

integrated mobility

MOBILITY 2045 UPDATE

THE METROPOLITAN TRANSPORTATION PLAN FOR NORTH CENTRAL TEXAS

SAME | Infrastructure Forum

Dan Lamers, P.E. and Brendon Wheeler, P.E. | December 2, 2022

plan in progress
MOBILITY 2045
2022 UPDATE

NCTCOG REGIONAL PERSPECTIVE

Population

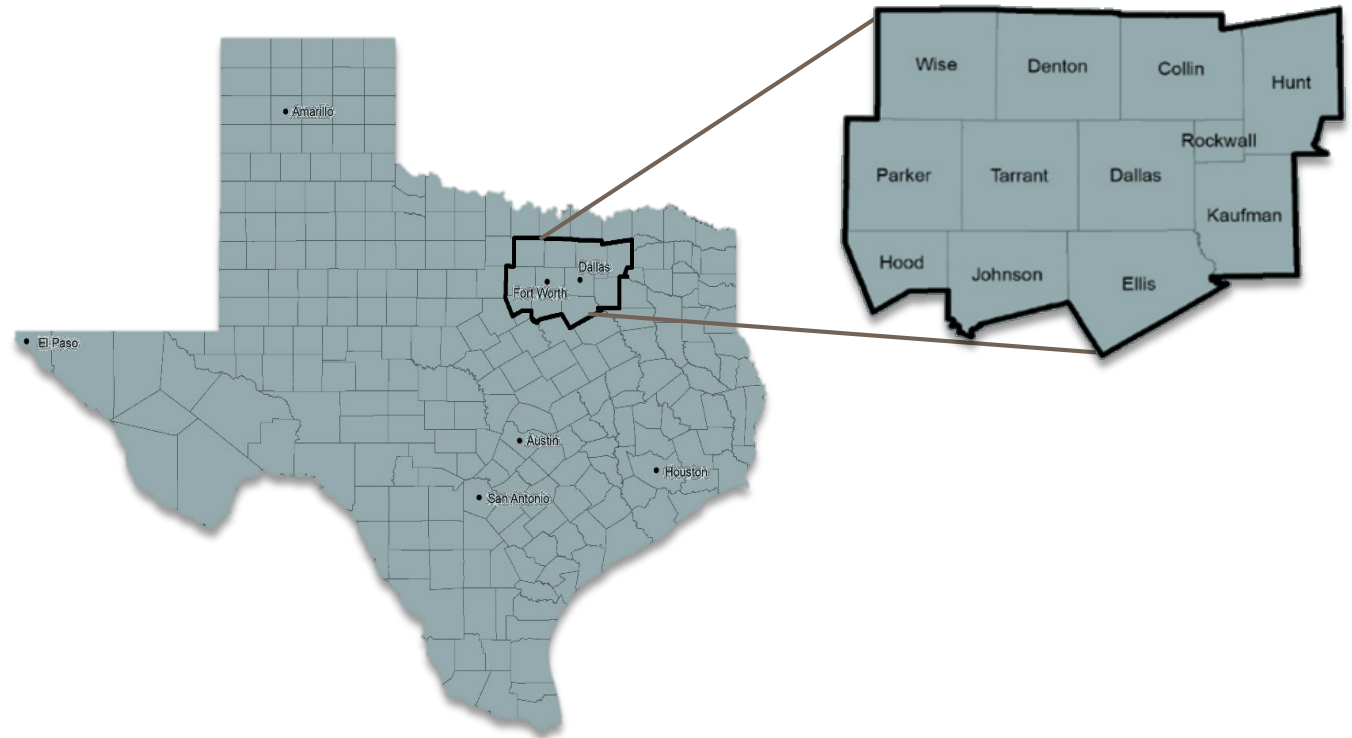
- 4th Largest Metropolitan Area by Population
- 150,000 People Added per Year

