

TRANSPORTATION DEPARTMENT FY2021 GOALS AND ACCOMPLISHMENTS

1. **Goal:** Develop and maintain analytical tools for transportation projects analysis.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits [TDCs]), federal Surface Transportation Block Grant Program (STBG) funds, Regional Transportation Council (RTC) Local funds, local funds, and Transportation Development Credits.

Attainment: Met

Primary Work Tasks:

1. Maintain and enhance the regional travel models (RTMs) for the Metropolitan Planning Area.¹
2. Maintain and improve an information system for transportation data.¹
3. Design and conduct travel survey and data collection projects.¹
4. Develop and maintain demographic forecasts.¹

Principal Performance Measures:

1. Maintain and enhance the existing and new Regional Travel Models, respectively called DFX and TAFT, ensuring usability and proper operation. Improve TAFT reporting capabilities. Maintain the software applications, and archive system of model versions and model runs. Develop model description documentation and training materials and conduct user training sessions. Provide support in the use of RTMs through updates to the software application and technical assistance to model users.
2. Continue to develop methods and computer tools to facilitate, disseminate, and optimize the integration of data collected by NCTCOG or provided by partner agencies. Integrate the data into SQL server databases and geographic layers. Provide support to staff and stakeholders for analysis of data.
3. Plan for continuation of the 2020 Transit Onboard Survey. Analyze data acquired from the 2017 National Household Travel Survey. Initiate the Toll Road User Survey.
4. Provide support for demographic data for the existing forecast. Coordinate with local governments, process data, and create a new set of demographic forecasts with the horizon year of 2045.

Results:

1. The existing Regional Travel Model, DFX, was properly maintained for operation. Staff implemented transit coding tools, model run reporting tools, and air quality reporting tools in TAFT, the new and updated Regional Travel Model. Staff maintained the Regional Travel Model (RTM) software applications and a library of RTS software application versions. An archive system for model runs was also maintained. Transit ridership data was used to validate the model; 2019 roadway and transit validation documents were created. Model description documents were started for various components. Several user training sessions were held, and training documents were

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created for modules of the TAFT RTM. Staff provided technical support to model users for the existing and new Regional Travel Model.

2. Several datasets were assembled to calculate and illustrate the impact of COVID-19 on the regional transportation systems. The latest traffic counts collected by partner agencies were integrated in the centralized database. The traffic speed data delivered by FHWA was integrated and used in several analyses. Origin-Destination datasets were integrated into the centralized database. The review of the traffic data collected by radar side-fire devices was initiated.
3. The 2017 National Household Travel Survey was used for Regional Travel Model validation checks. The 2020 Onboard Transit Survey was not resumed due to the continuing COVID-19 pandemic disruptions to transit ridership. Staff coordinated with local transit agencies to develop a plan to resume main data collection in fall 2022 and spring 2023. A supplemental Dallas Area Rapid Transit Demographic Survey in spring 2021 was conducted that included 5,000 surveys by service type. A Scope and Request for Proposals for the Toll Road User Survey/Limited Access Facilities Survey was created and posted, and a consultant was selected. Data collection of traffic counts and development of a survey instrument for the limited access facilities survey began in fall 2021.
4. Support for existing demographic forecast was provided and project-specific alternative demographic for the existing forecast was prepared. A new demographic forecast was created with the horizon year of 2045 through an analytical process and submitted to local governments for review.

2. **Goal:** Engage local elected officials, public- and private-sector organizations, and the general public in the multimodal transportation and air quality planning process.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits, federal Department of Energy funds, federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, public and/or private funds, and Transportation Development Credits.

Attainment: Met

Primary Work Tasks:

1. Produce print and online content and publications to inform the public and media about regional transportation and air quality issues.^{1, 2, 3} (FHWA, FTA, TxDOT)
2. Engage local governments and public and private organizations, including community groups, business organizations, chambers of commerce, local community/technical colleges, and school districts, in transportation and air quality projects and programs.¹
3. Increase awareness of transportation and air quality programs through outreach and education campaigns.¹
4. Maintain a Public Participation Plan.^{2, 3} (FHWA, FTA, TxDOT)
5. Offer multiple ways for the public to learn about and provide input on transportation plans, including in person and online opportunities.^{1, 2, 3} (FHWA, FTA, TxDOT)
6. Publicize opportunities for public involvement.^{2, 3} (FHWA, FTA, TxDOT)
7. Provide reasonable accommodations to encourage individuals and groups protected by federal civil rights laws to participate in planning processes.^{2, 3} (FHWA, FTA, TxDOT)

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Principal Performance Measures:

1. Publish or contribute to monthly and semiannual newsletters and provide content to other publications, including those developed by the agency. Publish technical reports and other topic-specific publications, as needed. Compile data and information from both internal staff and external agencies to create the content for an annual state-of-the-region report. Maintain and update the website and social media resources regularly to ensure current information is being presented. Provide timely responses to media inquiries and distribute press releases as needed.
2. Coordinate with regional partners on transportation and air quality projects and programs; plan for, host, and attend meetings. Provide educational resources to partners. Select and participate in transportation and air quality-related virtual or in-person outreach events and educate the public about various transportation and air quality campaigns.
3. Implement transportation and air quality education campaigns. Monitor campaign web traffic, electronic email list of users, and surveys to quantify effectiveness of educational campaigns. Provide graphic, audio/visual, educational, social media messages, and informational services for local governments, as well as NCTCOG's Transportation Department, on transportation and air quality-related programs/campaigns.
4. Update the Public Participation Plan, as necessary, to ensure that it is current with federal guidelines, paying particular attention to environmental justice elements.
5. Hold public meetings, partner to jointly host meetings with other organizations, or offer online opportunities on relevant transportation topics to inform the public and seek input on the decision-making process.
6. Maintain current contact information for individuals, transportation partners, elected officials, businesses, chambers of commerce, and others to whom public meeting notices and notices for online participation opportunities are sent by mail or email. Publicize opportunities for public involvement in newspapers, including minority and Spanish-language newspapers.
7. Select locations for public meetings based on physical accessibility and proximity to public transportation. When possible, provide an online viewing option for public meetings to help ensure resident participation in the decision-making process. Provide translation of materials when appropriate according to the Language Assistance Plan.

Results:

1. Transportation Department staff published monthly and semiannual newsletters, fact sheets, and technical reports with information about regional transportation and air quality issues. These publications were distributed to partners and the public through the mail and online. Staff also contributed to agency publications and provided content to partners. These efforts educated the public about regional programs and projects related to transportation and air quality. This year, the Department's annual state-of-the-region report, Progress North Texas, focused on Transportation For All, using a narrative and performance measures to show how regional planning efforts affect communities. Approximately 7,000 hard copies were mailed to policymakers, elected officials, transportation partners, and other interested parties, including school districts, civic organizations, businesses, and public libraries. Additional copies were shared electronically upon request. An online version was also published in HTML and PDF formats. In addition, staff received and responded to dozens of inquiries from the media, matching reporters to subject-matter experts to assist them with their stories about

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transportation and air quality issues. Furthermore, staff wrote and distributed 31 press releases about a variety of projects and programs affecting the lives of residents.

