

MOBILITY 2045 UPDATE

*The Metropolitan Transportation Plan
for North Central Texas*

The Metropolitan
Transportation Plan for
North Central Texas



AGENDA

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What is the Metropolitan Transportation Plan?

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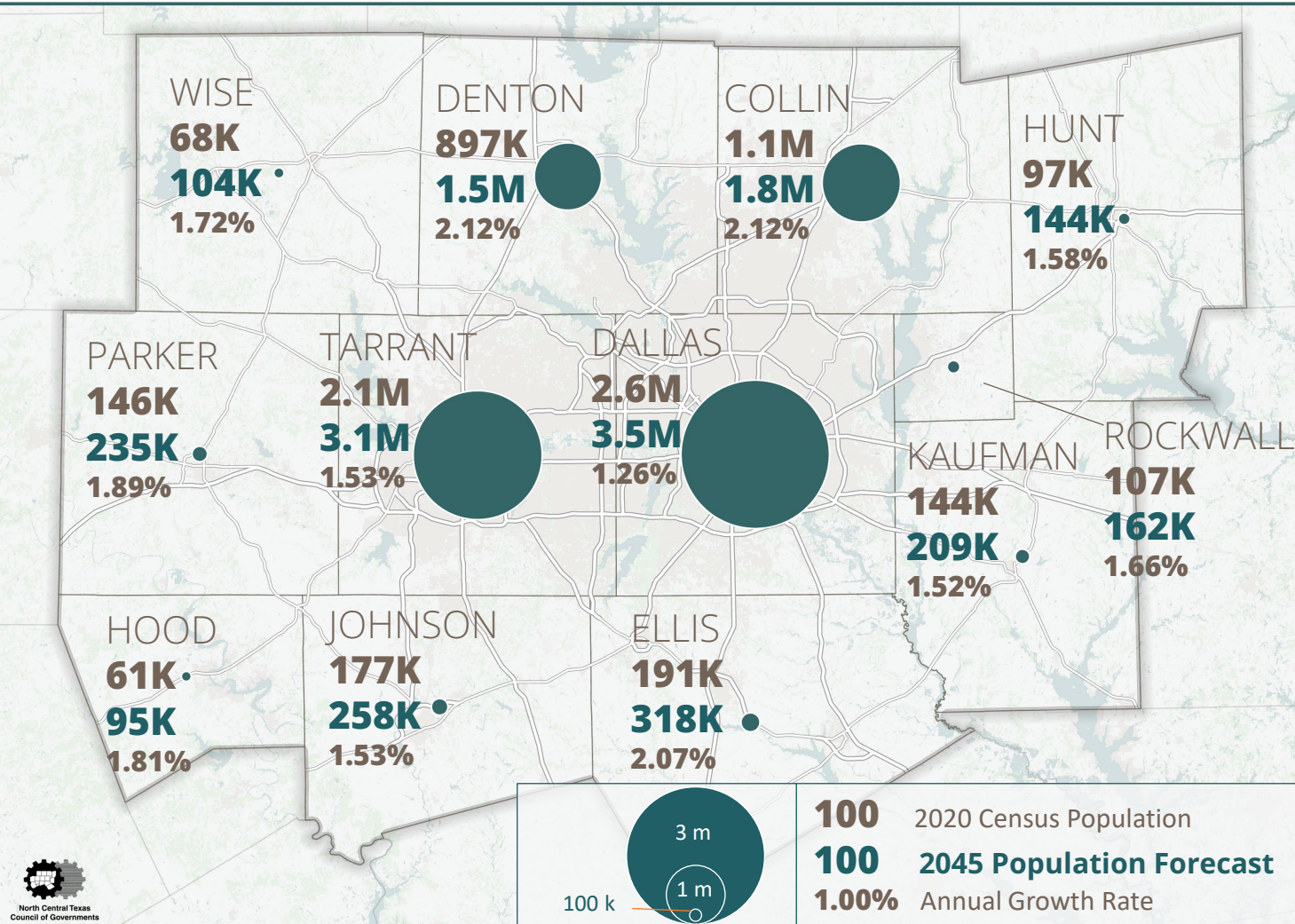
Public Involvement