Area

- 9,441 Square Miles
- 2nd Largest Metropolitan Planning Area by Land Area

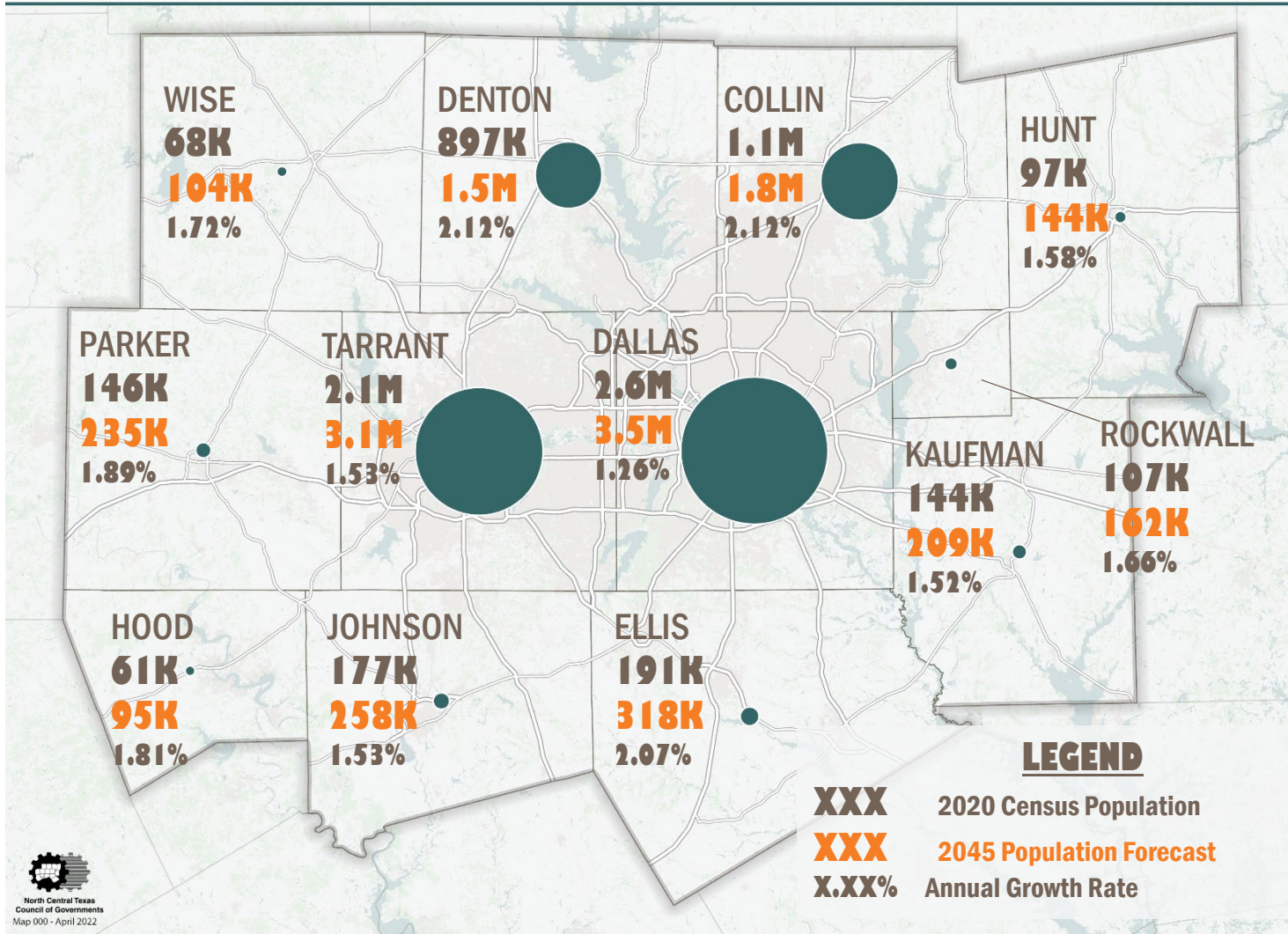
Economy

- Home to 24 Fortune 500 Firms
- Projected to be Ranked 14th Globally in Metro GDP
- Represents 30% of State's Economy



