



THE METROPOLITAN TRANSPORTATION PLAN FOR NORTH CENTRAL TEXAS EXECUTIVE SUMMARY

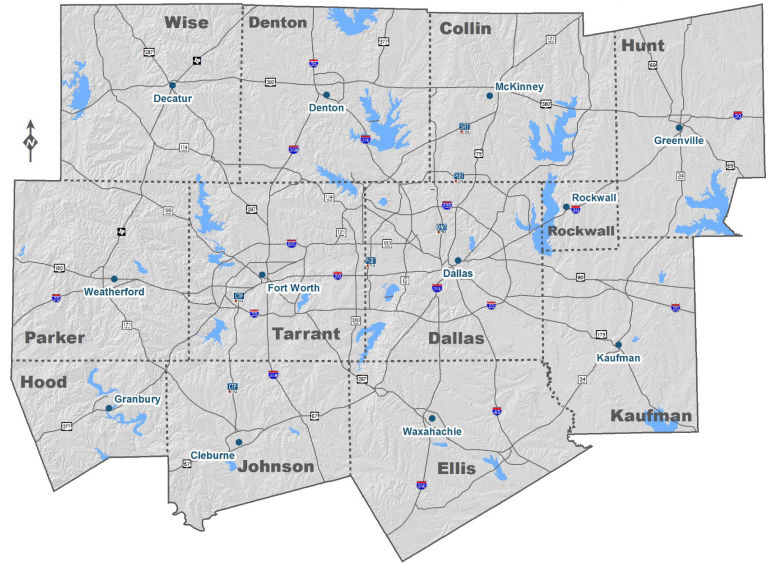


REGION OF TRANSPORTATION CHOICE

THE METROPOLITAN TRANSPORTATION PLAN

Mobility 2040 is the latest iteration of the long-range Metropolitan Transportation Plan (MTP) for North Central Texas. It serves as a blueprint for improvements to the region's transportation system. Mobility 2040 recommends policies, programs, and projects to meet the region's transportation goals. It includes recommendations for many modes of transportation, including travel by automobile, public transit, bicycle, and walking. The recommendations in the MTP will be implemented by 2040.

DALLAS-FORT WORTH METROPOLITAN PLANNING AREA



The Dallas-Fort Worth Metropolitan Planning Area includes 12 counties in North Central Texas and covers approximately 9,500 square miles. For additional information on Mobility 2040, please visit: www.nctcog.org/mobility2040.

MOBILITY 2040 GOALS

MOBILITY

- Improve the availability of transportation options for people and goods.
- Support travel efficiency measures and system enhancements targeted at congestion reduction and management.
- Ensure all communities are provided access to the regional transportation system and planning process.

QUALITY OF LIFE

- Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.
- Encourage livable communities that support sustainability and economic vitality.

SYSTEM SUSTAINABILITY

- Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system.
- Pursue long-term, sustainable revenue sources to address regional transportation system needs.

IMPLEMENTATION

- Provide for timely project planning and implementation.
- Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.

The Mobility 2040 Goals guide the development of the MTP's recommendations.

A GROWING AND DIVERSE REGION

The Dallas-Fort Worth area is the fourth largest metropolitan region in the country in terms of population – and it is growing. With a current population of 7 million, the area adds approximately 1 million people every decade. By 2040, the region will be home to nearly 10.7 million people and will provide 6.7 million jobs.