REGIONAL PERSPECTIVE

DEMOGRAPHIC FORECAST

Population Forecast by County



Forecast Totals

	2020	2045
Regional Population 	7.6 M	11.4 M
Regional Employment 	5.0 M	8.1 M



4th

Largest metro area in US



30%

of Texas' GDP



40%

Increase in population forecasted

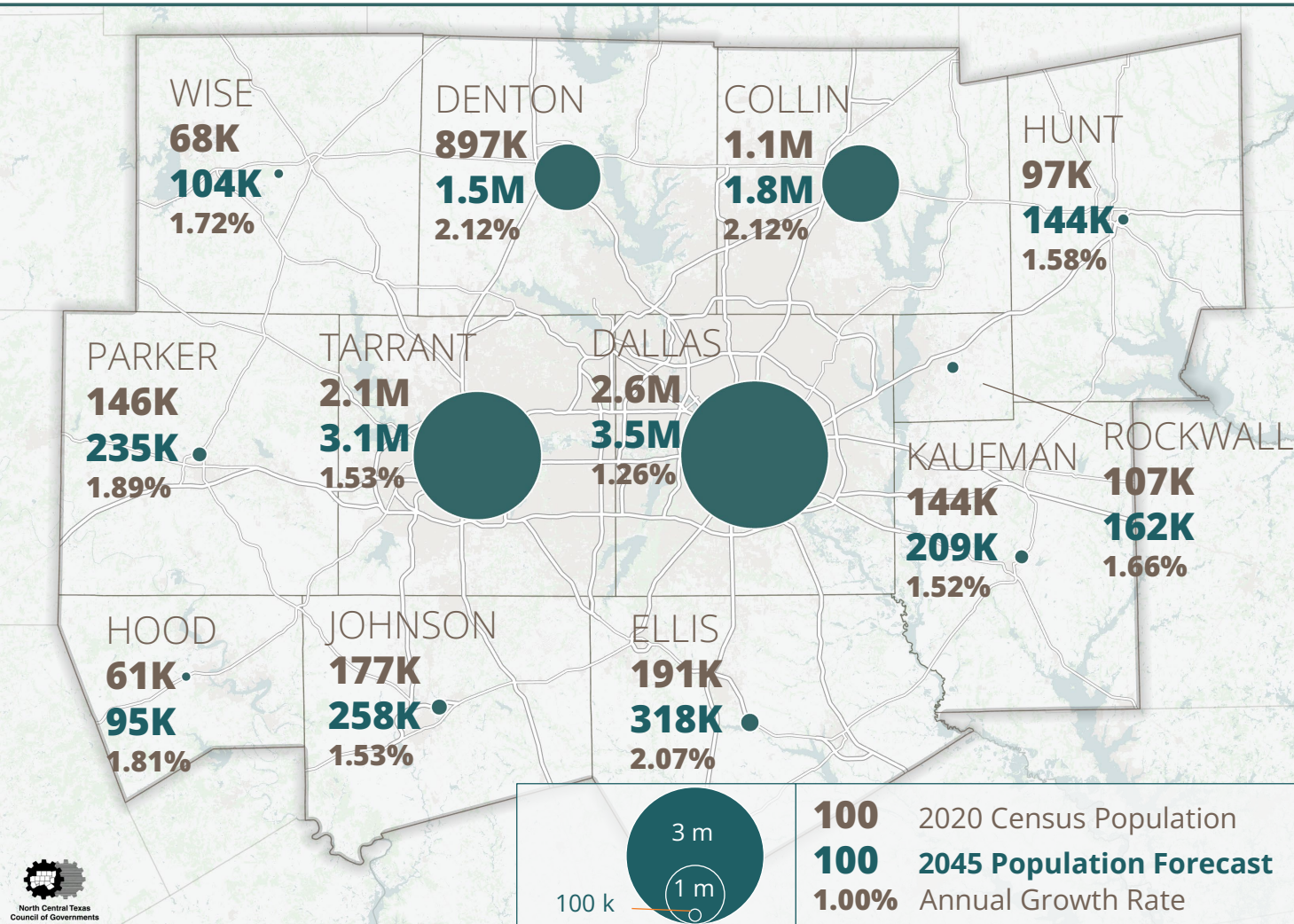


45%

Increase in employment forecasted

DEMOGRAPHIC FORECAST

Population Forecast by County



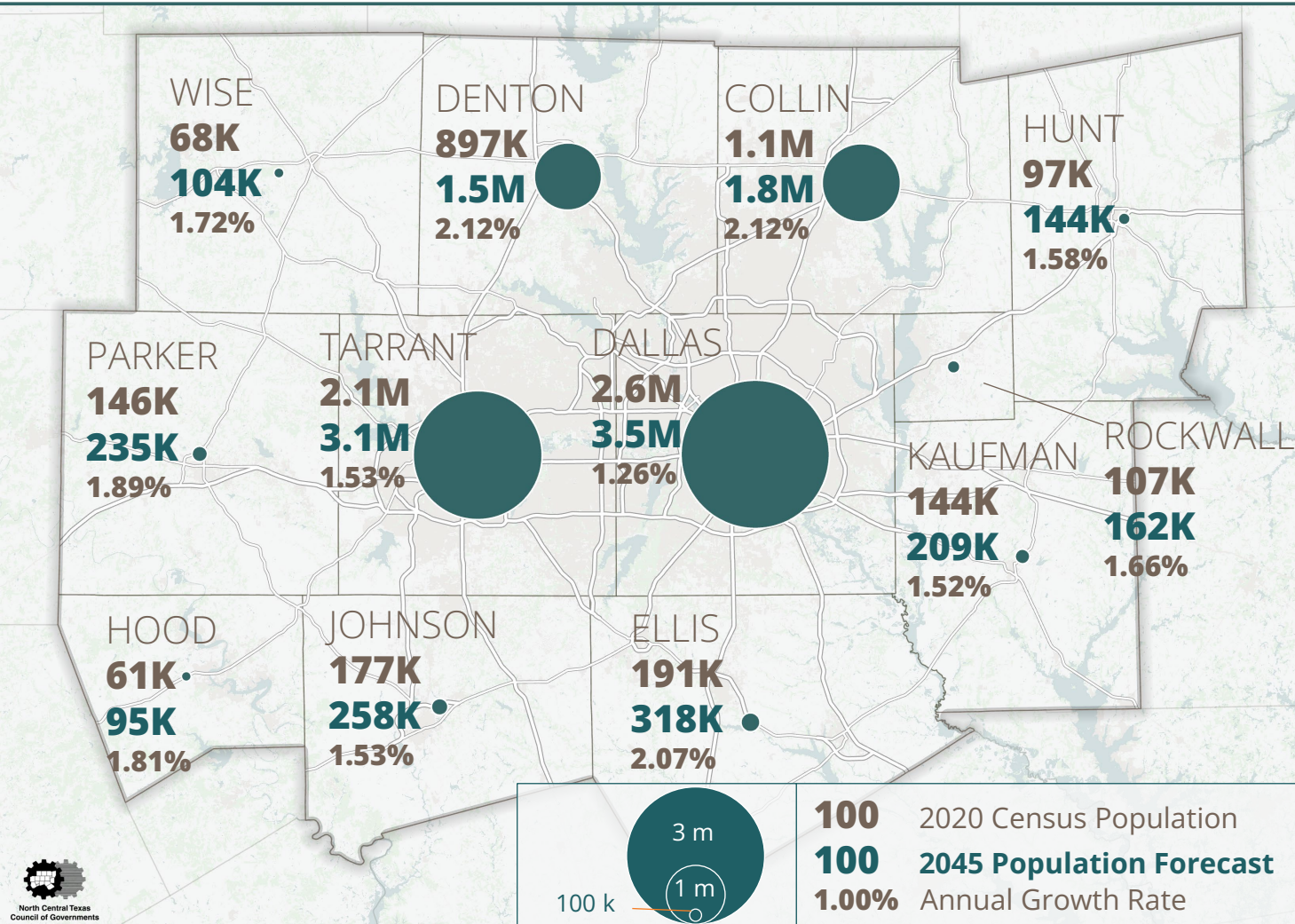
Top 5 Fastest Growing Counties

Absolute Change

TARRANT	+964 K
DALLAS	+951 K
COLLIN	+731 K
DENTON	+619 K
ELLIS	+128 K

DEMOGRAPHIC FORECAST

Population Forecast by County



Top 5 Fastest Growing Counties

Annual Percent Increase (CAGR)

COLLIN	2.12%
DENTON	2.12%
ELLIS	2.07%
PARKER	1.89%
HOOD	1.81%

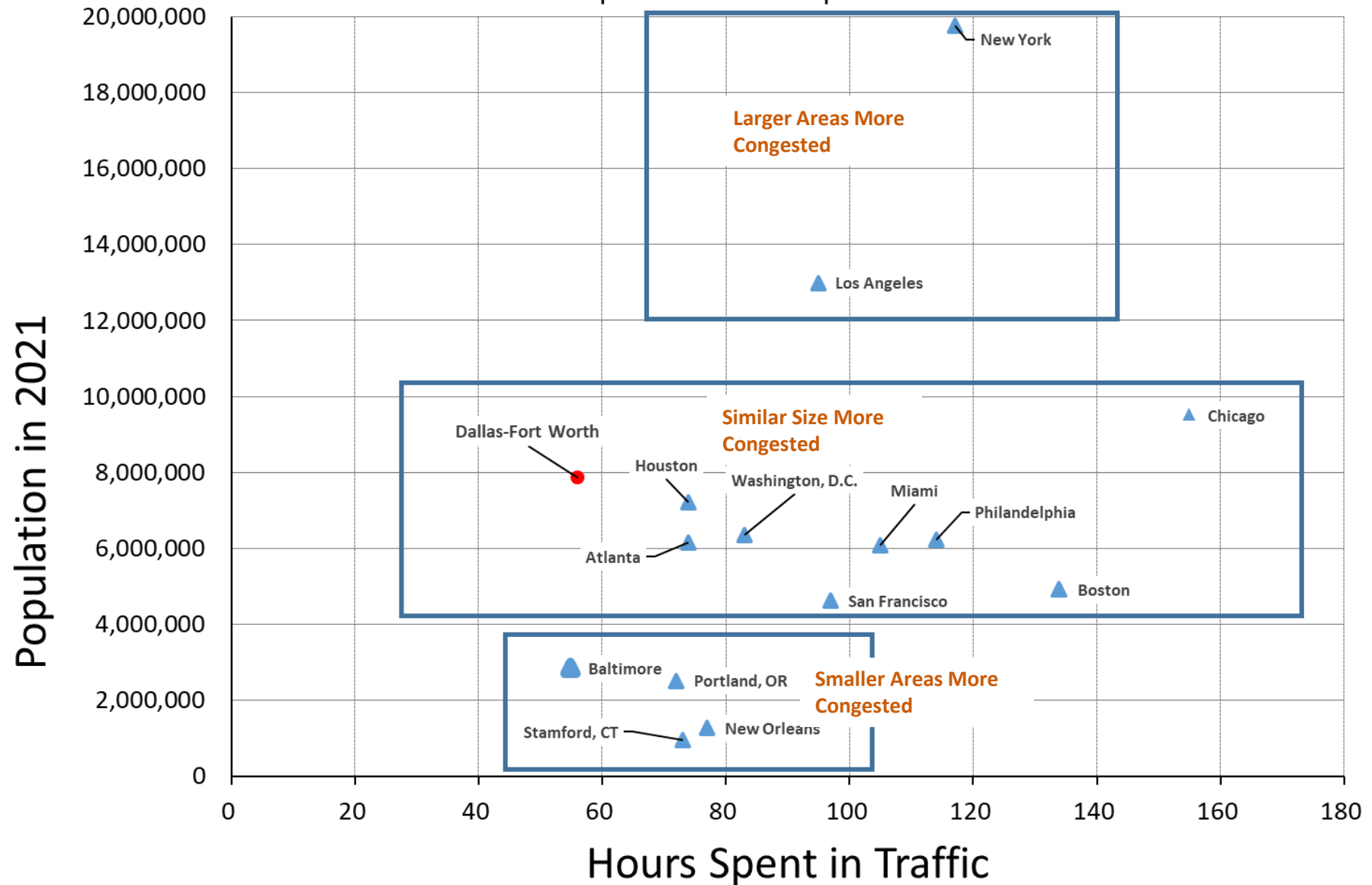
POPULATION FORECAST BY COUNTY: FASTEST GROWING

Top Five
Fastest
Growing
Counties

	2020 Census	2045	Change	Compound Annual Growth Rate
Collin	1.1 million	1.8 million	+0.73 million	2.1%
Denton	0.9	1.5	+0.62	2.1
Ellis	0.2	0.3	+0.13	2.1
Parker	0.1	0.2	+0.09	1.9
Hood	0.1	0.1	+0.03	1.8
Wise	0.1	0.1	+0.04	1.7
Rockwall	0.1	0.2	+0.05	1.7
Hunt	0.1	0.1	+0.05	1.6
Johnson	0.2	0.3	+0.08	1.5
Tarrant	2.1	3.0	+0.96	1.5
Kaufman	0.1	0.2	+0.07	1.5
Dallas	2.6	3.5	+0.95	1.3
TOTAL	7.6 million	11.4 million	+3.80 million	1.6%

Source: The Perryman Group. (March 2020). A Long-Term Employment and Population Forecast for the North Central Texas Council of Governments Region; numbers may not sum due to rounding

15 Most Congested Regions Comparison of Hours Spent in Traffic and Population of Metropolitan Areas

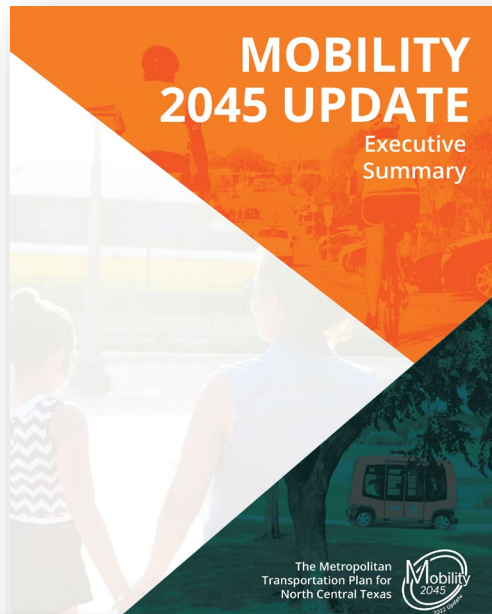


Sources: INRIX 2022 Data, Census 2021 and North Central Texas Council of Governments



WHAT IS THE METROPOLITAN TRANSPORTATION PLAN?

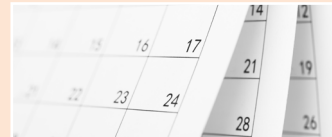
WHAT IS THE METROPOLITAN TRANSPORTATION PLAN?