REGIONAL PERSPECTIVE

Population Forecast by County



4th

Largest metro area
in US

30%

of Texas' GDP

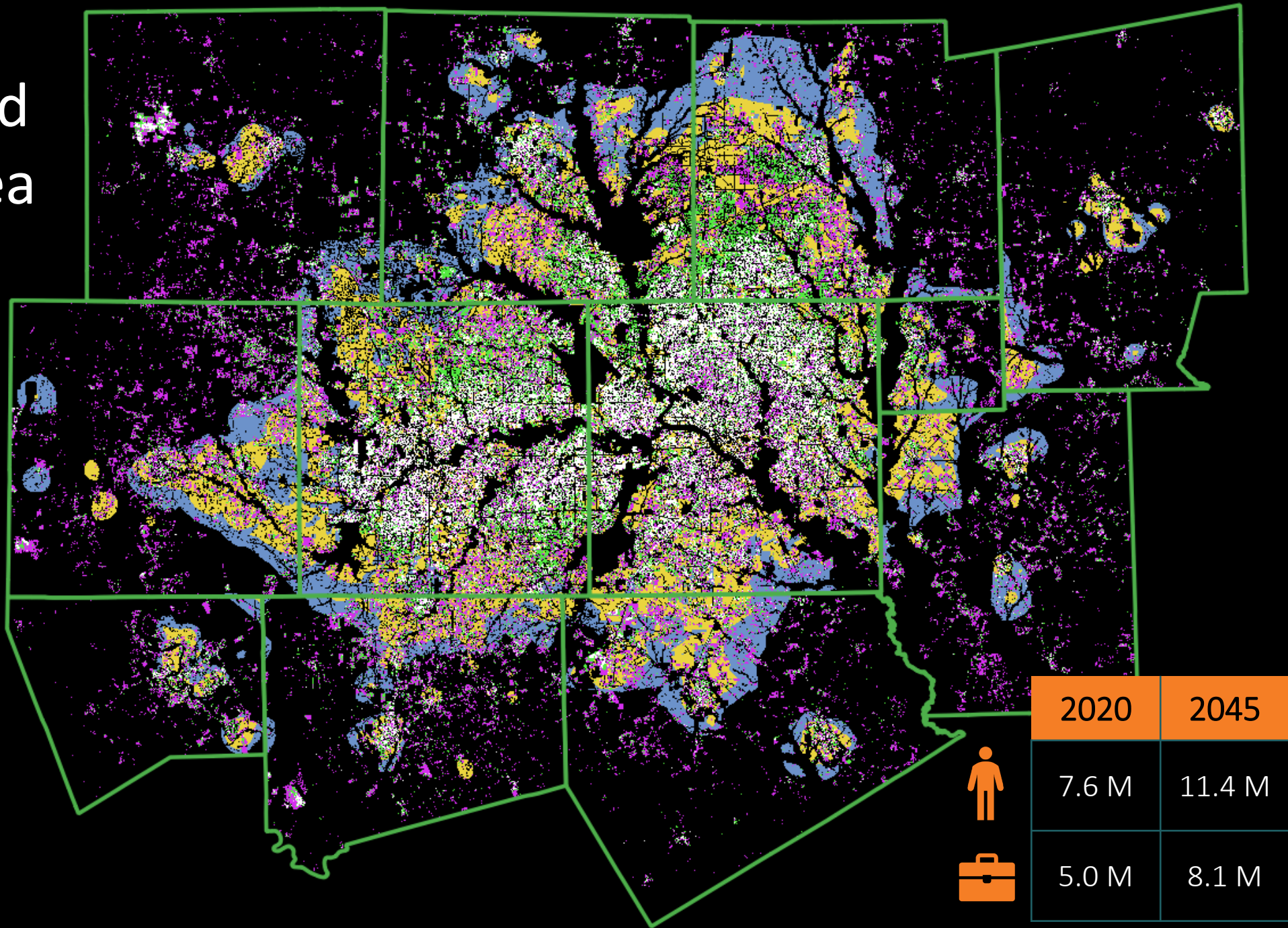
40%

Increase in population
forecasted

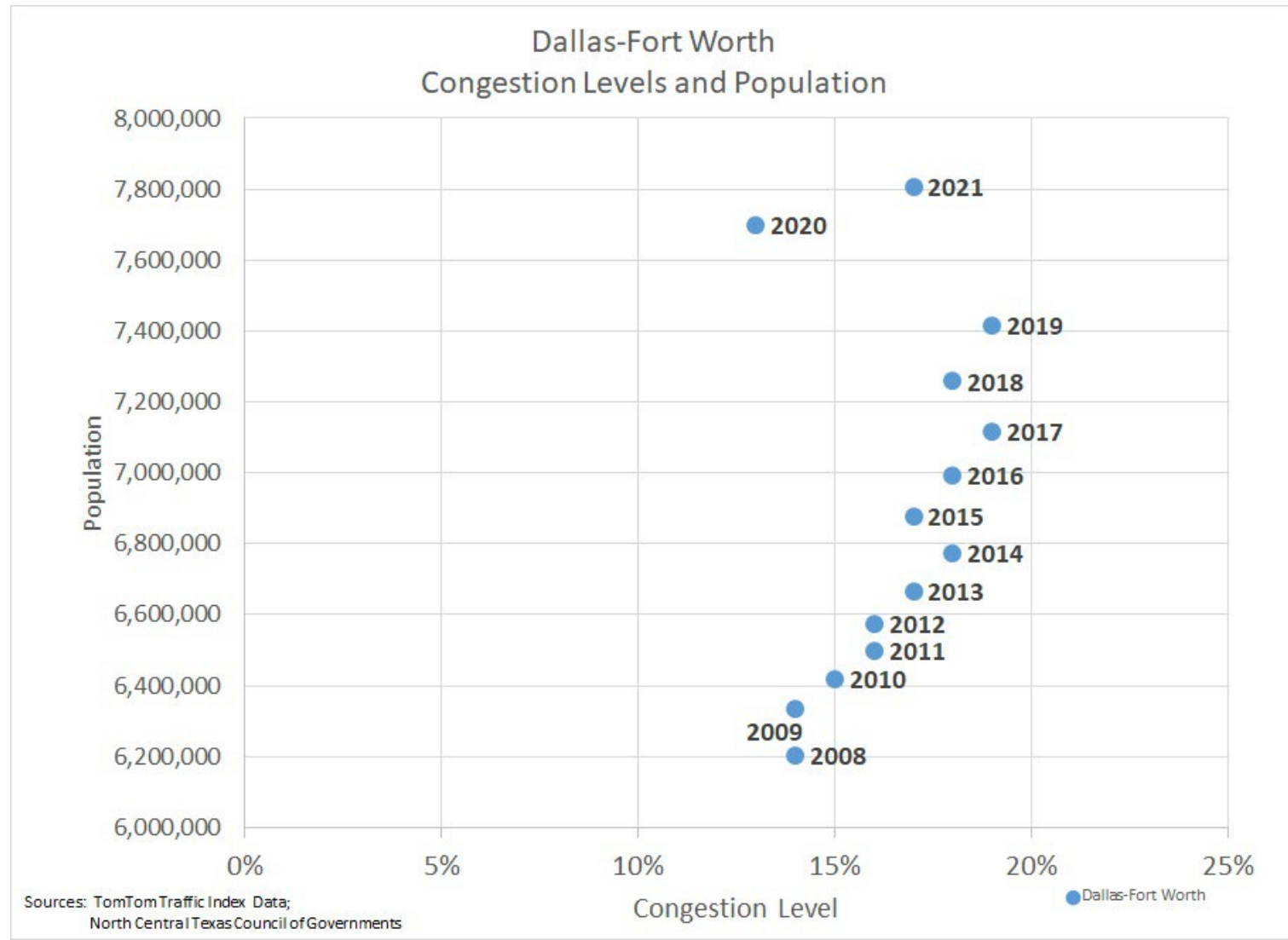
45%

Increase in employment
forecasted

2045 Predicted Built Area



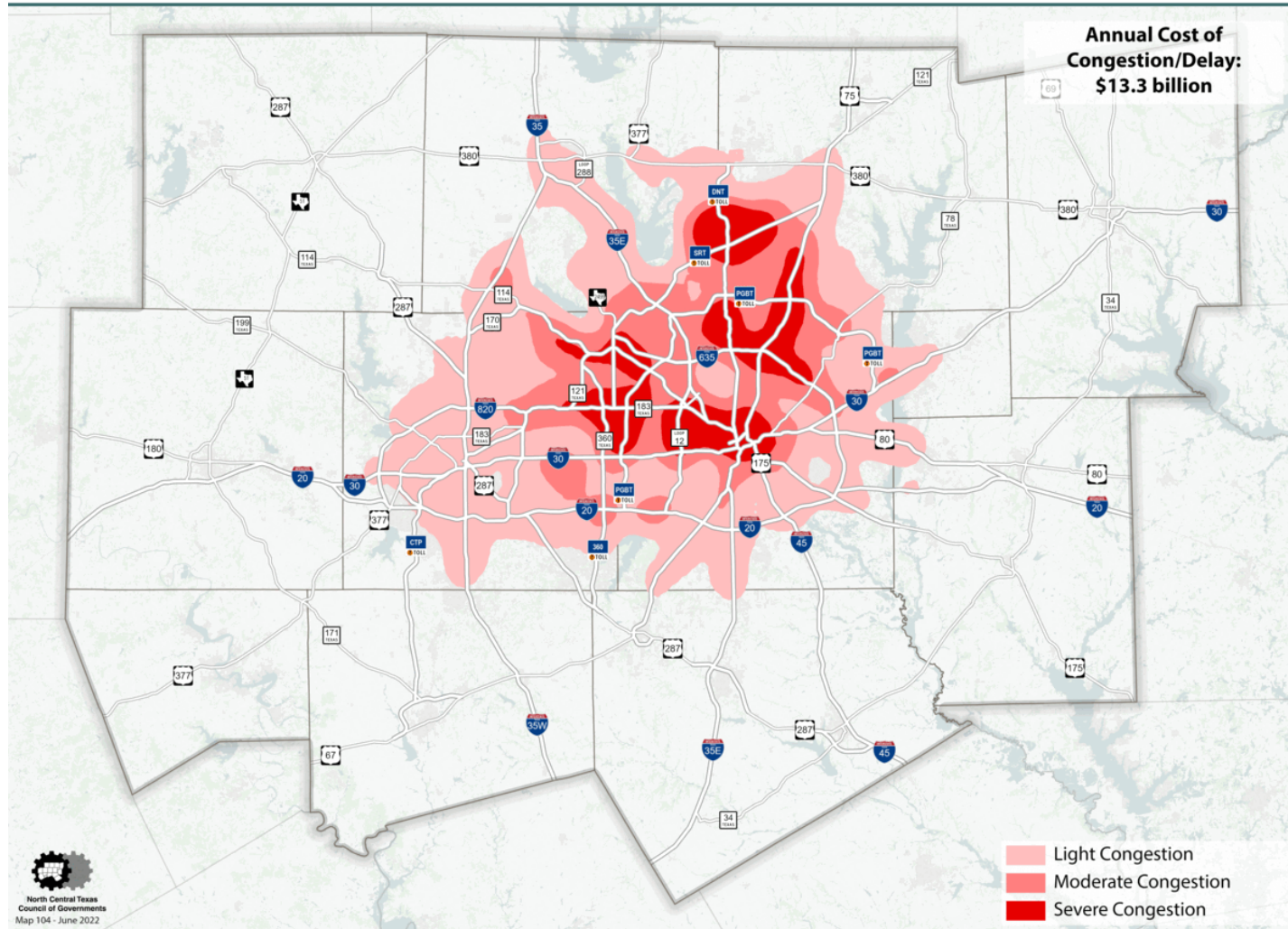
DALLAS-FORT WORTH CONGESTION LEVELS AND POPULATION



SIMULATED ROADWAY CONGESTION



