North Central Texas Council of Governments

# 2024 Progress North Texas



Using Technology to Get You There

# From the Chair



Dear Neighbor,

Thank you for reading Progress North Texas 2024. Again this year, we highlight the work accomplished throughout the region to improve transportation and air quality and the planning underway to ensure future progress.

This year's theme is Using Technology to Get You There. The integration of technology into our daily lives is improving how we do things and what we can accomplish. Transportation is no different. It has also been touched by innovation.

The Regional Transportation Council collaborates with local, state and federal partners to find innovative ways to use technology to make improvements to the transportation system. In this report, you will read about how technology helps us travel more efficiently and safely, while enhancing how we communicate with you about the projects and programs we have undertaken, as well as those planned for the future.

As the region continues to see an increase in population, it is important to assess, upgrade and improve the system to ensure it is adequately serving the people who call North Texas home. It does not matter if they choose to walk, bike, drive or take transit.

This report also offers us the privilege of hearing from future decision-makers. We asked students in Fort Worth how they see technology at work in transportation. I would like to congratulate the winner of this year's art contest, Kalei Gipson from Rocketship Dennis Dunkins Elementary School in Fort Worth, whose illustration is on the cover. As a longtime public servant in Fort Worth, I am thrilled to see the creativity that comes from our students and hope they continue to pursue their artistic talents and passions.

As we are confronted with the challenges of today, it is critical that the solutions improve safety and efficiency for people across the region. I encourage you to take time to read this report. Then, let your voice be heard. An educated public is our greatest tool as planners and policymakers. We look forward to hearing from you.

Sincerely, Gyna Bivens

Chair, Regional Transportation Council Mayor Pro Tem, Fort Worth

Cover art by Kalei Gipson.

All graphics are from NCTCOG, and all photos are from Getty Images, unless otherwise indicated.



# **North Texas Today**

Dallas-Fort Worth remains one of the fastest-growing regions in the country, having gained approximately 400,000 residents since 2020. The population of the 12-county metropolitan planning area grew by 158,000 (1.5%) in 2022, surpassing 8.1 million. Rockwall County grew the fastest by percentage (4.7%), followed by Collin (3.6%) and Ellis (3.4%).

Jobs are also on the rise. Data from the Bureau of Labor Statistics shows North Texas has recovered well from the dip it experienced in employment during the pandemic. Regional employment reached 5.8 million in 2022, growing by over 6% in the past year. Since 2019, employment has expanded by 12.7%, even with the slight decrease experienced in 2020.

The North Central Texas Council of Governments (NCTCOG) collaborates with local, state and federal partners to program funding to projects that will increase roadway capacity and maintain current assets.

### **Congestion Comparison**

According to data compiled and analyzed by the navigation company TomTom, the region's congestion level slightly increased in 2023 but it is still less than in previous years. Dallas-Fort Worth is No. 40 in the nation in congestion, ranking better than peer cities such as Austin and Houston.

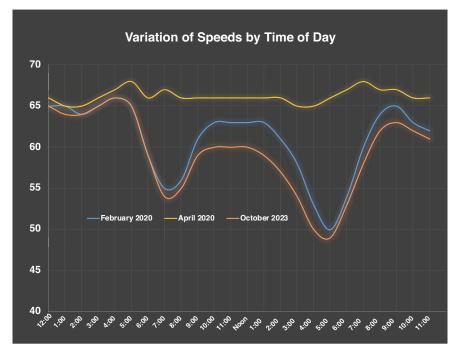
Despite its status as the nation's fourth-largest region, Dallas-Fort Worth has seen the reliability of the roadway system remain steady over the years. According to TomTom, the congestion level is similar to what it was in 2018, when approximately 1 million fewer people called the area home. Continued improvements to the multimodal transportation system have given residents and visitors more options for traveling in the region.

### **Roadway Trends**

Freeway speeds have returned to what they were before the pandemic. In fact, due to the recovery of traffic during the school year, there was a measurable decrease in daytime speeds. In summer 2023, traffic decreased minimally, but overall, weekday traffic was up 2% over 2022.

### Reliability

Reliability refers to the predictability and consistency of congestion and travel times. Reliability can be impacted by weather, crashes, special events, roadway geometry and other unpredictable factors. It can be improved by asset optimization, Intelligent Transportation Systems infrastructure, safety patrols and provision of alternate routes. Reliable commutes are easier to plan for and lessen the economic impact of congestion. In 2023, 73.4% of travel on interstates and 79.3% of travel on non-interstate major roadways in the region met federal thresholds for reliability. Additionally,



Roadway speeds in Dallas-Fort Worth are similar to pre-pandemic levels, one indication congestion has returned to historical levels.

Source: TxDOT

the average traveler spent 14.6 hours in excessive delay conditions in 2023. These values are roughly in line with observations before the pandemic. For more information on federal performance measures, visit www.nctcog.org/pm/fed.

### **Managed Lane Data**

8,400,000

8,200,000

8,000,000

7,800,000

7,600,000

7,400,000

7,200,000

7,000,000

6,800,000

6,600,000 6,400,000

6,200,000

6,000,000

The TEXpress Lane Network is one tool allowing the region to keep up with growth, even as the population increases by more than 100,000 people a year. For the

first time since before the pandemic, the annual transactions collected in the managed lanes were higher in 2023 than 2019. Toll roads operated by the North Texas Tollway Authority told a similar story, as transactions were 10% higher in 2023 than in 2019.

NCTCOG will continue monitoring data on traffic and congestion patterns, working with regional, state and federal partners to improve the system so it responds appropriately to the needs of a growing population.

**Annual Transactions at TxDOT** 

# **DFW Congestion Levels** and **Population**

# 80.0 70.0 60.0 60.0 50.0 40.0 39.4

2020

Source: TxDOT

2017
2016
2016
2015
2014
2013
2011
2010
2019
2009
2008

10% 15% 20% 25%
Congestion Level

Source: NCTCOG, TomTom Traffic Index

2021

2019

0 2018

2020

20.0

10.0

2019

The region's congestion levels have remained relatively constant over the years (left), thanks to the investment of billions of dollars in the transportation system. One example is the region's TEXpress Lane System. Annual transactions on TxDOT managed lanes (above) were higher last year than in 2019.

2021

# **Roadways**

Technology is helping the region's transportation system provide users with a safe and efficient experience. The region's system of tolled managed lanes was built in coordination with the private sector. In select corridors throughout Dallas-Fort Worth, motorists have the choice to use the tax-supported general-purpose freeway lanes for no additional charge or pay a variable toll for more reliable trips. North Texans who choose to take the region's TEXpress Lanes to avoid traffic congestion can save 50% on peak-period tolls across Dallas-Fort Worth by using the FREE GoCarma app to share a ride. In 2023, almost 12,800 new users signed up for GoCarma. Users recorded approximately 1.4 million TEXpress Lane transactions, an increase of 12% over 2022. For more information, visit www.gocarma.com/dfw.