CURRENT POPULATION:
7.0 MILLION

2040 POPULATION:
10.7 MILLION

CURRENT EMPLOYMENT:
4.6 MILLION

2040 EMPLOYMENT:
6.7 MILLION



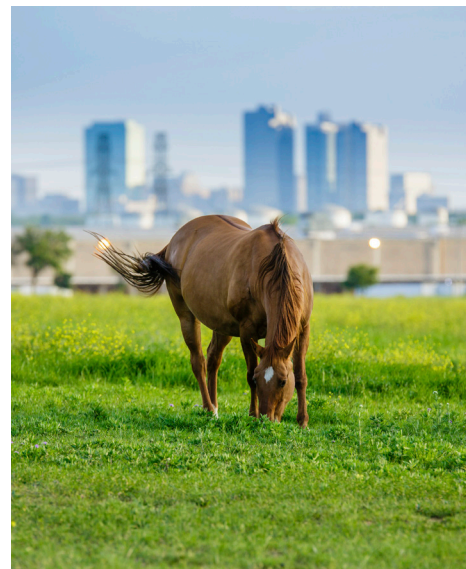
1 million people 

1 million jobs 



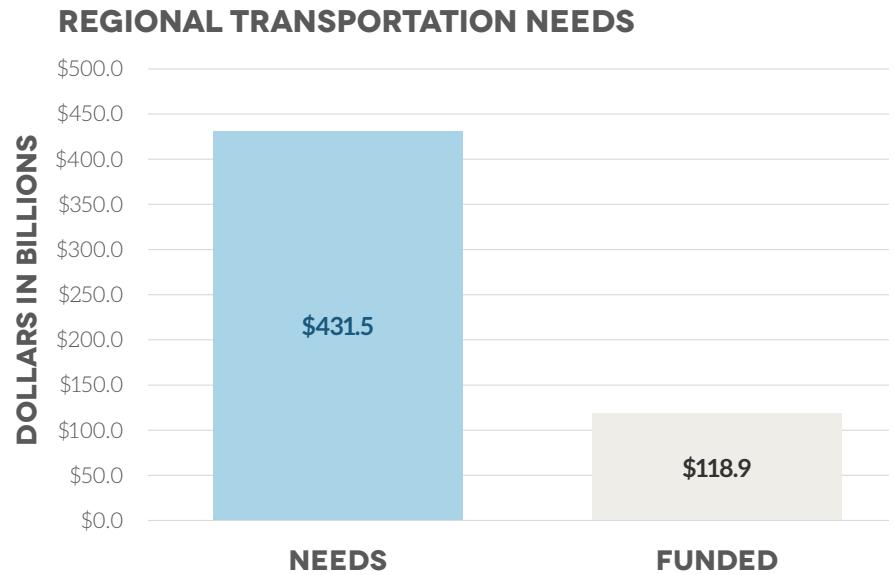
The region's population and employment are expected to grow by 53 percent and 47 percent, respectively. This growth will increase demand on the region's already congested transportation system.

Covering about 9,500 square miles, the region's landscape ranges across dense urban areas to suburban development, small town centers, and rural ranch and farm land. Multiple transportation options are needed to help the region's diversity of residents reach their destinations.



REGIONAL TRANSPORTATION NEEDS

Mobility 2040 identifies options – from roadways to trails to passenger rail – to provide the region’s residents with choices when they travel. Current estimates indicate that the region would need to spend \$431.5 billion by 2040 to eliminate the worst levels of congestion. However, the MTP is not a wish list of improvements. It can only include recommendations for projects for which funding is expected to be available. Recent state Constitutional Amendments have provided additional transportation funding, and Mobility 2040 identifies \$118.9 billion in transportation improvements. But these expected funds will meet less than 30 percent of the region’s transportation needs.

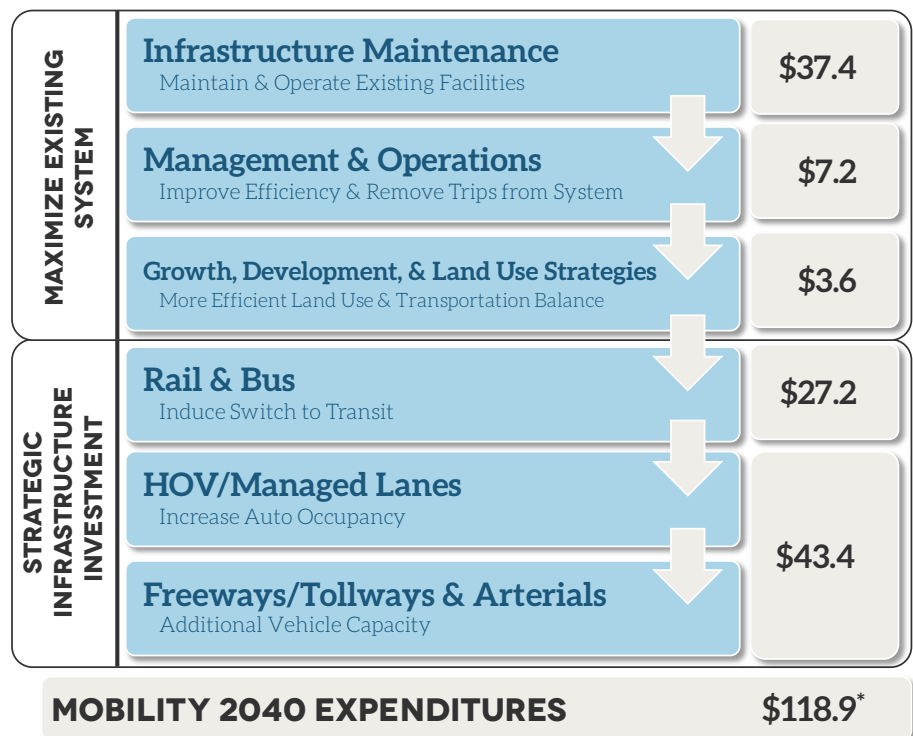


Despite nearly \$18 billion in new funding for transportation that is expected to be available through state Constitutional Amendments, the region still lacks the necessary funding to fully implement needed transportation improvements.