**Adopted by the
Regional Transportation
Council on June 9, 2022**



Represents a blueprint for the region's multimodal transportation system for all users



Covers at least a 20-year timeframe



Responds to region's goals



Identifies policies, programs, and projects for continued development, consistent with federal/state air quality goals



Guides the expenditure of federal and state funds, demonstrates financial constraint

NEW FOR THE MOBILITY 2045 UPDATE



Builds on Mobility 2045



New demographic forecast



Content brought up-to-date from 2018 to 2023



New financial forecast



Updated policies, programs, and projects



Environmental document consistency



Performance measure framework established



Consistent with Infrastructure Investment and Jobs Act (IIJA)



Updated technology discussion, which includes broadband internet

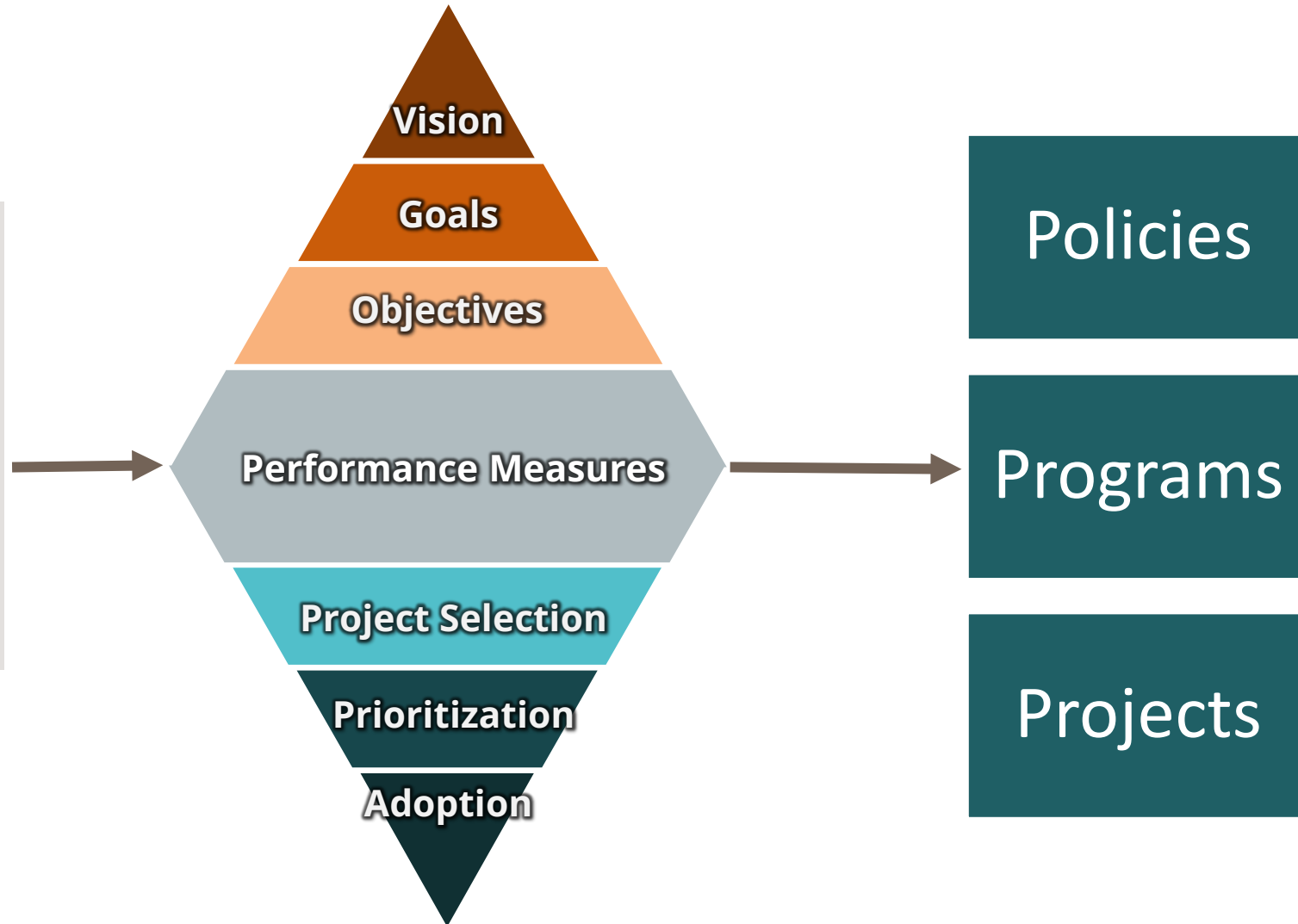


New federal Transportation Conformity determination (Dec. 2022)

MOBILITY PLAN DEVELOPMENT


Considered throughout the process:

- Public Involvement
- Equity
- Air Quality
- Financial Constraint
- Technology
- Scenario Planning




MOBILITY 2045 UPDATE GOALS


MOBILITY

 Improve transportation **options** for people and goods

 Support travel **efficiency** strategies


 Ensure community **access** to the transportation system and planning process


QUALITY OF LIFE

 Enhance **environment** and **lifestyles**


 Encourage **sustainable development**

SYSTEM SUSTAINABILITY

 Ensure adequate **maintenance, safety, and reliability**

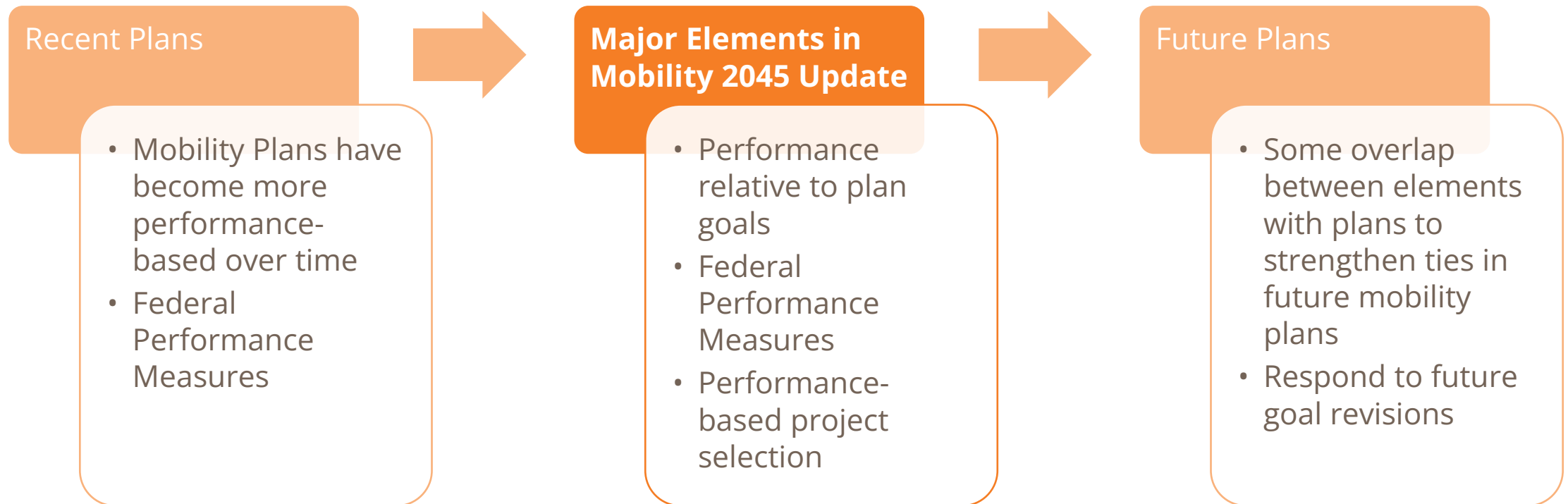
 Pursue long-term, sustainable **financial resources**

IMPLEMENTATION

 Provide timely **planning and implementation**

 Develop **cost-effective** projects and programs

PERFORMANCE-BASED PLANNING



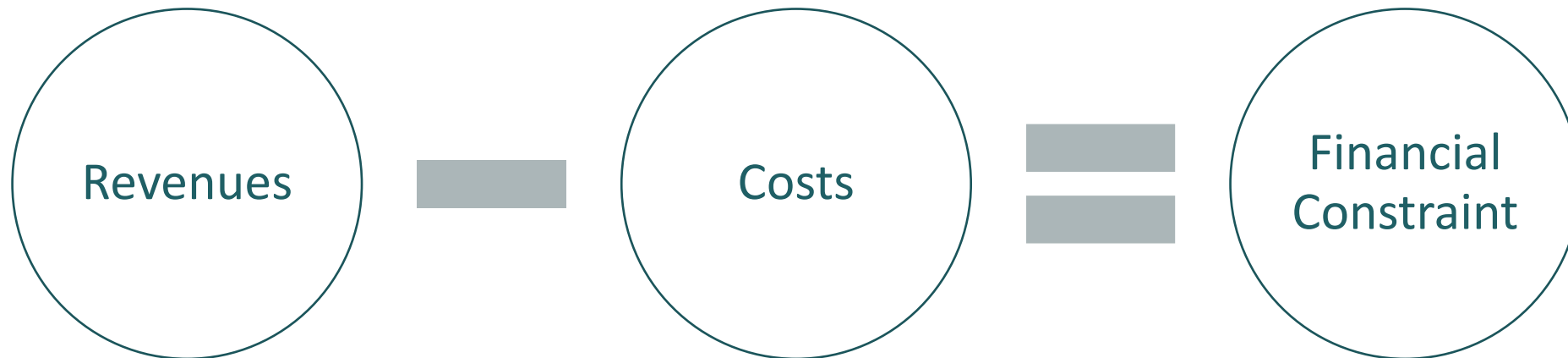
FINANCIAL PLAN REQUIREMENTS

Plan must be financially constrained

Include all reasonably expected sources of revenue




Year of expenditure dollars

Balance priorities with available revenues



PLANNING APPROACH AND FINANCIAL PLAN

MAXIMIZE EXISTING SYSTEM

 Infrastructure Maintenance Maintain and operate existing transit and roadway facilities	\$42.8 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	\$49.1 B
Freeways/Tollways and Arterials Add vehicle capacity	