### **US 75 Technology Lanes**

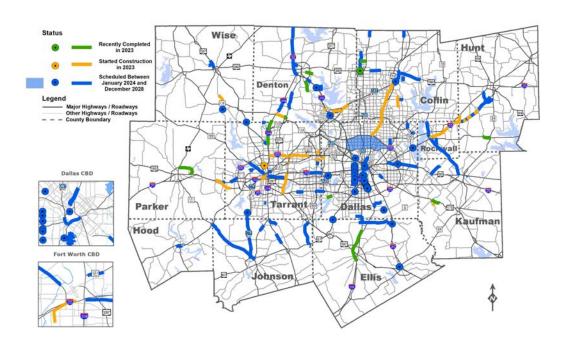
The US 75 Technology Lane project involves replacing the existing US 75 high-occupancy vehicle (HOV) lanes with peak-hour "technology lanes" from the Dallas County line to Bethany Drive. No tolls would be charged to vehicles using the technology lanes. During peak travel times (southbound in the morning and northbound in the evening) HOVs, low-emission vehicles and motorcycles will be allowed to access the technology lanes. In non-peak hours, the lanes will be open to everyone.

### **Major Transportation Investments**

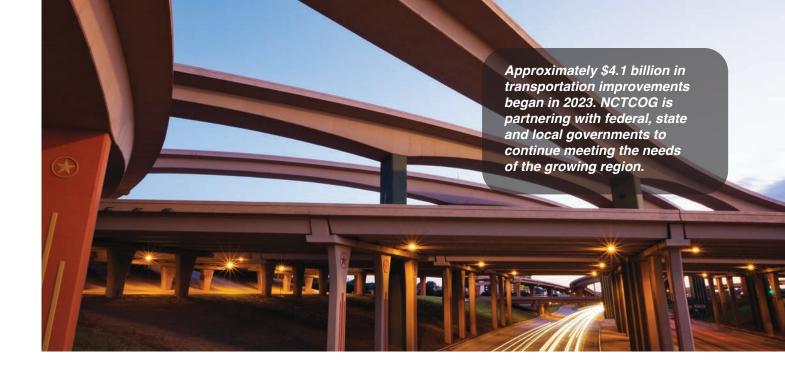
Approximately \$4.1 billion in transportation improvements went to construction in 2023 across Dallas-Fort Worth. The US 75 technology lanes highlighted projects in the eastern part of the region that began last year. The project will improve mobility and air quality in the corridor while also managing congestion during peak travel times. In the western part of the region, work began on the East-West Connector project in Tarrant County. This project runs from State Highway 360 to International Parkway and will enhance regional mobility in and around Dallas Fort Worth International Airport.

The Regional Transportation Council continued to fund projects in 2023 through multiple partnerships, including \$10.38 million through the second round of the COVID-19 #097 Infrastructure Program: Transit Partnership to help improve transit facilities and service. The RTC also awarded \$11.4 million of federal funding for Phase 2 of the Cotton Belt Trail project. To prepare the region for significant events such as the 2024 Major League Baseball All-Star Game, the 2024 Cowtown Air Show, and the 2026 FIFA World Cup, \$22 million of RTC funding was approved for transit support, parking and safety improvements around the event sites. The RTC programmed \$815 million in additional funds to major infrastructure projects as

### **2023 DFW Major Capital Improvements**



Approximately 41 centerline miles of roadway improvements were completed in 2023, and construction started on 87 miles. These improvements, along with over 312 miles of planned enhancements, will help North Texas accommodate current and future growth.



part of the annual update to the Regional 10-Year Plan and TxDOT's Unified Transportation Program. The region was awarded funding through various state and federal programs, which will help provide critical improvements to the air quality and transportation network. Through the Fiscal Year 2023 RAISE Grant Program, the region was awarded \$25 million to reconstruct East Lancaster Avenue in Fort Worth. The region also secured \$33.5 million through the Safe Streets and Roads for All Grant Program to implement safety countermeasures and conduct additional safety planning.

### **Pavement and Bridge Condition**

NCTCOG monitors the condition of pavement and bridges along 12,000 miles of the National Highway System as part of its federally required performance measurement activities. These activities include either the adoption of unique regional targets or a decision to affirm and support existing statewide targets. In July 2023, the RTC voted to support the Texas Department of Transportation's new statewide targets for pavement and bridge condition. Policymakers continue to track and report the condition of these assets as data is available.

NCTCOG is working with TxDOT, local governments and universities to improve bridges across the region. In August 2023, the University of Texas at Arlington completed a study through the University Partnership Program intended to develop and identify optimized bridge treatments to improve bridge condition and/or life cycle length.

There are multiple grant opportunities available through the Bipartisan Infrastructure Law, and

NCTCOG and its partners continue to pursue new sources of funding for critical projects. Additionally, NCTCOG and local governments are coordinating to improve arterial streets. Two examples are Fair Park Links in Dallas and Forest Hill Drive in Tarrant County.

### **Fair Park Links**

Fair Park Links is a study NCTCOG is conducting in coordination with the City of Dallas, TxDOT, Fair Park and local community-based organizations. The project aims to reconnect Fair Park to the Deep Ellum neighborhood, with additional connectivity further into downtown Dallas.

An important consideration for the Fair Parks Links Study is the proposed reconstruction of IH 30 and IH 345 as a depressed highway system — an initiative led by TxDOT and in coordination with the City of Dallas. The depressed highway system creates opportunities for the city to plan and redesign its roadway network to include new routes and improved connectivity between the three communities.

### **Forest Hill Drive**

NCTCOG is coordinating with the cities of Everman, Forest Hill and Fort Worth on a project to widen Forest Hill Drive from two to four lanes, add bicycle and pedestrian facilities, and improve safety from LonStephenson Road to Shelby Road. The project also includes a flood study funded by NCTCOG and performed by Tarrant County. To gain consensus on the plans to widen Forest Hill Drive required coordination with three cities, two schools and multiple businesses. The study is scheduled to be completed in August 2024.

# **Safety**

Capacity improvements and congestion management are important ways to help the region maintain the reliability of the roadway system. But the job first responders do every day to keep the roads clear is also essential to reliability.

With the intense focus on safety across the region and state, training remains important for agencies and emergency personnel responsible for responding to roadway incidents. Efficient clearing of roadway incidents is safer for first responders and the motorists themselves.

### **Safety Training**

The region's Traffic Incident Management training course seeks to initiate a coordinated response to traffic incidents that will develop partnerships, enhance safety for emergency personnel, reduce upstream traffic accidents, improve the efficiency of the transportation system and improve air quality. NCTCOG offers two courses throughout the year. The First Responders and Managers Course is geared toward those with daily involvement in responding to traffic incidents. In 2023,104 first responders were trained through this course. The Executive Level

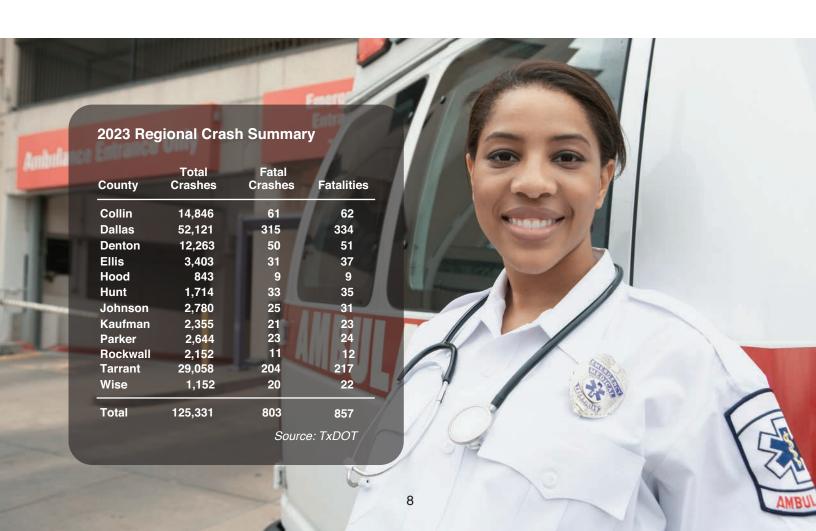
Course provides agency decision- and policymakers a high-level overview of the topics discussed with first responders and managers. In 2023, 73 executives received this training.