2. Due to the COVID-19 pandemic, the Department did not attend in-person community events in FY2021, and many of these events were either canceled or postponed. Department staff participated with partners in four virtual community events across the region to communicate information about multiple regional transportation and air quality programs and issues. As a part of Air North Texas Coalition efforts, staff also continued to develop and maintain relationships with a wide range of regional partners to coordinate the regional air quality awareness campaign, holding six conference calls. Air quality educational materials, such as promotional items and outreach campaign elements, were produced for partners and provided for distribution at one in-person event. Staff also began implementing a Transit Pandemic Recovery Campaign in conjunction with Dallas Area Rapid Transit, Denton County Transit Authority, and Trinity Metro to help increase transit ridership. Campaign tactics and phases were developed, and materials to educate North Texans about transit safety protocols were created for use by the agencies and local partners. Additionally, NCTCOG procured paid education campaign spokespersons from local radio stations to promote transit through a social media and radio spot campaign. NCTCOG and the three transit agencies met twice a month to manage the campaign's implementation.
3. For the Air North Texas campaign, staff used paid education and social media, and coordinated with partners to increase air quality awareness. Clean Air Corner, the Air North Texas blog, was distributed monthly to more than 5,000 subscribers. Staff also maintained contact with other State, federal, and local air quality partners to collaborate on consistent messaging and themes. Ozone alerts issued by the Texas Commission on Environmental Quality were monitored to ensure local Ozone Action Day Alert messages were disseminated to interested parties. Twenty-eight Ozone Action Day Alerts were distributed to subscribers. Air North Texas website traffic was monitored; the website recorded more than 21,000 users and 26,000 sessions for the fiscal year. On August 4, Air North Texas celebrated the 12th annual Clean Air Action Day, which staff implemented with regional partners. For Clean Air Action Day, educational materials and promotional ideas were provided to 35 Air North Texas partners, including cities, counties, and transportation agencies. More than 1,100 North Texans made commitments to participate in Clean Air Action Day as a result. Communication services continued for other Department air quality-related programs and campaigns such as the Try Parking It commuter tracking program, GoCarma, and bicycle/pedestrian education. Some materials developed include graphics, outreach campaign materials, original video series, and educational items. Since staff and related partners worked from home through FY2021, meetings still primarily took place virtually, so staff uploaded these meetings to online platforms and the Department's YouTube Channel for public viewing.
4. NCTCOG maintained a Public Participation Plan that was most recently updated in 2020. The plan incorporates a Language Assistance Plan, environmental justice elements, and Title VI considerations. Staff monitored federal legislation and guidance to ensure the Public Participation Plan complied with regulations. Significant work researching and evaluating how to enhance outreach and communication was accomplished and will contribute to ongoing efforts to educate and involve North Texans in transportation planning.
5. Due to the COVID-19 pandemic, provisions of the Texas Open Meetings Act were suspended by the Governor on March 16, 2020. Consequently, staff held 10 online public input opportunities, in accordance with procedures in the Public Participation Plan, to educate the public on current and future Metropolitan Planning Organization activities and to seek input.

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² Federal Measure

³ State Measure

⁴ Local Measure

6. Meeting notifications and other outreach materials were sent through the Department's public outreach database of interested parties. At the end of the fiscal year, the database contained about 15,000 people. Notices were published in area newspapers, including minority publications, and translated notices were placed in Spanish newspapers and a Vietnamese newspaper. Online and social media advertising complemented print notices. More than 140 libraries in the Metropolitan Planning Area received public meeting flyers to make available to patrons. Additionally, public meeting flyers were provided to municipal offices.
7. Due to the COVID-19 pandemic, public meetings were not held in FY2021. In accordance with the Public Participation Plan, some online public input opportunities included a recorded video presentation; these were posted at www.nctcog.org/video as part of the Department's standard procedures for public review and comment. As an accessibility measure for individuals without a connection to the internet, print copies of presentation materials were made available upon request. The need and resources available for translation of materials were monitored. Each public input opportunity notice included information in English and Spanish about how to request language assistance. Also, the Department continued its efforts to translate major plans, reports, and other informational pieces into Spanish.

3. **Goal:** Reduce congestion on the roadway system and improve reliability.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits), federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, federal Surface Transportation Block Grant Program (STBG) funds, Texas Department of Transportation (TxDOT) funds, Regional Transportation Council (RTC) Local funds, and Transportation Development Credits.

Attainment: Met

Primary Work Tasks:

1. Complete update of the Congestion Management Process (CMP) for the Dallas-Fort Worth Metropolitan Area. ^{2,3} (FHWA, FTA, TxDOT)
2. Monitor the integration of CMP in the Metropolitan Transportation Plan (MTP) and the Transportation Improvement Program (TIP) and improve related processes and documentation. ^{2,3} (FHWA, FTA, TxDOT)
3. Monitor, implement, and promote Travel Demand Management (TDM) strategies outlined in the CMP and MTP. Coordinate TDM activities within the region and implement TDM projects. ^{2,3} (FHWA, FTA, TxDOT)
4. Monitor, implement, and promote Transportation System Management and Operations (TSMO) strategies outlined in the CMP and MTP. Coordinate TSMO activities within the region and implement TSMO projects. ^{2,3} (FHWA, FTA, TxDOT)

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Principal Performance Measures:

1. Complete update of the CMP document. Track, evaluate, and respond to CMP Project Implementation documents submitted for projects that add roadway capacity. Perform planning analysis for added-capacity roadway projects.
2. Continue to monitor new project requests and project modification requests that add capacity for MTP conformity. Hold new project and project modification requests for added capacity in the TIP until congestion mitigation strategies are included in the TIP or other funding program. Track and monitor projects in the TIP. Complete process update of CMP compliance activities as part of CMP Update effort.
3. Continue to manage and oversee the Regional Trip Reduction Program, the Try Parking It Program, vanpool reimbursement on managed lane activities, and HOV Rewards Program. Promote TDM strategies and participate in employer and community outreach activities. Monitor and track TDM-related performance measures.
4. Support and assist regional partners to plan and implement strategies, promote cooperation, participate in committee meetings, and support and develop existing and new TSMO projects in the region. Provide project oversight and management for the Regional Traffic Signal Program and Minor Improvement Program.

Results:

1. An update to the Congestion Management Process was completed. Roadway capacity projects were tracked and evaluated based on the CMP Project Implementation form, including single-occupant vehicle justification.
2. All projects being entered into the TIP through the modification process were evaluated for added capacity and confirmed through communication with TIP staff. CMP compliance forms were completed for all capacity projects added to the TIP. The compliance form will be updated to improve the modification process and documentation.
3. Staff continued to manage and implement the Regional Trip Reduction Program, including oversight of the Try Parking It website/application, the Vanpool Managed Lane Toll Reimbursement Program, and GoCarma HOV Reward Program. Staff initiated and finalized the development of the Regional Single-Occupancy Vehicle (SOV) Trip Reduction Target Resolution which established an annual target of a 20 percent reduction for SOV trips during peak periods. Staff continued to update and maintain the regional Park-and-Ride facility inventory listing. Due to COVID-19 related restrictions/recommendations, staff participated in modified outreach activities such as video presentations and virtual outreach events to promote TDM strategies to regional employers and the general public. Staff continued activities related to the redesign and update of the Regional Trip Reduction Employer Guide. Regional TDM-related program performance measures continued to be collected/tracked/maintained and reported/published in the annual Regional TDM Performance Report.
4. Support and assistance were provided to regional partners in the planning and implementation of strategies for existing TSMO projects and development of new TSMO projects in the region. General contract management and project oversight of the Regional Traffic Signal Program was provided, including invoice approval, hosting monthly status meetings with consultants and TxDOT staff, and participation in committee meetings. Staff also facilitated interlocal agreements and coordinated implementation of the Minor Intersection Improvement Program with participating agencies. General contract management and project oversight of the regional 511DFW

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Traveler Information System, including invoice approval and hosting status meetings twice a month. The Regional ITS Architecture was updated.

4. **Goal:** Enhance the safety and security of the transportation system.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits), federal Surface Transportation Block Grant Program (STBG) funds, federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, Regional Transportation Council (RTC) Local funds, other local funds, and Transportation Development Credits.

Attainment: Met

Primary Work Tasks:

1. Coordinate and oversee committee meetings, educational events, and activities.^{1,2,3} (FHWA, FTA, TxDOT)
2. Enhance the Regional Safety Information System; collect and analyze regional crash, fatality, and hazardous materials data.^{1,2,3} (FHWA, FTA, TxDOT)
3. Manage the regional Traffic Incident Management Training Program.^{1,2} (FHWA)
4. Coordinate and support the Mobility Assistance Patrol Program (MAPP) and Commercial Vehicle Enforcement (CVE) programs and projects.^{1,2} (FHWA)
5. Participate in projects/activities that will reduce traffic incident clearance times and reduce crash injuries and fatalities within the region.¹
6. Provide transportation security planning services to agency and regional partners.^{2,3} (FHWA, FTA, TxDOT)

Principal Performance Measures:

1. Coordinate and oversee the activities of the Regional Safety Advisory Committee, holding four meetings per year. Identify, coordinate, and host safety and/or security-related events, training and/or groups, as needed. Participate in PWERT (Public Works Emergency Response Team) committee meetings and assist with Continuity of Operations Plan, as requested.
2. Coordinate with TxDOT related to the State Crash Records Information System (CRIS) and procure Web-based mapping software application(s) to house the Regional Safety Information System data. Request, analyze, and maintain regional safety data, including crash data from TxDOT's Crash Records Information System, fatality data from the National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS), hazardous material spill data from the National Response Center, and other data sources as made available. Conduct crash data analyses for staff, member agencies, and the public as requested. Monitor and participate in activities related to TxDOT Safety Performance target setting as it relates to MPO coordination; and set targets, monitor, and report on FHWA Safety Performance Measures.
3. Offer TIM First Responder and Manager training classes and Executive Level training courses. Review monthly invoices and performance reports, maintain course material as needed, and implement instructor recruitment strategies. Implement and/or oversee

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

activities related to the 2020 Incident Management Equipment Purchase Call for Project was also provided.