TOTAL

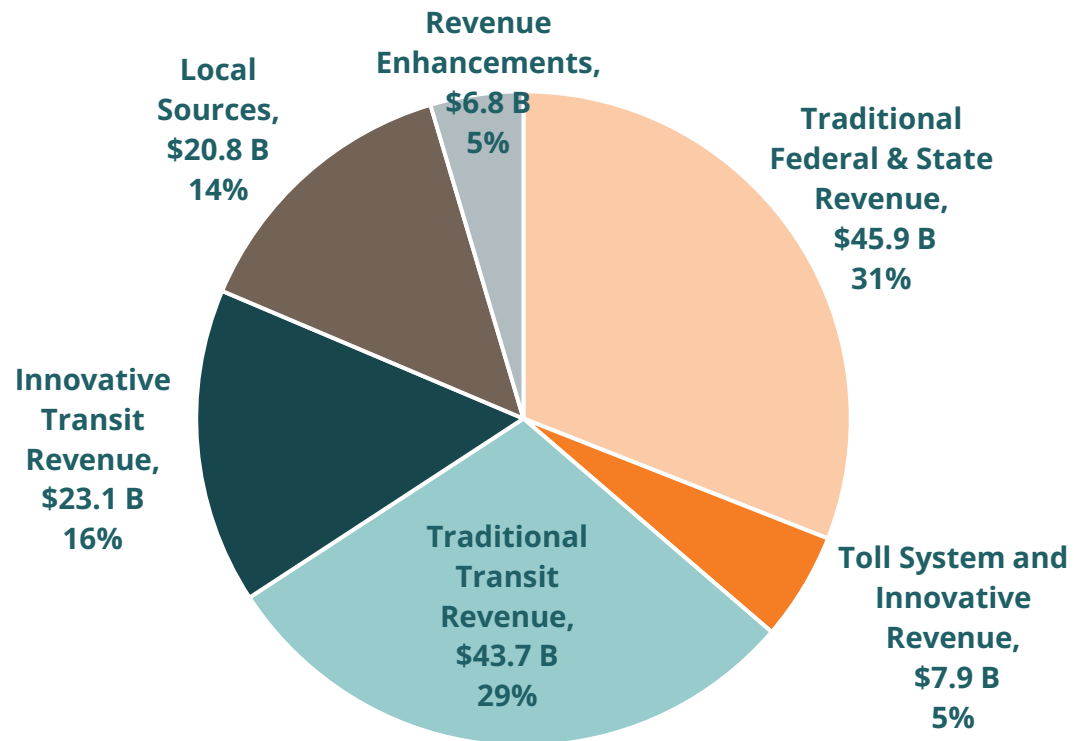
\$148.3 B

Financial Requirements

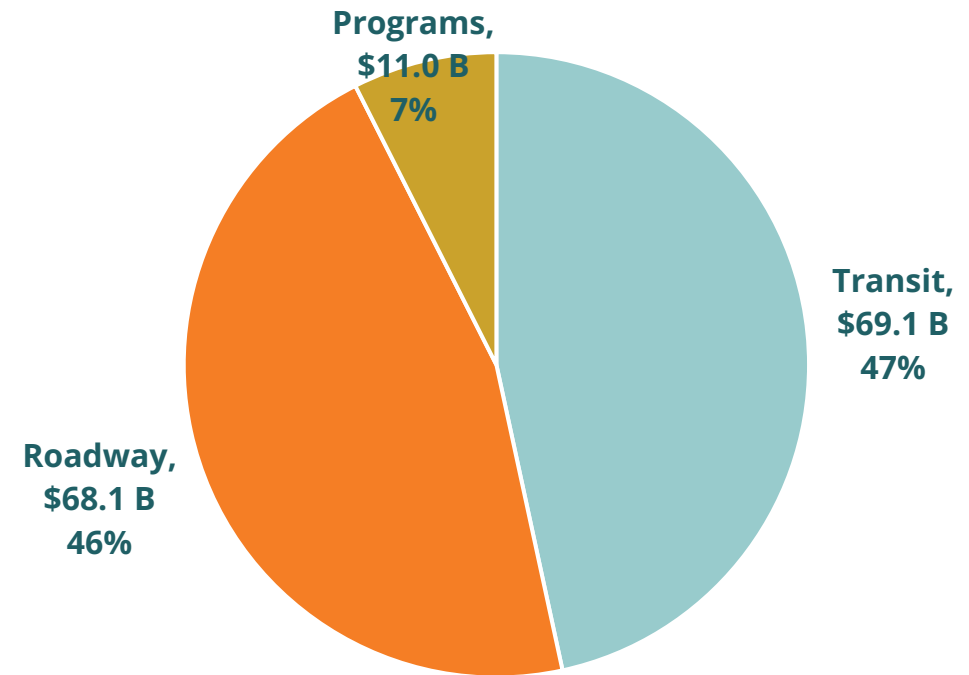
- Financial constraint
- Reasonably expected sources of revenue
- Year-of-expenditure dollars
- Balance priorities with available revenues