### **Crash Data**

In 2023, the 12-county Dallas-Fort Worth area experienced 125,331 crashes, 803 of which were fatal. While crashes were down over 2022, there was a slight increase in incidents involving at least one fatality. Overall, the number of fatalities dropped slightly. Additionally, seven of the 12 counties reported fewer fatalities than in 2022.

### **Regional Safety Plan**

Approved by the Regional Transportation Council in March 2023, the NCTCOG Regional Roadway Safety Plan is the first region-wide plan developed to eliminate all fatalities on North Texas roadways by 2050. The plan includes a region-wide safety analysis to identify which crash types resulted in the most fatalities or serious injuries and recommended changes to prevent these crashes or reduce their severity. The following eight emphasis areas were



identified as part of the plan: speeding, distracted driving, impaired driving, intersection safety, bicyclist and pedestrian safety, roadway and lane departures, occupant protection (seatbelts), and motorcycles.

The plan also identifies roadways with the most fatal and serious injury crashes and scores those segments as candidates for engineering upgrades or other safety enhancements. The Regional Roadway Safety Plan will guide the implementation of future safety projects and programs throughout the region as planners and policymakers work toward a goal of zero fatalities on the region's roadways by 2050.

To read the Regional Roadway Safety Plan, visit www.nctcog.org/RSP.

### **Safety Funding**

The Texas Transportation Commission established a task force composed of representatives from TxDOT and the state's metropolitan planning organizations to further identify and fund safety projects with a focus on reducing fatalities on Texas highways.

The task force has developed a five-year proposal to identify best practices, recommendations and new ideas to reduce highway fatalities, injuries and traffic crashes. The task force also developed a short-term plan to invest funding in ongoing safety initiatives to reduce speeding and impaired driving, while improving bicycle-pedestrian and motorcycle safety, increasing awareness for seatbelts and implementing safety efforts in work zones. TxDOT has committed \$50 million to each MPO across the state to support safety efforts and document safety activities to help reduce fatalities.

### **Mobility Assistance**

The Roadside Assistance Program (RAP) is an important part of incident response and traffic safety efforts in North Texas. Area RAP programs help alleviate congestion and prevent secondary crashes on busy highways/freeways and toll roads by providing free assistance to stranded motorists. Patrols also protect other first responders and warn motorists approaching the scene of a crash. Patrols are currently operated by the Dallas County Sheriff's Office, Tarrant County Sheriff's Office, North Texas Tollway Authority, LBJ Express, and North Tarrant Express Mobility Partners.

Coverage has focused on congested highways in Dallas and Tarrant counties but also extends into portions of Collin, Denton and Johnson counties. Further expansion into Parker, Ellis, Johnson and Rockwall counties is in development. In 2023, there were 74,824 assists in Dallas and Tarrant counties.

### **Federal Performance Measures**

NCTCOG is federally required to track data on fatalities and serious injuries to help make the roads safer for all users. The latest available information is below. NCTCOG will continue coordinating with local, state and federal partners on plans, policies and projects to improve safety for all roadway users and meet federal safety targets. For more information on federal performance measures, visit www.nctcog.org/pm/fed.

### **Safety Performance Measures**

| Performance                                     | 2022 Targets | 2022 Actual Performance |
|---|--------------|-------------------------|
| Fatalities                                      | 580          | 622                     |
| <b>Fatality Rate</b>                            | 0.755        | 0.799                   |
| Serious Injuries                                | 3,033        | 3,646                   |
| <b>Serious Injuries Rate</b>                    | 3.939        | 4.685                   |
| Non-Motorized Fatalitie<br>and Serious Injuries | 595          | 595                     |

Safety targets are becoming more stringent as the state moves toward its goal of a transportation system with zero fatalities by 2050.

Continued coordination across all levels of government will ensure North Texas has the projects, programs and policies to make the roads safer for all users.

# **Freight**

The North Texas MOVES Program (Multimodal Operations, Velocity, Efficiency and Safety) is a long-range plan for increasing freight and passenger mobility throughout the Dallas-Fort Worth area using strategic investment in rail capacity.

Two projects that will result in capacity improvements along stretches of the Trinity Railway Express are in the design phase and expected to move to construction in 2025:

- Double-tracking and bridge improvements from Medical Market Center to Stemmons Freeway in Dallas
- Double-tracking and bridge improvements from Handley-Ederville Road to Precinct Line Road in Fort Worth

These projects will be funded in part by a Better Utilizing Investments to Leverage Development (BUILD) discretionary grant. When complete, they are expected to relieve congestion while enhancing mobility, connectivity and reliability. Better corridor reliability is also anticipated to improve safety and air quality.

### **Technological Improvements**

The freight sector is turning to technology to help drive improvements in safety and efficiency. NCTCOG is working with regional rail partners to develop and implement a Regional Rail Information System (RRIS). This innovative system will help maximize efficiency on

freight and passenger rail networks by allowing rail agencies to exchange timely, accurate and actionable information on train movements in the region. Collaboration with regional rail partners is key to the progress of this project, currently in the design and development phase. This system will address shared-use corridors and interconnected network issues, monitor ongoing performance measures, improve capital project selection and facilitate public-private partnerships.

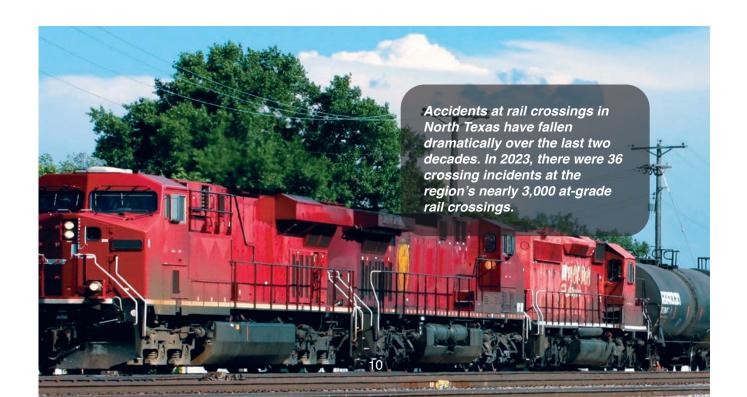
### **Freight Safety Initiative**

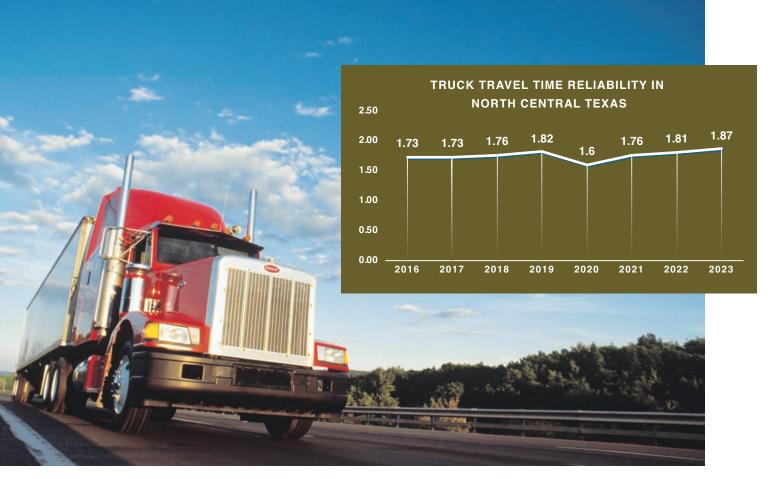
In 2023, NCTCOG conducted the Freight Safety Initiative. Trucks and passenger vehicles interact daily, which can result in life-threatening incidents. Greater awareness of safer driving habits can help mitigate these incidents. NCTCOG also partnered with Operation Lifesaver to help promote safety near at-grade rail crossings.