MOBILITY 2040 PLANNING APPROACH

Because transportation needs are outpacing available funding, Mobility 2040 prioritizes projects that maximize the existing transportation system, then strategically invests in new infrastructure.

Mobility 2040 is the product of a comprehensive, cooperative, and continuous planning effort. The recommendations in Mobility 2040 seek to meet the transportation demands of a diverse and growing region.



*Actual dollars, in billions. Values may not sum due to independent rounding.

MAXIMIZING THE EXISTING SYSTEM

To make the most of the existing transportation system, Mobility 2040 focuses on the following recommendations. These typically cost less than building new road and rail infrastructure, and they offer a high return on investment.

INFRASTRUCTURE MAINTENANCE

- Road maintenance and rehabilitation
- Transit maintenance and operations
- Safety improvements
- Transit core capacity

MANAGEMENT & OPERATIONS STRATEGIES

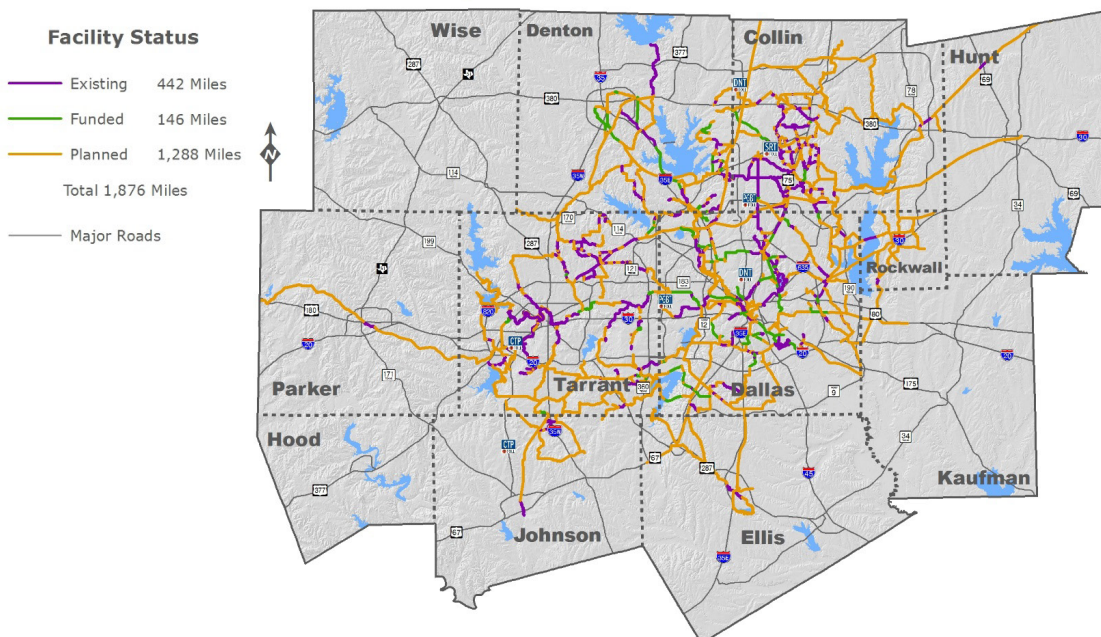
- Intersection improvements
- Traffic signal improvements
- Bottleneck removals
- Trip reduction programs
- Freeway incident management
- Regional mobility assistance patrol

GROWTH, DEVELOPMENT, & LAND USE STRATEGIES

- Sustainable development initiatives
- Bicycle and pedestrian improvements
- Air quality improvement efforts
- Environmental stewardship



REGIONAL VELOWEB: OFF-STREET BICYCLE & PEDESTRIAN FACILITIES



The Regional Veloweb is a network of off-street, shared-use paths designed for bicyclists, pedestrians, and users of other non-motorized forms of transportation. 32 percent of trips made in the region are 3 miles or less, making them ideal for biking or walking.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