REVENUE AND EXPENDITURE CATEGORIES

MOBILITY 2045 REVENUE SOURCES



MOBILITY 2045 EXPENDITURE CATEGORIES





ISSUES AND CHALLENGES

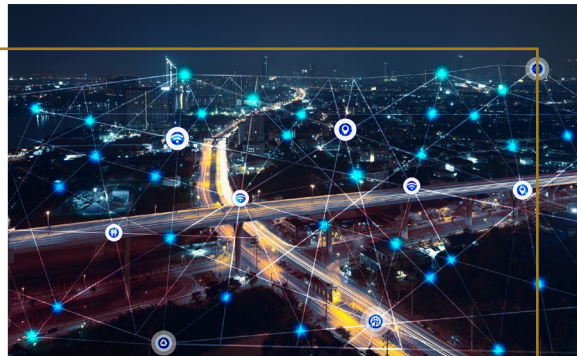
ISSUES AND CHALLENGES



Anticipated growth



Changes in travel behavior



Emerging technologies

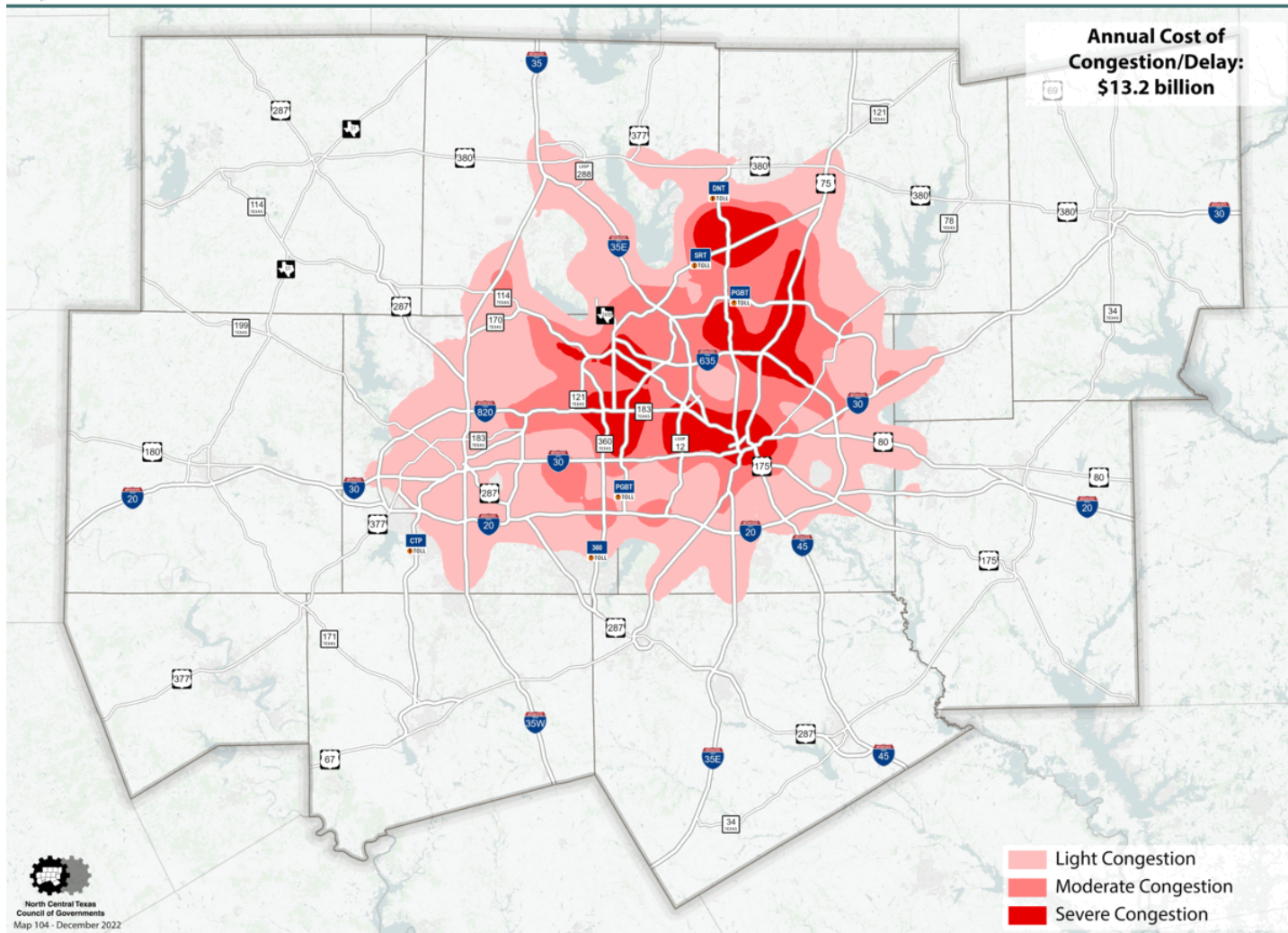


Air Quality

SIMULATED CONGESTION



2023 Levels of Congestion/Delay



Annual Cost of Congestion/Delay

2023
current conditions

\$13.2
billion

2045
build conditions

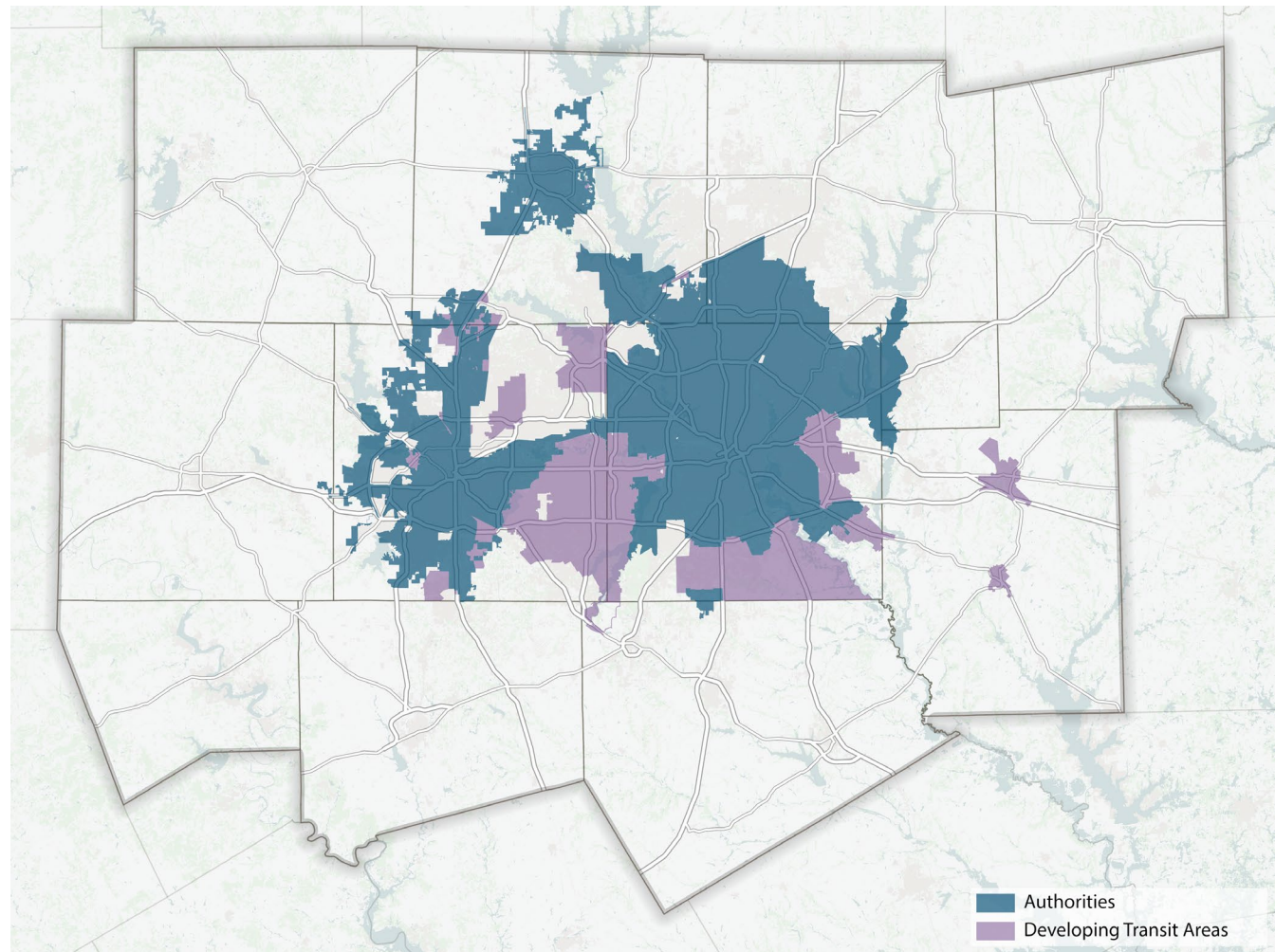
\$30.1
billion

2045
no-build conditions

\$59.8
billion

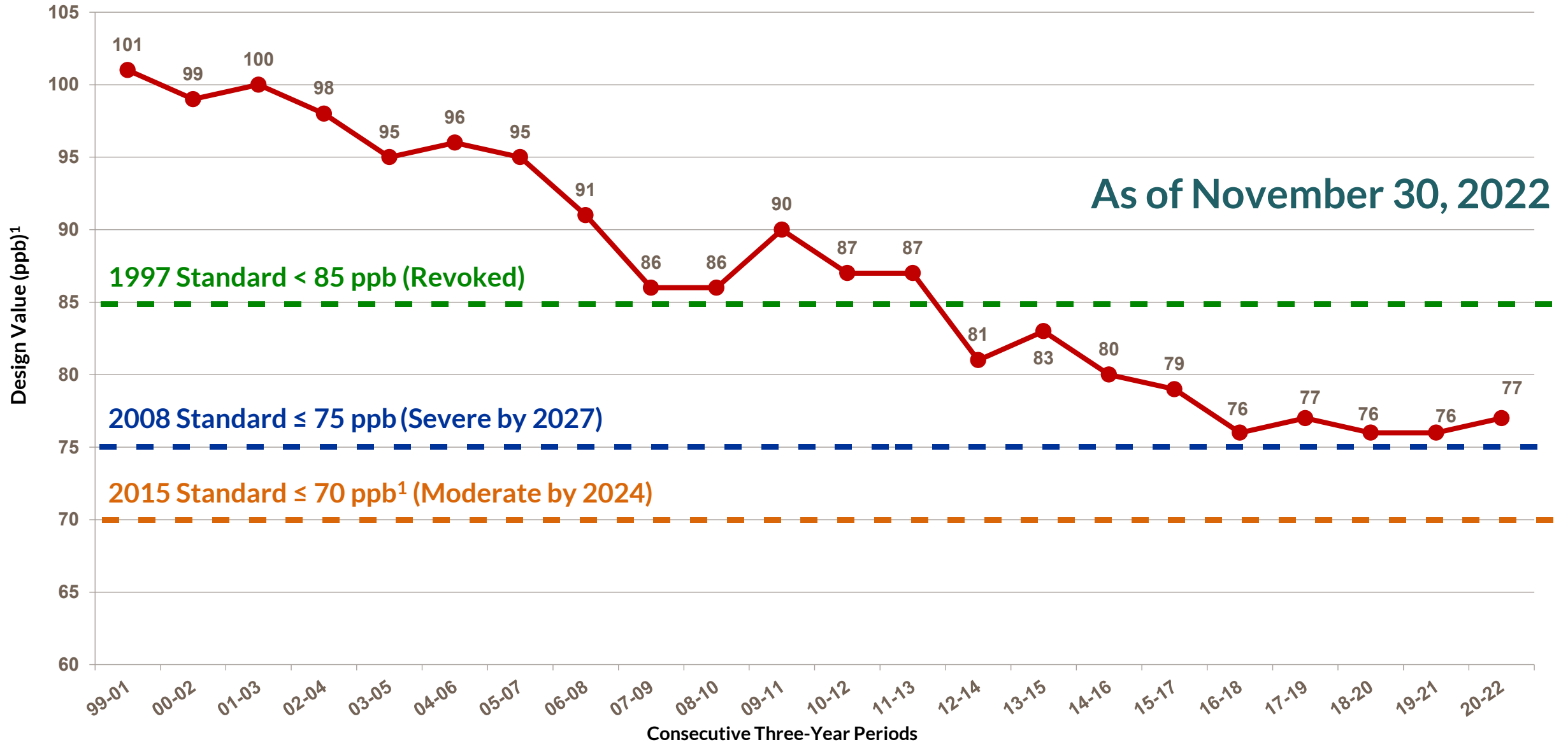
POPULATION FORECAST: TRANSIT SERVICE AREAS

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

OZONE DESIGN VALUE TREND



¹Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the *Design Value* (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