2023 Levels of Congestion/Delay



Annual Cost of Congestion

CURRENT
conditions

\$12.3
Billion

2045 BUILD conditions

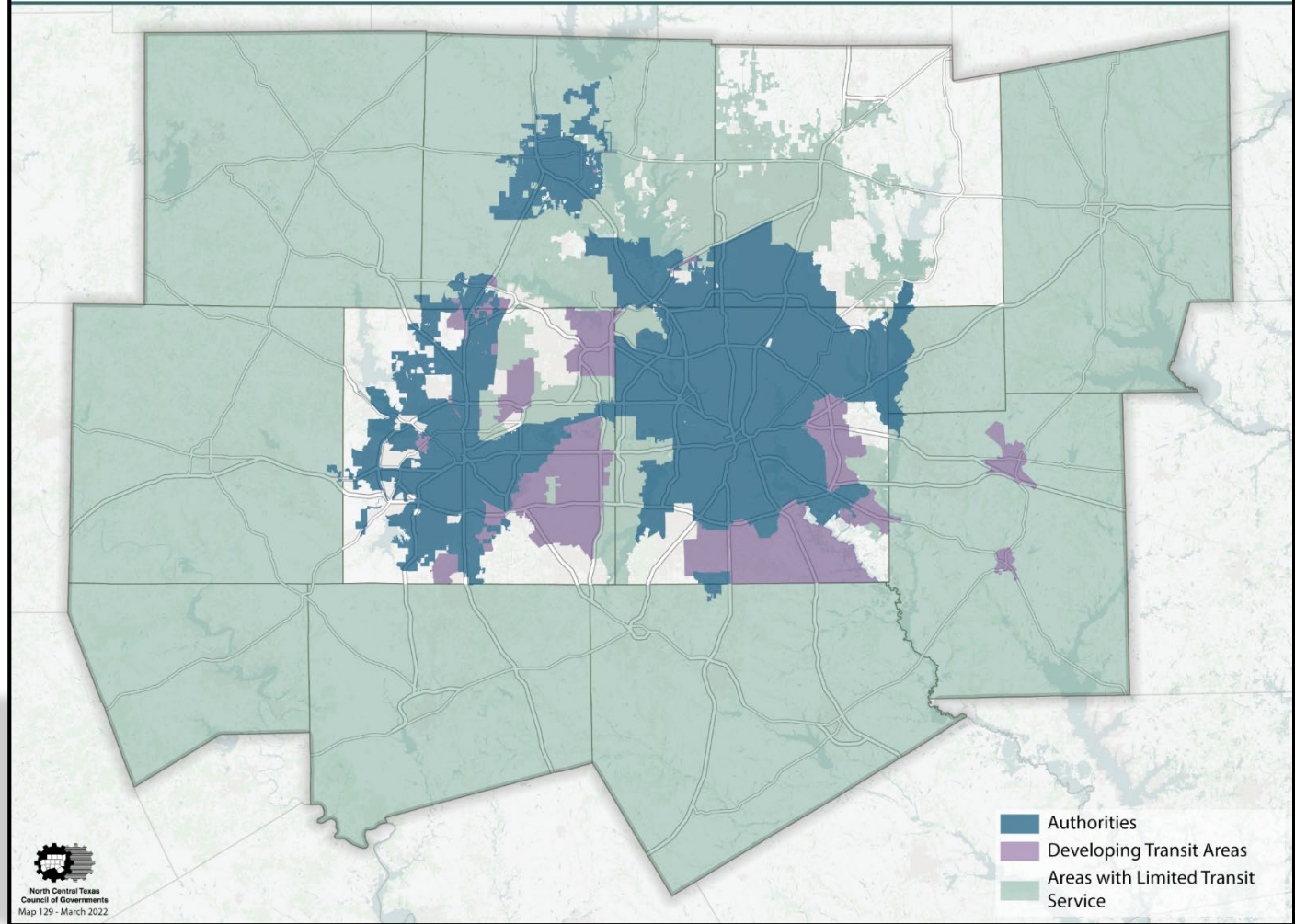
\$32.1
Billion

2045 NO-BUILD
conditions

\$60.8
Billion

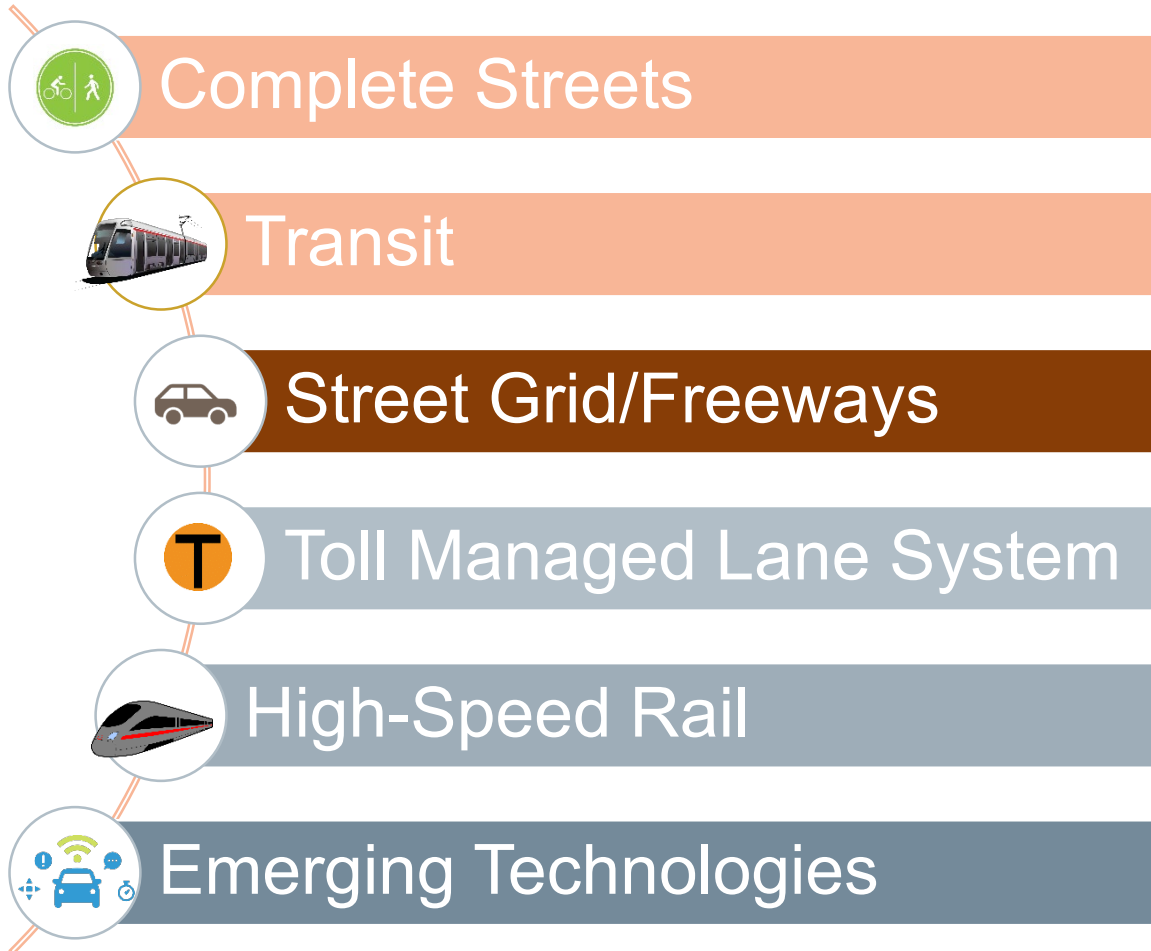
POPULATION FORECAST TRANSIT SERVICE AREAS

By 2045, nearly **60%** of the region's population is projected to reside outside existing transit authority service areas



	2020	2045	Change
Total Population	7,611,000	11,412,000	3,801,000
Population Residing Outside Existing Transit Authority Service Areas	4,023,000	6,803,000	2,780,000

SYSTEMWIDE RELIABILITY



Reliability



Resiliency

- Overlapping modes creating reliability/choice
- Diversification/fail-safes
- Mitigating pressures: high fuel costs, resource availability, electrical grid capacity, weather, etc.

WHAT IS THE METROPOLITAN TRANSPORTATION PLAN?



