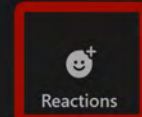


Tarrant County Transit Study

Public Meeting
March 25, 2021



Please use the
“raised hand” emoji
to let us know you have
a question.



Meeting Overview

**Introductions +
Welcome**



**Project
Overview**



**Funding
Strategies**



**Implementation
Planning**



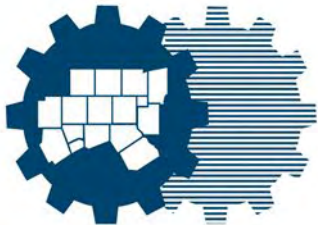
**Public Feedback
+ Next Steps**



**Open
Q&A**



Opening Remarks



**North Central Texas
Council of Governments**

Shannon Stevenson

Team Introductions

Cambridge Systematics

Kimley-Horn

CTG

Marlene Connor Associates

K Strategies

Scott Boone & Baird Bream

Ivan Gonzalez

Jim Baker

Marlene Connor

Wil Murphy & Alicia Ortega



Tarrant County Shared Mobility Scenarios

presented by

Cambridge Systematics
Connetics Transportation Group
Kimley-Horn
Marlene Connor Associates
K Strategies



**North Central Texas
Council of Governments**

March 25, 2021

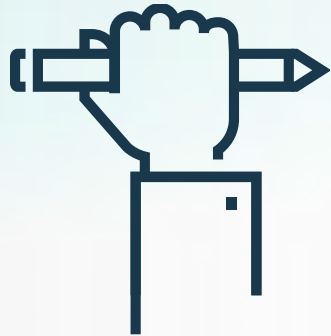
Agenda

- Team and Study Background Review (Scott Boone, CS)
- Scenario Development (Jim Baker, CTG)
 - » Baseline Assumptions
 - » Service Components
 - » Scenarios
- Funding Strategies (Ivan Gonzalez, KHA)
- Implementation Planning (Baird Bream, CS)
- Next Steps (Scott Boone, CS)
- Questions and Answers

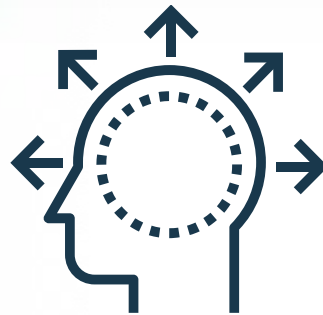


Study Purpose

Identify, analyze, prioritize and develop a comprehensive approach to planning and implementing transit services outside of transit authority services areas.



Implement Strategic and Near-Term Strategies

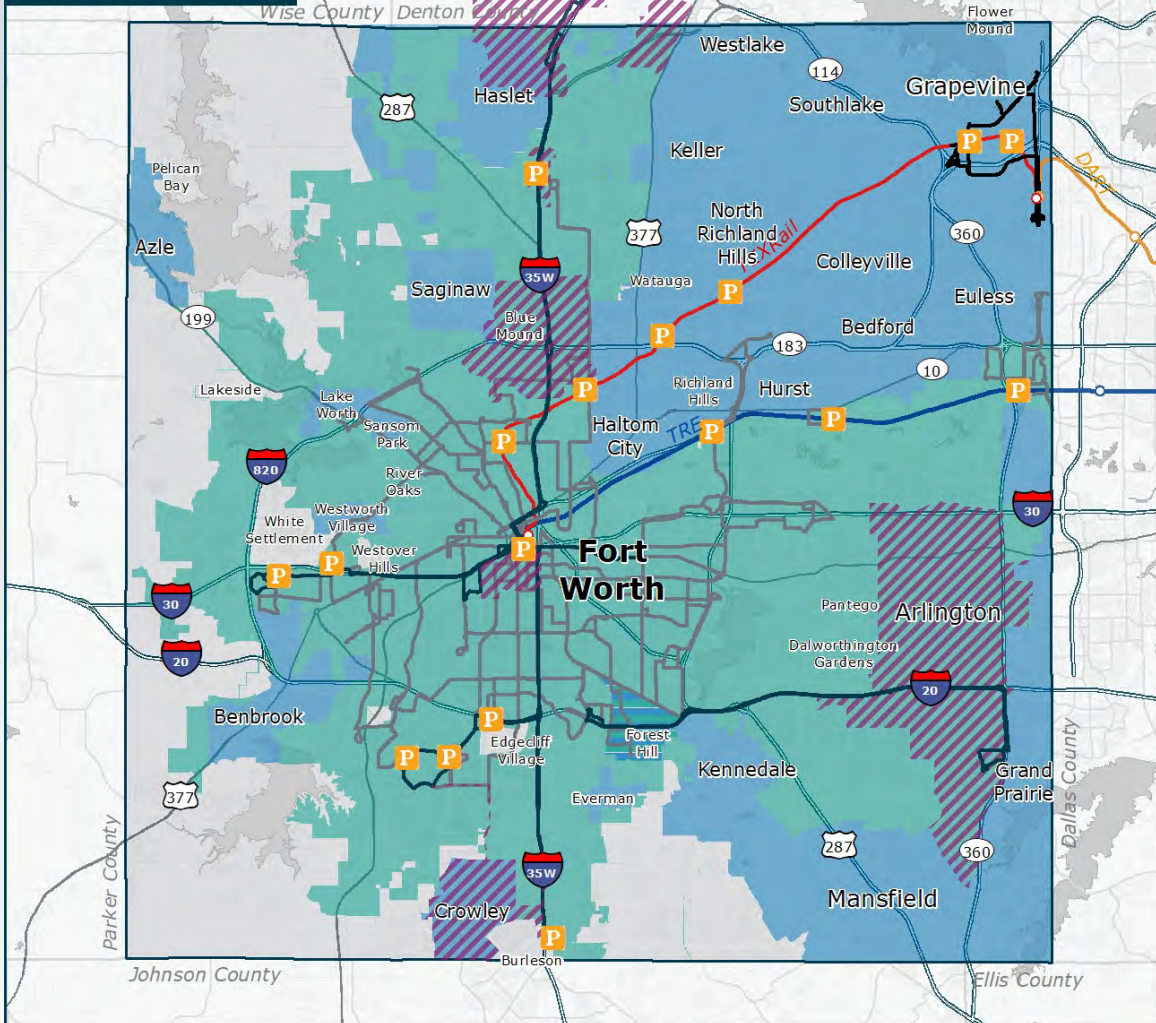


Review Transportation Options



Identify Funding Options

Tarrant County



Fixed Route Service

- Local Buses
- Express Buses
- Grapevine Shuttles
- TEXRail
- Trinity Railway Express
- P** Park and Ride

On-Demand Services

- /// On-Demand Services

Demand-Response Services

- Pre-Qualified Demand-Response Service Areas
- Paratransit Services Complementary to Fixed-Route Services
- Paratransit and Pre-Qualified Demand-Response Services
- No Demand-Response Services

Area of Focus:

- Non-Trinity Metro Service Area



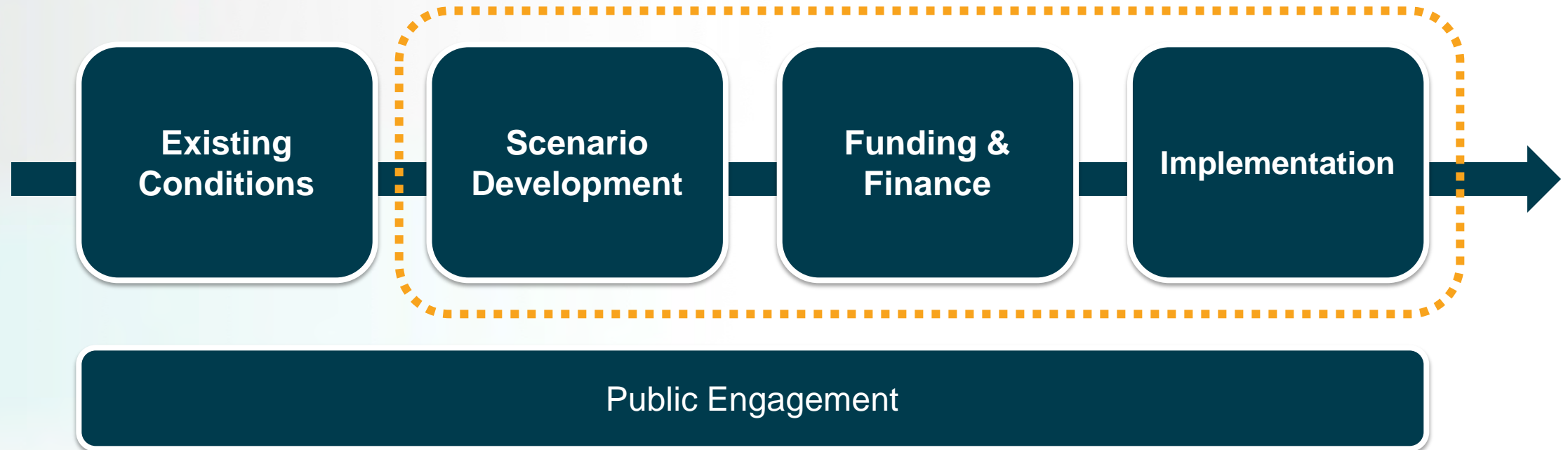
North Central Texas
Council of Governments

Study Background



Geographic Focus	NCTCOG Region	NCTCOG Region	Tarrant County (outside Trinity Metro service Area)
User Focus	All Users	Vulnerable Users	All Users
Travel Types	Car, High Intensity Bus, Commuter Rail	Bus, Demand Response, and Paratransit	Bus and Demand Response
Vision	Long Range	Short-Medium Range	Short-Medium Range

Study Progress



Study Progress

Existing Conditions

What transit and shared mobility options are currently available in Tarrant County?

Scenario Development

Based on demographics and travel patterns, what new types of shared mobility options are feasible?

Funding & Finance

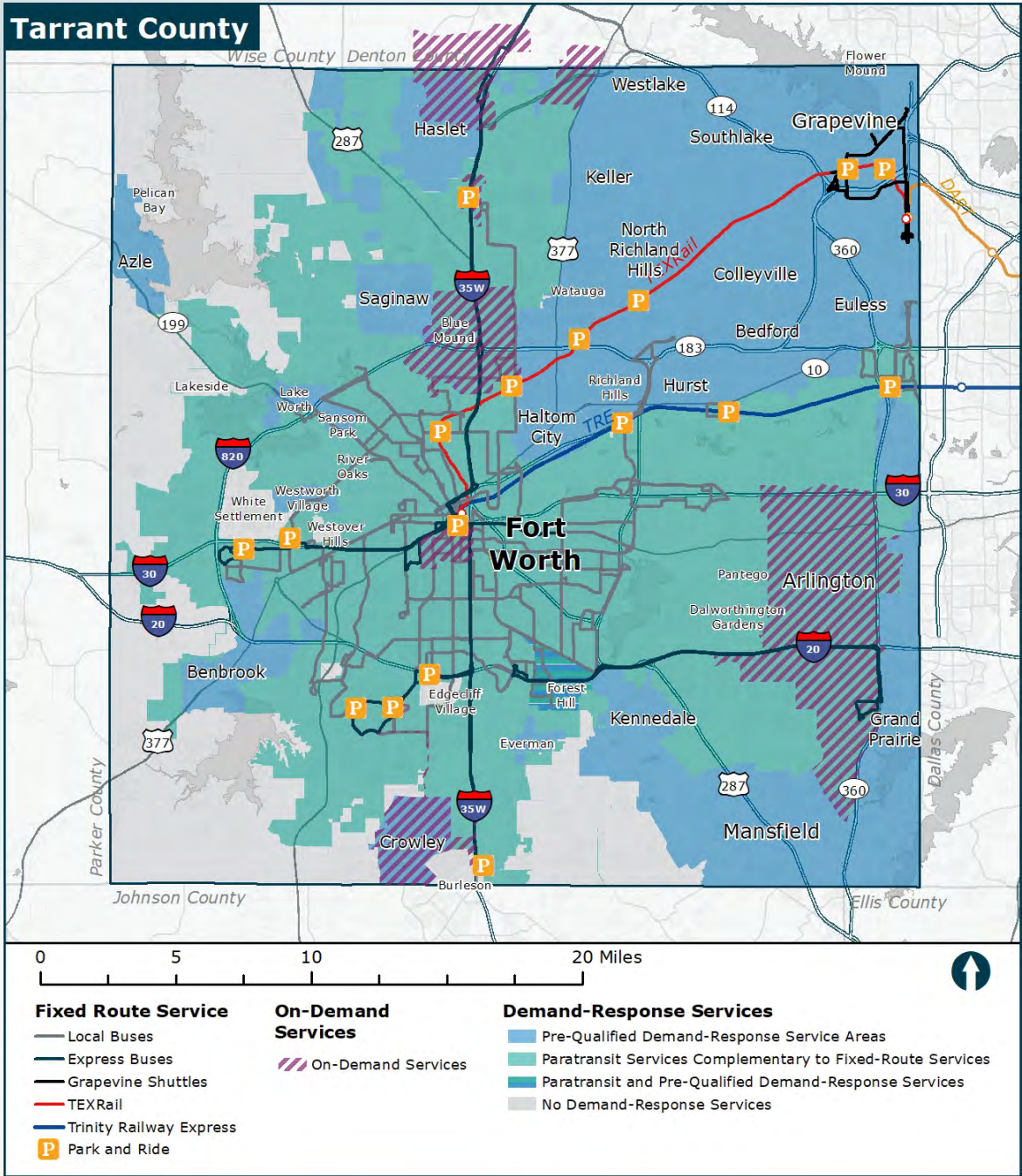
What types of funding options are available in communities not served by Trinity Metro, DCTA, or DART?

Implementation Plans

What are the next steps for communities to increase the number of shared mobility options available?

SCENARIO DEVELOPMENT AND ANALYSIS





Area of Focus:

- Non-Trinity Metro Service Area

Baseline Budget Target

- \$18.0 to \$18.5 million
- Based on current per capita Trinity Metro and Arlington Via transit expenditures



Baseline Budget Target

Upper Bound

Trinity Metro
O&M Cost per Capita
\$25.59

Lower Bound

Arlington Via
O&M Cost per Capita
\$5.48

*Adjusted based on
density factors. Costs in
2021\$.*



Total Tarrant
County Unserved
Population &
Employment
1,200,000









Target Annual
Budget
\$18.5 M
Annual per
Pop+Emp
\$15.54

*Average of upper and
lower bounds. Costs
in 2021\$.*

Scenario Development

- **Local Priorities** (served by local fixed-route, circulators, on-demand modes)
 - » Population / Employment Density
 - » Transportation Disadvantaged Communities
- **Regional Priorities** (served by regional & commuter express modes)
 - » Employment Density
 - » Key Activity Centers
 - » Regional Trip Flows



Tarrant County Transit Study Service Type	Purpose	Local Examples
Local Mobility-On-Demand 	Connects lower-density areas; can provide connections to rail or express services 	ZipZones, Via, GoLink
Local Fixed-Route 	Connects close medium-density areas, for all trip purposes 	Trinity Metro local routes
Regional Fixed-Route 	Connects far-apart medium-density areas, especially job centers 	Trinity Metro express routes

LOCAL SERVICE



Local Services Needs Approach

Categorize transit service needs potential based on:



Population and employment densities



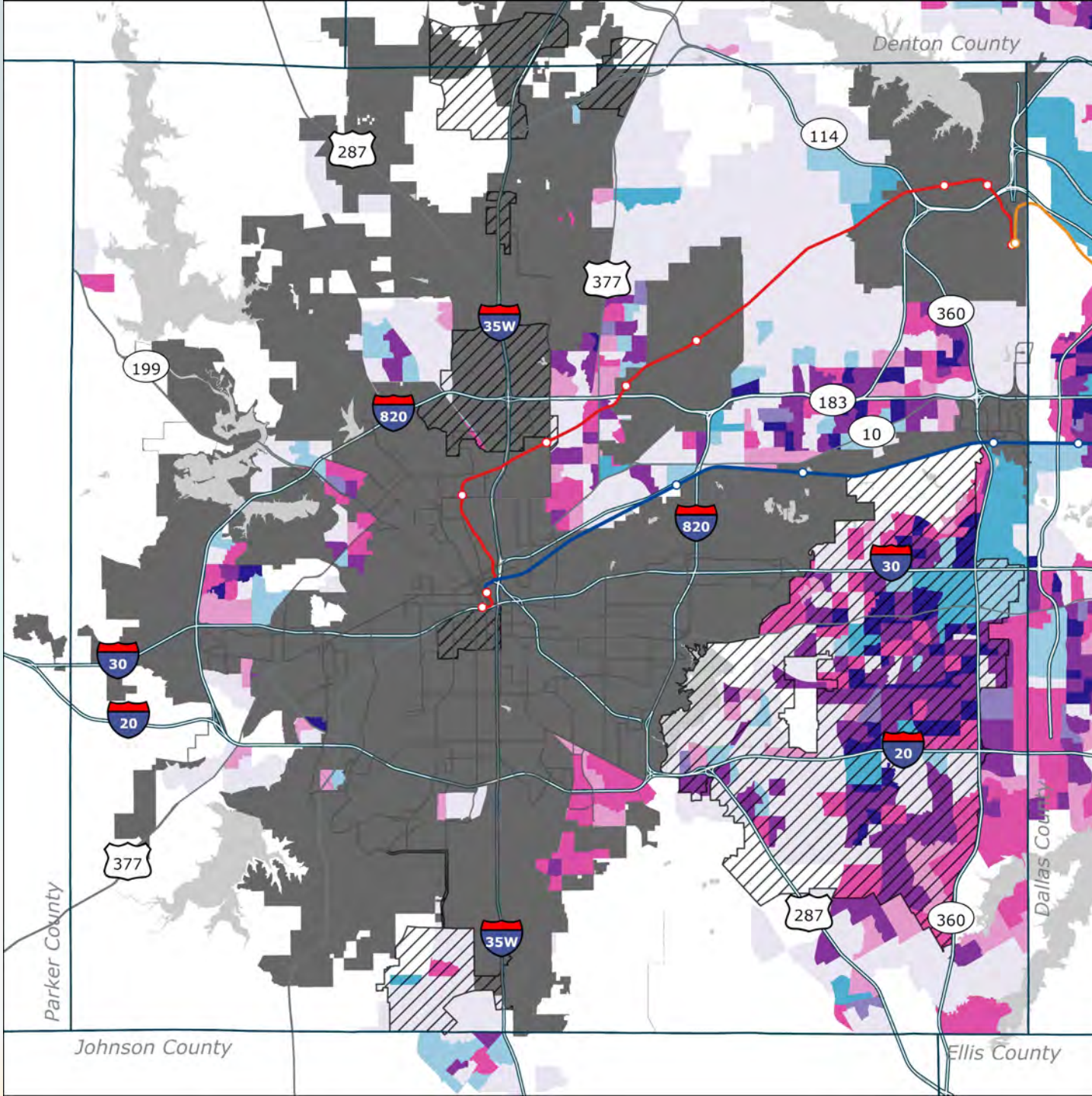
Equity population (minority population and low-income household) densities

Local Services Needs Approach

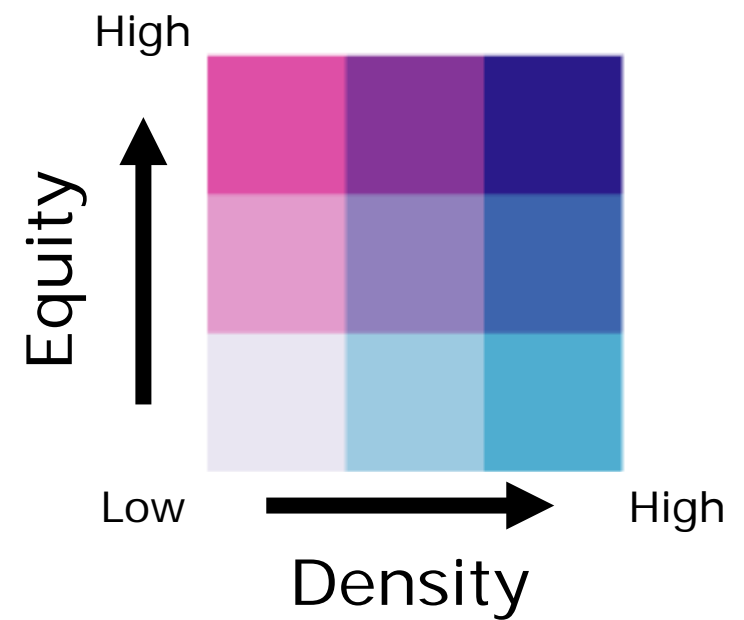
*Highest priority focus is on **high density areas** currently not served by transit*



Combined Population and Employment Density Characteristics

- Tarrant County Average: 5 per acre
- Unincorporated areas: <1 per acre
- White Settlement, Watauga, Bedford: >10 per acre



Composite Needs Assessment



-  Existing MOD Zones
-  Existing Service Area

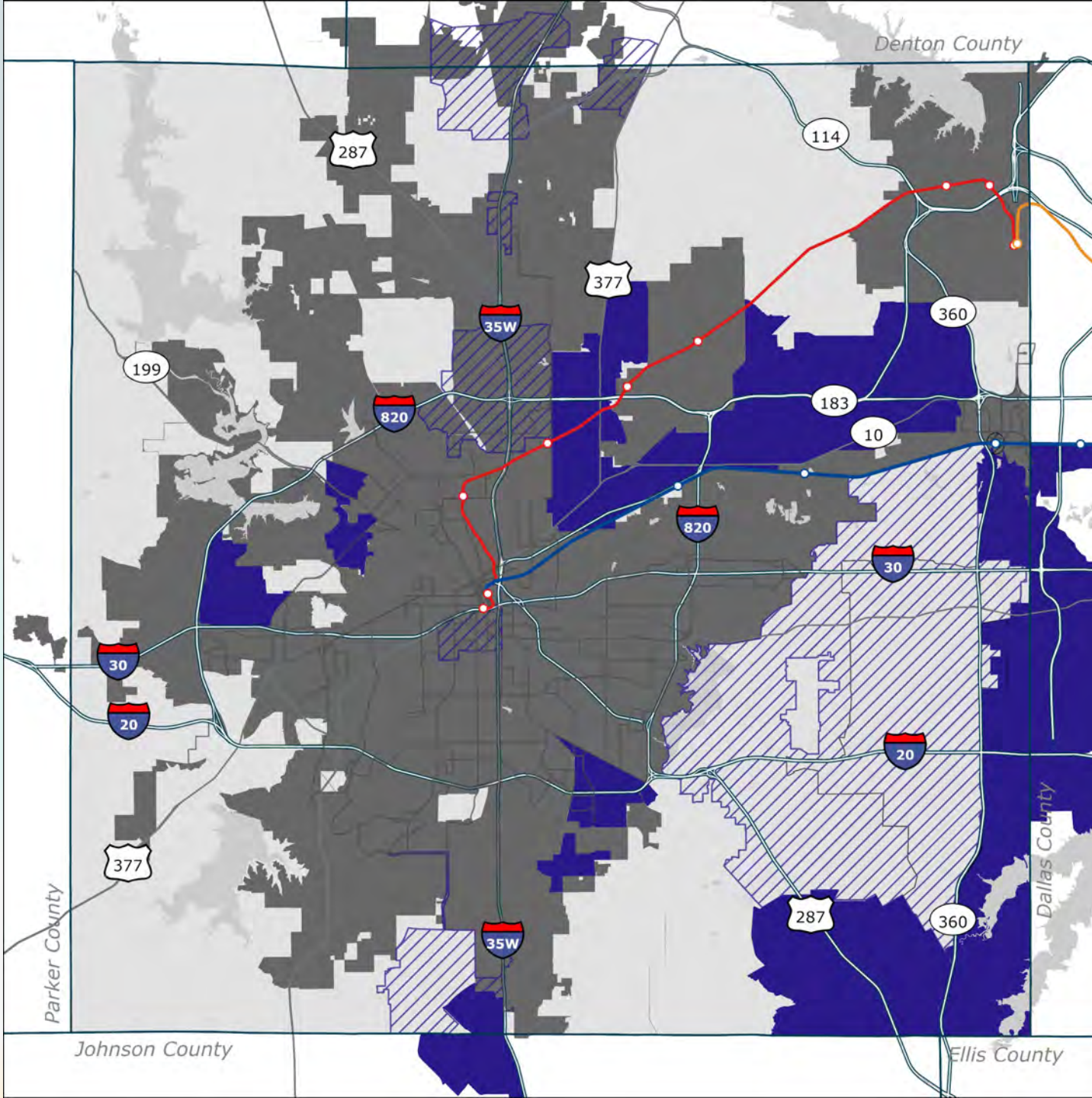
High Service Needs

- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

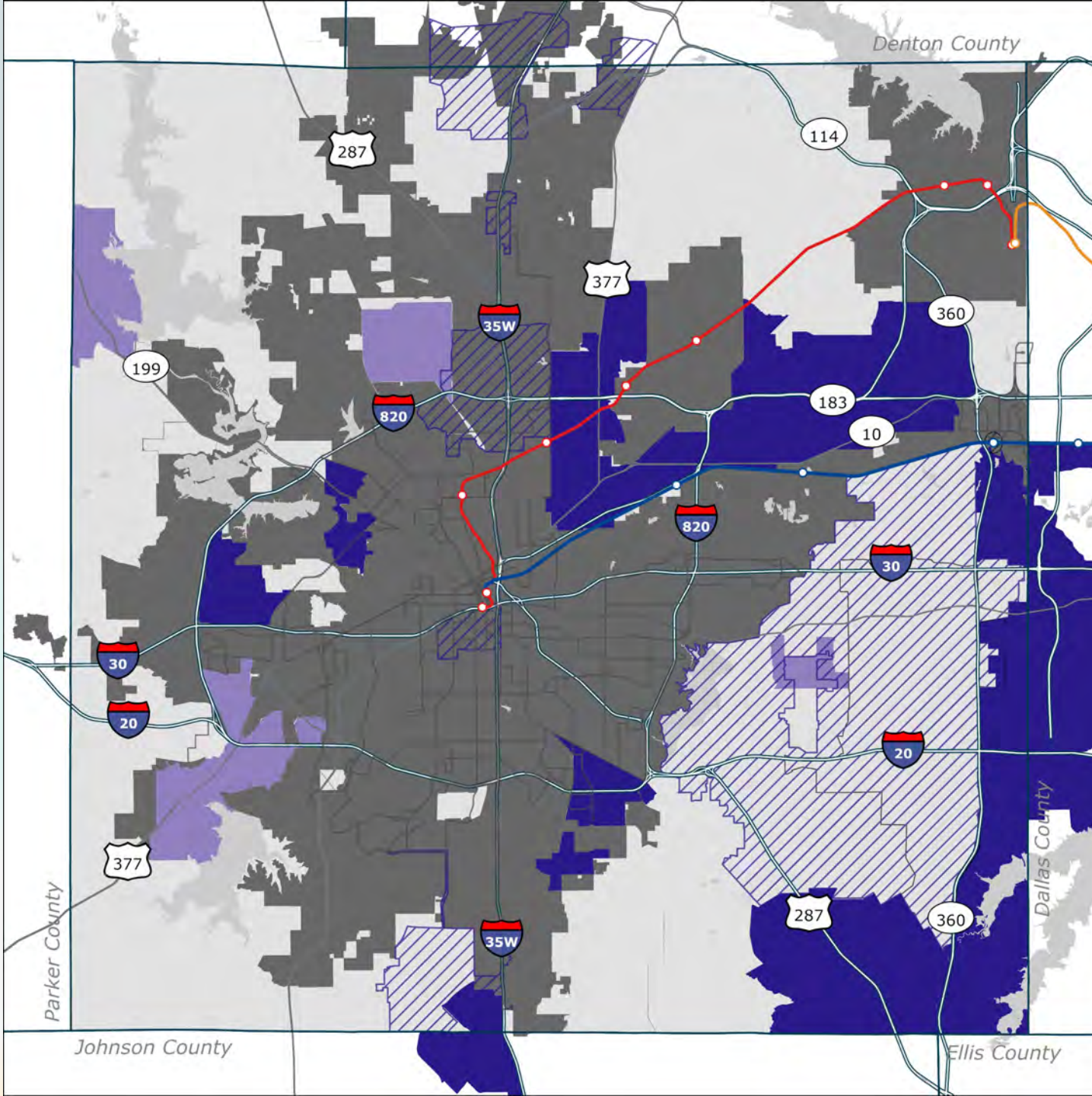
 Existing MOD Zones

 Existing Svc. Area

 Does Not Meet Threshold



High + Medium Service Needs



HIGH NEEDS

- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

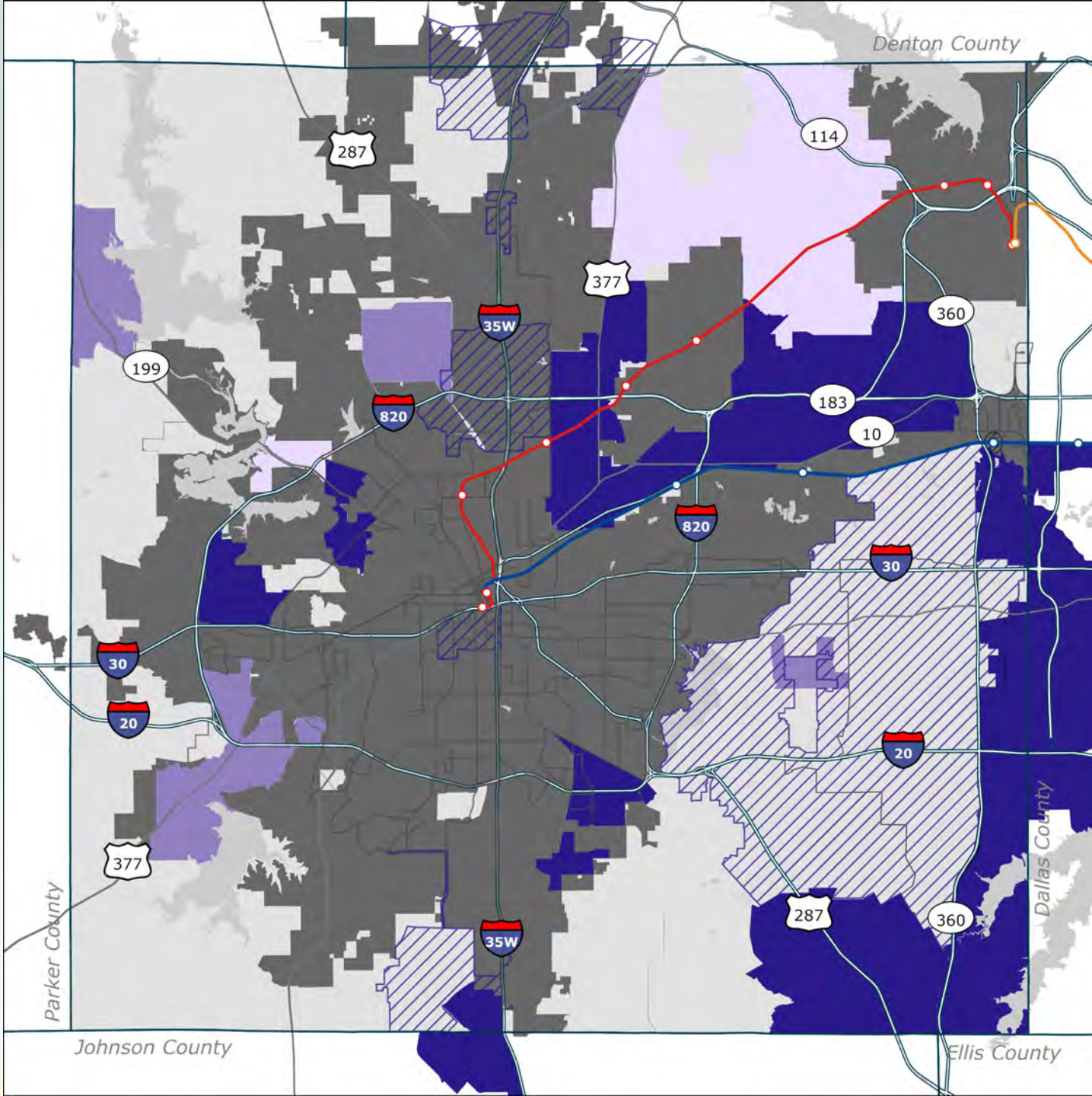
MEDIUM NEEDS

- Azle
- Benbrook
- Pantego
- Saginaw

 Existing MOD Zones

 Existing Svc. Area

 Does Not Meet Threshold



High + Medium + Low Service Needs

HIGH NEEDS

- Bedford
- Burleson
- Euless
- Everman
- Forest Hill
- Grand Prairie
- Haltom City
- Hurst
- Mansfield
- Richland Hills
- River Oaks
- Sansom Park
- Watauga
- White Settlement