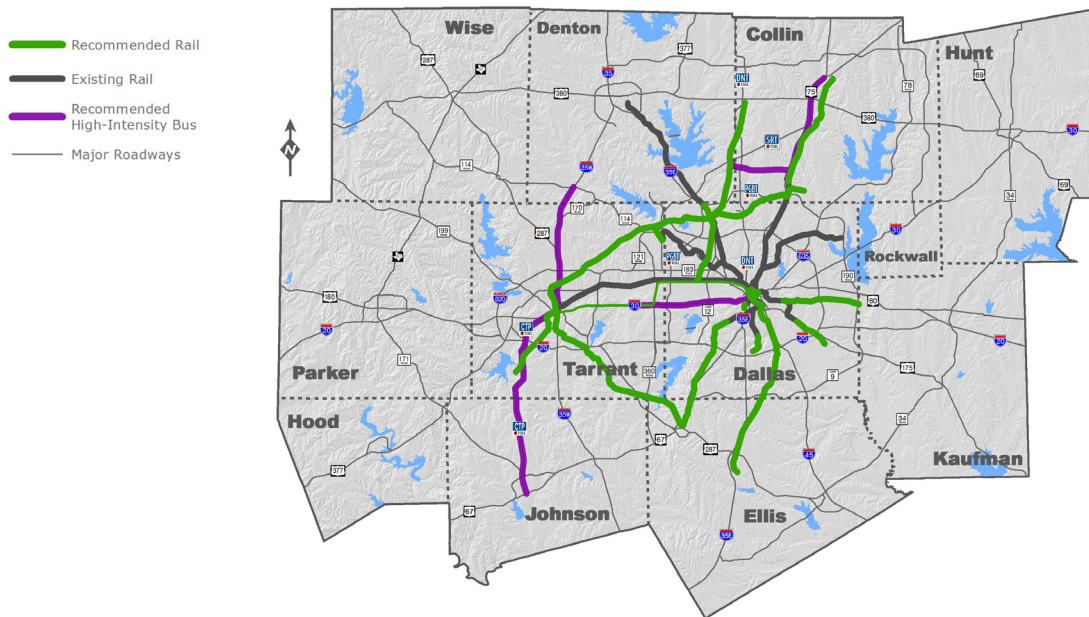
STRATEGICALLY INVESTING IN INFRASTRUCTURE

After the incorporation of lower-cost improvements into the MTP, major infrastructure investments are still necessary to address the region's transportation needs. Mobility 2040 focuses on:

- Rail and bus to increase the availability of transit options.
- HOV/managed lanes that provide an incentive for higher auto occupancy or guarantee faster travel in exchange for a toll.
- Freeways, tollways, and arterials that increase the number of vehicles the transportation system can carry.

These improvements will create a transportation system that serves a variety of travel needs. The recommendations in the MTP take steps toward allowing the region's residents to choose how they want to travel to their destination. Providing choices can improve quality of life for the region's residents.