4. Track MAPP Program performance and monitor program budgets for the Dallas and Tarrant County patrols. Evaluate and monitor patrol routes, route coverage, hours of operation, and efficiency of each of the programs using performance measures. Continue coordination efforts with regional CVE Working Group agencies to initiate additional projects/programs that improve commercial vehicle safety. Complete the CVE Equipment and Training Program which provides portable scales to North Texas CVE departments. Host commercial motor vehicle violations training for prosecutors and judges.
5. Continue efforts to promote and track regional incident management performance measures, monitor intersection improvements of locations included in the Regional Intersection Safety Implementation Plan (ISIP) and the Texas ISIP, monitor activities for the Wrong-Way Driving (WWD) Mitigation project, monitor performance of the Safety Patrol/Incident Management project, and continue development of a regional safety education campaign and website.
6. Provide data and refine methodologies for Critical Infrastructure/Key Resources (CIKR). Develop transportation infrastructure nominations for inclusion in the CIKR database.

Results:

1. Staff hosted four virtual Regional Safety Advisory Committee meetings. No additional safety or security-related events, training, or group meetings were necessary. Staff attended meetings of the North Central Texas Public Works Emergency Response Team; however, no Continuity of Operations Plan assistance was requested or provided.
2. Staff continued to request, process, and analyze TxDOT's Crash Records Information System data to investigate crash trends and identify methods and countermeasures to reduce crashes within the metroplex. CRIS data, along with Fatality Analysis Reporting System (FARS) data, was utilized to monitor progress towards meeting federally mandated safety performance targets. 2021 FHWA Safety Performance Targets for the region was established and progress on 2018 safety targets was reported. Crash data requests for NCTCOG staff and member agencies was completed, as needed. Hazardous materials data from the National Response Center was collected for incidents that occurred on limited access facilities. Staff also developed and published the annual Regional Safety Performance Report, along with a Crash Fact quick reference sheet for the North Central Texas region.
3. Staff hosted five Traffic Incident Management (TIM) First Responder and Manager training classes and two Executive Level training courses. Staff coordinated with Training and Development Institute (TDI) staff and TIM Instructors on the development and update of an in-person training safety protocol, to continue hosting the TIM training classes safely in person, considering COVID-19 restriction changes. Staff reviewed and processed monthly invoices, monitored, and tracked course performance statistics, maintained the First Responder and Manager's Course material, and continued instructor recruitment efforts. The 2020 TIM Self-Assessment (SA), in partnership with the Federal Highway Administration (FHWA), was conducted to evaluate regional performance relating to traffic incident management. Staff continued to coordinate with regional partners, assist with agreement amendments, and processed invoices for the awardees of the 2020 Incident Management Equipment Purchase Call for Projects. Staff also developed and released the 2021 Incident Management Freeway Blocking Equipment Call for Projects for \$1 million, available to assist partner agencies with

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

purchasing freeway blocking equipment used to provide protection to first responders while responding to traffic crashes.

4. Staff tracked and assessed Mobility Assistance Patrol Program performance measures and operations changes for both Dallas County and Tarrant County Sheriffs' patrols and coordinated with the North Texas Tollway Authority and the private operators on the LBJ and North Tarrant Express managed lanes. The process of re-evaluating Dallas and Tarrant County operations continued and possible route expansions and late-night coverage options to each county and TxDOT personnel was discussed. Twenty-six sets of portable weighing scales were issued to 15 North Texas commercial vehicle enforcement departments as part of the Commercial Vehicle Enforcement Equipment and Training Program. Staff hosted two commercial motor vehicle violations training for prosecutors and judges.
 5. low-cost systemic intersection safety improvements related to Wrong-Way Driving Mitigation countermeasures in the Dallas and Fort Worth TxDOT districts was tracked. Staff continued to monitor WWD warning technologies. Work continued on a before-and-after analysis of intersections identified by the ISIP. Staff finalized the design of the newly created safety campaign website for Drive Aware North Texas, the regional driver safety outreach campaign, to positively influence negative driver behaviors; and developed/initiated demographics-focused marketing and education outreach activities focused on reducing speeding.
 6. Technical transportation data needed to support transportation security and emergency preparedness planning efforts was provided. Staff implemented Mobility 2045 Policy Bundles outlining policies related to transportation security and developed Policy Bundle updates. Staff supported transportation infrastructure nominations for evaluation of the Critical Infrastructure/Key Resources database.
5. **Goal:** Support access to and expansion of general aviation facilities and assist in the safe integration and use of unmanned aircraft systems (UAS) in the region.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits), Regional Transportation Council (RTC) Local funds, and other local funds.

Attainment: Met

Primary Work Tasks:

1. Support the Air Transportation Advisory Committee (ATAC).^{1, 2} (FHWA, FTA, TxDOT)
2. Support data collection to assess the impact of aviation activity on transportation planning and surface access to aviation facilities.^{1, 2, 3} (FHWA, FTA, TxDOT)
3. Assess the viability of the current North Central Texas General Aviation and Heliport System Plan.¹
4. Collaborate with regional educators, industry partners, and governments to seek and provide innovative ways to sustain regional aviation education and workforce programs.¹
5. Support the Unmanned Aircraft Systems (UAS) Safety and Integration Task Force and working groups. Assist in the safe and efficient integration of UAS into the region's existing transportation system.

¹ NCTCOG Measure

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Principal Performance Measures:

1. Host four ATAC meetings to include briefings for elected officials at the local, State, and federal levels and provide status reports on ATAC activities to other NCTCOG committees. Monitor and track aviation funding provided to the region. Foster more communication and collaboration amongst ATAC members.
2. Update travel-time contours to regional aviation facilities as needed. Monitor the aviation chapter in the Metropolitan Transportation Plan, Mobility 2045, related to implementation of programs and policies.
3. Review and initiate an update to the North Central Texas General Aviation and Heliport System Plan for accuracy.
4. Participate on committees to share data and resources with stakeholders and support curriculum development to assist and facilitate aviation programs. Maintain, enhance, and promote NCTAviationcareers.com at aviation education outreach events.
5. Host at least six UAS Safety and Integration Task Force and working group meetings for local, State, and federal partners, as well as industry experts, universities, and other organizations. Coordinate the UAS Task Force to monitor, inventory, and share efforts to implement UAS initiatives within the region. Host at least four Know Before You Fly workshops for the public and interested individuals.

Results:

1. Staff hosted four ATAC meetings to include briefings for elected officials at the local, State, and federal levels and provided status reports on ATAC activities to other NCTCOG committees. Staff monitored and tracked aviation funding provided to the region by inventorying Texas Transportation Commission funding and reporting back to ATAC. More communication and collaboration amongst ATAC members was fostered by encouraging general aviation airport representatives to provide committee presentations and scheduling staff briefings on UAS Task Force activities.
2. Regional aviation goals and strategies outlined in the Metropolitan Transportation Plan, Mobility 2045, were monitored. Staff reviewed and scored the aviation section of the Mobility 2045 Policy Bundle applications that were submitted by local governments, transit agencies, and independent school districts. Staff was not required to update travel-time contours to regional aviation facilities in FY2021.
3. In FY2021, staff continued to review and initiate an update to the North Central Texas General Aviation and Heliport System Plan for accuracy. An application for funding of a new system plan will be pursued with the Federal Aviation Administration.
4. Staff participation on the Dallas-Fort Worth Regional Aerospace Consortium continued. The Consortium monitors aerospace and aviation workforce data. A new survey of aviation education initiatives was administered to assess the current state of aviation-related programs in the region. Work with career and technology education programs continued within area independent school districts to promote aviation education. Participation in these programs was provided through presentations, speaking engagements, and other outreach events, as well as membership on various committees. Staff participated on the Tarrant County Community College Advisory Committee, Game of Drones Planning Committee, Bell Aerial Robotics Advisory Committee, Fort Worth Drone Advisory Committee, NCTX Aerial Robotics Leadership Committee, Fort Worth ISD UAS Workforce Steering Group, Irving ISD Aviation Advisory Board, Crowley ISD CTE Advisory Board, and the Midlothian ISD Advisory Board.
5. Nine Unmanned Aircraft Systems Safety and Integration Task Force meetings were completed. Staff also organized four UAS working groups focused on issues and

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² Federal Measure

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opportunities associated with legislation, education, integration, and training as it continued to monitor, inventory, and share efforts to implement UAS initiatives within the region.