The goal of the campaign was to reduce freight-related wrecks and inform the public about safe-driving practices near large commercial motor vehicles.

The campaign used social media and other educational tools to encourage drivers to consider freight safety on the roadways and at railroad crossings.

The results from the initiative ensured the message of freight safety was seen and heard throughout the region on a variety of platforms.





Truck Travel Time Reliability in North Texas has worsened since the pandemic. A TTTR score of 1.87 means a truck driver traveling on a route that normally takes 30 minutes should allow for the trip to take about 56 minutes. NCTCOG is working to boost reliability by examining a variety of improvements.

### At-Grade Rail Crossing Accidents

Accidents at rail crossings have fallen dramatically over the past two decades. In 2023, the 12-county Dallas-Fort Worth area had 36 incidents at its nearly 3,000 at-grade crossings. Although influenced mainly by traffic levels, the location and severity of incidents help determine which crossings are most dangerous and require additional safety measures or other upgrades. One way at-grade crossings have been upgraded is the realignment of intersections to improve sight lines from both directions.

Through work with regional partners, NCTCOG can help bring more attention to rail safety. In 2023, NCTCOG completed the first city-specific rail crossing study, the Fort Worth Rail Crossing Analysis. The review provided guidance and recommendations to improve safety at crossings throughout the region. Included in this analysis is the assessment and review of the highest priority rail crossings and recommended improvements in Fort Worth. The analysis also includes strategies and policies for mitigating future rail crossing conflicts.

### **Truck Travel Time Reliability**

Truck Travel Time Reliability (TTTR) is a required federal performance measure to evaluate the level of predictability in travel times for trucks along interstate highways. This is expressed as a value of 1.00 or higher, with 1.00 being perfect reliability. Many factors affecting TTTR are unpredictable. Weather and roadway construction, for example, both have significant impacts on how long a trip will take due to slower travel speeds, potentially hazardous driving conditions and congestion. Predictable traffic times throughout the day and week can also affect TTTR over extended periods of time. More congestion means a larger impact on travel throughout the region, and the travel times naturally increase.

TTTR in North Texas worsened to 1.87 in 2023. This means a truck driver who is making a delivery that normally takes 30 minutes must allow the trip to take about 56 minutes. NCTCOG is pursuing various means to improve TTTR, such as examining truck bottlenecks, identifying opportunities to improve infrastructure and deploying technological enhancements to existing infrastructure that improve first- and last-mile connections.

# **Transit**

### **Regional Transit Ridership**

Transit ridership continued to bounce back in 2023 from its COVID-induced decline. Data suggests NCTCOG's partnership efforts with Dallas Area Rapid Transit (DART), Trinity Metro and Denton County (DCTA) Transportation Authority have helped push ridership higher across the region. The three major transit authorities combined provided nearly 57 million rides to customers in 2023, a 13.4% increase over 2022. For more information, visit www.nctcog.org/transittrends.

### **Microtransit**

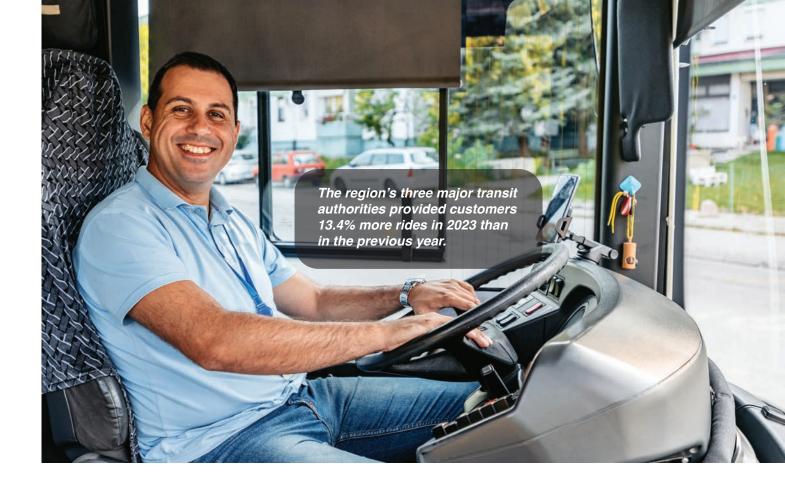
As the population grows, transit agencies and local governments are collaborating to efficiently connect riders. Microtransit is using technology to introduce services in new places and enhance services in lower-density areas. Passengers using this on-demand form of transportation schedule rides directly by phone or through a mobile app. Trinity Metro's ZIPZONE serves riders in the Alliance, Mercantile, Southeast, Southside and South Tarrant zones. DCTA operates GoZone in Denton, Lewisville and Highland Village. DART GoLink covers over 30 zones across cities in Dallas and Collin counties.

Arlington and Grand Prairie offer microtransit through the VIA rideshare service. Arlington's microtransit service fleet continues to operate autonomous vehicles integrated into its operation in 2021. Additionally, STAR Transit's STARNow, which operates across select cities in Dallas and Kaufman counties, introduced service to Cedar Hill and Duncanville in 2023.

### **Vanpool Program**

The North Central Texas Regional Vanpool Program is managed by DCTA and Trinity Metro. With over 280 vanpools in the region, this program offers commuters opportunities to share rides to and from the office. Individuals can form or join groups to commute to work together, while splitting the cost of the vehicle lease. Saving over 476,000 commuter trips and over 18.4 million miles in 2023, the vanpool program continues to be an effective transportation option in the region. The program has also reduced over 13.9 million pounds of carbon dioxide emissions, contributing to improved air quality. For more information, visit www.nctcog.org/vanpool.

|                            | for Smaller Providers                 | 90      |
|----------------------------|---------------------------------------|---------|
| Transit Provider           | Service Area                          | Trips   |
| City/County Transportation | Johnson County                        | 32,166  |
| Community Transit Service  | Ellis and Navarro counties            | 38,555  |
| Public Transit Services    | Parker and Palo Pinto counties        | 56,148  |
| Span, Inc.                 | Denton County                         | 51,275  |
| STAR Transit               | Kaufman, Rockwall and Dallas counties | 224 024 |
|                            | counties                              | 224,921 |
| <b>Total</b>               |                                       | 403,065 |
|                            |                                       |         |
|                            |                                       |         |



### **Transit Studies**

NCTCOG continued to work with partners in the region in 2023 on two transit planning studies. One focuses on developing a comprehensive approach to planning and implementing transit in Denton County, while the other is looking at public transportation options in eastern Dallas, Kaufman and Rockwall counties outside transit authority service areas. Each study seeks to examine transit needs and demand and identify opportunities to expand service. Following analysis and stakeholder input, recommendations will be developed for each study area. For more information, visit www.nctcog.org/transitstudies.