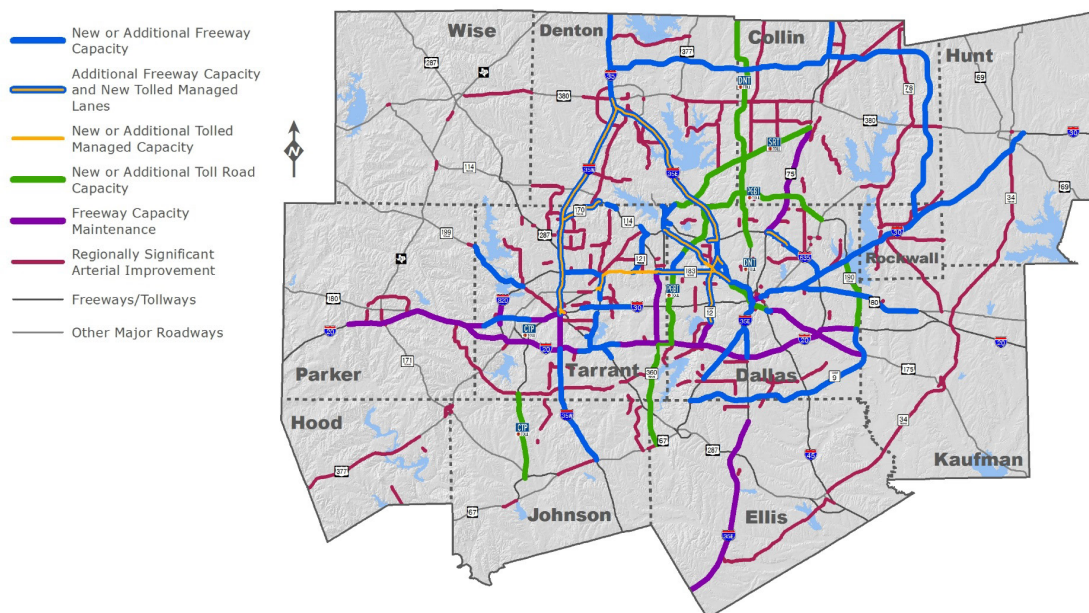
MAJOR TRANSIT RECOMMENDATIONS



Transit will improve mobility and accessibility throughout the region. As the region grows, transit will play an increasingly important role in the way people travel.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

MAJOR ROADWAY RECOMMENDATIONS



Mobility 2040 includes substantial investment in improvements, expansions, management, and new capacity to the region's roadway network.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

OTHER PLANNING CONSIDERATIONS

Factors beyond operations and infrastructure must be considered when creating a robust transportation system. Mobility 2040 also addresses the following elements:

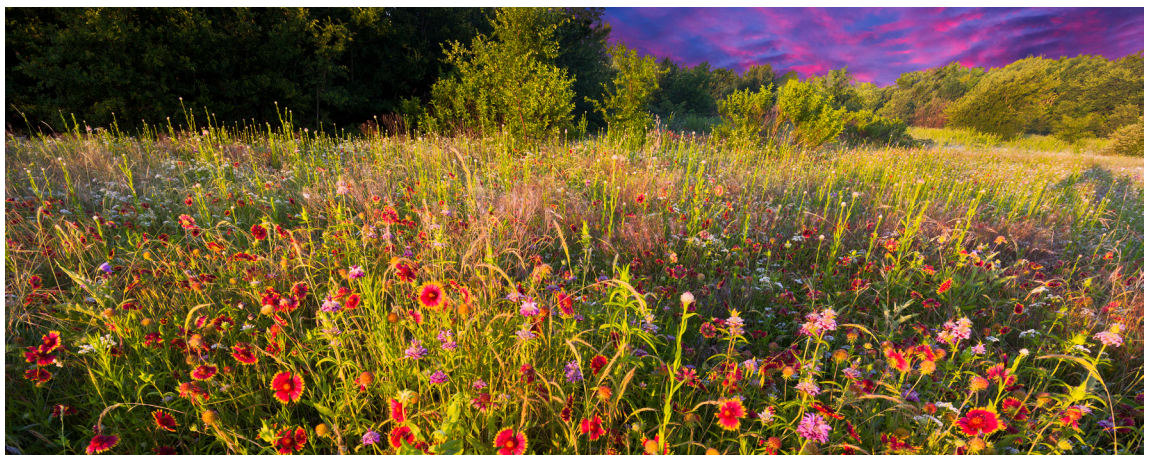
Air Quality: Mobility 2040 includes programs and projects that reduce air pollution generated by the transportation sector. Many of these programs and projects target ground-level ozone because 10 counties in the Dallas-Fort Worth region are in nonattainment for air quality standards set by the Environmental Protection Agency. Efforts to address air pollution include reducing the number of miles that vehicles travel, reducing emissions-causing congestion, and public education campaigns.



Planned transportation improvements must not degrade air quality because the region is in nonattainment of federal air quality standards. This photo is for illustrative purposes and represents the difference between days when air pollution is low (left) and high (right).

Environmental: Natural areas provide services such as parks and clean water for people and habitat for wildlife. Transportation projects can be designed to reduce people's impacts on these areas. Each roadway and rail corridor in Mobility 2040 has been scored on its potential impact on the environment.

Social: Mobility 2040 recommendations are analyzed to determine how they affect and benefit communities, including low-income residents and those who have been historically discriminated against. Participation from the public was actively sought during development of Mobility 2040.