PLAN RECOMMENDATIONS

FOCUS ON SYSTEMWIDE RELIABILITY



Complete Streets



Transit



Street Grid/Freeways



Toll Managed Lane System



High-Speed Rail



Leverage emerging technologies



Overlap modes to create options and reliability



Diversify and create fail-safes

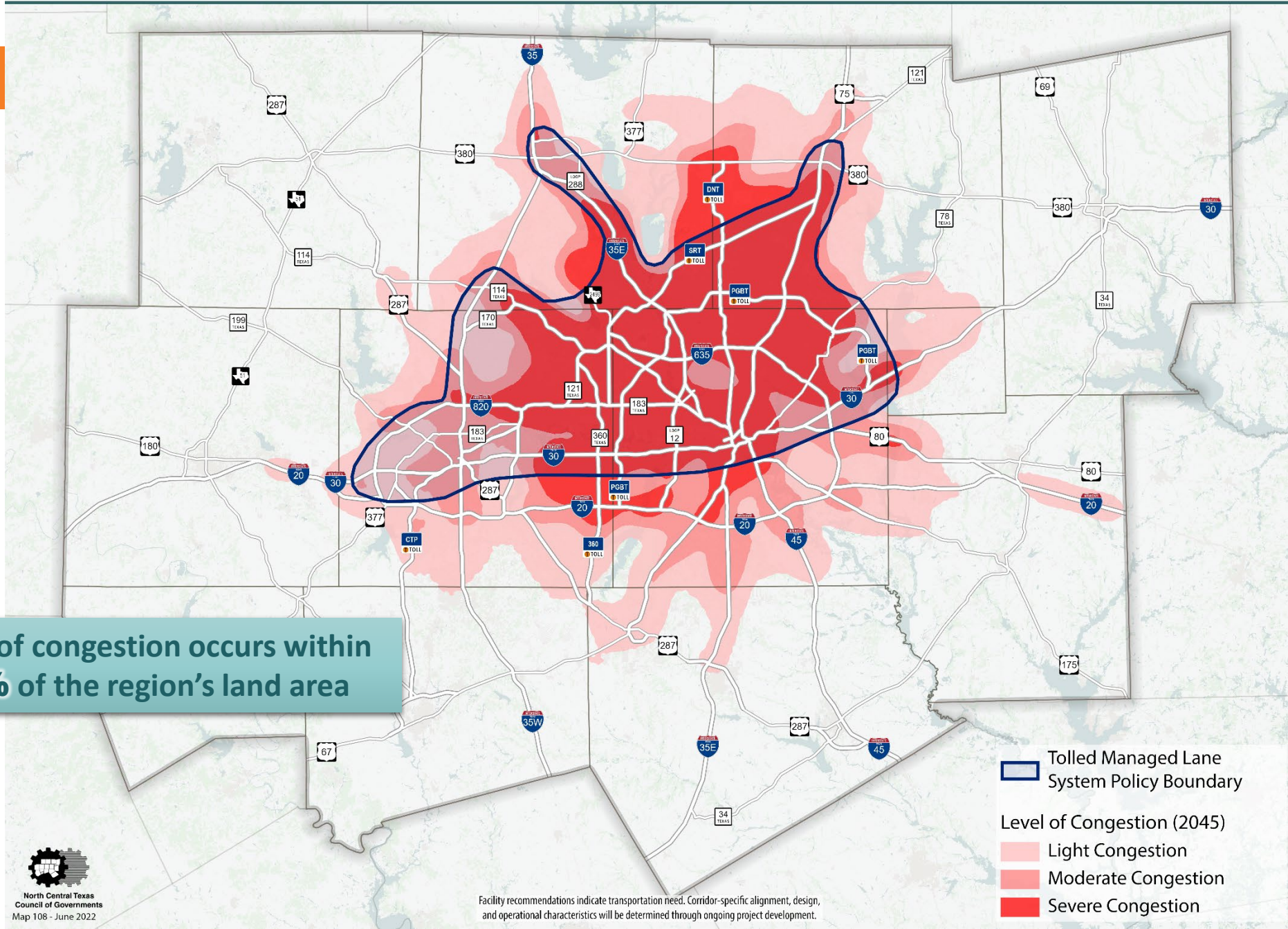


Mitigate pressures: fuel cost, resource availability, grid capacity, weather

Reliability

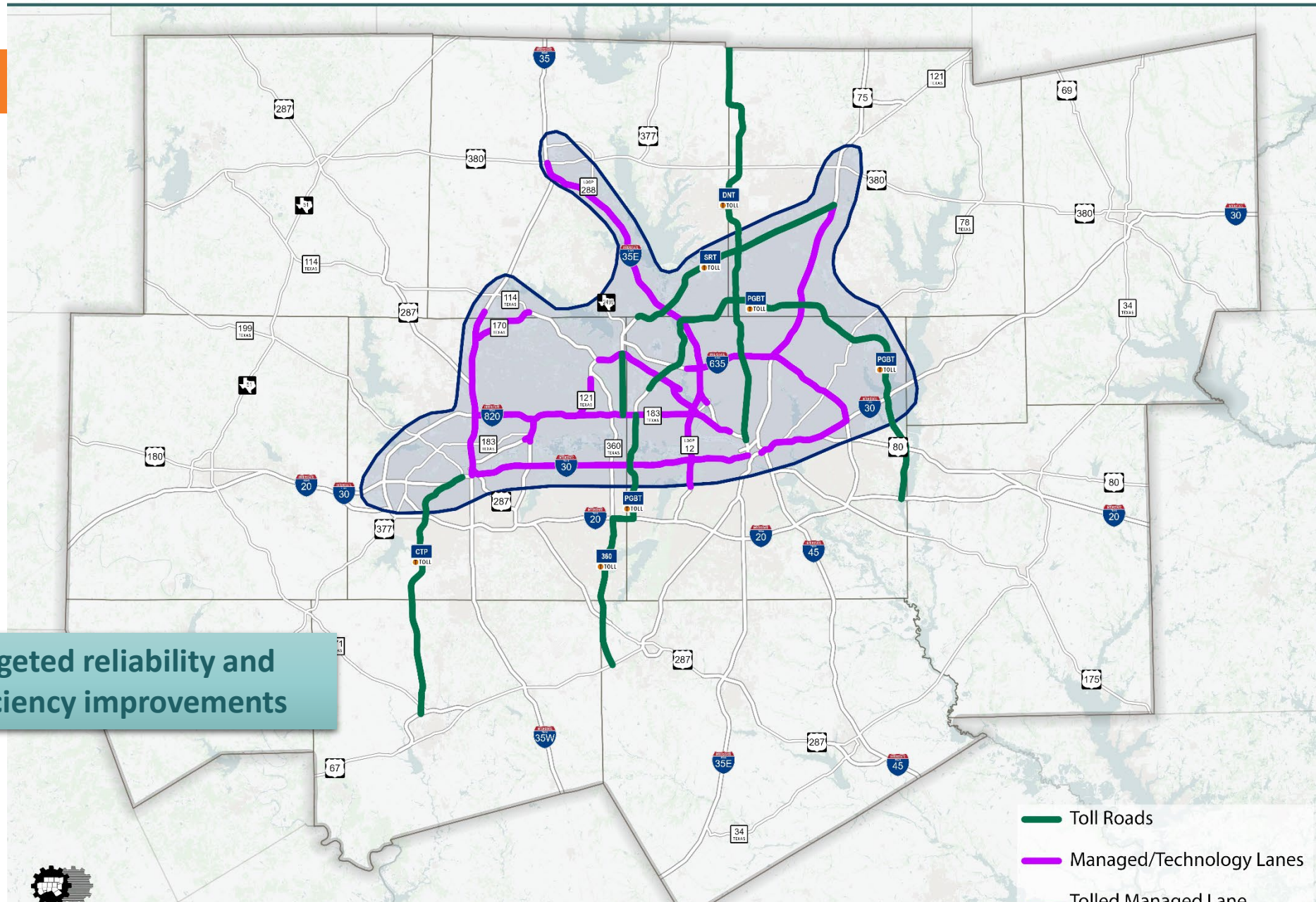


Resiliency



**78% of congestion occurs within
13% of the region's land area**

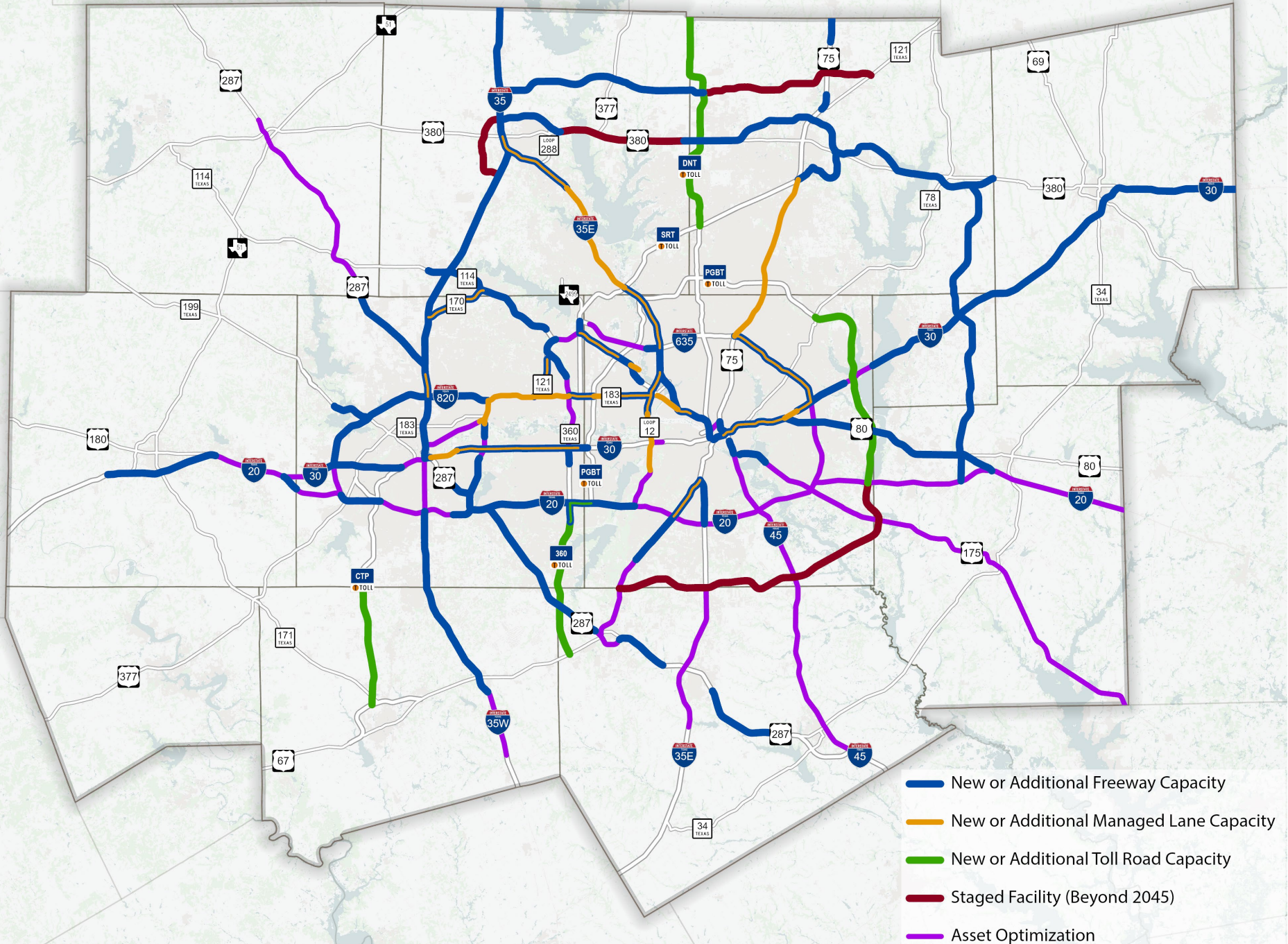
- Tolled Managed Lane System Policy Boundary
- Light Congestion
- Moderate Congestion
- Severe Congestion