MEDIUM NEEDS

- Azle
- Benbrook
- Pantego
- Saginaw

LOW NEEDS

- Colleyville
- Keller
- Lake Worth
- Southlake

 Existing MOD Zones

 Existing Svc. Area

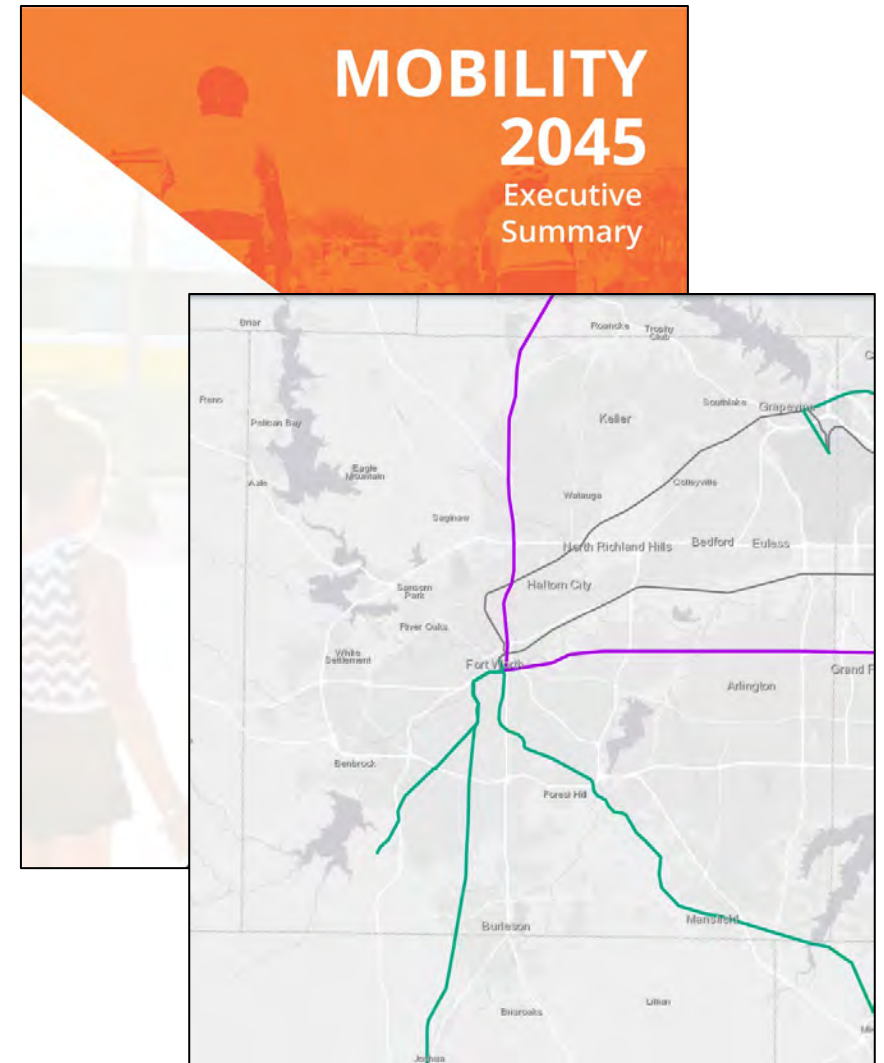
 Does Not Meet Threshold

REGIONAL SERVICE

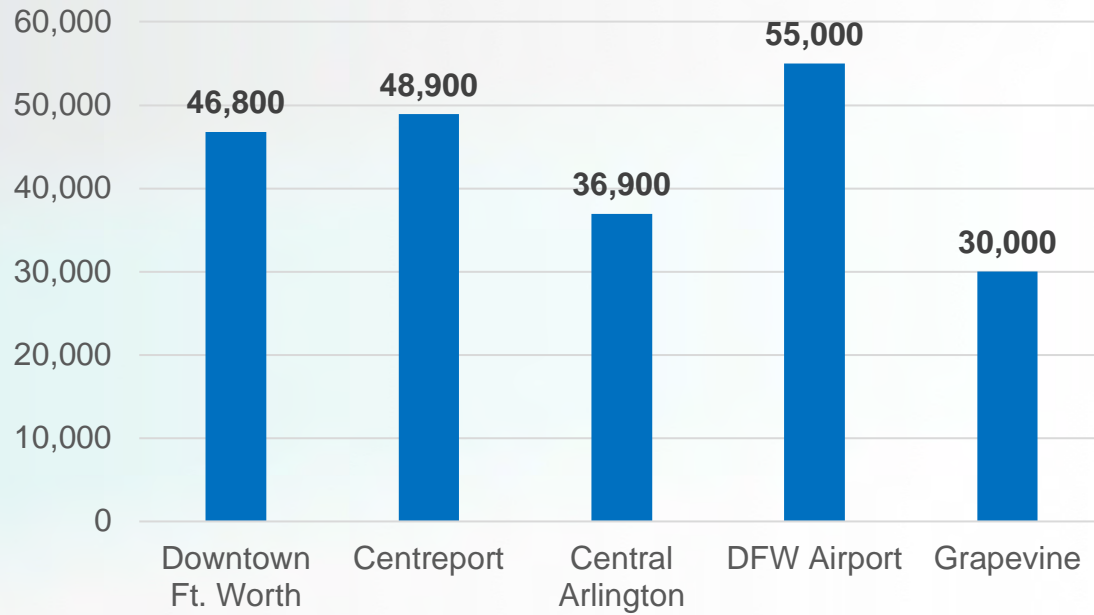


Regional Service Needs

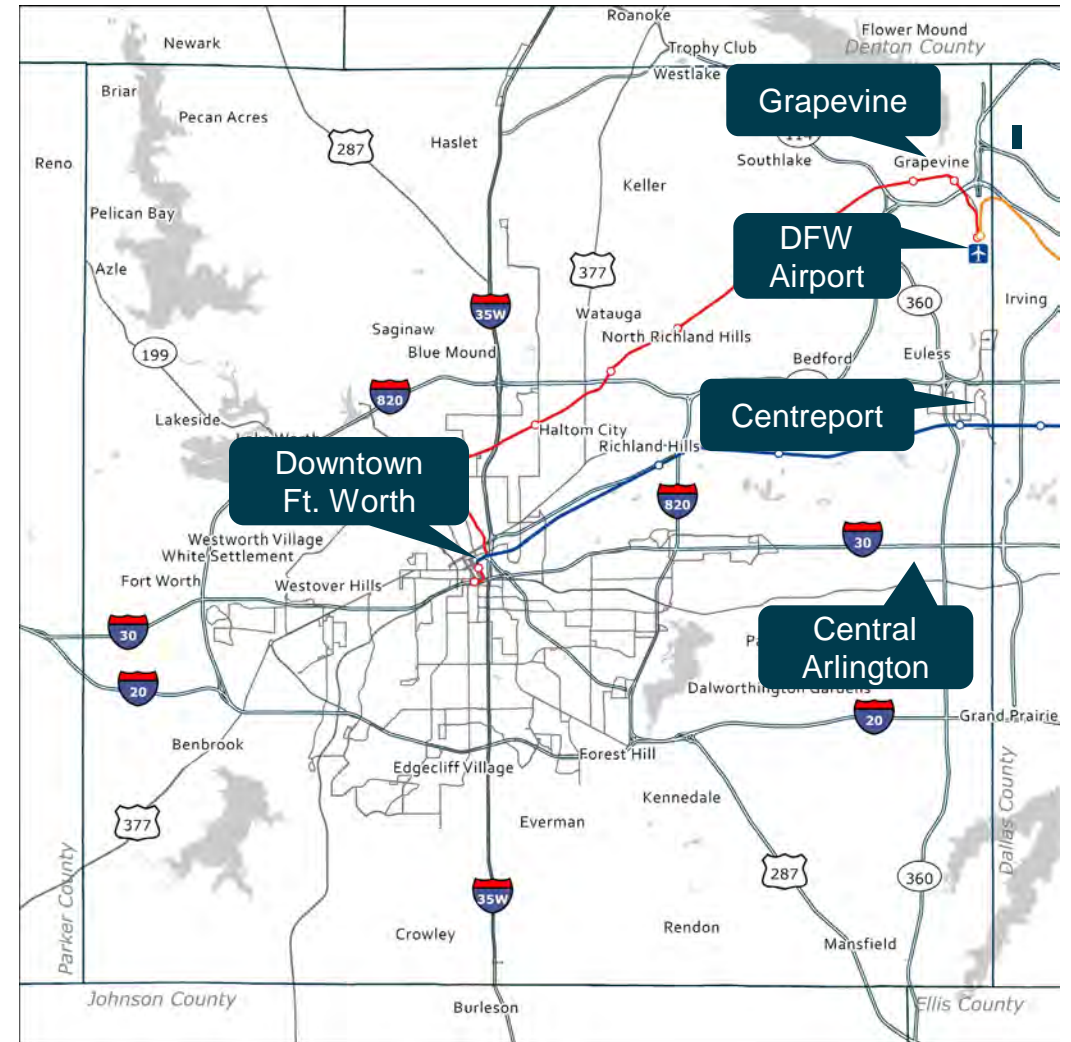
- Mobility 2045 Rail Corridors
 - Mansfield to Fort Worth
 - Southwest TexRail
 - Cleburne Line to Fort Worth
- Mobility 2045 High Intensity Bus Corridors
 - IH30 from Fort Worth to Dallas
 - IH35W from Fort Worth to Denton



Major Tarrant County Employment Centers

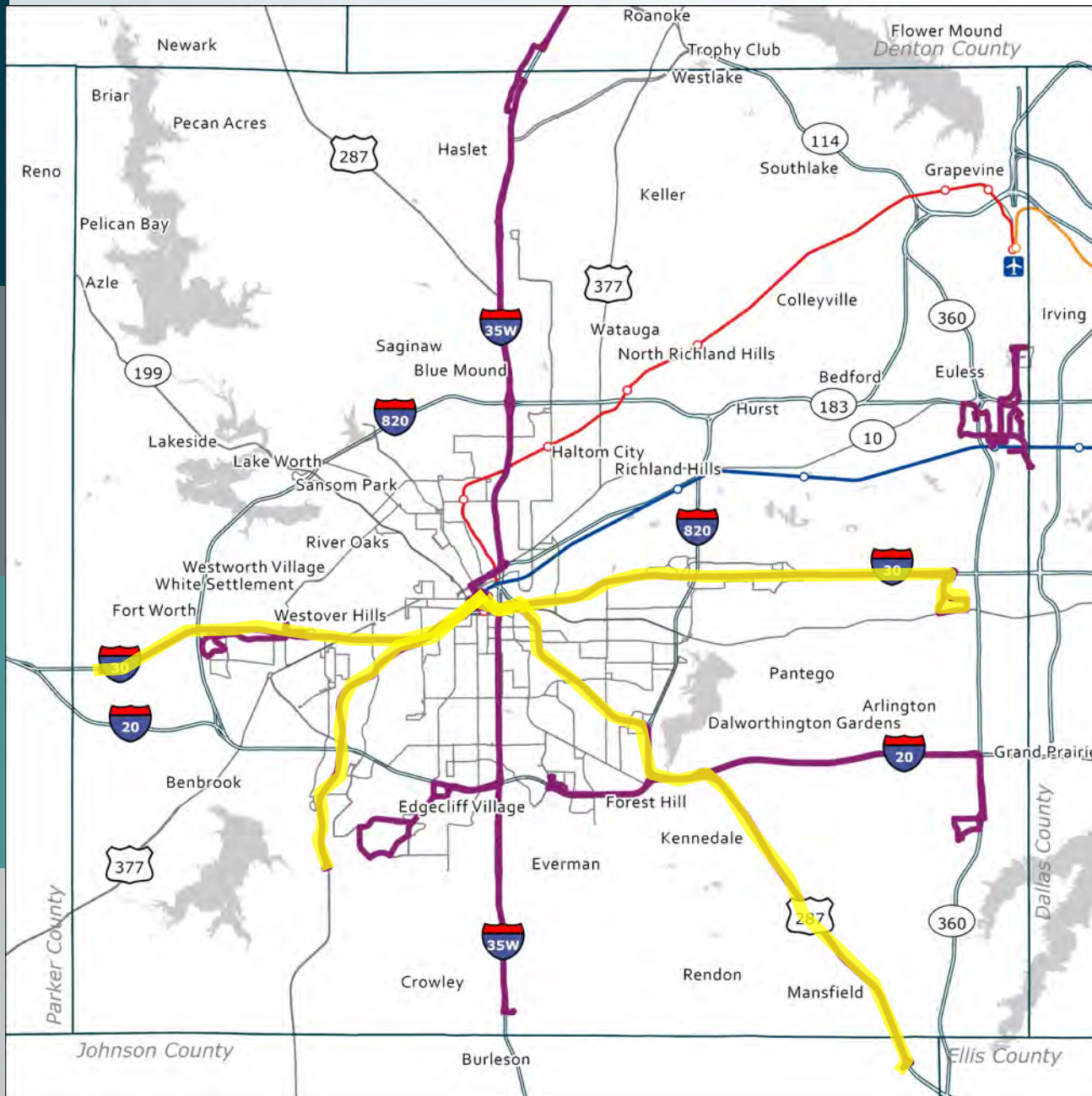


Jobs estimates from Remix



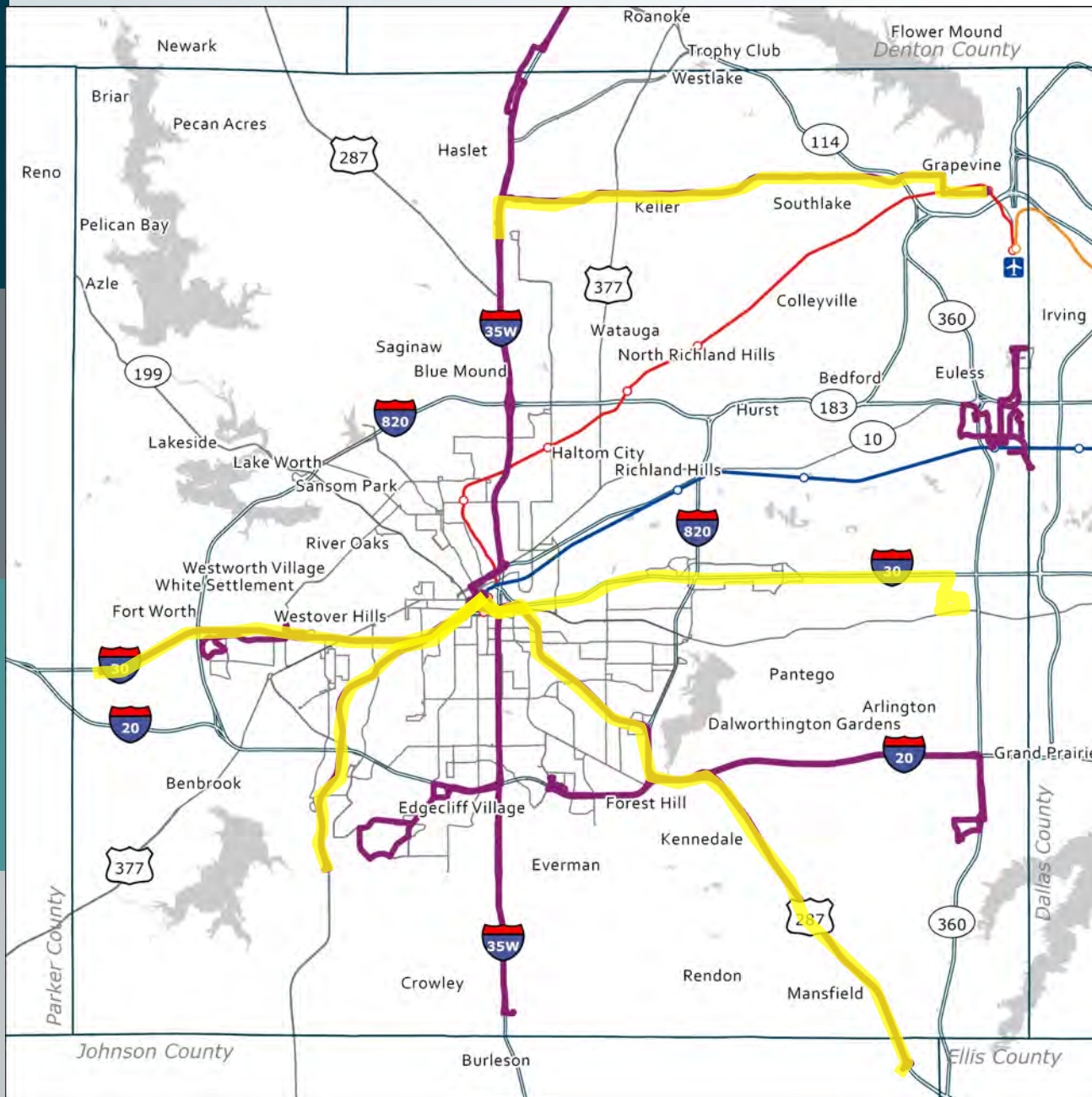
High Service Needs Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth



Proposed new regional routes highlighted in **yellow**

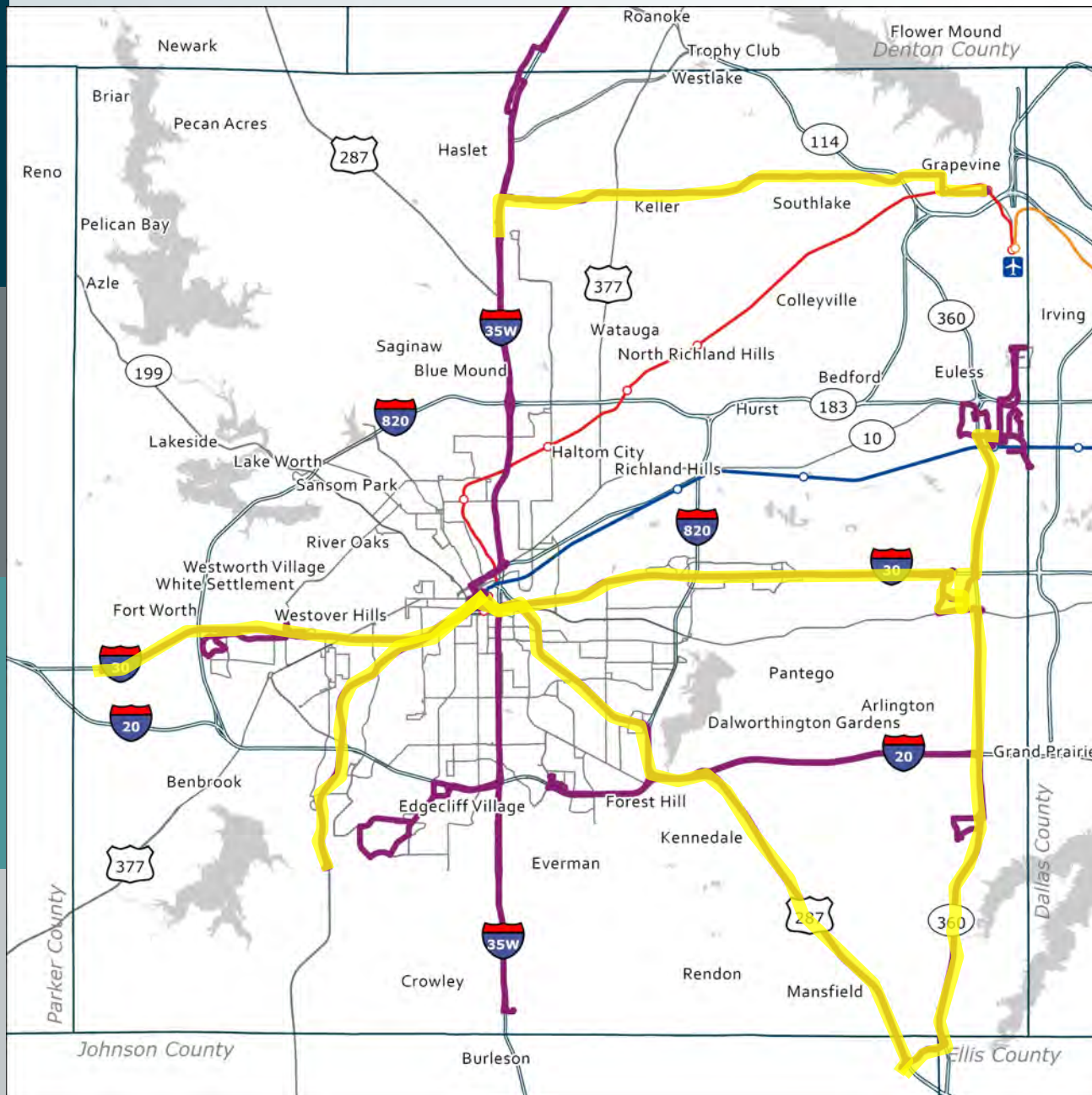




High + Medium Service Needs Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth
- North Tarrant-Keller-Grapevine

Proposed new regional routes highlighted in **yellow**



Proposed new regional routes highlighted in **yellow**

High + Medium + Low Service Needs Regional Service Expansion

- Mansfield-Fort Worth
- SW Tarrant-Fort Worth
- West Tarrant-Fort Worth
- Arlington-Fort Worth
- North Tarrant-Keller-Grapevine
- Mansfield-Arlington-Centreport

- **Scenario 1**

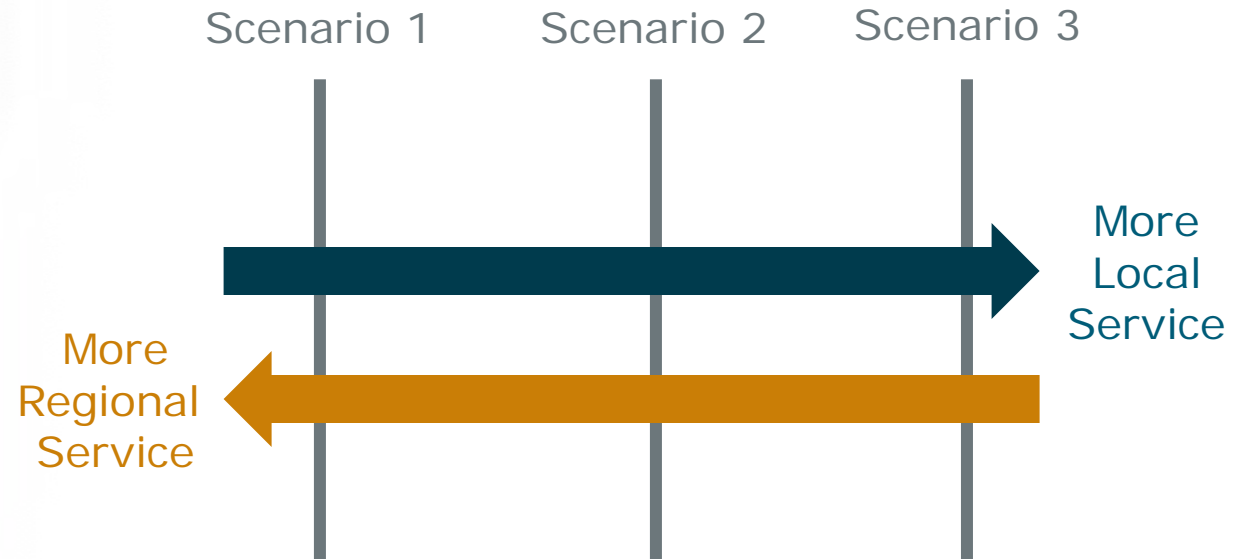
- **Local:** High Service Needs
- **Regional:** High + Medium + Low Service Needs

- **Scenario 2**

- **Local:** High + Medium Service Needs
- **Regional:** High + Medium Service Needs

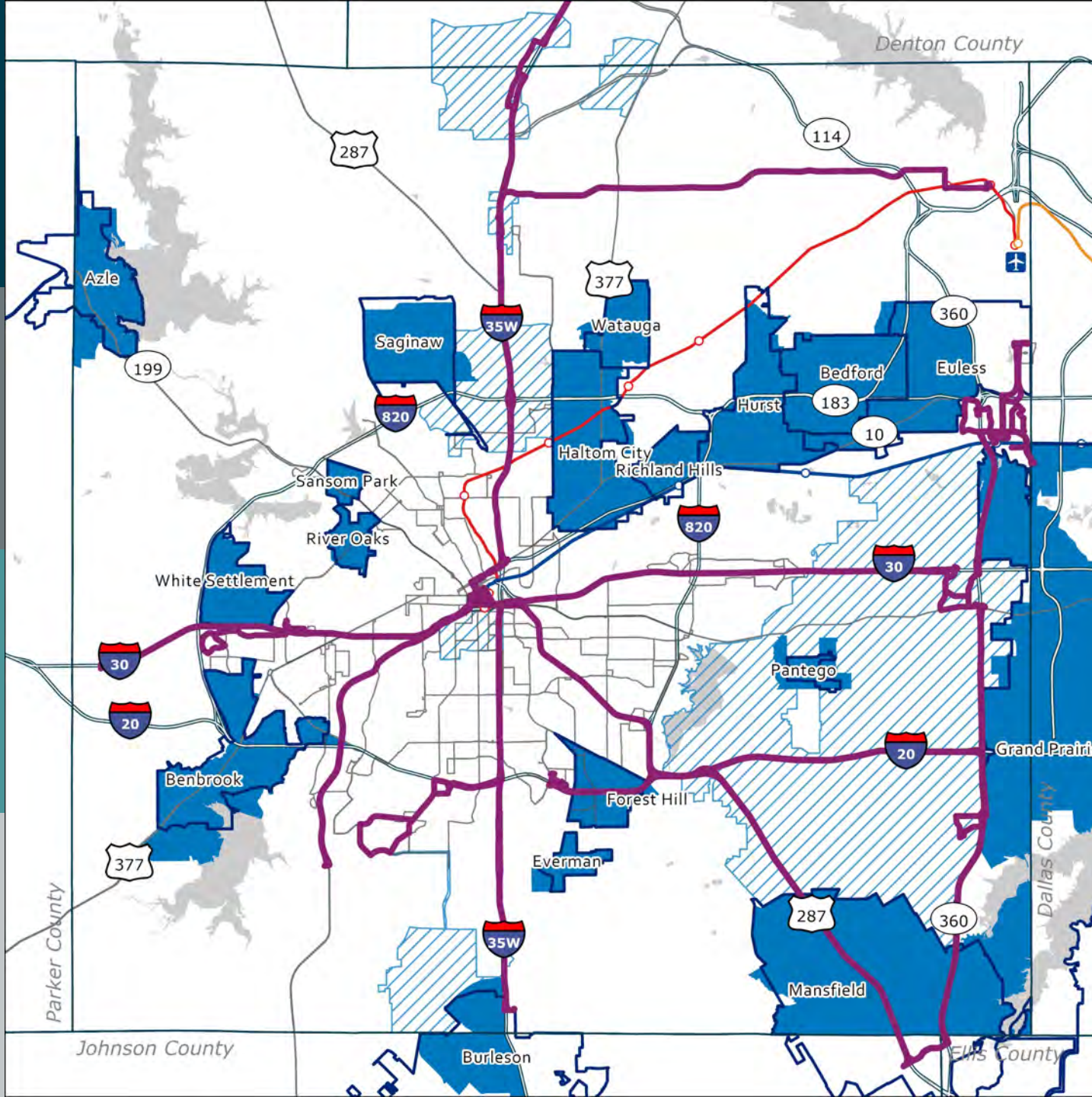
- **Scenario 3**

- **Local:** High + Medium + Low Service Needs
- **Regional:** High Service Needs



FINAL DRAFT SCENARIOS









Scenario 1

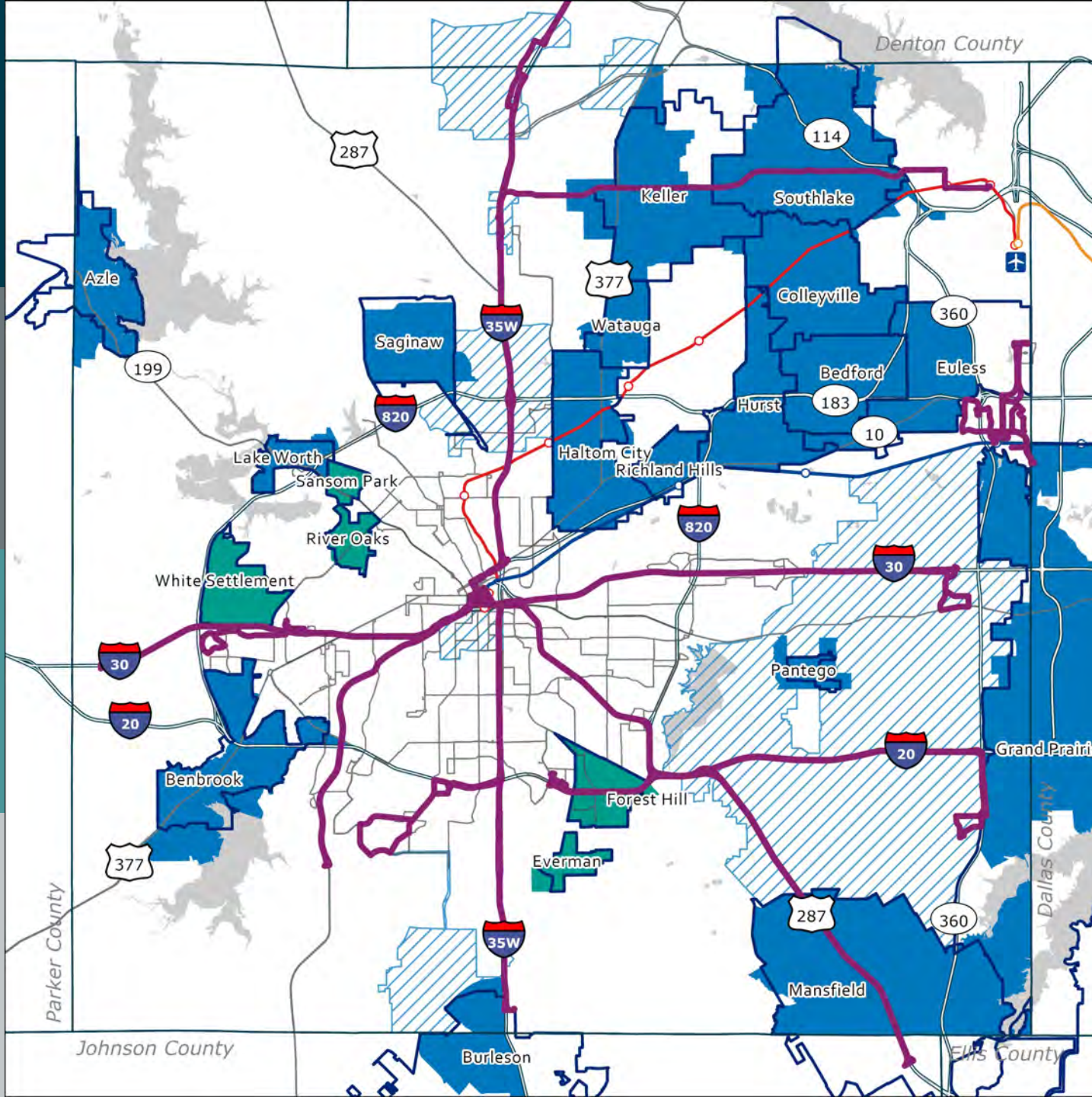
Service Type	Hours	% of Total
Local	245,000	88%
Regional	34,300	12%
Total	279,300	100%