Represents a Blueprint for the Region's Multimodal Transportation System



Covers at Least a 20-Year Timeframe



Responds to Goals



Identifies Policies, Programs, and Projects for Continued Development



Guides the Expenditure of Federal and State Funds

EXPENDITURES FORECAST



MAXIMIZE EXISTING SYSTEM

Infrastructure Maintenance

Maintain and operate existing transit and roadway facilities

\$39.5 B

Management and Operations

Improve efficiency and remove trips from system

\$9.6 B

Growth, Development, and Land Use Strategies

Improve transportation and land use balance

\$1.5 B

STRATEGIC INFRASTRUCTURE INVESTMENT

Rail and Bus

Encourage switch to transit

\$44.9 B

HOV/Managed Lanes

Increase auto occupancy

\$52.8 B

Freeways/Tollways and Arterials

Add vehicle capacity

TOTAL

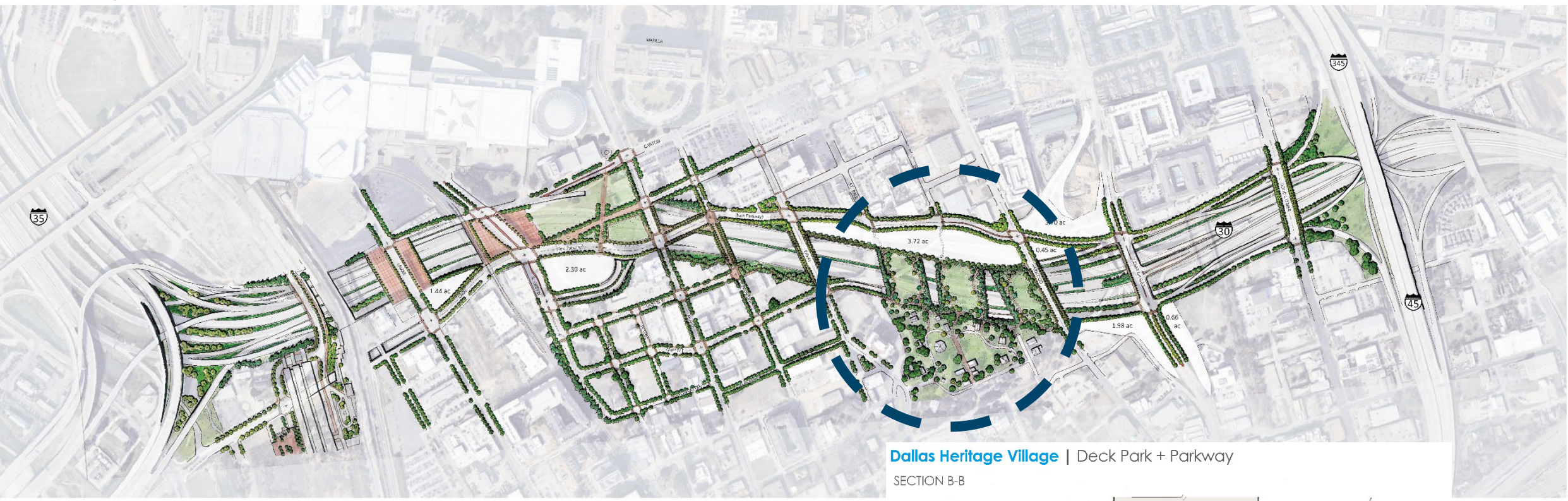
\$148.3

B

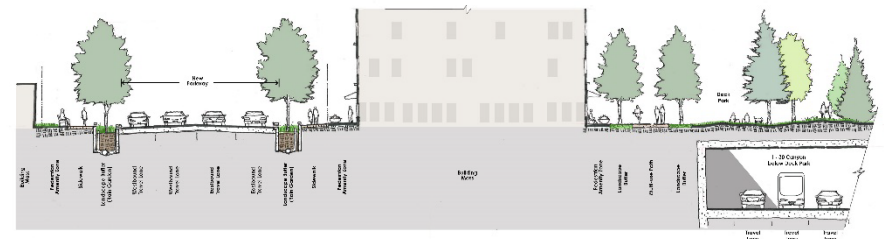


IH 30 CANYON – DECKING OPPORTUNITY

Illustrative Plan | DRAFT



Dallas Heritage Village | Deck Park + Parkway
SECTION B-B



Scale 1" = 120'
City of Dallas

P+UD I-30 Canyon October 29, 2019

Legend

- Parks / Open Space
- reco
- Plan

Potential Skyline (Downloadable from Dallas to TxDOT Project to TxDOT, San Diego City)

Source: TxDOT/City of Dallas, <https://www.txdot.gov/inside-txdot/get-involved/about/hearings-meetings/dallas/1>