Additionally, NCTCOG completed the Intermodal Transportation Hubs for Colleges and Universities Study, which developed a comprehensive guide for planning and implementation of mobility hubs at campuses around the region. For more information, visit www.nctcog.org/trans/plan/transit-management-and-planning.

### **Non-SOV Travel**

NCTCOG tracks the proportion of commute trips that use a mode other than driving alone ("non-SOV" trips) as part of the broader suite of federal performance measures. This measure has spiked in recent years

primarily due to the rise in telecommuting brought on by the pandemic. The latest available census data shows a non-SOV commute rate of 26.7% in the Dallas-Fort Worth-Arlington Urbanized Area, 28.2% in the Denton-Lewisville Urbanized Area, and 33.4% in the McKinney-Frisco Urbanized Area. These percentages are expected to continue increasing due in part to the ongoing normalization of telecommuting and NCTCOG's efforts to diversify trips.

### **Transit Safety**

As important as it is for the region's public transportation agencies to offer a variety of service options, they must do so safely. NCTCOG collaborates with the region's transit providers to set and monitor targets for fatalities, injuries, safety events and system reliability as part of the responsibility to report federal performance measures. The number of safety events reported in fiscal year 2022 showed performance continued to exceed established targets. There were 172 events, far below the target of 490. The region also exceeded the target for transit system reliability based on an increase in average miles between major mechanical failures of vehicles. The overall goal is to realize a 5% improvement over the regional baseline average performance by 2025. The fatality goal remains zero, in line with the RTC's safety position.



| Asset Category  | Metric   | FY 2022<br>Performance | Adopted<br>Target | FY 2022<br>Performance | Adopted<br>Target |
|---|--|------------------------|-------------------|------------------------|-------------------|
|   |  | (Large Agencies)       | (Large Agencies)  | (Small Providers       | (Small Providers) |
| Rolling Stock<br>(Transit Vehicles)                     | Vehicles meet or exceed industry standard (FTA Useful Life Benchmark | 6.2%                   | 0%                | 18.6%                  | 5%                |
| Equipment (Support Vehicles)                            | or custom agency<br>benchmarks)                                      | 64.4%                  | 25%               | 60.5%                  | 25%               |
| Infrastructure<br>(Rail Track)                          | Rail track segments with performance restrictions                    | 0%                     | 0%                | 0%                     | 0%                |
| Facilities<br>(Buildings,<br>Stations, Park &<br>Rides) | Percentage rated below "adequate"                                    | 5.1%                   | 0%                | 0%                     | 0%                |

### **Transit Asset Management**

Federal legislation also requires NCTCOG to set regional transit asset management targets and evaluate the performance of transit assets to ensure public transportation vehicles, rail lines and other capital assets are in a state of good repair. Updated targets were set in coordination with transit agencies and adopted by the RTC in September 2022. Separate

targets were established for the region's three large transit agencies and smaller providers. This acknowledges the potential operating advantages of larger agencies. These targets are compared with regional performance data from Fiscal Year 2022 in the accompanying table. More information: www.nctcog.org/pm/fed.

# **Air Quality**

The North Central Texas Council of Governments' primary air quality goal is to reach attainment with the National Ambient Air Quality Standards (NAAQS), with the greatest current concern being ozone. The region also may soon be declared nonattainment for particulate matter pollution. Many air quality efforts addressing ozone also reduce particulate matter and greenhouse gas emissions, thus ozone-reducing efforts improve air quality comprehensively in the growing region.

### **Ozone**

To be in attainment with the 2008 and 2015 standards. the annual design value for ozone must be 75 parts per billion (ppb) and 70 ppb, respectively. Ten North Texas counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise) are in severe nonattainment for the 2008 8-hour ozone standard. Nine of these counties (excluding Rockwall County) are now classified as moderate nonattainment, according to the updated 2015 standard. But the Environmental Protection Agency is taking public comments on the reclassification of the region to serious under the 2015 8-hour ozone standard, at the request of Governor Greg Abbott. The new attainment date to meet the 2015 ozone standard is August 3, 2027, with data from 2026 being used to determine attainment. NCTCOG and the Texas Commission on Environmental Quality are engaging

with industry leaders for voluntary reductions of ozone precursors, while the region continues to strive for compliance with both the 2008 and 2015 ozone standards.

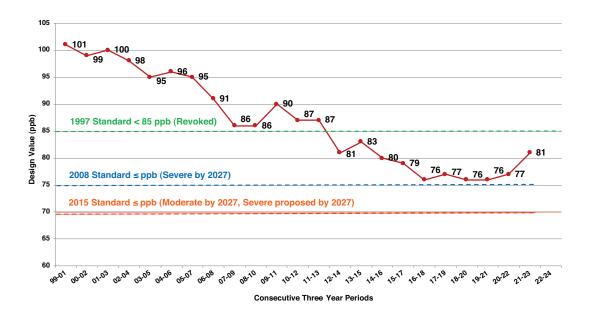
### **New Particulate Matter Standard**

The EPA has announced the strengthening of the NAAQS for particulate matter (PM2.5), commonly known as soot, which means two North Texas counties could be in nonattainment when the standard takes effect. To reflect new scientific understanding of the effects of particulate matter pollution, the EPA is upgrading the primary (health based) annual PM2.5 standard from 12.0 micrograms per cubic meter ( $\mu$ g/m3) to 9.0  $\mu$ g/m3. According to preliminary 2023 annual design value data, Dallas and Tarrant counties may be in nonattainment of the new standard, expected to take effect in February 2026.

# Alternative Fuel and Electric Vehicle Infrastructure Growth

One way to help the region reach attainment is through the adoption of alternative fuel and electric vehicles (EVs), which emit lower rates of ozone-forming pollutants. Use of EVs, including zero-emission battery EVs and plug-in hybrid EVs, has increased significantly in the past several years. In 2023, over 30,000 new EVs were added in the region, bringing the total number of EVs to over 90,000. Charging infrastructure

# **2023 Ozone Progress** (8-hour Ozone NAAQS Historical Trends)



Ozone attainment is reached when the Design Value (the three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is less than or equal to 75 ppb for the standard established in 2008 and 70 ppb for the standard established in 2015.



has also grown to accommodate EV adoption, with over 2,600 electric vehicle Level 2 and Direct Current Fast Charge (DCFC) connectors locally.

To support EV growth, the Texas Department of Transportation has begun implementing the Texas EV Charging Plan. Across the state, 50 EV charging station locations will be built along highways with a minimum of four DCFC ports per site. Additional investment in urban areas, county seats and locations recommended by metropolitan planning organizations is planned. Separately, NCTCOG was awarded \$15 million through the Federal Highway Administration's (FHWA) Charging and Fueling Infrastructure (CFI) Community Grants program to build up to 100 EV charging ports on public property in the region, emphasizing locations in disadvantaged communities.

To support transition of the medium- and heavy-duty sectors to zero-emission fuels, NCTCOG was awarded an additional \$70 million through the FHWA's CFI program. NCTCOG will work with stakeholders to build five publicly accessible medium- and heavy-duty hydrogen refueling stations throughout the Texas Triangle, bounded by Dallas-Fort Worth, San Antonio and Houston.