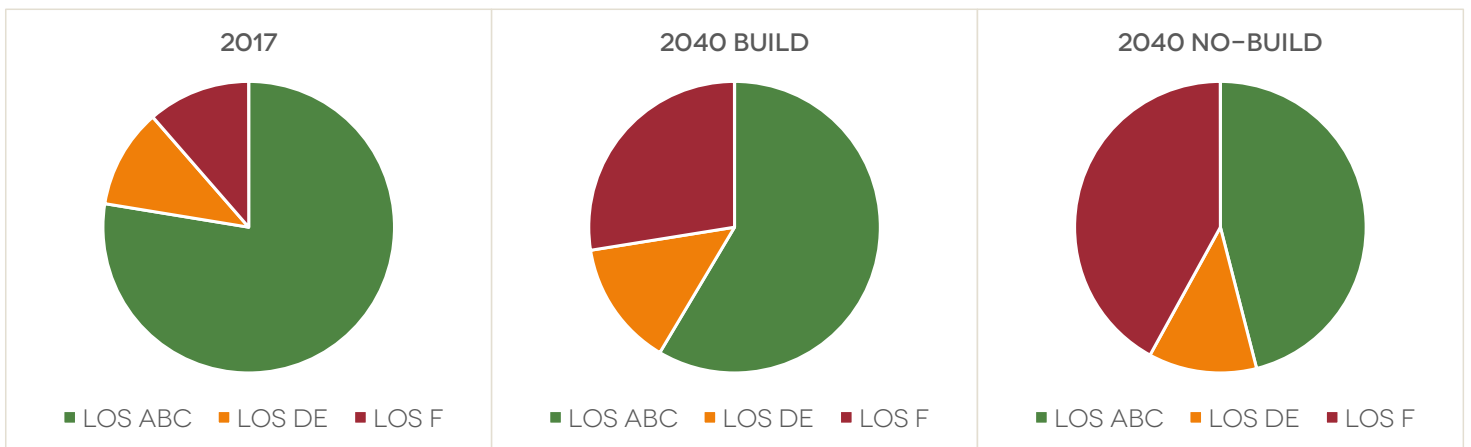
REGIONAL SYSTEM PERFORMANCE

Performance measures are used to demonstrate whether the recommendations in the MTP will generate the intended benefits. Performance measures compare simulated travel conditions for 2017 and for two 2040 scenarios: one that assumes the Mobility 2040 recommendations are implemented and one that assumes the Mobility 2040 recommendations are not implemented. The latter scenario is known as the No-Build scenario. The regional performance measures show that travel conditions in the region will decline even if the Mobility 2040 recommendations are implemented. This decline will occur because of continued growth and inadequate financial resources; however, the decline would be greater in the No-Build scenario.

REGIONAL PERFORMANCE MEASURES	2017	2040	NO-BUILD
Population	7,235,508	10,676,844	10,676,844
Employment	4,584,235	6,691,449	6,691,449
Vehicle Miles of Travel (Daily)	206,162,076	319,470,644	320,119,945
Annual Hours Spent in Delay (Per Person)	72	114	198
Vehicle Hours Spent in Delay (Daily)	1,521,068	3,587,038	6,198,230
Increase in Travel Time Due to Congestion	38.2%	58.4%	98.2%
Annual Cost of Congestion (Billions)	\$10.7	\$25.3	\$43.9

Continual review and monitoring of the transportation system's performance will be necessary to select and implement projects that offer travel, air quality, and other benefits to the region.

LANE MILES AT LEVEL OF SERVICE ABC, DE, AND F



Level of Service (LOS) is a term used to gauge the flow of traffic. The scale ranges from free-flowing (ABC) to stopped (F). By 2040, the number of lane miles in the region earning an LOS score of F will increase.

INNOVATING TO MEET DEMAND

Mobility 2040 recognizes that innovative solutions are needed to achieve the goals outlined in the plan, solutions beyond traditional improvements to increase capacity. The plan identifies the following alternatives:

CAPITAL/OPERATIONS ASSET MANAGEMENT

This program seeks to relieve congestion and enhance mobility by implementing lower-cost solutions, typically within the transportation system's existing right-of-way. These improvements can be made without completely reconstructing corridors and can extend the useful life of the region's transportation infrastructure.

HIGH-INTENSITY BUS

This service will link communities to destinations across the region. High-Intensity Bus can be used to introduce transit into corridors that will be served by rail in the future, or it can be implemented in place of a rail line. It may be implemented in highly traveled corridors that feature managed lanes - those lanes where travel speeds are guaranteed through active management by transportation agencies. High-Intensity Bus service can help commuters reach their destinations more quickly than driving alone and will provide them with amenities such as a wireless connection to the Internet.