6. **Goal:** Develop and implement the Transportation Improvement Program, and support and facilitate the funding and implementation of transportation projects in the Dallas-Fort Worth Metropolitan Area.

Funding Source: FY2021 Transportation Planning funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits [TDCs]), federal Surface Transportation Block Grant Program (STBG) funds, Regional Toll Revenue (RTR) funds, and Transportation Development Credits.

Attainment: Met

Primary Work Tasks:

1. Begin development of the 2023-2026 Transportation Improvement Program (TIP).^{2,3} (FHWA, FTA, TxDOT)
2. Modify the 2021-2024 TIP each quarter, in line with TxDOT's quarterly Statewide Transportation Improvement Program (STIP) modification cycle.^{2,3} (FHWA, FTA, TxDOT)
3. Maintain updated information system to track TIP projects and continue development of new project tracking system.¹
4. Monitor the status of RTR-funded projects and manage RTR funds.¹

Principal Performance Measures:

1. Conduct meetings with project sponsors and TxDOT districts to gather updates on projects needed for development of the 2023-2026 TIP/STIP.
2. Refine projects in the 2021-2024 TIP/STIP through coordination with cities, counties, and transportation agencies throughout the region. Project modifications will be submitted to TxDOT for inclusion in quarterly STIP revision cycles, as appropriate.
3. Finalize enhancements in Invoicing module. Initiate development and testing of the TIP Development module. Continue the development of the new public web mapping site in a more robust ArcGIS Online.
4. Track the implementation of RTR-funded projects by reviewing RTR-funded TIP modifications, coordinating with local government entities and TxDOT, monitoring fund balances to ensure financial constraint, processing closeouts as needed, and submitting Texas Transportation Commission (TTC) minute order change requests after each quarterly TIP modification cycle.

Results:

1. Work began on the 2023-2026 Transportation Improvement Program (TIP), which included gathering project data for more than 900 transportation projects being implemented by 67 project sponsors.

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2. Four hundred fifteen modifications to the TIP were completed, including 278 which required Federal Highway Administration or Federal Transit Administration approval.
 3. Staff tested, verified, and deployed an updated Invoicing module to accommodate the display of closed-out projects, ensured all phases of a project with an advance of RTR funds appeared on the invoice, allowed invoices to be submitted with overlapping dates, and ensured running totals worked as intended when an invoice was created or updated. In addition, the team began to document needed improvements, create rules, and add new functionality for the Funding Allocation module. Eighty-three enhancements and improvements were deployed to the Projects, TIP Mod Submission, TIP Mod Editing, Invoicing, and Reports modules.
 4. RTR-funded projects were reviewed, and four (4) project close-outs were completed. County RTR account balances were analyzed, and adjustments were made to correct account balances as needed. Changes to RTR-funded projects requiring TTC approval were submitted after each TIP modification cycle to be included in the minute order.
7. **Goal:** Expedite the advancement and delivery of regional transportation projects resulting from a coordinated, comprehensive, data-driven, and performance-oriented linkage of transportation and environmental planning processes based on equity, stewardship, and sustainability.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits [TDCs]), federal Surface Transportation Block Grant Program (STBG) funds, Regional Toll Revenue (RTR) funds, and Texas Department of Transportation (TxDOT) funds.

Attainment: Met

Primary Work Tasks:

1. Assist the Texas Department of Transportation (TxDOT), North Texas Tollway Authority (NTTA), transit authorities, and other transportation implementing entities through partnership efforts to expedite planning, prioritization, engineering review, environmental evaluation, economic analyses, permitting/approval, programming, construction, and performance monitoring of high-priority freeway, toll road, managed lanes (e.g. tolled, express lanes, truck lanes), thoroughfare, transit, and other multimodal transportation corridor projects.^{1,2,3,4} (FHWA, FTA, TxDOT, local agencies)
2. Encourage and support innovative design and construction methods for the projects that maximize cost-effective lifecycle functionality and include measures to facilitate enhanced integration between transportation and environmental mitigation, asset management, infrastructure resiliency, resource preservation, and context sensitivity.^{1,2,3,4} (FHWA, FTA, TxDOT, local agencies)
3. Coordinate with federal, State, and local partners and provide support for Transportation Department staff to maintain compliance and expand applications with appropriate nondiscrimination laws and regulations among plans, programs, and projects in pursuit of transportation equity objectives.^{1,2,3} (FHWA, FTA, TxDOT)

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4. Continue to develop, implement, review, and refine multifaceted analytical tools, data governance measures, and communication techniques to help inform the transportation planning and investment decision-making processes.^{1 2,3} (FHWA, FTA, TxDOT)

Principal Performance Measures:

1. Work cooperatively with North Central Texas transportation providers, federal and State resource agencies, and local governments to identify and track the development, delivery, condition, and performance of high-priority projects. Coordinate regularly with all partners to improve relationships, clarify roles and responsibilities, and develop and initiate strategies to reduce project implementation costs and delays for high-priority projects.
2. Collaborate frequently with North Central Texas transportation providers, federal and State resource agencies, subject-matter expert (SME) teams, industrial producers, environmental nonprofit groups, and local governments on strategies to enhance consideration and incorporation of regional economic and environmental priorities within the metropolitan transportation planning process. Engage partners in defining and quantifying methods, opportunities, risks, and benefits in applying those strategies where feasible toward innovative and sustainable design, construction, and preservation measures.
3. Provide education, enable training opportunities, and apply best practices for staff and appropriate committees on federal nondiscrimination requirements, as well as monitor and document current efforts, coordinate with public involvement, and evaluate procedures and guidance for the NCTCOG Transportation Department and its partners, as necessary. Produce and update methodologies and planning products to analyze Title VI and environmental justice compliance for North Central Texas plans, programs, and project implementation, and outline progress and/or additional steps toward transportation equity achievements.
4. Coordinate with federal, State, and local entities, as well as with internal Department sources, regarding transportation and environmental data needs, applications, collection activities, protocols, and potential linkage or consolidation possibilities in addressing transportation project development, programming, decision-making, and performance. Produce planning products such as maps, databases, dashboards, methodologies, manuals, reports, and other written or visual correspondence to better inform those processes.

Results:

1. Staff assisted the Texas Department of Transportation (TxDOT), North Texas Tollway Authority (NTTA), transit authorities, and other transportation implementing entities, through partnership efforts, to expedite permitting/approval, programming, environmental review and coordination, and funding on region priority freeways, toll roads, managed lanes, arterials, and transit projects.
2. A multiyear integrated regional transportation, development, and stormwater management study was initiated to address infrastructure vulnerability to flooding and create a comprehensive framework linking asset management, resiliency, performance management, and project selection/prioritization. A University Partnership Program study was completed, with assistance from university students, to identify resilience dimensions of transportation infrastructure and develop a decision-making tool to measure relative levels of resilience with respect to specific natural hazards. Staff

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

formulated a new Statewide Resiliency Technical Work Group, through coordination with the Federal Highway Administration (FHWA) Texas Division, Texas A&M Transportation Institute (TTI), TxDOT, and the Texas Association of Metropolitan Planning Organizations (TEMPO), to collectively assist metropolitan planning organizations, local governments, and transportation providers with enhancing the incorporation of resiliency and risk-based planning/programming.

3. Staff was trained in best practices to incorporate equity analyses and outreach in their work. Staff participated in quarterly coordination meetings with NCTCOG Transportation Department Public Involvement staff. Data and methodologies for the Environmental Justice Index and Transit Accessibility Improvement Tool was updated. Transportation needs of equity communities were identified.
4. Staff updated data in online tools that support environmental stewardship and mitigation. Staff surveyed public and private entities about environmental data needs, and continued to address performance data needs and coordination improvements with respect to target setting for National Highway System (NHS) bridge and pavement assets, particularly those on off-system facilities.

8. **Goal:** Improve air quality and ensure compliance with federal standards.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration (FHWA) Section 112 PL funds, Federal Transit Administration (FTA) Section 5303 funds, and Texas Department of Transportation (TxDOT) matching funds in the form of Transportation Development Credits), federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, federal Surface Transportation Block Grant Program (STBG) funds, US Environmental Protection Agency (EPA) funds, US Department of Energy (DOE) funds, Texas Commission on Environmental Quality (TCEQ) funds, Regional Transportation Council (RTC) Local funds, and other public or private funds and in-kind contributions.