### **Mobile Sources**

Light-duty vehicles produce around 27% of on-road nitrogen oxide emissions, and heavy-duty vehicles account for approximately 67%. NCTCOG closely monitors NOx and volatile organic compounds – which interact to form ground-level ozone – as part of its commitment to track federal performance measures. Levels of NOx and VOCs have declined with the implementation of new projects such as bicyclepedestrian trails and regional intersection and traffic signal improvement efforts.

### **Performance Measures**

NCTCOG is required to monitor and set targets for a specific set of performance measures covering various aspects of the transportation system in North Texas. One measure specific to air quality is the Congestion Mitigation and Air Quality Improvement (CMAQ) Program through measurement of total emissions reductions for NOx and VOCs from projects or programs that contribute to the attainment of NAAQS. For more information on the federal performance measures, visit www.nctcog.org/pm/fed.

### **DFW Air Quality Improvement Plan**

Local governments across the region are working with NCTCOG to develop the Dallas-Fort Worth Air Quality Improvement Plan. The DFW AQIP is a roadmap to improve air quality, protect public health, provide increased social equity and reduce impacts of extreme weather events. This initiative is funded through the EPA's Climate Pollution Reduction Grants (CPRG) program, which provides funds to develop and implement plans for reducing greenhouse gas emissions.

NCTCOG was awarded \$1 million from the CPRG planning grants on behalf of the region. NCTCOG submitted a Priority Climate Action Plan, which outlines work that is ongoing or will be done through 2030 to achieve comprehensive air quality improvement. The next step is development of a more comprehensive plan that will encompass work through 2050. For more information, visit www.publicinput.com/dfwAQIP.

### **Air Quality Initiatives**

### **Engine Off North Texas**

Engine Off North Texas (EONT) provides information related to idling impacts and idle-reduction strategies. In 2023, EONT distributed brochures and posters to entities in jurisdictions with idle-restriction ordinances and received 49 idling complaints. Currently, 29 local governments have active idling ordinances. Visit www.EngineOffNorthTexas.org.

### **SMARTE Program**

The Saving Money and Reducing Truck Emissions program (SMARTE) focuses on providing emissions reduction strategies and emphasizing fuel cost savings for truck drivers and fleet managers. In 2023, SMARTE hosted five webinars to engage with the trucking industry on a variety of topics like fuel alternatives, truck parking, sustainable solutions for small fleets, and tools and resources for owner operators. SMARTE plans to actively engage with the trucking industry to develop a more comprehensive vendor directory offering SmartWay-verified technology products. For more, visit www.nctcog.org/SMARTE.

### **DFW Clean Cities**

The Dallas-Fort Worth Clean Cities Coalition works to reduce transportation energy use and improve air quality by providing guidance to fleets and drivers about clean vehicle fuels/ technologies, coordinating infrastructure planning and readiness, and facilitating best practices around transportation-energy integration. Each year, local fleets report on their efforts to improve air quality and increase fuel efficiency in the Clean Cities Annual Survey. For more information, visit www.dfwcleancities.org.

### **Clean Fleet Information**

Fleets operating in the region are encouraged to adopt the RTC's Clean Fleet Policy. This policy provides a framework for efficient and low-emitting operations, which helps the region work toward improving air quality. Fleets adopting the policy may apply for clean vehicle funding made available by the RTC. In 2023, there were 111 adopting entities. Adopting entities that also

complete the Clean Cities Annual Survey are eligible for Fleet Recognition Awards based on reducing the use of conventional petroleum fuels through conservation efforts and the use of low-emission or alternative fuel vehicles. In 2022, the 52 reporting fleets helped reduce the equivalent of nearly 30 million gasoline gallons, 56 tons of ozone-forming NOx and 176,000 tons of greenhouse gas emissions. For more, visit www.nctcog.org/fleetpolicy and www.dfwcleancities.org/fleetrecognition.

### **Planning Resilient EV Charging**

As transportation continues to electrify, the region could face challenges related to increased demand on the electric grid because of EVs or their ability to access grid power during extreme weather. NCTCOG will develop a plan to address EV charging resilience and test resilience strategies identified through a demonstration phase. The results will be used to construct a blueprint to ensure EV charging for critical travel remains during electric grid outages.

### **Community Readiness**

NCTCOG is engaged in multiple projects that aim to increase community readiness for the region's increasing EV adoption. The EMPOWER Workplace Charging Project reduces barriers through education, connecting workplaces with local EV charging coaches and providing access to a centralized library of workplace-focused resources. More information can be found at www.workplacecharging.com.

To meet the demand for a workforce prepared to install and maintain the growing number of EV charging stations in the region, the workforce development initiative, Guaranteeing Access to Underserved and Marginalized Populations by Building Employment Opportunities (GUMBO), will integrate EV charging technician training at local community colleges. The Charging Smart program provides communities with a framework of actions, best practices and technical assistance to set and achieve EV readiness goals and promote equitable access to electric mobility as well as recognize communities for these efforts.

# **Active Transportation**

Technology is helping NCTCOG plan for safer streets and better pedestrian connectivity. The NCTCOG Spatial Data Cooperative Program, using aerial imagery, helped create a new geographic information systems (GIS) data layer for sidewalks in 159 municipalities in the 12-county metropolitan area. New data for 139 cities that did not have the information to map sidewalks was combined with existing sidewalk data from 20 cities. This data is available to local municipalities to support their transportation planning needs.

### **DCTA Routes to Rail Stations**

Denton County Transportation Authority (DCTA) is considering how to improve connectivity with its stations. The DCTA Routes-to-Rail Stations Study completed in 2023 identifies recommendations to enhance pedestrian connectivity with rail stations, which ultimately could increase transit ridership.

This study provides a high-level inventory and evaluation of pedestrian infrastructure needs within a half-mile of all six DCTA rail stations. NCTCOG aerial imagery and Google Street View were used to review roadways surrounding each rail station to identify existing sidewalks and trails, as well as gaps in the network. The study estimates approximately

\$20 million in improvements are needed around the rail stations.

### **Cotton Belt Trail**

In 2023, the US Department of Transportation (USDOT) and the Texas Transportation Commission awarded significant funding for construction of the Cotton Belt Regional Veloweb Trail. Planned to parallel the Dallas Area Rapid Transit (DART) Silver Line, this trail will provide pedestrian and bicycle access to rail stations in seven cities across three counties.

In June 2023, the USDOT announced a \$25 million award from the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant Program for construction of 5.3 miles of the trail in Dallas, Richardson and Plano. The Texas Transportation Commission followed this federal funding in October by awarding an additional \$25 million for construction of 4.7 miles of trail in Addison, Dallas, Richardson and Plano.

DART anticipates construction will begin in fall 2024 on some segments of the 10 miles of trail receiving this funding. These portions of the trail are expected to be completed and open by summer 2026.





### **Community Gardens Guide**

Community gardens provide many health, social and environmental benefits. Community gardens near transit or accessible by nonmotorized transportation can help offset food insecurity, especially in disadvantaged communities.

In 2023, NCTCOG completed the Community Gardens Public Program Guide and an interactive map. The guide focuses on frameworks and steps cities and other public organizations (transit agencies, school districts, etc.) may consider when developing a publicly led community gardens program.

The interactive map highlights possible areas for community garden development on public land. This analysis used a variety of criteria to help local governments explore where they could consider establishing these assets near transit facilities and bikeways.