POLICY BUNDLE

These policies can be voluntarily adopted by local governments and transportation agencies to address issues that affect transportation in the region. The policies cover a number of topics such as the locations of new schools, strategies that guide land use, and implementation of transit service. By voluntarily adopting 50 percent of these policies, participating agencies will receive assistance in funding federal transportation projects.



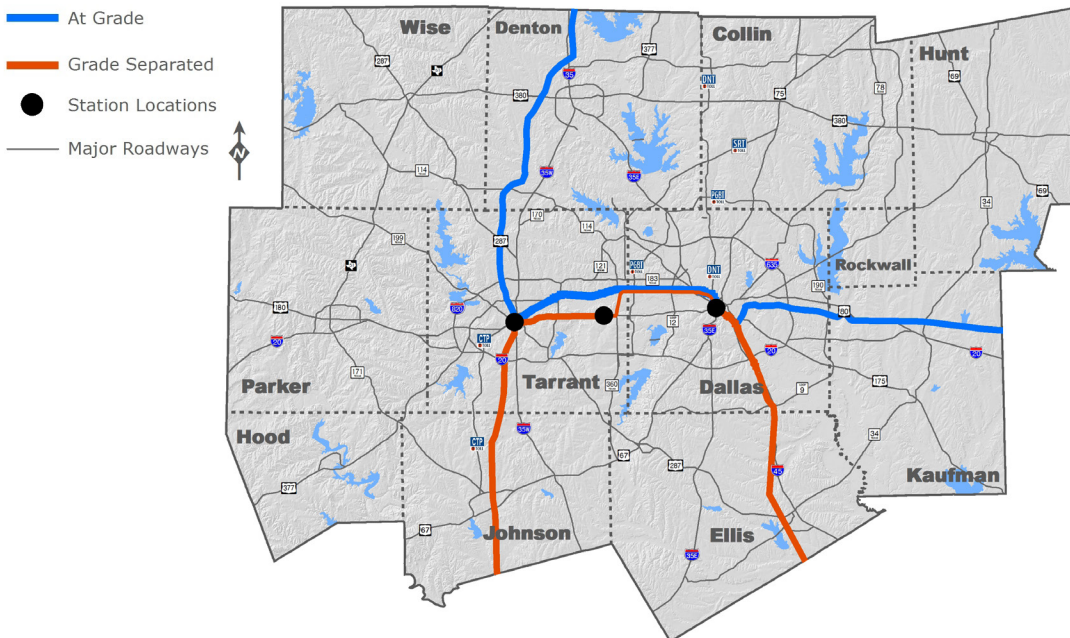
These are just a few of examples of innovative approaches outlined in Mobility 2040 to improve transportation in the region.

SUMMARY

Many factors contributed to the recommendations in Mobility 2040. People wish to travel through, to, from, and within the region. As a region of transportation choice, people would like the option of traveling using more than one mode of transportation. The MTP addresses several outcomes including improved safety, reliability, and air quality. As a result, Mobility 2040 relies on both traditional and innovative solutions to meet the transportation needs of a growing region.



HIGH-SPEED RAIL



High speed rail enhances transportation choices when traveling through, to, from, and within North Central Texas and beyond.

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.

CONNECT

We'd love to hear any questions or comments you have about the transportation planning process. We have several channels through which you can communicate with us since continuous communication is crucial. Public meetings offer the opportunity to voice your opinion about a project in your neighborhood. The Regional Transportation Council conducts these meetings regularly at locations throughout the region to encourage wider participation and attract residents who would be most affected by proposed projects. Information on upcoming meetings is available at www.nctcog.org/meetings. Additionally, we offer other options for sharing your opinions if attending public meetings is not feasible or convenient for you. Connect with us through any of the mediums below.