Attainment: Met

Primary Work Tasks:

1. Initiate, develop, and assist with air quality planning measures that provide demonstrating transportation conformity, development of State Implementation Plans, and provide research, technical, and educational air quality related projects. ^{1,2,3,4} (FHWA, FTA, TCEQ, TxDOT)
2. Develop, implement, assist, and promote strategies and policies/best practices that reduce emissions from fleets and other commercial vehicles. ^{2,3} (EPA, DOE, FHWA, TCEQ)
3. Develop, implement, assist, and promote policies and other measures available to local governments and businesses that help facilitate deployment of lowest-emissions and efficient technologies. ^{2,3} (DOE, FHWA)
4. Develop, implement, assist, and promote initiatives to reduce emissions from consumer vehicles. ^{2,3,4} (DOE, FHWA, TCEQ, nonattainment counties)

Principal Performance Measures:

1. As necessary, develop a successful regional Air Quality Conformity analysis, incorporating new or updated projects proposed for inclusion in the Metropolitan

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Transportation Plan and Transportation Improvement Program (TIP) to confirm that on-road emission levels are consistent with the State Implementation Plan (SIP). Update and maintain a Mobile Source Emission Reduction Strategies database that will ensure the nonattainment area continues to meet federal requirements of timely transportation control measure implementation. Prepare and submit CMAQ annual report(s) of funded projects for use by USDOT. Prepare multipollutant emission inventories for inclusion into a comprehensive information system. Respond to technical and research requests from local municipalities, federal government agencies, RTC representatives, and others. Actively participate in local, State, and national technical groups and committees dealing with National Ambient Air Quality Standards (NAAQS), and mobile source issues. Assist TCEQ, EPA, local governments, and others with the development, analysis, and monitoring of elements contained in and required of the SIP, as necessary, to meet air quality requirements. Compile existing and future emission reduction control strategies for use in the maintenance of air quality standards. Stay current and perform sensitivity analyses on EPA, FHWA, Federal Aviation Administration, and other model developments used in regional air quality planning. Continuously monitor and provide updates regarding lawsuits, legislative activities, the TCEQ public hearing announcements, NAAQS, and other pollutants, including federal rulemaking activity.

2. Facilitate fleet and commercial vehicle technology improvements such as vehicle/equipment replacements, alternative fuel or electrified parking infrastructure development, and other technology upgrades that reduce emissions. Administer and/or promote funding initiatives for fleet upgrades. Host or participate in workshops/meetings, trainings, webinars, loaner programs, and ride-and-drives for local fleets and commercial vehicle stakeholders to be exposed to and educated about advanced technologies and emissions-reducing strategies. Provide technical support to fleets in identifying grant opportunities, appropriate technologies, and setting policies/goals. Perform on-site auditing and monitoring visits of subrecipients and participating parties to ensure grant compliance. Engage fleets and commercial vehicle stakeholders through collaborative programs. Evaluate oversize/overweight heavy-duty diesel vehicle compliance by identifying and assessing associated emissions. Procure, operate, and maintain department vehicles for staff use in department business. Identify and pursue opportunities for demonstration of new measures to improve efficiency and reduce emissions as appropriate.
3. Collaborate with local, State, and national stakeholders to identify and execute policy-related and community readiness strategies related to reducing emissions impacts from transportation and related sources. Promote local government adoption of RTC-recommended policies that influence operations within their jurisdictions. Develop template documents and guidance for regulatory changes that support deployment of the lowest-emissions technologies. Maintain websites to provide technical and policy resources to regional stakeholders. Evaluate new areas where regional policy development may be appropriate and incorporate policy statements in the Metropolitan Transportation Plan Policy Bundle, as applicable.
4. Develop and implement projects to inform the public and seek behavior change to reduce vehicle emissions. Host or participate in events to educate and expose the public to new vehicle technologies. Support the Regional Emissions Enforcement Program by partnering with local law enforcement agencies to conduct on-road enforcement, and pursue improvements through local, regulatory, and legislative means. Identify and pursue opportunities for demonstration of new measures to improve efficiency and reduce emissions, as appropriate.

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Results:

1. Planning continued to conduct a transportation conformity analysis in 2021 for the NCTCOG Metropolitan Transportation Plan, *Mobility 2045: The Metropolitan Transportation Plan for North Central Texas*, and associated Transportation Improvement Program for North Central Texas. Staff performed numerous sensitivity runs to understand impacts between the EPA's MOVES 2014b model and the new model, MOVES3, especially effects on on-road emission inventories. Updates to the Mobile Source Emission Reduction Strategies (MoSERS) commitments of CMAQ-funded projects continued as needed, based on project parameter updates, for inclusion in Transportation Improvement Program reporting and the annual CMAQ report. Staff completed and submitted the 2019 annual CMAQ report to the Texas Department of Transportation. Continued updates to MoSERS commitments of CMAQ-funded projects were conducted as needed, based on project parameter updates. Review was conducted to ensure CMAQ emissions reductions for federal Performance Measures targets were met for FY2021 and on track for FY2022, with adjustments made to FY2022 targets based on current data. Sensitivities were conducted on required air quality tools to ensure output and implementation impacts. Assistance was provided to various teams, both internally and externally, by querying emissions factors from the MOVES model runs and estimating emissions benefits for different strategies and grant applications, as requested. This included work done for the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) and Infrastructure for Rebuilding America (INFRA) grant projects and the Meadows Foundation to continue working on the comprehensive multipollutant emission inventory. Assistance was provided to local governments by estimating emissions benefits for different strategies and grant applications, as requested. Staff began planning for the region's reclassification from serious to severe under the 2008 ozone NAAQS and from marginal to moderate under the 2015 ozone NAAQS. This included coordination with EPA and TCEQ to understand upcoming requirements and development of multiple on-road emissions inventories for TCEQ. Participation continued in statewide and national efforts, including those of the Association of Metropolitan Planning Organizations (AMPO) Air Quality Workgroup, Transportation Research Board's Transportation and Air Quality Committee, Advisory Council of the Texas Air Quality Research Program, the Coordinating Research Council, Motor Vehicle Emission Simulator (MOVES) Review Work Group, and Statewide Technical Working Group for Mobile Source Modeling. During ozone season, daily updates were made to allow public awareness to real-time ozone levels and trends. Tracking was also conducted on relation of COVID-19 and impacts to air quality.
2. Three Calls for Projects were administered to provide funding assistance for emissions-reducing projects: the Clean Fleets North Texas 2020 Call for Projects, the North Texas Emissions Reduction 2020 Call for Projects, and the North Texas Freight Terminal Electrification 2020 Call for Projects. Across these initiatives, a total of 13 heavy-duty diesel vehicle replacements, 10 diesel non-road equipment replacements, and 135 electrified parking space projects were awarded, and project implementation began. Implementation of projects awarded in previous fiscal years continued, including reimbursement of five heavy-duty vehicle replacements and monitoring activities to ensure grant compliance. Sixteen email blasts promoting or announcing various funding opportunities were distributed throughout the year to the "Air Quality Funding" email list, which added 96 subscribers throughout the year. Staff heavily promoted the Texas Volkswagen Environmental Mitigation Program funding, resulting in Dallas-Fort Worth being the only region across the State in which all funds were requested for bus, refuse, or local freight truck replacement projects. NCTCOG continued to serve as the Dallas-

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Fort Worth Clean Cities (DFW Clean Cities) Coalition and hosted nine meetings/webinars to educate fleets on emissions-reducing technologies, alternative fuel vehicles, and related funding opportunities. Staff analyzed one local fleet inventory to guide fleets toward potential funding programs and facilitated completion of electrification plans for two additional fleets. Outreach and funding initiatives resulted in 12 additional organizations adopting the RTC Clean Fleet Policy during the fiscal year, bringing the total number of adopting entities to 85. Engagement with fleets and commercial freight stakeholders continued through the Saving Money and Reducing Truck Emissions Program and the EPA SmartWay Transport Program activities. One low-emissions vehicle was maintained and operated for staff use in department business.

3. NCTCOG continued to promote and facilitate adoption of Clean Construction Contract Language and Locally Enforced Idling Restrictions through the Metropolitan Transportation Plan Policy Bundle effort. Websites related to these policies were maintained. As part of DFW Clean Cities efforts, nine webinars/roundtable meetings were held to provide information to communities or property owners about planning for electric vehicle (EV) infrastructure. Policy implications of EV adoption, particularly with regard to transportation revenue, were evaluated, and staff initiated discussions around the idea of building codes or standards for new construction. Staff also facilitated local stakeholder participation in a national EV data collection project. Collaboration with local and State stakeholders continued to address policy-related and community readiness strategies related to reducing emissions impacts of idling vehicles. Outreach was continued to increase compliance with statutory electricity consumption reporting requirements that apply to the nonattainment area, increasing the number of reporting organizations to 96. Stakeholder meetings were held, and planning activities conducted, to develop an infrastructure deployment plan to enable a Zero-Emission Vehicle Corridor along Interstate 45 with focus on heavy-duty vehicle fleets. Supported the Regional Integration of Sustainability Efforts (RISE) Coalition and held four meetings of a related working group to discuss the impacts of transportation-related air pollution on public health.
4. NCTCOG provided presentations about air quality and vehicle technologies (especially EV technology) at both virtual and in-person events held throughout the region. Idle reduction best practices and consumer-related educational materials continued to be maintained on the Engine Off North Texas website (www.EngineOffNorthTexas.org). Regional Smoking Vehicle Program and car care awareness were promoted to inform the public how consumer behaviors impact vehicle emissions. Staff continued support to partnering with local law enforcement agencies through the Regional Emissions Enforcement Program. Stakeholder meetings were coordinated to discuss evolving the technology to improve the needs of State vehicle inspection programs for consumer vehicles.