Approx. Cost = \$18.1 million
(74% local/26% regional)

-  On-Demand
-  Existing MOD Zones
-  Fixed-Route + On-Demand
-  Regional



North Central Texas
Council of Governments



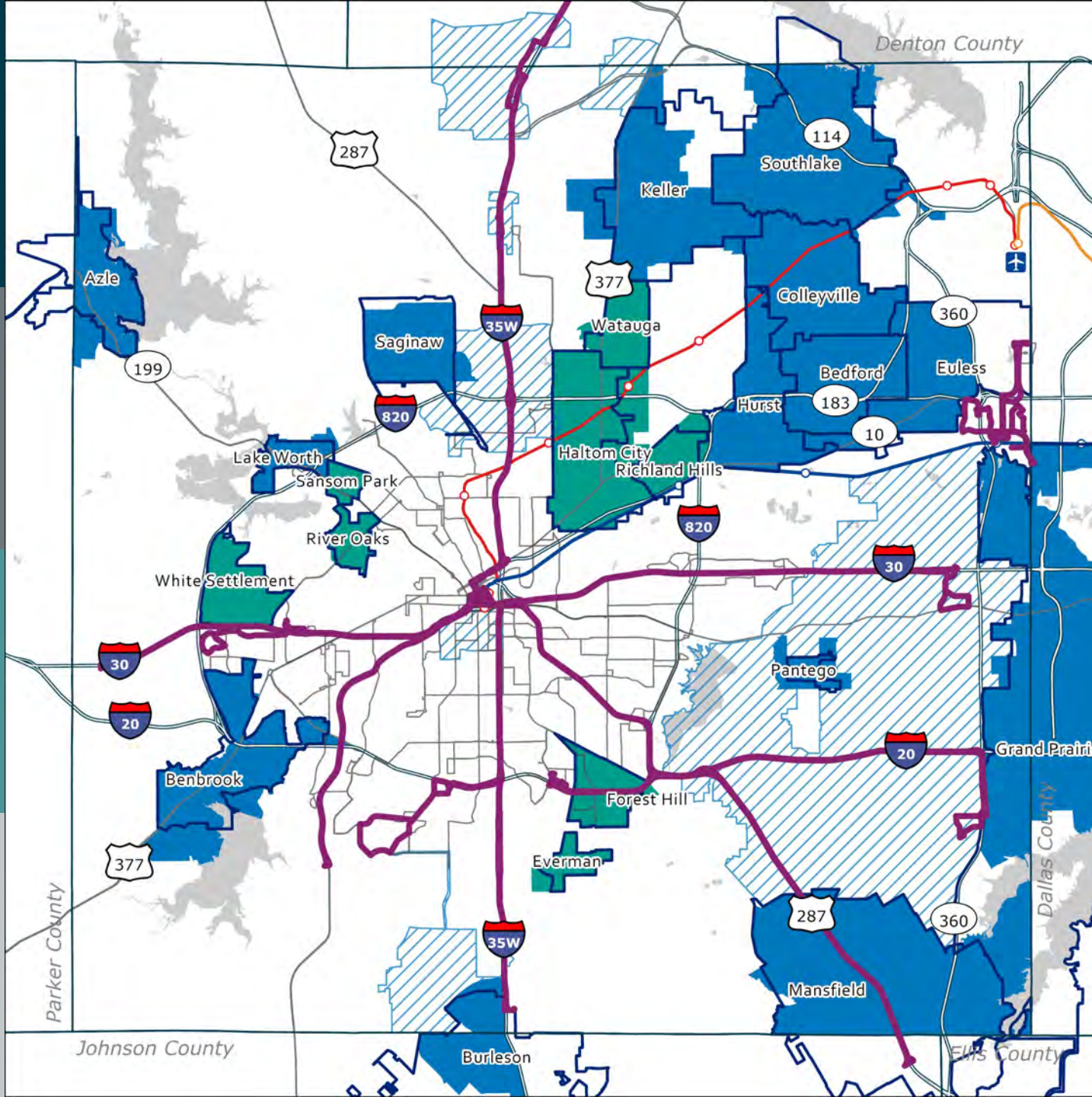
Scenario 2

Service Type	Hours	% of Total
Local	271,100	92%
Regional	24,100	8%
Total	295,200	100%

Approx. Cost = \$18.4 million
(82% local/18% regional)

- On-Demand
- Existing MOD Zones
- Fixed-Route + On-Demand
- Regional





Scenario 3

Service Type	Hours	% of Total
Local	276,100	94%
Regional	16,100	6%
Total	292,200	100%

Approx. Cost = \$18.3 million
(88% local/12% regional)

- On-Demand
- Existing MOD Zones
- Fixed-Route + On-Demand
- Regional



North Central Texas
Council of Governments

City	Scenario 1	Scenario 2	Scenario 3
Arlington	Regional	Regional	Regional
Azle	On-Demand	On-Demand	On-Demand
Bedford	On-Demand	On-Demand	On-Demand
Benbrook	On-Demand	On-Demand	On-Demand
Burleson	On-Demand	On-Demand	On-Demand
Colleyville	--	On-Demand	On-Demand
Eules	On-Demand	On-Demand	On-Demand
Everman	On-Demand	On-Demand Fixed Route	On-Demand Fixed Route
Forest Hill	On-Demand	On-Demand Fixed Route	On-Demand Fixed Route
Fort Worth	Regional	Regional	Regional
Grapevine	Regional	Regional	--
Grand Prairie	On-Demand Regional	On-Demand --	On-Demand --
Haltom City	On-Demand	On-Demand	On-Demand Fixed Route
Hurst	On-Demand	On-Demand	On-Demand
Keller	-- Regional	On-Demand Regional	On-Demand --
Lake Worth	--	On-Demand	On-Demand
Mansfield	On-Demand Regional	On-Demand Regional	On-Demand Regional
Pantego	On-Demand	On-Demand	On-Demand
Richland Hills	On-Demand	On-Demand	On-Demand Fixed Route
River Oaks	On-Demand	On-Demand Fixed Route	On-Demand Fixed Route
Saginaw	On-Demand	On-Demand	On-Demand
Sansom Park	On-Demand	On-Demand Fixed Route	On-Demand Fixed Route
Southlake	-- Regional	On-Demand Regional	On-Demand --
Watauga	On-Demand	On-Demand	On-Demand Fixed Route
White Settlement	On-Demand	On-Demand Fixed Route	On-Demand Fixed Route

Service Recommendations by Scenario

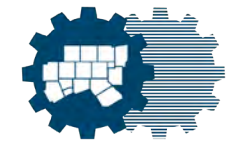
On-Demand



Fixed Route



Regional



North Central Texas Council of Governments

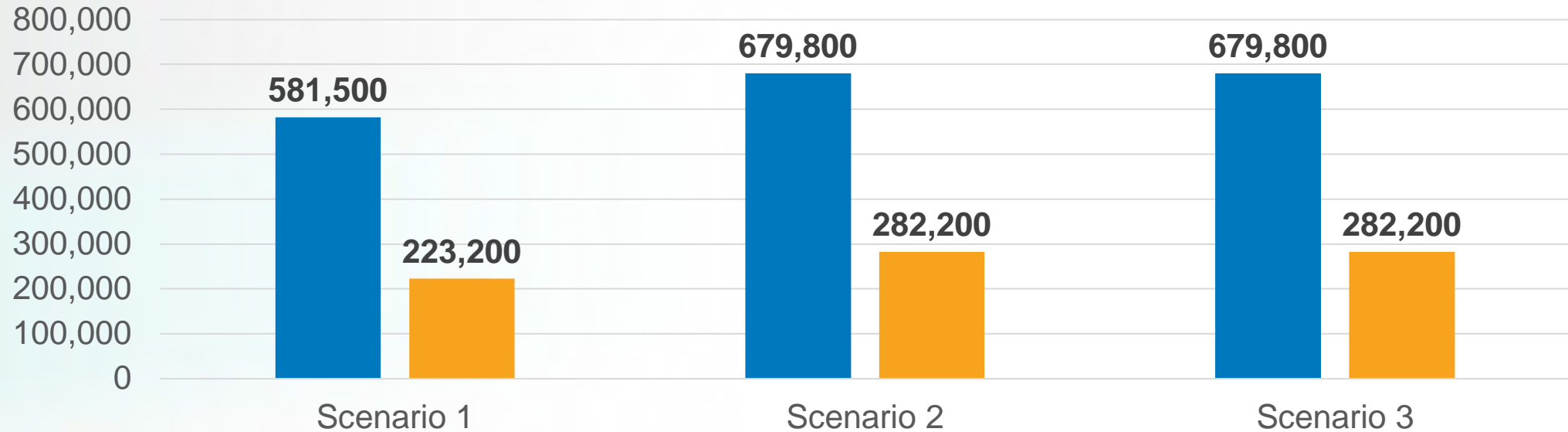
SCENARIO COMPARISONS



Performance Measure	Question Answered	Measurement Used
Accessibility	Where are routes and services located?	Population near transit
		Jobs near transit
Coverage	How well do routes and services reflect trip patterns?	Percent of trips completable (start to finish) on transit
Usage	How many people might use the service?	Estimated ridership
Equity	Are trips made by equity groups well-represented?	Percent of equity groups in access and coverage metrics

Performance Measure	Measurement Used	Data Source
Accessibility	Population near transit	ReMix; derived from American Community Survey
	Jobs near transit	ReMix; derived from LEHD
Coverage	Percent of trips (start to finish) completable on transit	Location-based services data
Usage	Estimated ridership	NCTCOG Model & Pilot Programs
Equity	Percent of equity groups in access and coverage metrics	Location-based services data

Mobility on Demand Zone New Accessibility



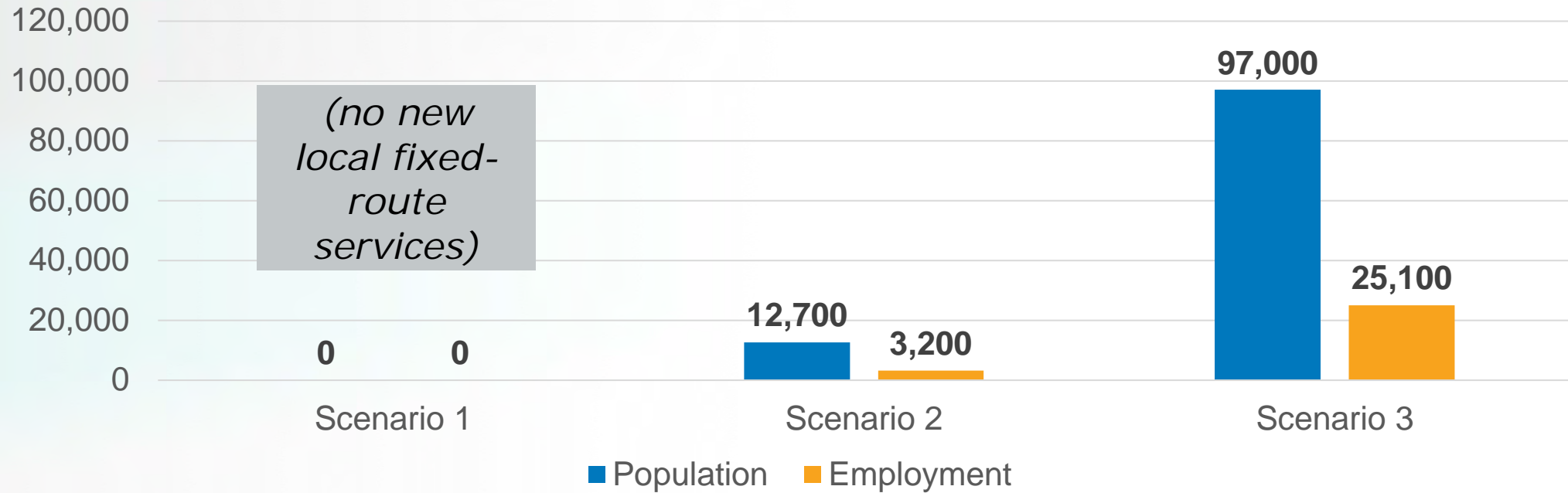
■ Population ■ Employment

(74% local/26% regional)

(82% local/18% regional)

(88% local/12% regional)

Local Fixed Route New Accessibility

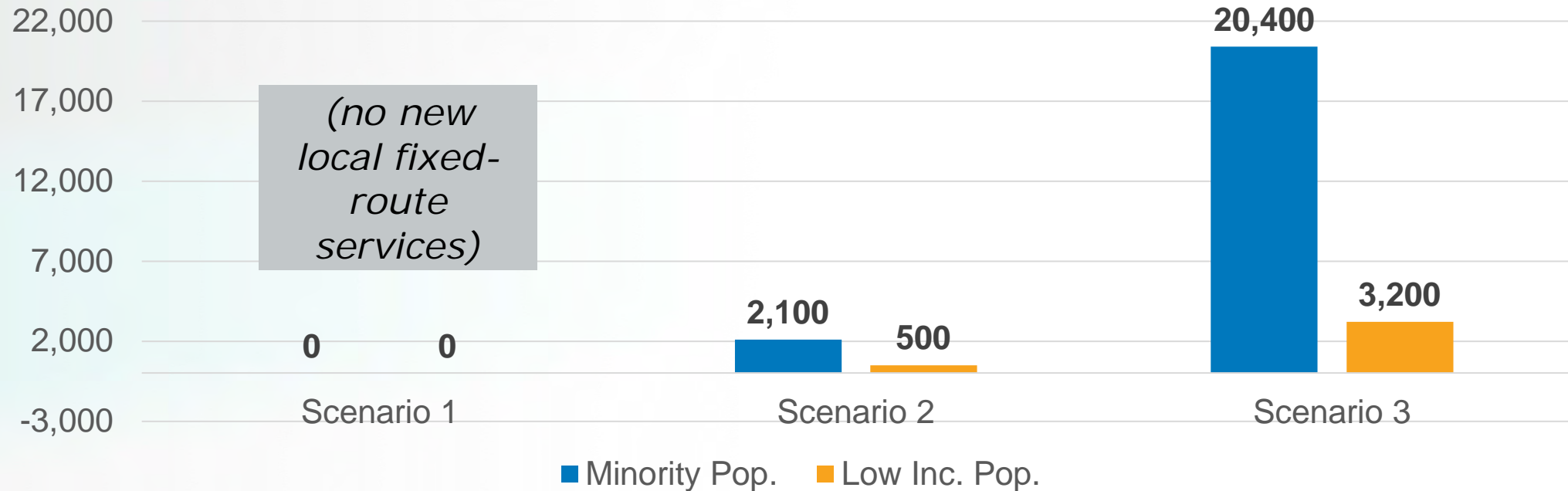


(74% local/26% regional)

(82% local/18% regional)

(88% local/12% regional)

Local Fixed Route Transit New Equity Accessibility



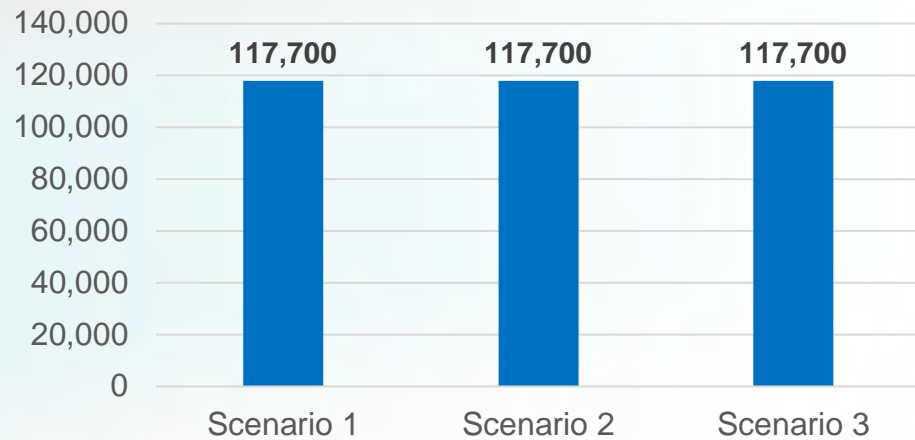
(74% local/26% regional)

(82% local/18% regional)

(88% local/12% regional)