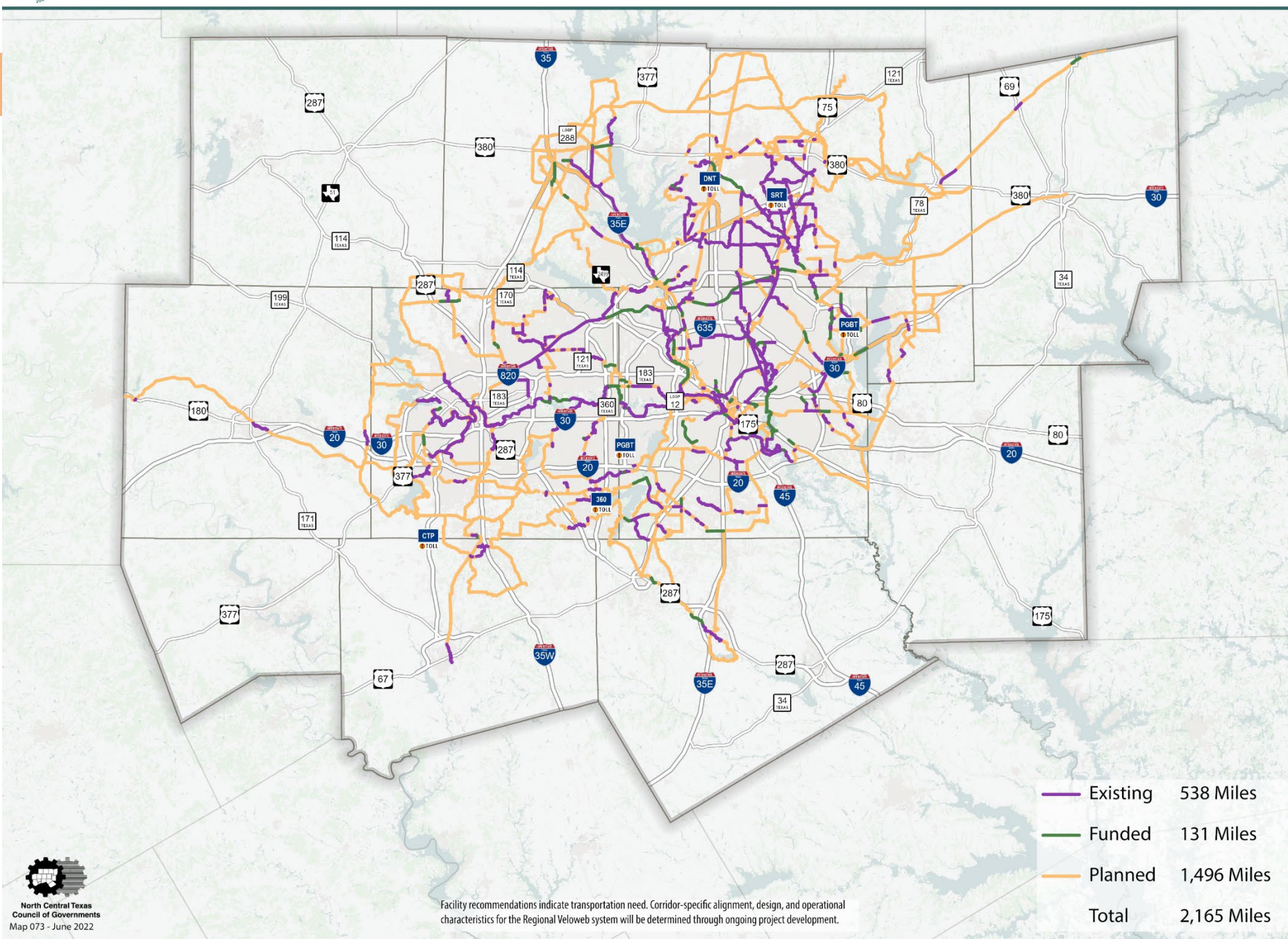
EAST LANCASTER

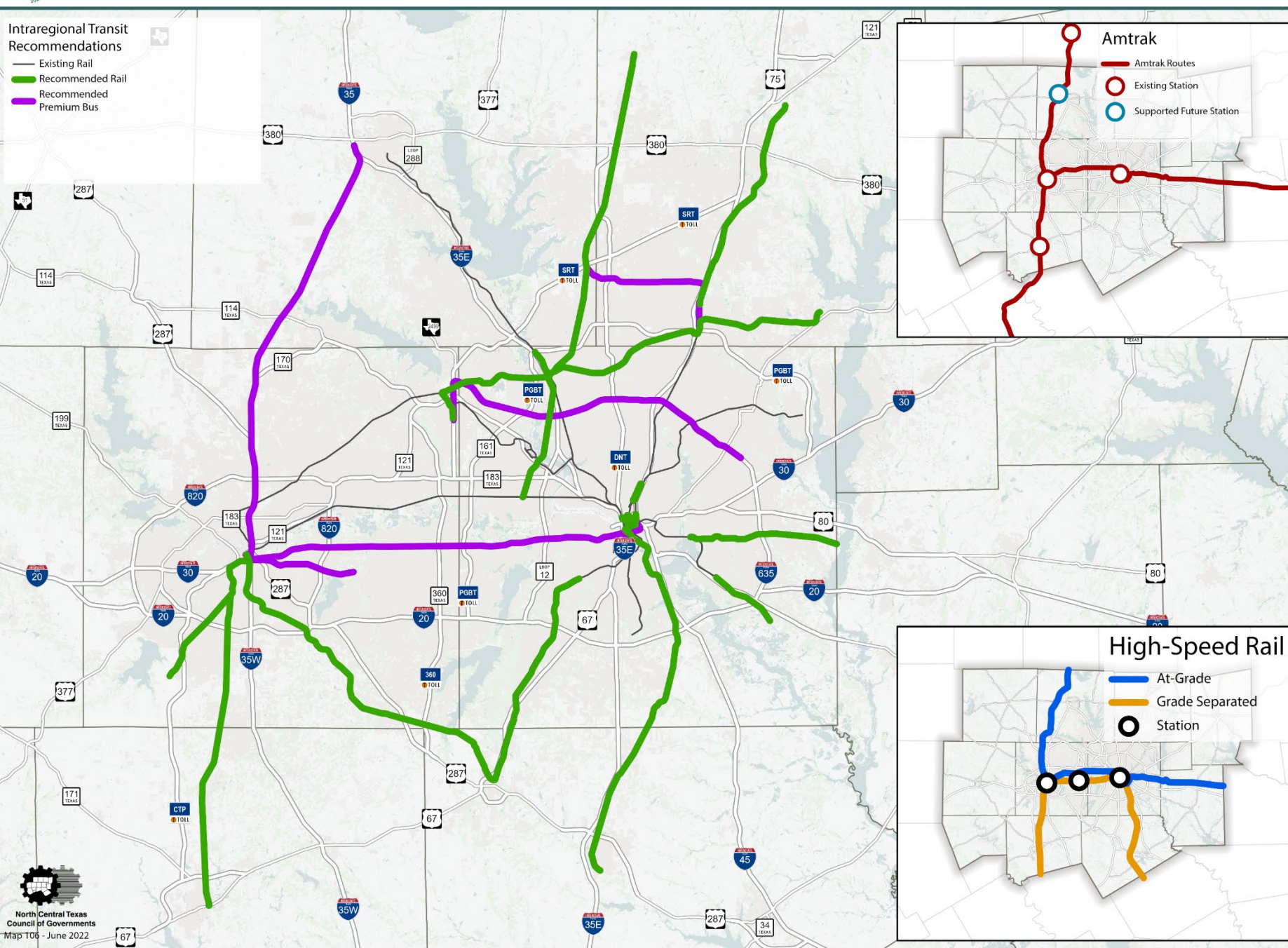
IH 30/East Lancaster
relationship
Context-sensitive multimodal
facility

- Improve transit operations and facilities
- Improve bicycle and pedestrian facilities
- Increase broadband access
- Enhance affordability of transportation options for environmental justice populations