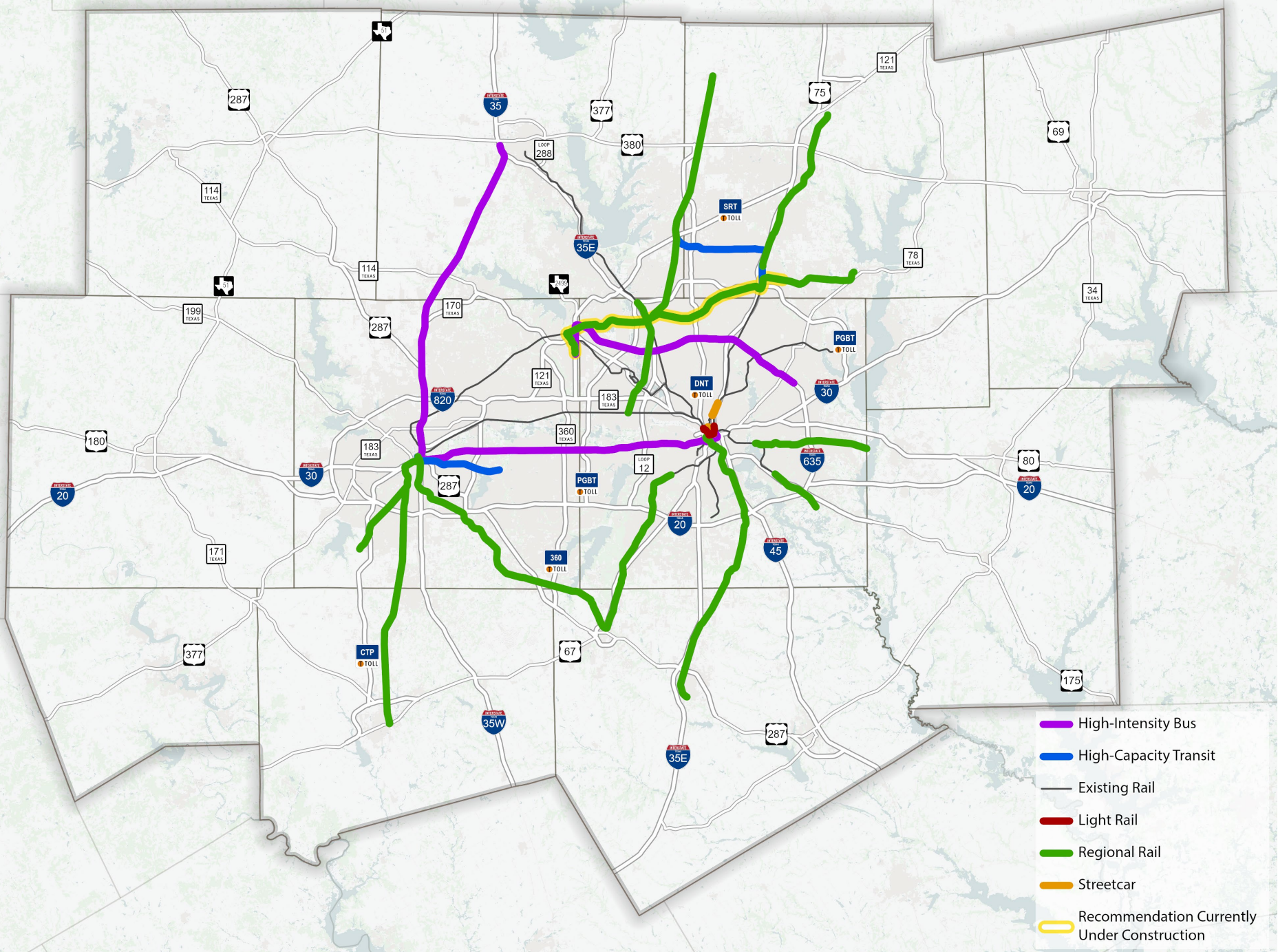
Targeted reliability and efficiency improvements

-  Toll Roads
-  Managed/Technology Lanes
-  Tolled Managed Lane System Policy Boundary