9. **Goal:** Continue to assist communities in the implementation of Sustainable Development initiatives such as bicycle and pedestrian planning, transit-oriented development, and land-use planning, economic development, parking, and community schools and transportation.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits), federal Surface Transportation Block Grant Program (STBG) funds, federal Congestion Mitigation and Air Quality Improvement Program (CMAQ)

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

funds, Federal Highway Administration (FHWA), Federal Transit Administration (FTA) funds, Regional Toll Revenue (RTR) funds, Regional Transportation Council (RTC) Local funds, other local funds, and Transportation Development Credits (TDCs).

Attainment: Met

Primary Work Tasks:

1. Contract and implement Sustainable Development infrastructure projects.¹
2. Continue coordination and implementation on existing planning studies and focus on completion and close-out procedures.¹
3. Provide planning assistance for land use and transportation projects, including transit-oriented development (TOD) projects.¹
4. Provide meeting opportunities for coordination on coordinated land use/transportation planning for cities and transit agencies.¹
5. Complete all products for the FTA TOD Planning Project.^{1,2} (FTA)
6. Advance the Community Schools and Transportation Program.^{1,2} (FTA)
7. Host quarterly Regional Bicycle and Pedestrian Advisory Committee (BPAC) meetings.¹
8. Provide planning assistance for bicycle and pedestrian projects and continue mapping efforts.¹
9. Continue bicycle and pedestrian data collection and reporting.^{1,2} (FHWA)
10. Provide training and webinar opportunities to stakeholders on Sustainable Development principles such as Bicycle and Pedestrian Safety and Accessibility, Land Use, School Siting and Safe Route to School, Green Infrastructure, Parking, etc.¹
11. Provide Regional Bicycle and Pedestrian Safety education and outreach.^{1,2,3,4} (FHWA, TxDOT, local governments in the Metropolitan Planning Area)
12. Continue developing a Regional Pedestrian Safety Plan.^{1,2,4} (FHWA, local governments in the Metropolitan Planning Area)
13. Initiate Regional Smart Transit Corridors and Walkable Places planning.¹
14. Initiate Regional Parking Management Initiatives.¹

Principal Performance Measures:

1. Work with local governments to implement projects by continuing oversight of design and construction on various Sustainable Development infrastructure projects. Review progress reports and invoices and provide overall project tracking and reporting of the program.
2. Continue to monitor and manage existing consultant planning studies, review deliverables as available, and participate in the public involvement process. As studies are concluded, complete close-out procedures.
3. Perform work related to planning technical assistance, workshops, land use and demographic analysis, parking, review of existing conditions, policies, zoning, and code requirements.
4. Host a minimum of two Coordinated Land Use and Transportation Planning Task Force meetings or trainings during the year.
5. Complete work to identify needs at the 28 stations of the study, develop priority corridors, and improvement recommendations and costs. Continue coordination with city partners and DART.
6. Develop tools and resources and provide technical assistance. Host a minimum of one large training session to discuss regional issues related to school siting and

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

transportation connections. Develop additional Safe Routes to School plans and a regional Safe Routes to School Action Plan.

7. Prepare meeting information and advertise for four BPAC meetings annually. Develop agendas and presentations that provide educational information and updates on programs, projects, and funding opportunities.
8. Continue efforts to develop and fund regional trails. Provide updated mapping to the regional Veloweb, community pathways, and on-street bikeways, and provide technical assistance on community plan and project development.
9. Produce an annual bicycle and pedestrian count report.
10. Host a minimum of two workshops/training sessions on Sustainable Development principles.
11. Continue regional safety outreach and promotion of LookOut Texans by providing education materials and items at events and online throughout the year.
12. Continue development of a regional Pedestrian Safety Plan, including analysis and recommendations to improve safety and connectivity, and develop roadway safety audit locations.
13. Develop multimodal planning reports and regional guidance documents to improve coordinated land use and transportation planning for current and future areas of interest.
14. Develop data-driven tools, strategies, and plans, and provide technical assistance to support management and programming of efficient parking at various locations in the region.

Results:

1. Staff continued to work with local governments to implement projects in the Sustainable Development Funding Program. Seven infrastructure projects are currently underway, and staff reviewed invoices and progress reports throughout the year. Four projects—Grapevine-Hudgins Street, Fort Worth-South Main, Lewisville-Old Town, and Irving Heritage Landbanking project—were completed. Staff began development of metrics and data collection/analysis for an evaluation study of completed Sustainable Development funding program projects.
2. Various consultant and project partner-led studies were managed. Staff reviewed various project deliverables and hosted stakeholder meetings throughout the planning process. Invoices and progress reports were also reviewed and approved. Data collection and preparation for public/stakeholder outreach began for the Fort Worth-to-Regional Trail Branding project. Preliminary engineering was completed for Southern Dallas County Regional Veloweb Alignment Study through the cities of Cedar Hill, Duncanville, DeSoto, and Lancaster. Preliminary engineering was also completed for the Fort Worth Bomber Spur Regional Trail.
3. Staff provided planning assistance to the City of Dallas for Vickery Meadows TOD Plan update and completed multimodal transportation improvement stakeholder coordination for the Dallas district of Deep Ellum. Development of a Downtown Wylie Vision plan was completed, including facilitation of stakeholder conditions and preliminary design concepts. Planning assistance to the City of Kennedale was provided to develop an existing conditions analysis and walk audit for the development of a Kennedale Parkway context-sensitive design plan. Staff provided planning assistance to the City of Balch Springs for development of a Hickory Tree Road context-sensitive design plan, including existing conditions review, preliminary concepts, stakeholder meetings, and launch of public outreach. Regional green infrastructure training was held. Work began on a regional guide for developing community gardens on public land near transit stations.

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Round 3 of the Blue-Green-Grey funding initiative was opened, and proposals submitted and selected for funding recommendations.

4. Four quarterly meetings of the Coordinated Land Use and Transportation Planning Task Force were held in FY2021. Staff prepared presentations, coordinated virtual meeting set up, contacted local governments to identify contacts, and recruited speakers. Each meeting had a featured topic, in addition to local updates on land use/transportation projects, policy, or plans that provided repeatable strategies for other local governments. Featured topics included repurposing right-of-way for parklets and increased sidewalk space, parking management and policy reform, infill development and transportation impact, and social equity in land use and transportation planning.
5. The DART Red and Blue Lines Corridor TOD Study final recommendations and summary documents were completed in August 2021. Various products are available online that outline the routes to rail analysis, the parking review, and the survey of those living and working near the stations.
6. Staff continued development of a Safe Routes to School regional action plan. Development of a workshop series began that focused on street connectivity/subdivision design for safe routes to school, as well as an RTC Safe Routes to School workshop. Technical assistance was provided to cities and independent school districts regarding planned or proposed school sitings and Safe Routes to School projects. Safe Routes to School projects awarded funding as part of a Transportation Alternatives Call for Projects were monitored for progress in advancement and coordination provided when needed.
7. Four quarterly meetings of the Bicycle and Pedestrian Advisory Committee were held in FY2021. Meeting agendas and materials were prepared, and announcement notices sent in advance of each meeting. A wide variety of topics were presented at the meetings, including how trails serve as an employee attractor for businesses, the increase in usage of trails and shared bicycle facilities during the COVID-19 pandemic, the Regional Pedestrian Safety Action Plan, TxDOT's Call for Bicycle and Pedestrian Infrastructure projects, TxDOT's Interim Guidance for Design Practices to Accommodate Bicycles; TxDOT's Comprehensive Accessibility Program; methodology and development of "Demand Zones" for pedestrian and bicycle travel, Best Practices for Trails and Bikeways GIS Fields and Attributes, technology for baseline data collection for bikeways in Fort Worth, and a summary of TxDOT's virtual public hearing for bicycle use on the State Highway System.
8. Coordination continued with Dallas Area Rapid Transit and local governments related to the design and construction of the Cotton Belt Trail to be implemented with the DART Silver Line Commuter Rail project. Ongoing updates were continued throughout the year related to the regional database of trails and bikeways. The data is provided on an online interactive map and used for multiple ongoing plans and studies throughout the region and will be included in the Mobility 2045 Update. Staff provided support for TxDOT's virtual public hearing for bicycle use on the State Highway System and provided trail and bikeway master plan GIS files to consultants coordinating various TxDOT highway improvement planning/projects.
9. The 2020 Bicycle and Pedestrian Traffic Data and Annual Report was finalized and distributed in March 2021. The report highlights bicycle and pedestrian facility user count data collected in 19 locations throughout the region. NCTCOG also began coordination with TxDOT to provide trail and bikeway count data in the region to be included in the Texas Bicycle and Pedestrian Count Exchange.
10. NCTCOG coordinated with the Federal Highway Administration to host two Designing for Pedestrian Safety virtual workshops for regional stakeholders and two Road Safety Audit virtual workshops (for pedestrian and bicycle safety).