Some statistics from the analysis include:

- 12,555 acres of public land identified as potential garden sites throughout Collin, Dallas, Denton and Tarrant counties
- Properties owned by 68 public entities, including 22 cities

 The City of Dallas and DART have the most surplus properties. Dallas leads with 621, and DART has 433.

### **North Texas Value Capture**

Local governments increasingly need more funding from a wider variety of sources to keep up with infrastructure demand. North Texas cities frequently use value capture tools like tax increment financing, impact fees and public improvement districts to help pay for transportation infrastructure. Once called "innovative finance," these tools are now standard practice with over 70 North Texas cities using one or more value capture tools.

NCTCOG released a report examining value capture use for transportation in the 12-county area. It also provides insight on NCTCOG's partnership with local governments where value capture funding is used. The report can also assist local stakeholders involved in transportation policy and funding to understand possible outcomes and use context. Finally, it examines the effectiveness of these tools and recommends ways to improve their transportation funding capacity. For more information, visit www.nctcog.org/trans/plan/Land-Use/ Economic-Development.

# **Aviation**

Aviation in North Texas is anchored by Dallas Fort Worth International Airport, one of the world's busiest airports. More than 81 million passengers flew through DFW Airport in 2023, an 11.5% increase over the previous year. Dallas Love Field showed a 10% increase in passengers. Daily operations at both airports also grew, with DFW Airport welcoming 5% more flights than in 2022 and Love Field increasing flights by 9%. The region's two commercial airports are expected to continue handling the demand for years to come, as the capacity is approximately 5,100 flights per day. Despite its visibility, commercial flight is only part of the broader North Texas aviation system.

### Air Cargo

Dallas-Fort Worth's location and aviation assets make it a key air cargo hub. Goods that need to reach their destination quickly, such as pharmaceuticals, consumer electronics, computers and computer components are typically sent by air.

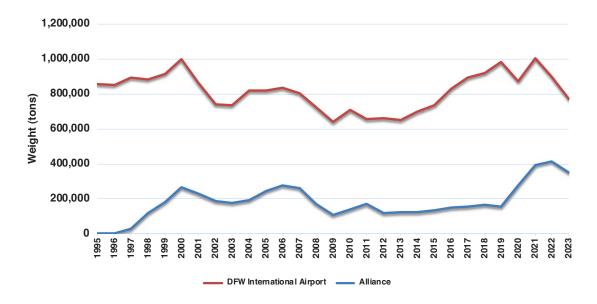
Air cargo shipped through the region's major cargo facilities dipped in 2023, with DFW Airport showing a 14% decline and Fort Worth Alliance Airport a 15% drop. This continued the correction that began in 2022. Approximately 775,000 tons of cargo passed through DFW Airport, while Fort Worth Alliance Airport saw over 350,000 tons.

### **Airport Funding**

Smaller airports across the region and state also play a significant role in moving people and goods. The Texas Department of Transportation is authorized to award federal and state funding for capital improvements to preserve and enhance the state's general aviation system. In 2023, 15 area airports shared \$33.7 million, with \$10.4 million going to Denton Enterprise Airport for pavement improvements. The other airports that received funding were Addison, Arlington Municipal, Cleburne Regional, Commerce Municipal, Decatur Municipal, Ennis Municipal, Fort Worth Spinks, Granbury Regional, Grand Prairie Municipal, Greenville, Hillsboro Municipal, McKinney National, Mid-Way Regional and Terrell Municipal.



## **Air Cargo Tonnage**



DFW Airport and Fort Worth Alliance Airport are the primary air cargo facilities in North Texas. Approximately 775,000 tons of air cargo passed through DFW Airport last year, with Fort Worth Alliance Airport handling over 350,000 tons.



### **Airspace Awareness**

The North Texas Airspace Awareness Pilot Program kicked off with 20 local governments and three airspace awareness partners. Each participating city received a license to a web-based platform for visualization and monitoring of airspace. This allows the participating cities and NCTCOG to enable residents and businesses to fly uncrewed aircraft systems (UAS) safely and receive live data on potential risks, as well as advisories for local events or emergencies. This pilot program is important to keep operators up to date on the rules, regulations and potential hazards that can directly affect the UAS community. For more information, including interactive maps showing what is happening in North Texas airspace, visit www.northtexasuas.com.

NCTCOG conducted a series of UAS workshops over a two-year period that examined rules and regulations governing this emerging technology, as well as use cases for both hobbyists and commercial pilots.

All 21 of the workshops are available online at <a href="https://www.youtube.com/nctcogtrans">www.youtube.com/nctcogtrans</a> by searching for the UAS Know Before You Fly playlist.

### **UAS Delivery Pilot Project**

One potential area of expansion for the industry is in the delivery of goods. As part of its role as host of the DFW Clean Cities Coalition, NCTCOG is partnering with the City of Arlington, Tarrant Area Food Bank and the University of Texas at Arlington on a program that will test the use of autonomous electric delivery vehicles (including UAS) to provide food to Arlington residents in need.

This study, funded by a \$780,000 grant to the City of Arlington from the US Department of Energy, aims to test the use of no-emission or low-emission UAS and small, four-wheeled robots to deliver essential food to North Texans who are historically disadvantaged or do not have reliable transportation.

The electric delivery vehicles have the added benefit of potentially reducing greenhouse gas emissions. This project could pave the way for the use of UAS and automation to help meet other challenges to improve quality of life.

# **Technology**

Transportation is no longer only about physically moving from one place to another. The rise of virtual meetings has thrust high-speed internet access to the forefront.

### **Broadband as Transportation**

Just as North Texans travel to the doctor's office, school or work and engage in commerce, they also make these "trips" digitally. However, not everyone has access to broadband. There are hundreds of thousands of Dallas-Fort Worth households without access to high-speed internet or the ability to afford access. The Regional Transportation Council has been working to improve access to the internet as a mode of transportation.

NCTCOG is planning to host a pilot project that would implement fiberoptic cables along East Rosedale and East Lancaster avenues, an economically disadvantaged community in Fort Worth. This "middle mile" of fiber will reduce costs associated with an internet service provider's entry into the market.

NCTCOG will pursue a four-pronged approach to assist with the delivery of broadband to the areas of the region that need it. NCTCOG will:

 Help the region coordinate data collection and analysis to improve reporting of broadband availability, affordability and residential usage rates.

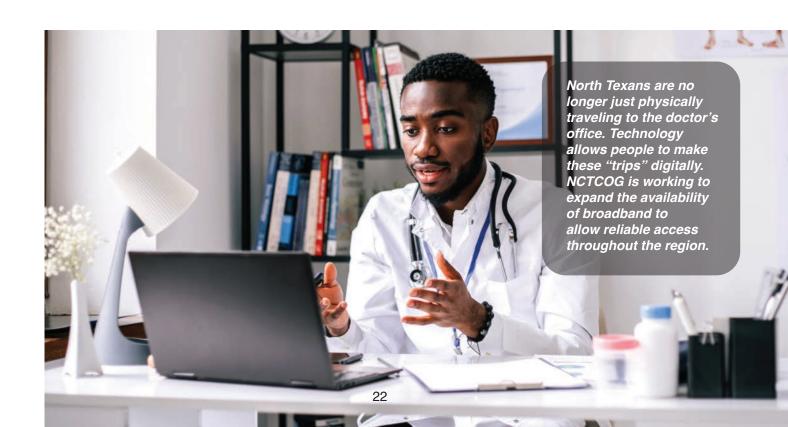
- 2. Create a policy committee of regional elected officials to provide clear, consistent feedback to the Texas Broadband Development Office.
- 3. Develop a legislative program to help guide the Texas Legislature on regional needs.
- 4. Continue outreach to broadband practitioners in the region and encourage municipalities to appoint broadband technical leads.