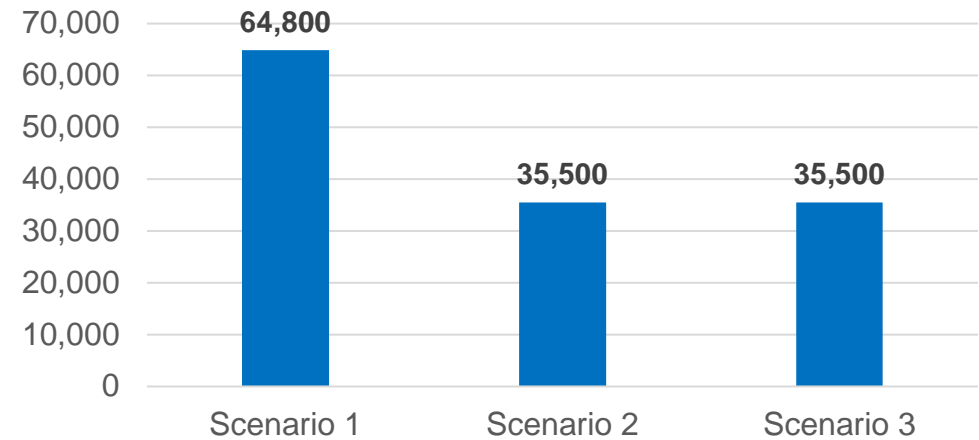
Regional Employment Center Accessibility

New Express Service Access to Downtown Ft. Worth (46,800 jobs)



Existing Population with Express Transit Service Accessibility = 482,000

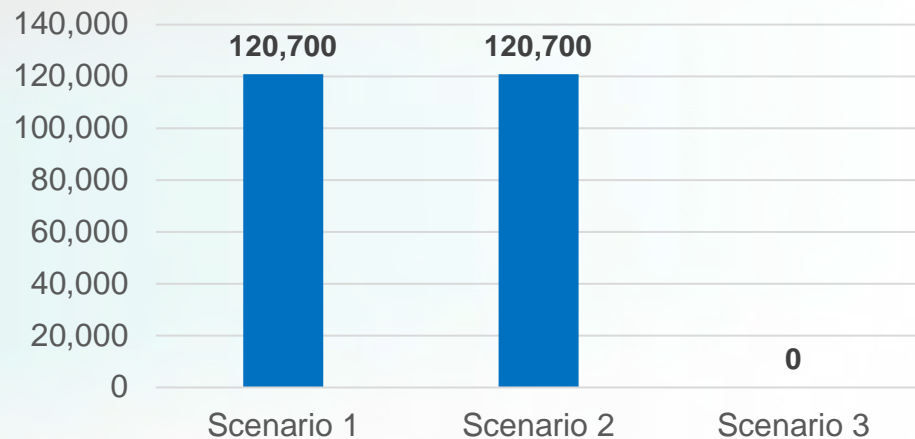
New Express Service Access to Central Arlington (36,900 jobs)



Existing Population with Express Transit Service Accessibility = 0

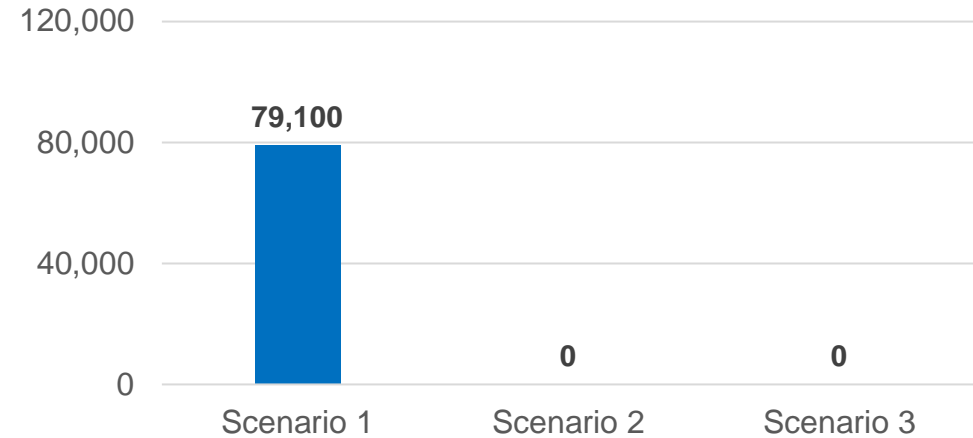
Regional Employment Center Accessibility

New Express Service Access to DFW Airport (55,000 jobs)



Existing Population with Express Transit Service Accessibility = 205,400

New Express Service Access to Centreport (48,900 jobs)



Existing Population with Express Transit Service Accessibility = 97,400

Other key performance metrics:

Of all the trips taken from a region, how many can be taken on proposed fixed route and shared mobility services?

Of all the trips taken by equity groups, how many can be taken on proposed fixed route and shared mobility services?

How many people do we expect to use the new services?

Demand Response

Local Fixed Route

Express Fixed Route

Other key contexts:

What is the **purpose** of the service?

To enhance access?
Equity?
Economic development?



How well do these services **connect** to existing and future regional transit options?



How well do these services provide **right-sized** options to non-urban areas of Tarrant County?



FUNDING AND FINANCE



Funding and Finance

What types of services make sense for local needs? What partnerships are needed?



What funding mechanisms are available to pay for transit and shared mobility services?



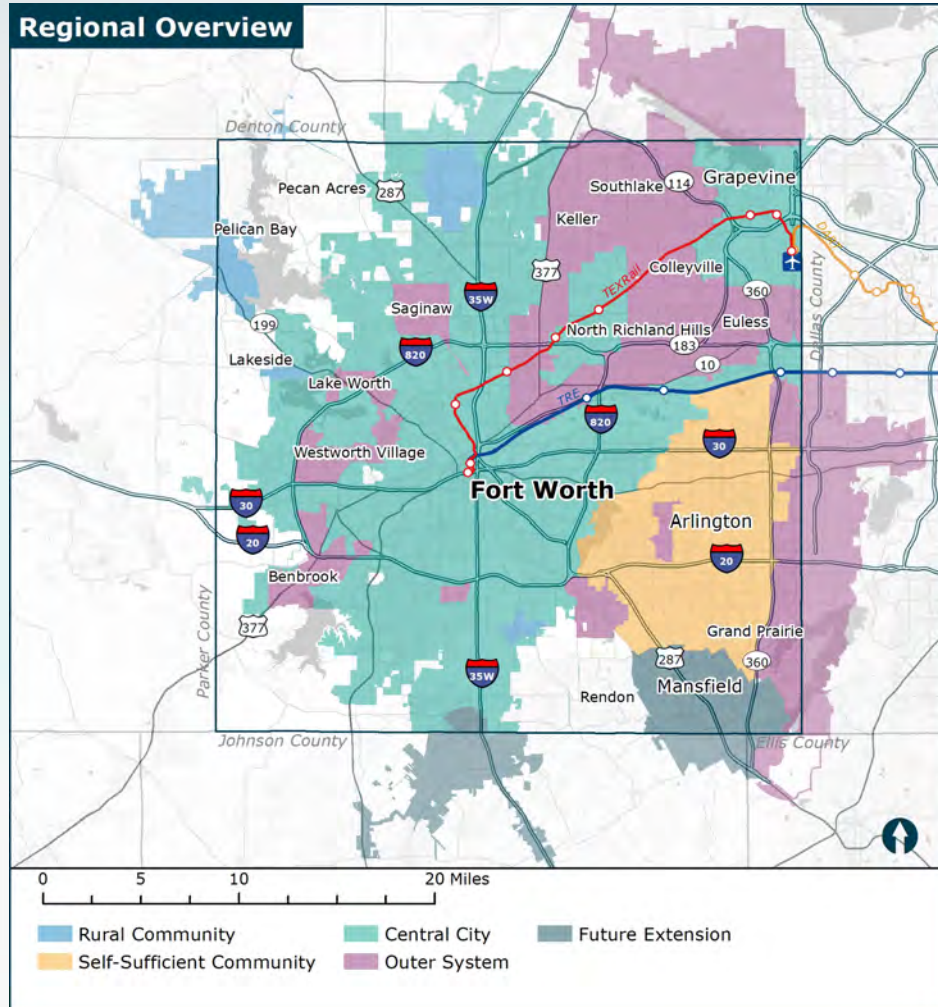
How much money can be expected from fares and state/federal sources?



What requirements are there to qualify for external funding sources?



Municipal Typology

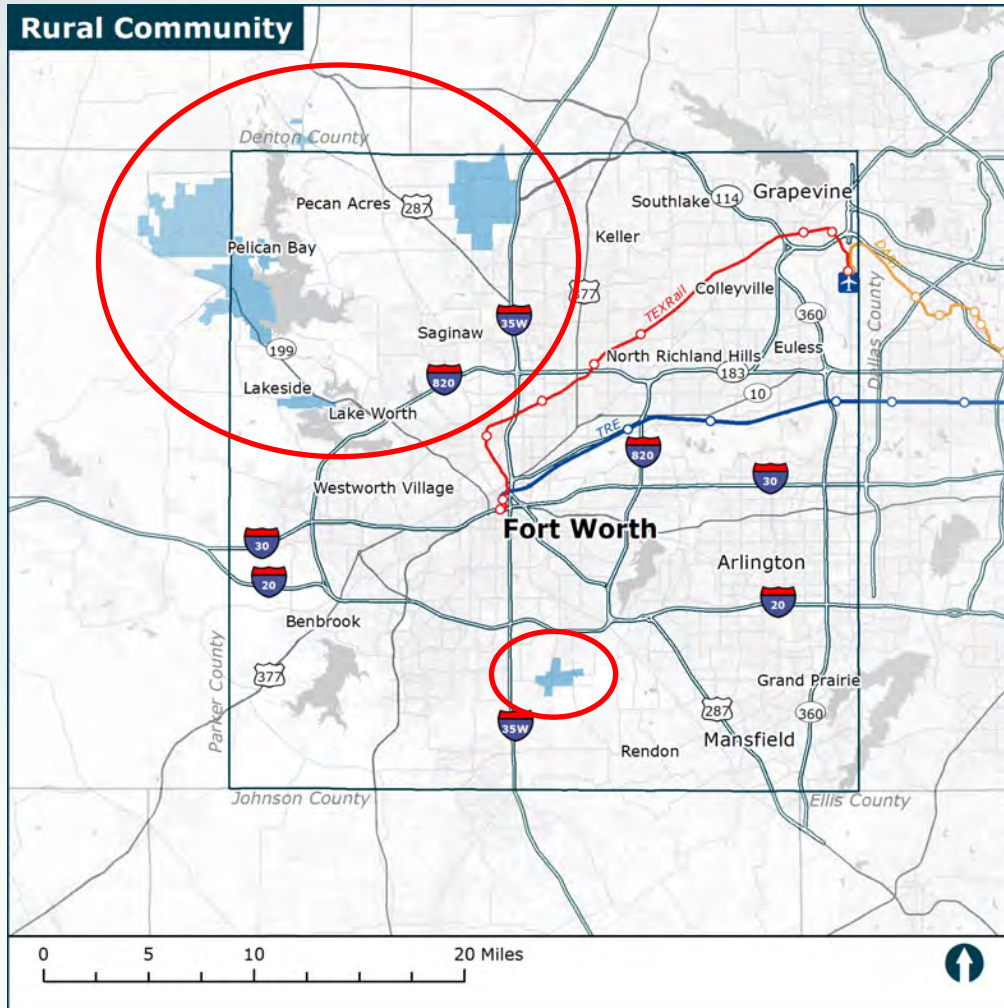


Purpose for Typology

- Identify similar regions
- Determine coordinated funding mechanisms and programs
- Determine potential cost share by municipal type

Rural Community

A municipality that is currently not served by public transportation. Typically, not adjacent to current transit-served areas.

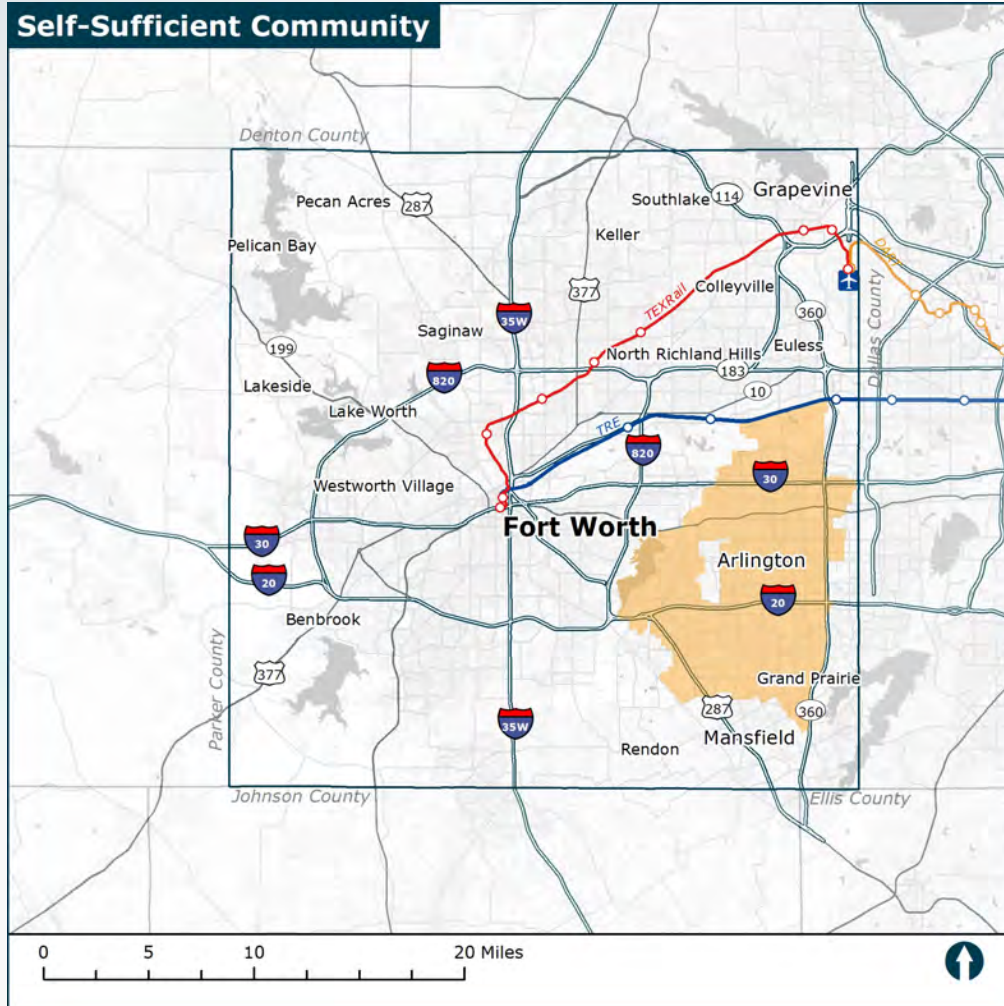


Municipalities:

- Azle
- Everman
- Haslet
- Lakeside
- Newark
- Pelican Bay
- Reno
- Trophy Club

Self-Sufficient Community

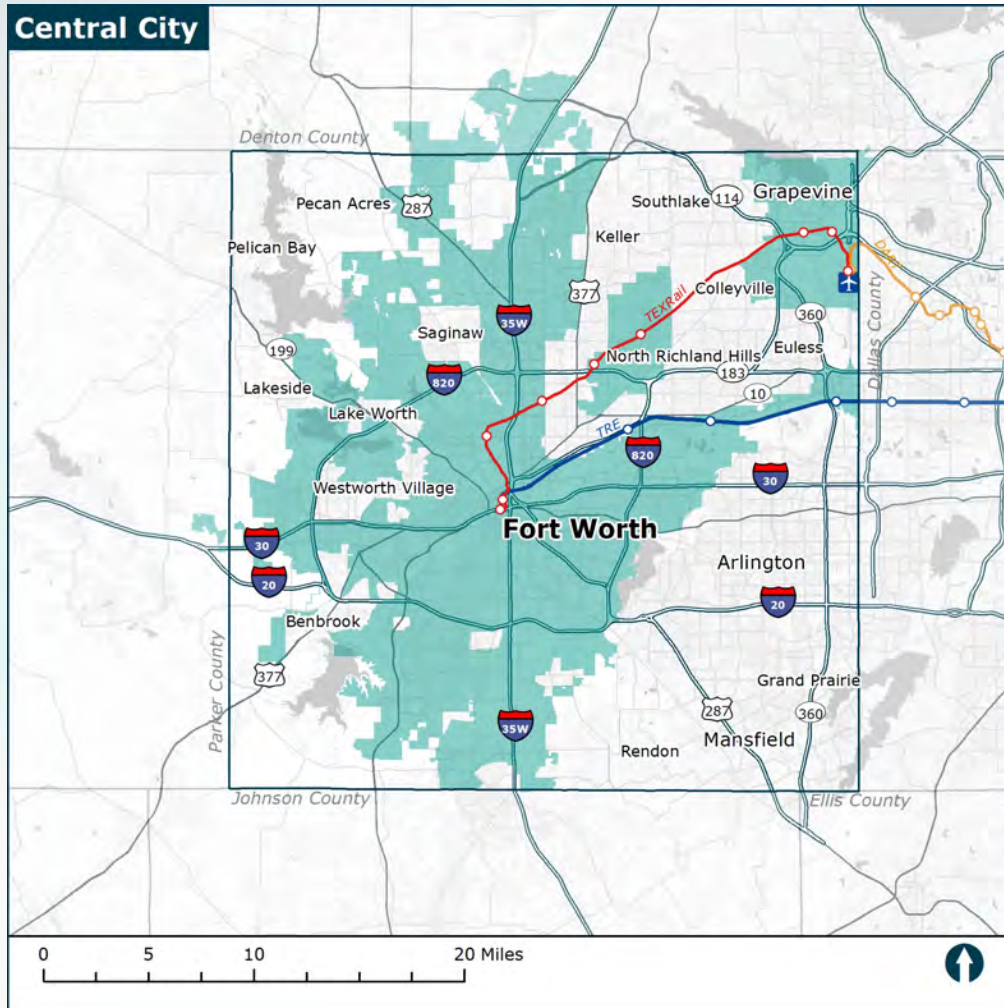
A municipality that has self-managed public transportation within the municipal boundaries. Municipality is not a member of a transit authority.