Federal Grant Programs







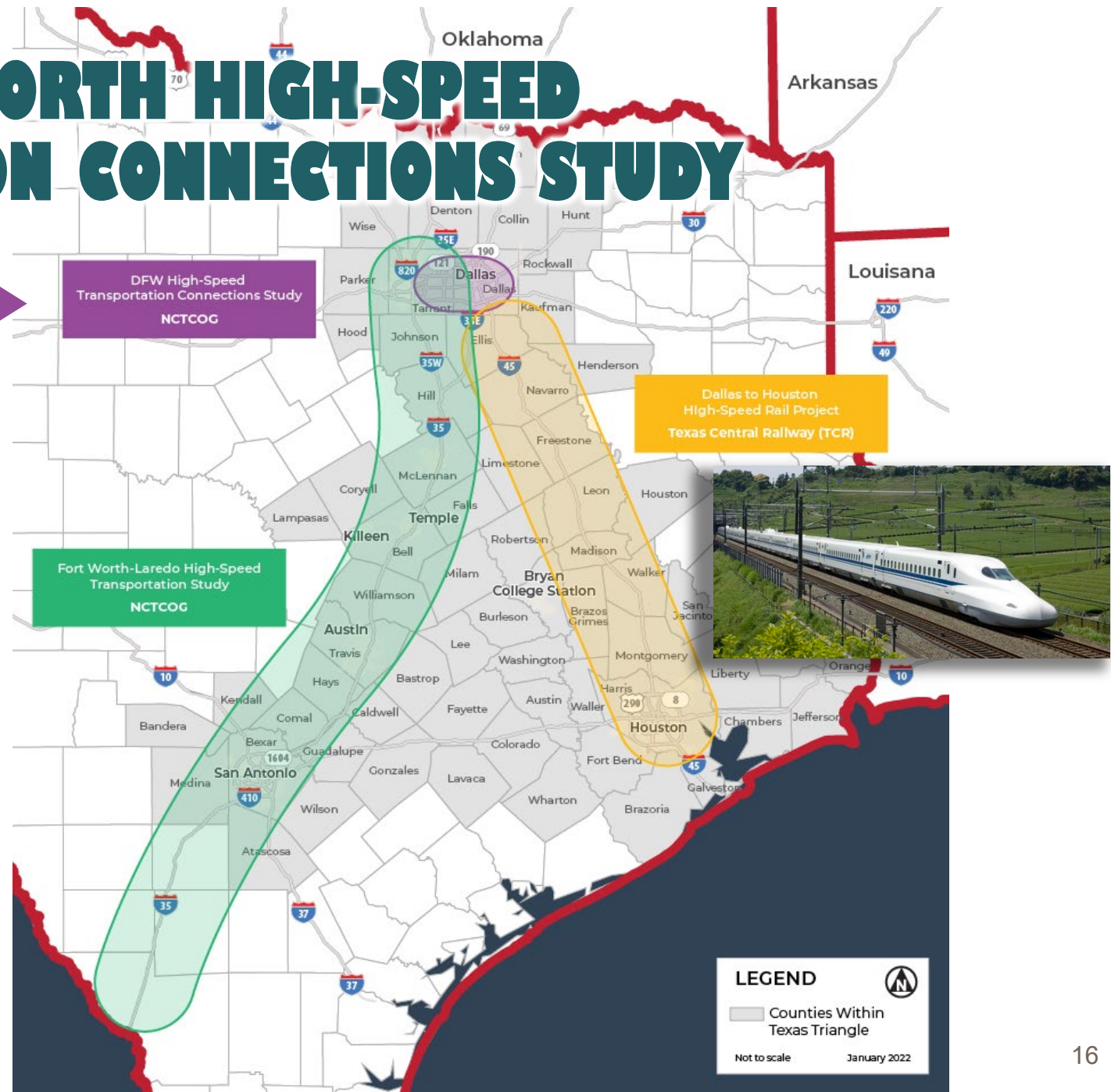
DALLAS-FORT WORTH HIGH-SPEED TRANSPORTATION CONNECTIONS STUDY

Objective:

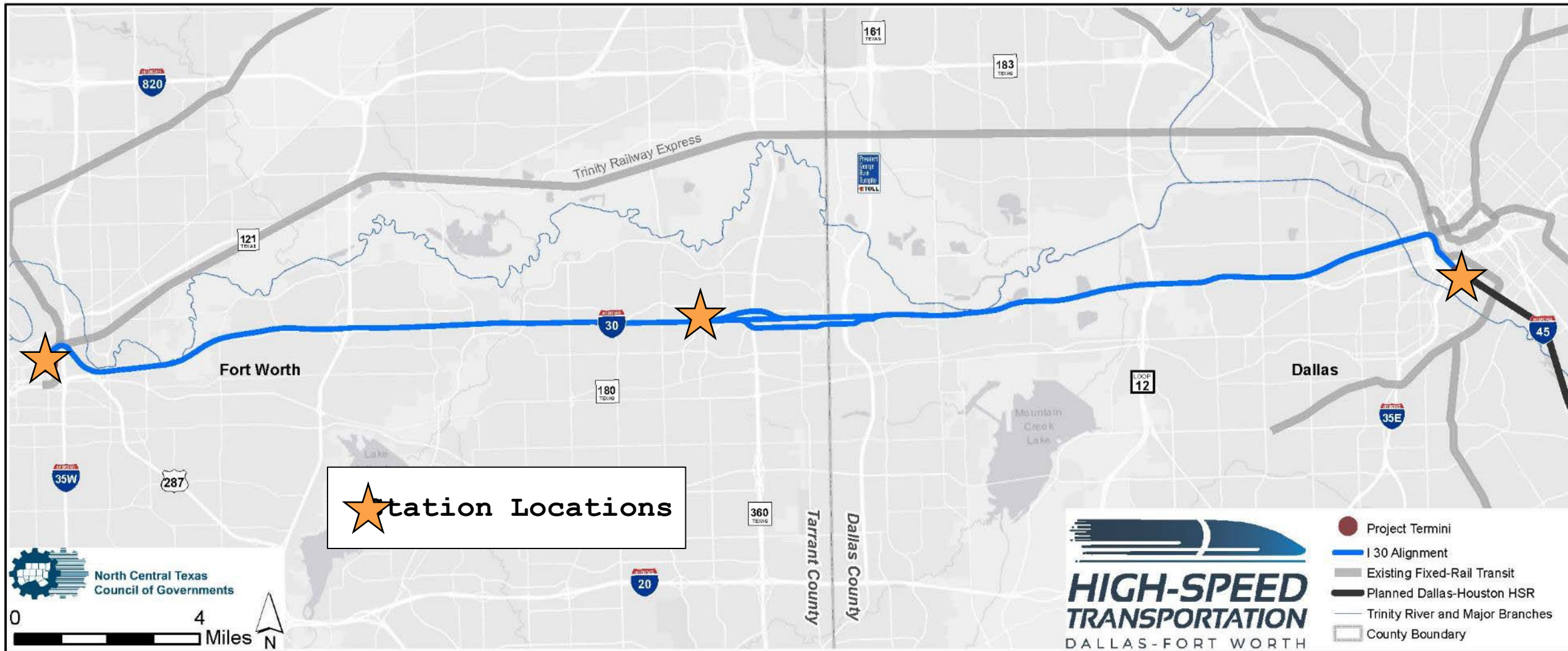
Evaluate high-speed transportation alternatives (both ***ALIGNMENTS*** and ***TECHNOLOGY***) to:

- Connect Dallas-Fort Worth to other proposed high-performance passenger systems in the state
- Enhance and connect the Dallas-Fort Worth regional transportation system

Obtain federal environmental approval of the viable alternative



HST STUDY PHASE 1 RESULTS (ALIGNMENTS)



GUARANTEED TRANSIT: HIGH-INTENSITY BUS

High-End Motorcoaches: Premium Characteristics along Managed Lane Corridors

Enhanced Amenities: Station Features (coffee, dry cleaning, etc.), WiFi, Increased Cleanliness, and Security

Guaranteed Transit: Riders Reimbursed Fare for Trips that Fail to Arrive on Time



CERTTPROGRAM

Certification of *Emerging* and *Reliable* Transportation Technology

Provide transparent process for RTC coordination with providers of new technology

Periodic solicitation/opportunity for new technology applications

Ensure level playing field for providers and local governments

Convert certification facility into commercial application, meeting long-range transportation needs



OTHER EMERGING TECHNOLOGIES

AV 2.1 PROGRAM



A



B



C



D



E



F



G



H



I

- A. Automated cars and trucks (partly or fully self-driving)
- B. Connected cars (cars that can communicate with other cars)
- C. Ride sharing services (e.g., Uber, Lyft) or car sharing services (hourly or daily car rental)
- D. Automated (self-driving) shuttles
- E. Mobility as a service (a single service that lets users plan and pay for travel across modes)
- F. Automated delivery robots
- G. High-speed trains
- H. Drone delivery
- I. Sidewalk robot delivery

CONTACTS



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