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

11. The regional safety campaign “Look Out Texans Bike-Walk-Drive Safely” continued throughout the year via the campaign website, www.lookouttexans.org. In addition, the Regional Trails of North Texas brochure was updated and distributed to stakeholders around the region. Various education and outreach materials were provided for community events and staff coordinated with regional partners to promote the safety tips. NCTCOG continued to promote pedestrian and bicycle safety tips via social media posts, and also continued ongoing promotions of videos highlighting regionally significant trails through social media and local stakeholders.
12. The Regional Pedestrian Safety Action Plan, which provided goals, policies, and action plan strategies to improve pedestrian safety across the region, was completed. The plan and related documents were endorsed by the Regional Transportation Council and are posted online.
13. Staff initiated the review and options to promote the development and adoption of Complete Streets policies by local jurisdictions in the region. Economic benefit of walkable places research was advanced through Benefit-Cost Analysis development. Research on national best practices in value capture related to coordinated land use and transportation was conducted. An inventory of tax increment revenue zones used in the North Texas region for the 50 largest municipalities was conducted. Staff also initiated work in developing criteria for identifying walkable places, identifying additional walkable places in the metroplex, and research for developing a walkable places typology.
14. A Summary of North Texas Local Parking Study was completed, covering insights from 11 parking plans and management studies of walkable places. Development of a regional parking utilization database was initiated.

10. **Goal:** Coordinate and support the planning for and deployment of automated vehicles to improve the region’s transportation system.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits), federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds, federal Surface Transportation Block Grant Program (STBG) funds, Texas Department of Transportation (TxDOT) funds, Regional Transportation Council (RTC) Local funds, and Transportation Development Credits (TDCs).

Attainment: Met

Primary Work Tasks:

1. Sustain and expand current efforts to implement transportation innovations across the region.¹
2. Establish initiatives to enhance and accelerate both planning and deployment of automated vehicles across the region.¹
3. Support efforts by local, regional, State, and academic institutions to explore the impacts and planning considerations of automated transportation technologies.¹

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Principal Performance Measures:

1. Encourage the deployment of automated vehicle technologies; cultivate transportation data sharing capabilities by local partners; support development of shared mobility services; educate regional decision makers and public on automated vehicle technology and planning considerations; and coordinate with local and State government entities on “smart city/smart transportation” initiatives.
2. Select consultant expertise to launch regional automated vehicle planning initiatives.
3. Develop web-based informational resources; workforce impact research studies; and data-driven forecasting and modelling tools for long-range transportation planning; as well as cultivate partnerships with local, regional, State, and academic entities.

Results:

1. Staff supported numerous smart city and transportation innovation conferences and participated in ongoing state- and nation-wide transportation technology working groups. Cities in North Texas were advised on possible automated vehicle solutions for mobility problems they have identified. Work continued between NCTCOG and TxDOT for the IH 30 Technology Corridor project as part of TxDOT’s Connected Freight Corridor Program, which includes piloting new communications technologies (e.g., direct short-range radio communications and 5G wireless) along significant corridors. Staff made 32 presentations to groups and associations across Texas and the United States. In FY2021, a consultant was selected to lead the Dallas-Fort Worth Freight Optimization project which aims to improve the flow of freight traffic at signalized intersections near freight-oriented developments throughout North Texas by using cutting edge traffic signal technologies.
 2. In 2021, a consultant was selected to begin work on a regional planning exercise to prepare the region for increasing roadway and vehicle automation, as well as increasing communications connectivity. This planning exercise is currently underway and will continue into 2022. Staff collaborated with local partners to develop six grant proposals which were then presented to, and approved by, the Regional Transportation Council. The next phase of work for these projects will begin in 2022.
 3. Work began to develop modeling tools focused on the impacts of automated vehicles on the region’s roadway system. A University Partnership Program project was completed that focused on the impacts of emerging transportation technologies and shared mobility within disadvantaged communities around Dallas-Fort Worth. A partnership was formed between NCTCOG and the region’s research universities to establish the North Texas Center for Mobility Technology (NTCMT). The NTCMT is an effort to cultivate local research talent, generate locally relevant research projects, and provide research resources to technologies developers interested in working in North Texas.
11. **Goal:** Develop and monitor the Metropolitan Transportation Plan (MTP) and perform planning studies to evaluate and refine roadway, transit, and freight projects recommended in the MTP.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits [TDCs]), North Texas Tollway Authority (NTTA) funds, TxDOT funds, and public or private funds.

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

Attainment: Met

Primary Work Tasks:

1. Monitor projects in the current long-range plan and conduct regular coordination with transportation planning partners and providers to identify potential modifications to the projects listed in the Metropolitan Transportation Plan.^{1,2,3} (FHWA, TxDOT, NTTA)
2. Monitor and evaluate potential revenue available for transportation projects between the years of 2022 and 2045.^{1,2,3} (FHWA, FTA, TxDOT)
3. Evaluate transportation system needs and develop potential alternatives on major travel corridors between years of 2022 and 2045.^{1,2,3} (FHWA, FTA, TxDOT, NTTA)
4. Monitor system performance, develop and track performance measures, and incorporate performance-based planning in the development of Metropolitan Transportation Plan.^{1,2,3} (FHWA, FTA, TxDOT)
5. Engage the public in the process of updating the Metropolitan Transportation Plan and provide results of the planning process.^{2,3} (FHWA, FTA, TxDOT)

Principal Performance Measures:

1. Identify projects, evaluate, recommend, and develop freight and multimodal improvements for inclusion in the Mobility Plan Update through a collaborative process with transportation partners.
2. Document estimates of future-year revenue availability using tax and revenue estimates from federal, State, and local government sources.
3. Produce reports that compare multimodal alternatives for inclusion in the Metropolitan Transportation Plan and follow-up efforts such as required environmental evaluation studies.
4. Monitor and assess transportation system performance using observed data and a variety of planning tools, including the Travel Demand Model. Monitor progress towards adopted performance targets and report performance results.
5. Develop online tools to inform and educate the public on the transportation planning process and the recommendations included in the Metropolitan Transportation Plan. Present information at committee and public meetings.

Results:

1. Quarterly coordination meetings and other project-specific ad hoc meetings were held with transportation partners to monitor the progress of ongoing studies and evaluate the effectiveness of design concept and design scope. Staff also collaborated with multiple freight railroads, the Texas Department of Transportation, cities, and counties on regional/corridor freight studies, including truck corridor studies, truck parking reviews, at-grade rail crossing safety initiatives, truck lane restrictions, and freight/passenger rail mobility. Staff coordinated and participated in public meetings, technical team meetings, and conference calls.
2. Revenue sources were estimated and compiled in the Mobility Plan revenue forecast model. Major base assumptions such as inflation rates, population estimates, fuel efficiency, and historical revenue trends were updated. Findings and estimates were reported on a regular basis to department management.
3. Roadway alternatives were evaluated to determine capacity needs within logical constraints on freeway and arterial corridors. Alternatives were also performed to calculate the benefits of providing optimal operational improvements on arterials. Travel

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

model support and coordination was provided for new and ongoing major roadway corridor studies, as well as thoroughfare planning and subarea studies. This effort included roadway network coding, travel demand modeling, the development of alternative scenarios, demographic review, historical volume research, volume change analyses, and select link and origin/destination analyses.