Municipalities:

- Arlington

Central City (Cities Receiving Transit)

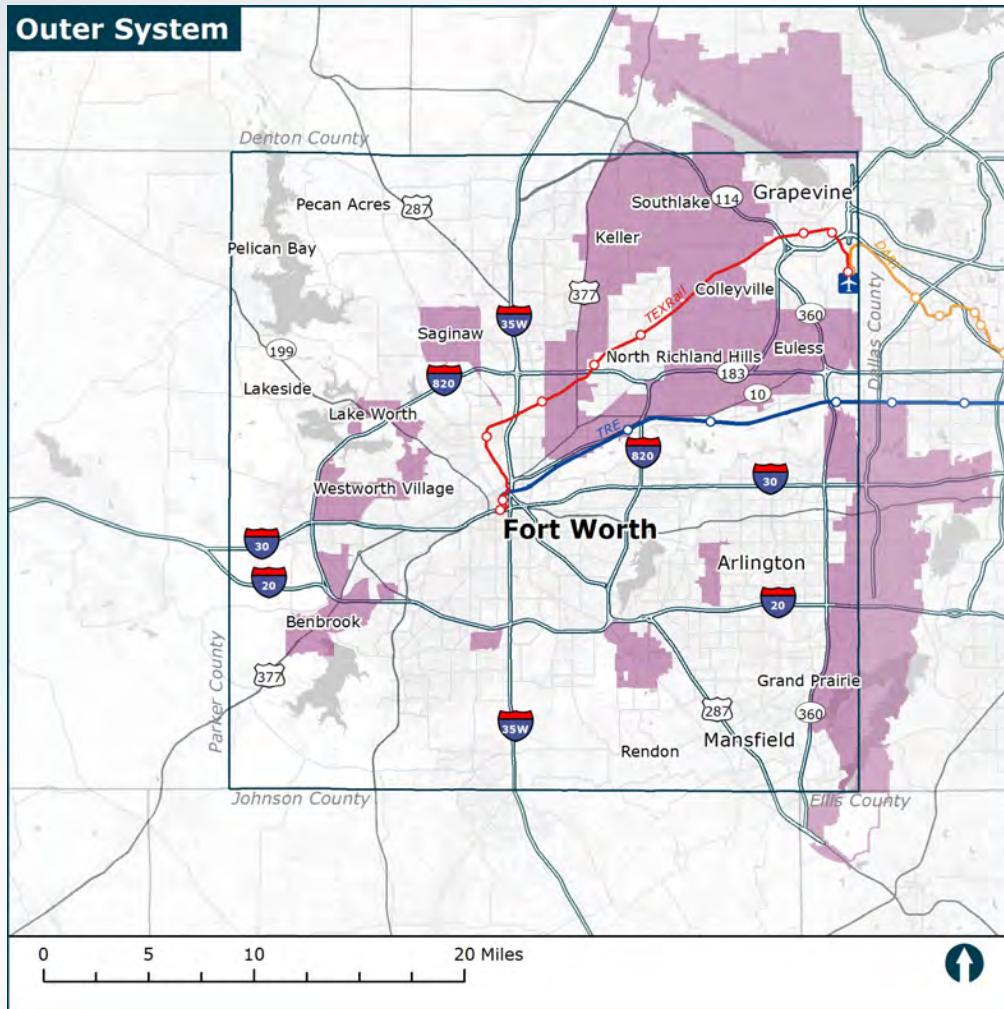


A municipality served by transit provided by Trinity Metro. Maybe a member city or utilizing a subscription of services through Trinity Metro.

Municipalities:

- Fort Worth
- Blue Mound
- North Richland Hills
- Grapevine
- Forest Hill
- Crowley

Outer System

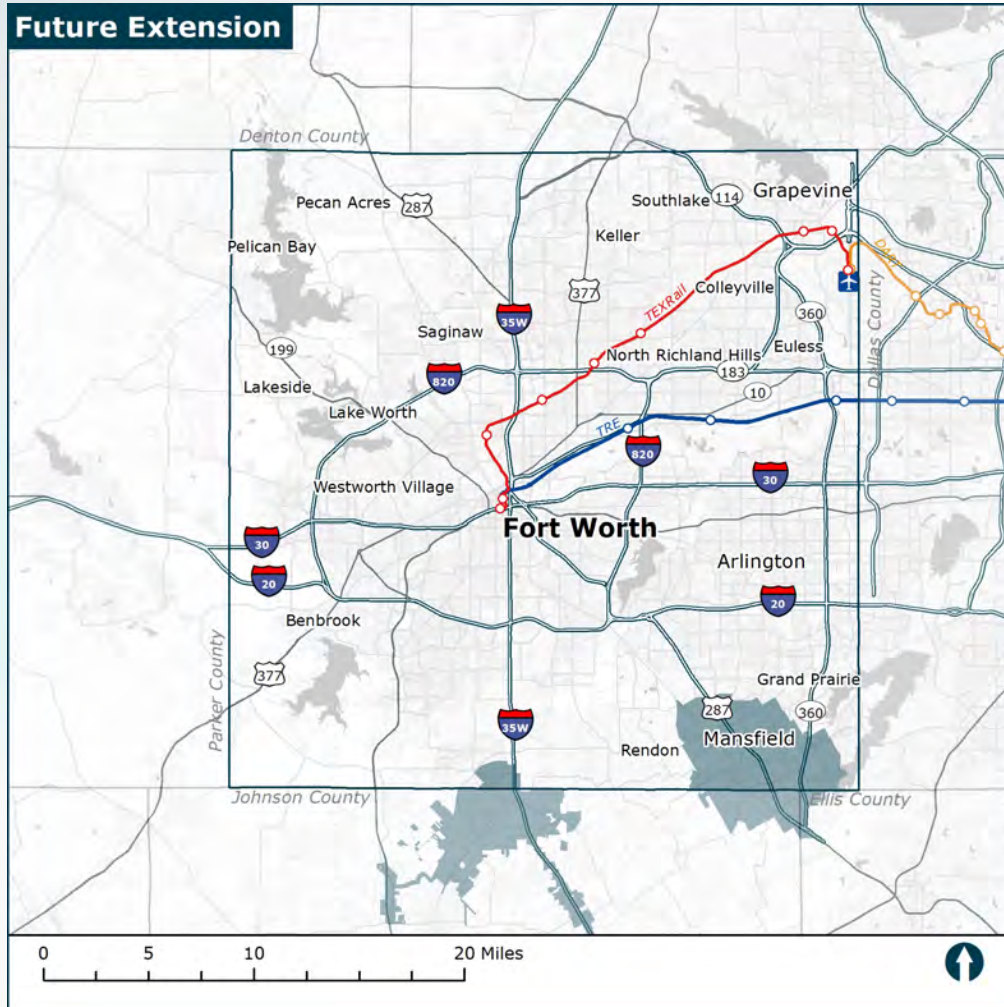


A municipality that borders a central city where public transportation is easily extended due to close proximity to the system.

Municipalities:

- Bedford
- Benbrook
- Dalworthington Garden
- Edgecliff Village
- Euless
- Haltom City
- Hurst
- Kennedale
- Lake Worth
- Pantego
- Richland Hills
- River Oaks
- Saginaw
- Sansom Park
- Watauga
- Westworth Village
- White Settlement
- Grand Prairie
- Keller
- Westlake
- Southlake
- Flower Mound
- Colleyville

Future Extension



A municipality that contains a walkable urban place, which will be a priority link in the transit system. Currently undergoing a rail or bus transit planning process.

Municipalities:

- Burleson
- Mansfield

Analysis Process for Funding Mechanisms

- 1. Level of Appropriateness** (based on current financial standing)
 - Local option sales tax available
 - Fiscal constraints
- 2. Level of Partnership** (in order to realize transit funding)
 - Transit-specific special development needs
 - Potential for transit-oriented development
- 3. Qualitative Assessment** (special circumstances)
 - Political constraints
 - Development potential constraints

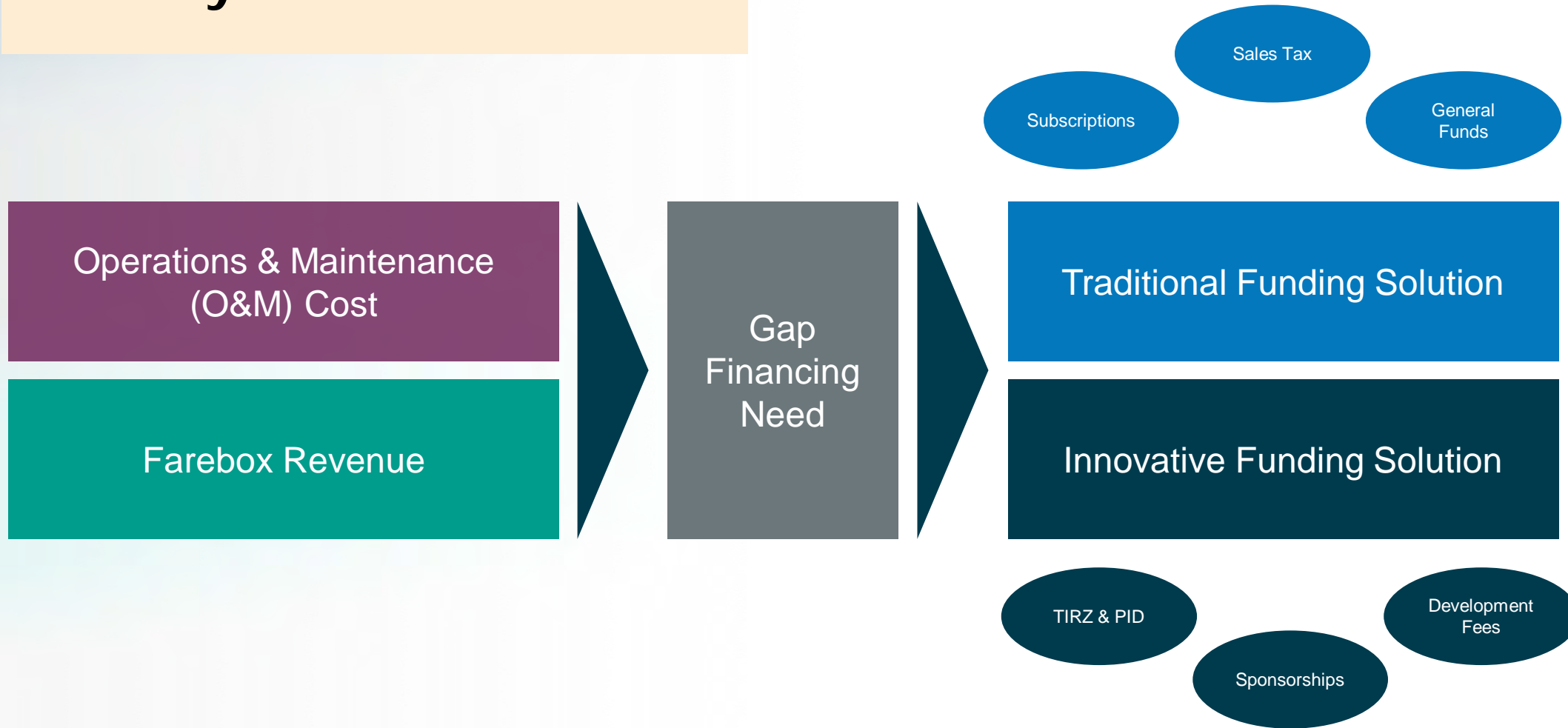
Potential Funding Mechanism by Type

Name	Rural Community	Self-Sufficient Community	Central City	Fringe System	Future Extension
Local (Municipality, Transit Authority or County)					
Sales Tax Contributions	•	•	•	•	•
Tax Increment Reinvestment Zone			•	•	•
Transportation Reinvestment Zone	•		•	•	•
General Fund Contributions	•	•	•	•	•
Toll Fee Allocation	County-wide initiative in coordination with State and Regional entities				
Fee for Service (VIA, ZipZone, etc.)	•	•	•	•	•
Development Fees / Impact Fees	•	•	•	•	•
Bonds/CIP programming			•		•
Public Improvement Districts	•	•	•	•	•