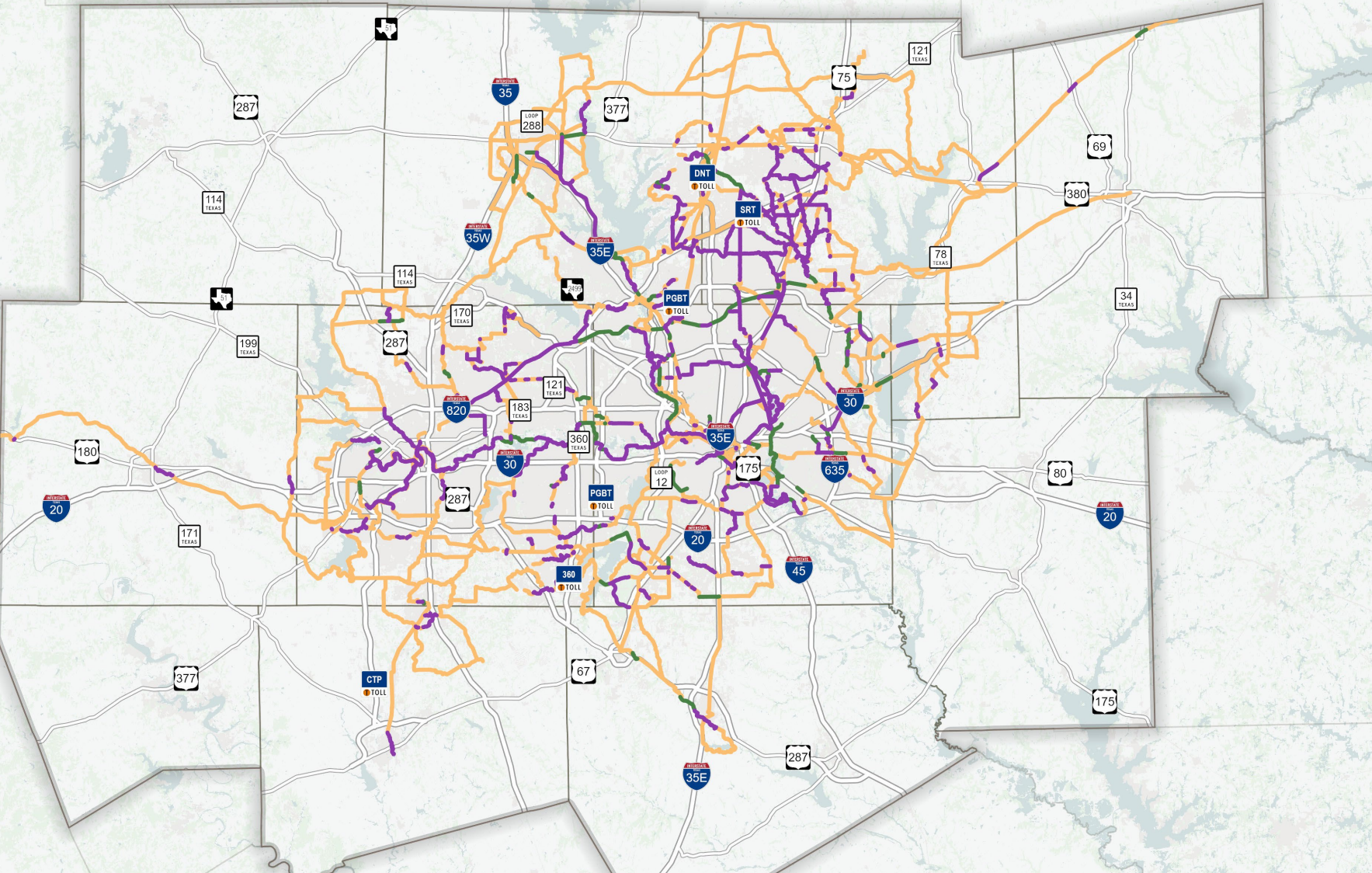
MAJOR ROADWAY RECOMMENDATIONS



TRANSIT RECOMMENDATIONS

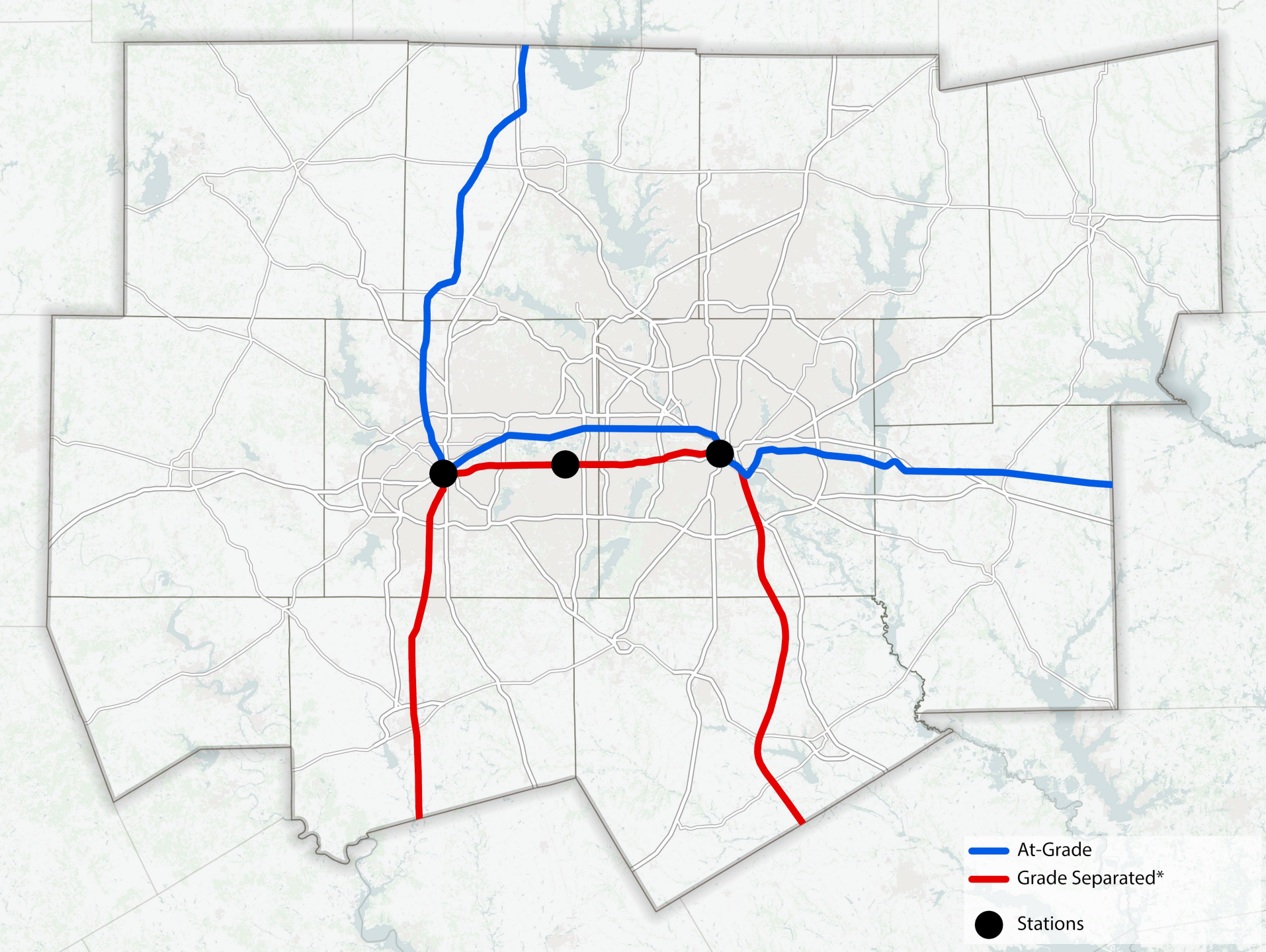


REGIONAL VELOWEB



The map displays a network of transportation corridors in the Dallas-Fort Worth area. Existing corridors are shown in purple, funded corridors in green, and planned corridors in orange. Major highways like I-35, I-20, I-45, and I-820 are also visible. Toll roads are marked with 'TOLL' and a yellow dot. The map includes county boundaries and various route numbers.

Existing	538 Miles
Funded	131 Miles
Planned	1,496 Miles
Total	2,165 Miles



HIGH-SPEED TRANSPORTATION

SEAMLESS, CONNECTED SERVICE

"ONE-SEAT" RIDE

3 STATIONS

- 📍 FORT WORTH
- 📍 ARLINGTON
- 📍 DALLAS

— At-Grade
— Grade Separated*
● Stations

HIGHLIGHTED POLICY AND PROGRAM UPDATES



Safety

References new Pedestrian Safety Action Plan endorsed by the Regional Transportation Council on June 10, 2021



Health Accessibility Program

Identify and support transportation solutions to address health disparities in underserved communities, including solutions that improve access to healthy food and medical care



Environmental Considerations

Build on air quality, resiliency, and environmental programs and incorporate new strategies



TDM Strategies

RTC Resolution R21-04 supports the establishment of a regional SOV trip reduction target of 20% annually

HIGHLIGHTED TECHNOLOGY PROGRAM UPDATES



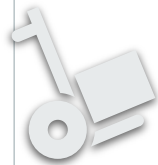
Advance High-Speed Transportation recommendations

Consider high-speed rail between Dallas-Arlington-Fort Worth, as well as connectivity with the proposed Houston-Dallas high-speed rail and Fort Worth-Laredo high-speed rail/hyperloop



Safe Integration of Vertical Mobility Technology in the NCTCOG region

New policy to safely and efficiently integrate Vertical Mobility Technology, Advanced Air Mobility, Urban Air Mobility, Unmanned Traffic Management, and Uncrewed Aircraft Systems into the NCTCOG region



Advance Automated Transportation Systems (ATS)

Apply ATS technology in passenger and freight applications for local circulation and first/last mile access to regional rail



Automated Vehicles

Incorporate the new Automated Vehicle 2.0 initiative launched since the adoption of the last Mobility Plan



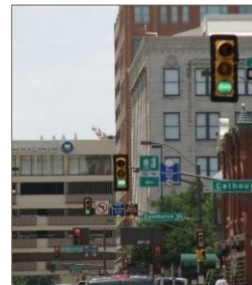
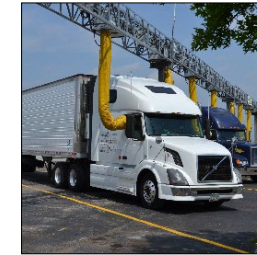
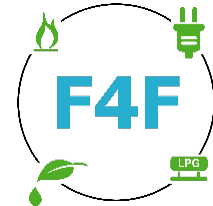
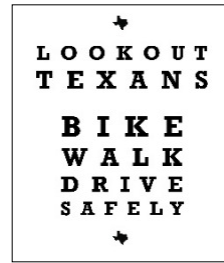
Internet and Broadband

Incorporates a new topic of broadband internet through discussion of access, infrastructure, the intersection of communications and transportation, and potential uses

AIR QUALITY STRATEGIES & PROGRAMS



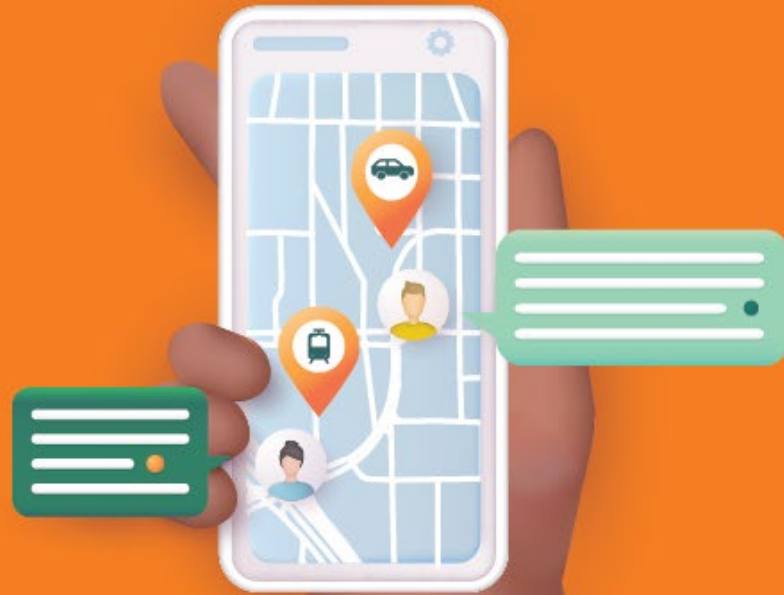
Rideshare. Record. Reward.





PUBLIC INVOLVEMENT

YOU CAN STILL PROVIDE INPUT



- 📍 **MYE is available online, anytime, in English and Spanish**
- 📍 **Mapping your travel experience helps us understand regional travel issues people are facing**
- 📍 **Comment on roadway, transit, bicycle and pedestrian topics, and more at:**

www.nctcog.org/MapYourExperience

MAP YOUR EXPERIENCE

Bike/Ped

- 1 **Sidewalk/Trail Availability**
- 2 **Safety**
- 3 **Lanes/Stripes/Markings**

Accessibility is the top concern for this mode. Safety is a top factor impeding people from walking or biking.

Transit

- 1 **Stops/Stations Needed**
- 2 **Other**
- 3 **Service Frequency**

Transit options in areas without existing service, and increasing frequency in areas with it, are top concerns.

Roadway

- 1 **Traffic**
- 2 **Safety**
- 3 **Road Condition**

Safety of merging, poor visibility, and blind spots are often mentioned.

Dashboard Available at: www.nctcog.org/MapYourExperience

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