4. The Travel Demand Model was utilized to assess roadway performance for new and previously recommended freeway/tollway improvement projects as staff worked to implement the recommendations in Mobility 2045. Preliminary testing for new roadway modeling processes for the Mobility 2045 Update continued. Work continued on general performance measure implementation, including preliminary assembly of a new performance measurement framework for the Mobility 2045 Update. Additional activities included target setting and progress monitoring activities related to federal performance measures. New targets were adopted for Highway Safety and Transit Safety measures in FY2021, along with preparations for anticipated additional target setting action for additional measures in early FY2022. Staff continued to maintain a cooperative framework for agency- and plan-specific performance measurement activities.
5. Several interactive online mapping tools were developed and maintained on the Mobility 2045 webpage to inform the public of the transportation planning process and the challenges of providing mobility within the region. In particular, a public-friendly GIS-based tool named Map Your Experience was developed and placed online to provide a platform for the public to make location-specific comments related to transportation within the North Central Texas region. Information on this new online tool, in addition to the schedule and major updates included in the Mobility 2045 Update, was presented to the Surface Transportation Technical Committee, the Regional Transportation Council, and through public meetings.

12. **Goal:** Enhance public transportation options and implementation in North Central Texas.

Funding Source: FY2021 Transportation Planning Funds (Federal Highway Administration [FHWA] Section 112 PL funds, Federal Transit Administration [FTA] Section 5303 funds, and Texas Department of Transportation [TxDOT] matching funds in the form of Transportation Development Credits [TDCs]), Federal Transit Administration (FTA) funds, federal Surface Transportation Block Grant Program (STBG) funds, Texas Department of Transportation (TxDOT) funds and in-kind matching funds in the form of Transportation Development Credits, Regional Transportation Council (RTC) Local funds, and other public or private funds.

Attainment: Met

Primary Work Tasks:

1. Provide recommendations to the Regional Transportation Council for programming of FTA funds to support the operation of public transportation services in the region.^{1,2} (FTA)
2. Serve as the FTA Designated Recipient for Urbanized Area Formula Program (Section 5307), Bus and Bus Facilities Program (Section 5339), State of Good Repair Program (Section 5337), and Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310) funds on behalf of public transportation providers in the

¹ NCTCOG Measure

² Federal Measure

³ State Measure

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Dallas-Fort Worth-Arlington Urbanized and Denton-Lewisville Urbanized Areas.²
(FTA)

3. Manage projects awarded Job Access/Reverse Commute Program (Section 5316) and New Freedom Program (Section 5317) funds in the Dallas-Fort Worth-Arlington and Denton-Lewisville Urbanized Areas.² (FTA)
4. Serve as the lead agency for regional public transportation coordination and planning activities in the 16-county North Central Texas region.^{2,3} (FTA, TxDOT)
5. Coordinate transit services and implement innovative transit-related projects and programs to encourage the use of sustainable transportation options and access to public transit services. ^{2,3} (FTA, TxDOT)
6. Identify and implement new and revised federal transit regulations.^{1,2} (FTA)
7. Monitor, implement, and promote the Regional Vanpool Program outlined in the Congestion Management Process (CMP) for the Dallas-Fort Worth Metropolitan Area and Metropolitan Transportation Plan (MTP) document.^{2,3} (STBG, FTA, TxDOT)

Principal Performance Measures:

1. Develop annual Transit Section program of projects, and coordinate programming of funds in an approved Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP).
2. Administer the Urbanized Area Formula Program (Section 5307), Bus and Bus Facilities Program (Section 5339), State of Good Repair Program (Section 5337), and Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310).
3. Obtain reimbursements for project implementation and reports summarizing project compliance including any needed corrective actions for subrecipients awarded funding for Job Access/Reverse Commute and New Freedom projects.
4. Conduct meetings; participate in task forces, working groups, and coordinating committees; and facilitate partnerships. Present data analyses, participate in public involvement activities, produce maps, document needs, identify gaps in transit service, and provide solutions to improve public transportation.
5. Identify strategic partnerships to establish or sustain transit services in the region. Develop and coordinate funding of project awards to transit services providers and public transit entities to address gaps in transit service and provide solutions to improve public transportation.
6. Provide plans and guidance to subrecipients in response to new regulations; assist transportation providers to revise policies, procedures, and plans based on new regulations.
7. Continue to manage and oversee the Regional Vanpool Program. Coordinate with transit agencies to create and promote a more streamlined program. Monitor and track vanpool-related performance measures.

Results:

1. Staff coordinated with 13 public transportation providers to process 22 Fiscal Year 2021 Programs of Projects ensuring TIP/STIP inclusion and approval for a combined total of approximately \$141 million in federal funds through Federal Transit Administration (FTA) programs.

¹ NCTCOG Measure

² Federal Measure

³ State Measure

⁴ Local Measure

2. Staff managed 33 FTA grants, totaling approximately \$87 million in federal funds, on behalf of 8 subrecipients. Staff coordinated and submitted 70 quarterly progress reports, 4 Charter Service reports, 6 National Transit Database (NTD) annual reports, 48 NTD Ridership & Safety and Security reports, and 25 Transit COVID-19 Response Program reports.
3. Two Job Access/Reverse Commute (JA/RC) and three New Freedom grants in excess of \$700,000 in federal JA/RC funds and approximately \$796,000 in federal New Freedom funds were managed.
4. Public outreach efforts for the Access North Texas 2022 plan update, which included a series of 28 virtual public outreach meetings throughout North Central Texas, was initiated. Outreach efforts also included the development and distribution of an English public survey, Spanish public survey, and an agency survey, resulting in a total of 1,504 responses; 1,250 of which were collected through a partner agency. Also, activities for My Ride North Texas 2.0 continued with travel navigators receiving 2,095 calls from 11 regional counties and personalized public transportation navigation and information to clients. Staff hosted four quarterly Regional Mobility Manager Meetings, each with around 30 participants from up to 15 regional transit partner agencies and led four coordination meetings for the regional Mobility on Demand (MOD) Working Group composed of members from transit agencies, local governments, private sector, and academia. Three county-level transit planning studies were successfully completed for the following areas: Collin County, Tarrant County, and the southern portion of Dallas County. Results from each of the studies were delivered through a final report that outlines service recommendations and a roadmap for service implementation. Two additional county-level transit planning studies were initiated for the following areas: Denton County and East Dallas, Kaufman, and Rockwall County (EDKR). The Denton County study initiated the process for procurement of a consultant team and the EDKR study will be undertaken by NCTCOG staff. The final planning study initiated for procurement of a consultant during this time was the Intermodal Transportation Hubs for Colleges and Universities Study, which will develop a comprehensive guide for planning and strategic implementation of mobility hubs on college and university campuses around the region.
5. Staff implemented two projects supporting strategies from Access North Texas and one project was transferred to a local transit partner to be implemented. These projects focused on transit service to jobs for low-income workers and service for individuals with disabilities. The Strategic Partnerships Funding Program, formerly the Call for Projects, was updated for a more deliberate and coordinated approach to help address gaps in service. The evaluation criteria were designed to address needs of these transit-dependent populations, strategic value, sustainability, stakeholder collaboration, and recommendations from existing plans and studies. A peer review was conducted with NCTCOG staff to present the proposed process, evaluation criteria, and discuss updates to the program. Information on the program was then presented to the Surface Transportation Technical Committee and the Regional Transportation Council.
6. Staff provided oversight activities for 12 subrecipients to address compliance with FTA requirements. Procurement guidance and review was provided for four subrecipients. Periodic meetings were also held to ensure compliance with programmatic requirements. NCTCOG staff provided guidance to the five subrecipients on eligible expenses and new regulations based on guidance from Coronavirus Aid, Relief, and Economic Security Act (CARES Act) legislation. Staff also provided guidance on the Transit COVID-19 Response Program. Information and assistance were provided to all applicable subrecipients in the development of transit agencies' Public Transportation

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Agency Safety Plans (PTASP) transit safety targets, both for the development of individual agencies' goals and coordination for regional safety target creation.

7. Staff monitored and administered the Regional Vanpool Program with the transit agencies through regular communication with vanpool program staff and meetings to address boundary and rider equity issues. Regional Vanpool Program activities included annual work plan completion, interlocal agreement development; program budgets coordination; invoice review and payment activities for the Dallas Area Rapid Transit (DART) Vanpool Program, and regular communication with vanpool program staff from DART, Denton County Transportation Authority (DCTA), Trinity Metro, and regional private vanpool providers. Meetings with the transit agencies focused on COVID 19-related issues/impacts and post COVID strategies, as well as establishing a more streamlined Regional Vanpool Program. At the end of FY2021, 147 total vanpools were in operation in the region.

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⁴ Local Measure