While work to close the digital divide continues, several innovative projects are bringing attention to vehicle automation and its role in connecting people.

### **Work Zone Data Exchange Initiative**

The US Department of Transportation is working to improve the efficiency of communication with vehicles in work zones through the Work Zone Data Exchange. This tool is standardizing the reporting of work zone data by public agencies, contractors and smart devices placed in work zones to improve operations and safety. NCTCOG completed a TXSHARE cooperative procurement of Work Zone Data Exchange services and entered into contracts with five vendors.

Public agencies throughout the region can utilize these contracts without having to do their own procurements. Ultimately, the exchange is intended to prepare the region for the next phase of connected and autonomous vehicles.





One issue stakeholders have found in implementing this program is a lack of available funding. To address this concern, NCTCOG will pursue a call for projects to implement these services using available federal funding.

### **Automated Vehicles 2.0**

The next phase of NCTCOG's Automated Vehicle 2.0 Program is underway. NCTCOG released a call for projects asking regional partner agencies to apply with their desired automated vehicle programs.

NCTCOG has identified several regional projects that support autonomous vehicles and the services they provide. Potential projects include:

- Automated vehicle ride-share and fixed-route micro transit
- Automated delivery robots to address food deserts and internet connectivity
- · Automated parking valet technologies
- · Autonomous transit bus deployment

Too often, the automated vehicle industry is primed for deployment of vehicles, only to lack the proper infrastructure support needed to communicate with technology along the roadways.

In the coming years, NCTCOG will oversee the development and implementation of automated vehicle projects the public can see, feel and even participate in.

### **CERTT Program**

Even the best idea for moving people will stop in its tracks if the innovative system, technology or service does not meet industry standards and is not properly certified. This is where the Certification of Emerging and Reliable Transportation Technology (CERTT) program comes into play. CERTT provides a connection between the creators of innovative transportation technologies and communities interested in testing them.

One new technology, a modern overhead gondola system offered by Swyft Cities, has advanced through the program. The modern gondola system uses independently driven cars along a stationary guideway, allowing the cars to serve stations on demand. Stakeholders are collaborating to find ways to make this project a reality.

### **High-Speed Rail**

The Dallas-Fort Worth High-Speed Transportation Connections Study is examining high-speed rail along the IH 30 corridor to connect people seamlessly from throughout the region to the planned Dallas-to-Houston route via a one-seat ride.

The study has moved into a National Environmental Policy Act (NEPA) analysis, focusing on route alignment, possible station locations and potential social and environmental impacts. The project is expected to emerge from the NEPA process by March 2025.

# **Public Involvement**

The opinions of people who use the transportation system play a vital role in the planning process, especially as the region is seeing a boom in population. NCTCOG's public involvement staff uses various methods to efficiently inform the public about new technology and innovations that move both people and goods across the region and get them where they need to be.

### **Virtual Engagement**

In 2023, NCTCOG kicked off the planning phase for the next long-range transportation plan— Mobility 2050. An essential part of this phase is gathering public input, which is then used to inform the goals addressed by the plan. Plan development will occur throughout 2024 and will include new analyses and forecasts, public engagement, and updated policies, programs, and project recommendations.

Public input opportunities for Mobility 2050 are underway and will be available to North Texans through May 2025. In addition to a Mobility 2050 survey, residents can provide feedback regarding specific transportation issues using NCTCOG's Map Your Experience tool, available online anytime at www.nctcog.org/mye.

2023 saw the continued integration of PublicInput.com for meetings, major projects and studies, as well as various email campaigns. Using this platform has increased the accessibility to information about NCTCOG projects, programs and policies. It provides one place to conduct both online and in-person meetings. Residents without internet access have the option of listening to meetings over the phone. Moving more meetings to **www.nctcog.publicinput.com** will help NCTCOG continue to reach a broader audience across the region.

### **Hybrid Meetings**

After implementing the hybrid public meeting format, NCTCOG continued to see a broader audience reached. In 2023, six hybrid public meetings were held. Staff hosted three online public input opportunities as well. These input opportunities are scheduled throughout the year to give residents the chance to hear about upcoming plans in the region and share their thoughts about the topics presented. NCTCOG hosted 41 community events in 2023, almost doubling the number of events hosted in the previous year. These events allow staff to interact with residents and provide a clearer picture of NCTCOG's various planning efforts and projects taking place throughout the region.

### **Top Five Most Engaging Topics on Social Media 2023**

| Topic                 | Reach  | Engagement Rate |
|-----------------------|--------|-----------------|
| Public Involvement    | 5,604  | 6.8%            |
| Air Quality           | 12,142 | 4.0%            |
| Transit               | 2,179  | 3.7%            |
| Electric Vehicles     | 1,401  | 2.7%            |
| Innovative Technology | 1,090  | 2.2%            |
|                       |        |                 |

These are the five most engaging topics covered on the department's Facebook and X (formerly Twitter) pages in 2023.



### **Social Media Growth**

NCTCOG's community outreach is also tracked through other measures, such as its social media presence. The Transportation Department uses Facebook, Instagram, X (formerly Twitter) and YouTube to reach a broader audience and keep North Texans informed about things happening in their community, such as transportation projects, public meetings and air quality efforts. In 2023, NCTCOG continued to see growth on its social media platforms. Instagram experienced the most growth, with a more than 20% increase in followers.

### **2023 Top Media Mentions**

| Topic                         | Mentions |
|-------------------------------|----------|
| Transit                       | 39       |
| High Speed Rail               | 37       |
| Highways                      | 35       |
| Automated Vehicles/Technology | 18       |
| Air Quality                   | 12       |
|                               |          |

### **Media Relations**

Media outreach is an important tool for NCTCOG, as it helps the Transportation Department communicate with a larger share of the region. Working with the media allows NCTCOG to effectively reach the over 8 million residents of the region through traditional print and broadcast outlets.

In 2023, NCTCOG distributed more than 30 press releases and received over 100 media requests to interview subject matter experts.

With several exciting projects and events planned throughout the region, such as high-speed rail, preparations for the 2026 FIFA World Cup and various infrastructure improvements, NCTCOG was mentioned in the media over 275 times in 2023. This represented a 50% increase from the previous year. NCTCOG will continue to work closely with the media to effectively communicate with the growing region.

Whether through community outreach, public meetings, social media or another tactic, we are listening to your concerns. We invite you to communicate with us, and look forward to you becoming part of the conversation.

### **2024 Art Contest Winners**

Congratulations to **Kalei Gipson**, a second grader at Rocketship Dennis Dunkins Elementary School, who created the artwork on the cover. Kalei won the annual Progress North Texas art contest. Featured below are the top three finishers. Thank you to art teacher K.E. Strain who helped the students with their entries.



**First Place Kalei Gipson** Second grade



**Second Place Richard Munoz**Second grade



**Third Place Franklin Moss**Second grade

www.nctcog.org/ourregion

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# **Progress North Texas 2024**

Using Technology to Get You There



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