transinfo@nctcog.org | 817-695-9240 | nctcog.org/mobility2040

facebook.com/NCTCOGtrans | twitter.com/NCTCOGtrans | youtube.com/NCTCOGtrans

instagram.com/NCTCOGtrans | vimeo.com/NCTCOGtrans

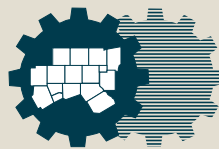
NCTCOG Executive Board 2015 - 2016

President John Horn County Judge Hunt County	Director J.D. Clark County Judge Wise County	Director Dan McClendon Councilmember City of Burleson	Director Laura Wheat Mayor Town of Westlake
Vice-President Lissa Smith Mayor Pro Tem City of Plano	Director Michael Glaspie Councilmember City of Arlington	Director Bobbie Mitchell County Commissioner Denton County	Director B. Glen Whitley County Judge Tarrant County
Secretary-Treasurer Tom Lombard Councilmember City of North Richland Hills	Director Kelly Allen Gray Councilmember City of Fort Worth	Director Keith Self County Judge Collin County	Ex Officio, Non-Voting Member Jeff Leach Texas House of Representatives
Past President Kathryn Wilemon Councilmember City of Arlington	Director Clay Lewis Jenkins County Judge Dallas County	Director Kevin Strength Mayor City of Waxahachie	Executive Director R. Michael Eastland
Director Bruce Archer Councilmember City of Mesquite	Director Lee Kleinman Councilmember City of Dallas	Director Chris Watts Mayor City of Denton	

Regional Transportation Council 2015 - 2016

Mark Riley, Chair County Judge, Parker County	Roger Harmon County Judge, Johnson County	Gary Slagel Board Secretary Dallas Area Rapid Transit
Ron Jensen, Vice Chair Mayor, City of Grand Prairie	Clay Lewis Jenkins County Judge, Dallas County	Lissa Smith Mayor Pro Tem, City of Plano
Rob Franke, P.E., Secretary Mayor, City of Cedar Hill	Jungus Jordan Councilmember, City of Fort Worth	Mike Taylor Mayor Pro Tem, City of Colleyville
Monica R. Alonzo Mayor Pro Tem, City of Dallas	Lee Kleinman Councilmember, City of Dallas	Stephen Terrell Mayor, City of Allen
Bruce Arfsten Councilmember, Town of Addison	Stephen Lindsey Councilmember, City of Mansfield	T. Oscar Trevino, Jr., P.E. Mayor, City of North Richland Hills
Douglas Athas Mayor, City of Garland	Brian Loughmiller Mayor, City of McKinney	William Velasco, II Citizen Representative, City of Dallas
Brian Barth, P.E. District Engineer Texas Department of Transportation, Fort Worth District	David Magness Commissioner, Rockwall County	Oscar Ward Councilmember, City of Irving
Carol Bush County Judge, Ellis County	Scott Mahaffey Chairman, Fort Worth Transportation Authority	Bernice J. Washington Board Secretary Dallas/Fort Worth International Airport
Mike Cantrell Commissioner, Dallas County	Matthew Marchant Mayor, City of Carrollton	Duncan Webb Commissioner, Collin County
Rudy Durham Mayor, City of Lewisville	Maher Maso Mayor, City of Frisco	B. Glen Whitley County Judge, Tarrant County
Andy Eads Commissioner, Denton County	Cary Moon Councilmember, City of Fort Worth	Kathryn Wilemon Councilmember, City of Arlington
Charles Emery Chairman, Denton County Transportation Authority	Stan Pickett Mayor, City of Mesquite	W. Jeff Williams Mayor, City of Arlington
Gary Fickes Commissioner, Tarrant County	Kevin Roden Councilmember, City of Denton	Erik Wilson Deputy Mayor Pro Tem, City of Dallas
Sandy Greyson Councilmember, City of Dallas	Amir Rupani Citizen Representative, City of Dallas	W. B. "Zim" Zimmerman Councilmember, City of Fort Worth
Mojoy Haddad Board Member, North Texas Tollway Authority	Kelly Selman, P.E. District Engineer Texas Department of Transportation, Dallas District	Michael Morris, P.E. Director of Transportation, NCTCOG

The contents of this report reflect the views of the authors who are responsible for the opinions, findings and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration or the Texas Department of Transportation. This document was prepared in cooperation with the Texas Department of Transportation and the US Department of Transportation, Federal Highway Administration, and Federal Transit Administration.



**North Central Texas
Council of Governments**

616 Six Flags Drive, Arlington, Texas 76011

transinfo@nctcog.org | 817-695-9240 | nctcog.org/mobility2040

facebook.com/NCTCOGtrans | twitter.com/NCTCOGtrans | youtube.com/NCTCOGtrans

instagram.com/NCTCOGtrans | vimeo.com/NCTCOGtrans

Image Sources

Cover: Top, L-R: LBJ Express, iStock; Middle, L-R: NCTCOG staff, iStock; Bottom, L-R: iStock, NCTCOG staff

Page 3, all: iStock

Page 5, L-R: Getty, iStock, NCTCOG staff

Page 7, all: Getty

Page 9, L-R: Texas A&M Transportation Institute, NCTCOG staff, Denton County Transportation Authority

Page 10: iStock