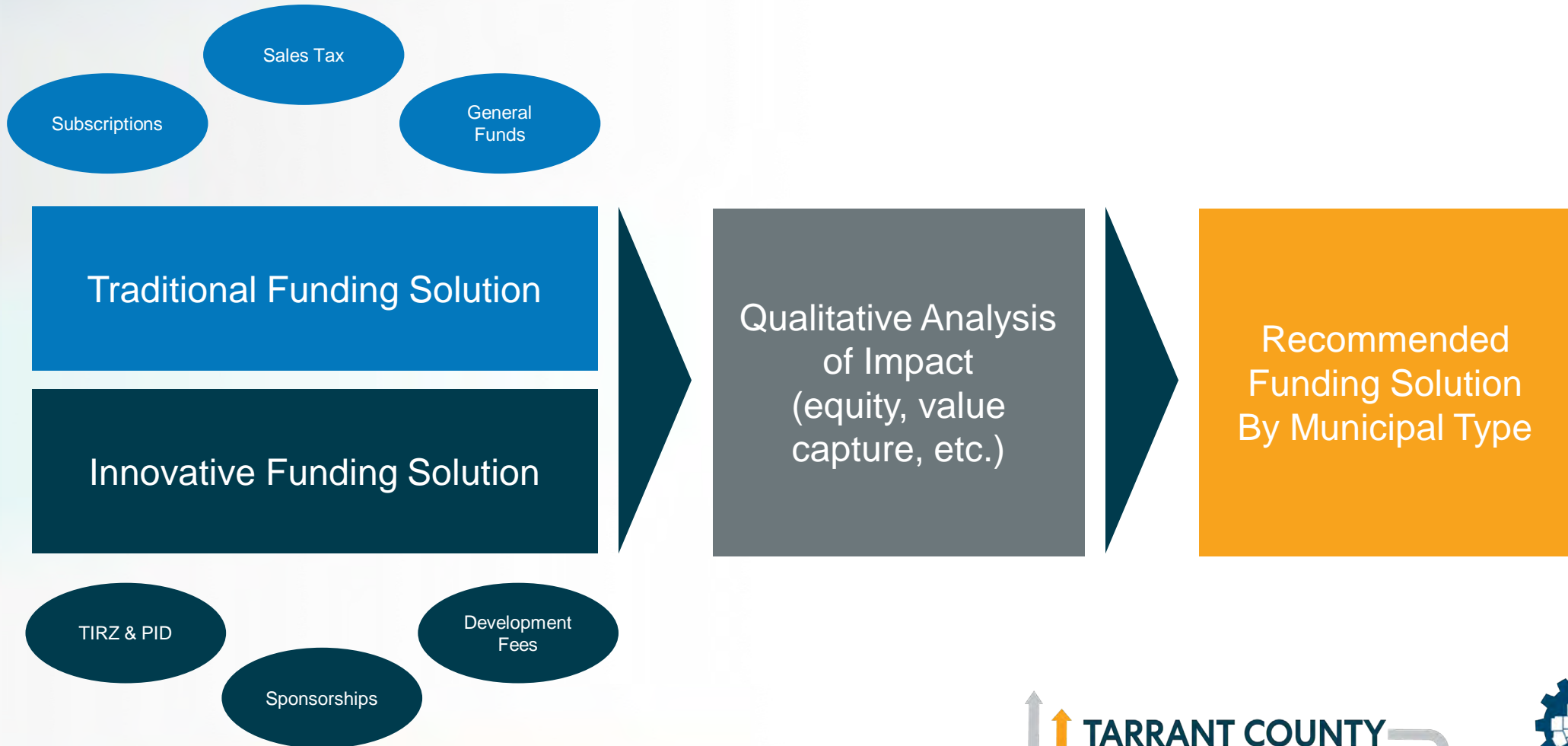
Potential Funding Mechanism by Type

Name	Rural Community	Self-Sufficient Community	Central City	Fringe System	Future Extension
Local (Municipality, Transit Authority or County)					
Property Assessments			•	•	•
Private Participation (Sponsorship by Corporations)		•	•	•	•
Agency Participation (Sponsorship by Institutions)	•	•	•	•	•
Local Motor Vehicle Registration Fee	•	•	•	•	•
Transit Fare Revenue	•	•	•	•	•
In-Kind Contributions	•	•	•	•	•
Joint Development Agreements/Projects			•	•	•
Luxury Transportation Tax	County-wide initiative in coordination with State and Regional entities				
Auxiliary Transit Revenues (Advertising & Concessions)	•	•	•	•	•

Analysis Per Scenario



Analysis Per Scenario



IMPLEMENTATION PLANNING



Implementation Plan: Overview

- Establish **menu of options** for shared mobility services including:
 - » Direct operation by cities
 - » Contracting with companies (like Lyft and Via)
 - » Purchased service agreement with agencies like Trinity Metro
- Identify **legal requirements and best practices** for providing service
- Provide cities and towns with tools to **match options with local needs**



Implementation Plan: Next Steps

- Conduct **peer interviews** to draw from examples in the region:
 - » Trinity Metro ZipZones
 - » DART GoLink
 - » Arlington/VIA partnership
- **Review** policies, practices, and standards
- **Build** menu of options
- **Connect** with cities



Next Steps

- Complete Scenario Comparison Analysis (March)
- Final meetings with stakeholders (April)
- Layout and review (May)
- Final report – to be available on website (June)

Q&A

Cambridge Systematics

Scott Boone & Baird Bream



Kimley-Horn

Brad Lonberger



CTG

**Jim Baker &
Dan Nelson**



Marlene Connor Associates

Marlene Connor



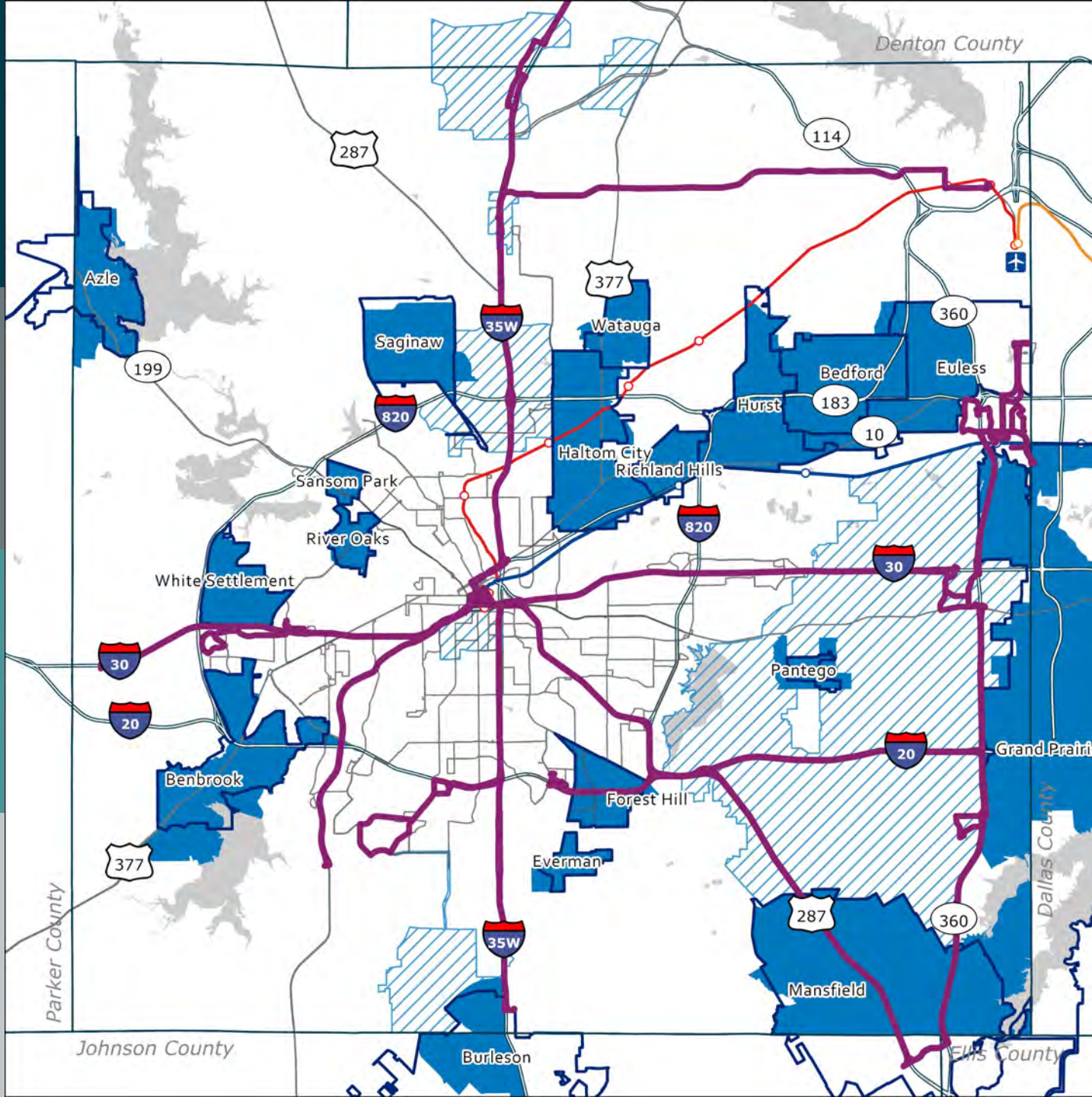


Q1: Are you more interested in:

- 1. Local travel options to reach destinations in your immediate community, or**
- 2. Regional travel options to reach more distant destinations around the metroplex?**



Q2: Would an on-demand ride to the nearest train station (TRE, TexRail, DART) cause you to use those services more?



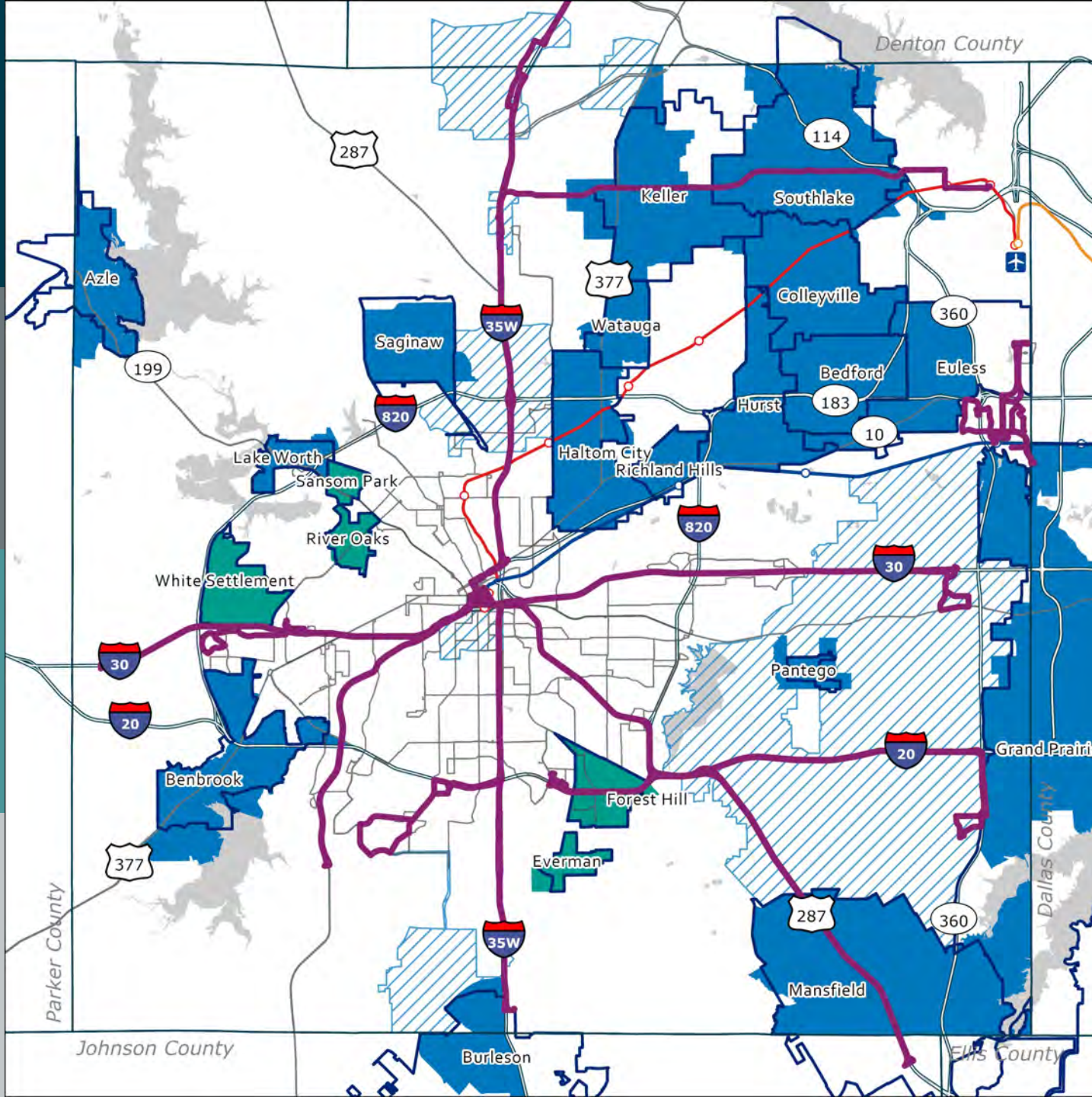
Scenario 1

Service Type	Hours	% of Total
Local	245,000	88%
Regional	34,300	12%
Total	279,300	100%

Approx. Cost = \$18.1 million
(74% local/26% regional)

- On-Demand
- Existing MOD Zones
- Fixed-Route + On-Demand
- Regional





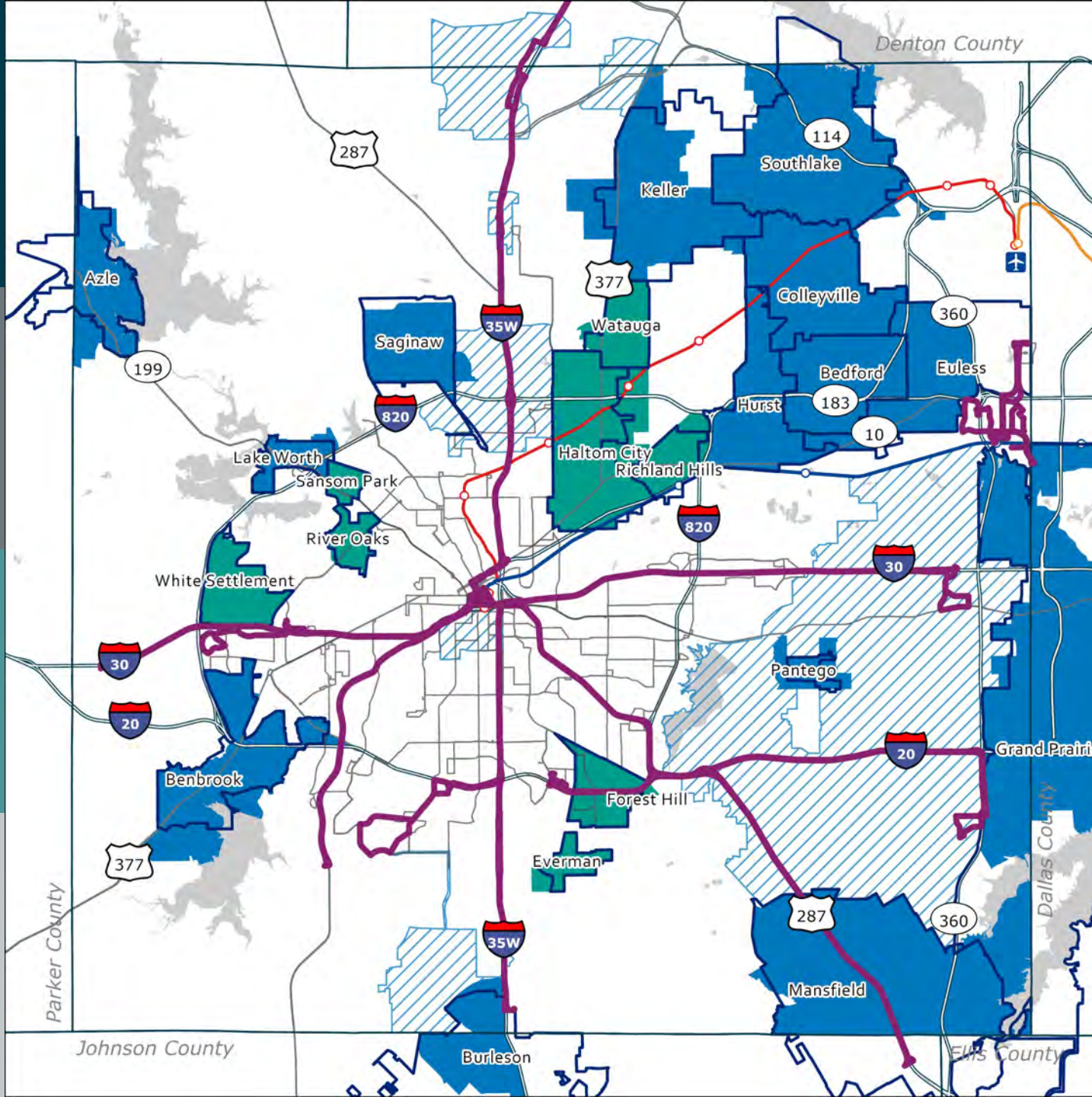
Scenario 2

Service Type	Hours	% of Total
Local	271,100	92%
Regional	24,100	8%
Total	295,200	100%

Approx. Cost = \$18.4 million
(82% local/18% regional)

- On-Demand
- Existing MOD Zones
- Fixed-Route + On-Demand
- Regional





Scenario 3

Service Type	Hours	% of Total
Local	276,100	94%
Regional	16,100	6%
Total	292,200	100%

Approx. Cost = \$18.3 million
(88% local/12% regional)

- On-Demand
- Existing MOD Zones
- Fixed-Route + On-Demand
- Regional



North Central Texas
Council of Governments



North Central Texas
Council of Governments



Thank you!



www.facebook.com/tarrantcotransit



www.tarrantcountytransitstudy.com