

FY2022 and FY2023

Unified Planning Work Program

For Regional Transportation Planning

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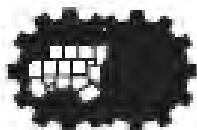
Transportation Department
North Central Texas Council of Governments

What is NCTCOG?

The **North Central Texas Council of Governments (NCTCOG)** is a voluntary association of, by, and for **local governments** within the 16-county North Central Texas Region. The agency was established by state enabling legislation in 1966 to assist local governments in **planning** for common needs, **cooperating** for mutual benefit, and **coordinating** for sound regional development. Its purpose is to strengthen both the individual and collective power of local governments, and to help them recognize regional opportunities, resolve regional problems, eliminate unnecessary duplication, and make joint regional decisions – as well as to develop the means to implement those decisions.

North Central Texas is a 16-county **metropolitan region** centered around Dallas and Fort Worth. The region has a population of more than 7 million (which is larger than 38 states), and an area of approximately 12,800 square miles (which is larger than nine states). NCTCOG has 229 member governments, including all 16 counties, 169 cities, 19 independent school districts, and 25 special districts.

NCTCOG's **structure** is relatively simple. An elected or appointed public official from each member government makes up the **General Assembly** which annually elects NCTCOG's **Executive Board**. The Executive Board is composed of 17 locally elected officials and one ex-officio non-voting member of the legislature. The Executive Board is the policy-making body for all activities undertaken by NCTCOG, including program activities and decisions, regional plans, and fiscal and budgetary policies. The Board is supported by policy development, technical advisory and study **committees** – and a professional staff led by **R. Michael Eastland**, Executive Director.



NCTCOG's offices are located in Arlington in the Centerpoint Two Building at 616 Six Flags Drive (approximately one-half mile south of the main entrance to Six Flags Over Texas).

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NCTCOG's Department of Transportation

Since 1974 NCTCOG has served as the Metropolitan Planning Organization (MPO) for transportation for the Dallas-Fort Worth area. NCTCOG's Department of Transportation is responsible for the regional planning process for all modes of transportation. The department provides technical support and staff assistance to the Regional Transportation Council and its technical committees, which compose the MPO policy-making structure. In addition, the department provides technical assistance to the local governments of North Central Texas in planning, coordinating, and implementing transportation decisions.

Prepared in cooperation with the U.S. Department of Transportation (Federal Highway Administration and Federal Transit Administration) and the Texas Department of Transportation.

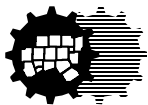
The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department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

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Approved by the Regional Transportation Council - _____
Approved by the Federal Highway Administration - _____



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Brian Moen, Chair
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I. Introduction

The North Central Texas Council of Governments (NCTCOG), through designation by the Governor of the State of Texas, serves as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth-Arlington, Denton-Lewisville, and McKinney Urbanized Areas. The designation of the MPO is by agreement among the units of general-purpose local governments and the Governor.

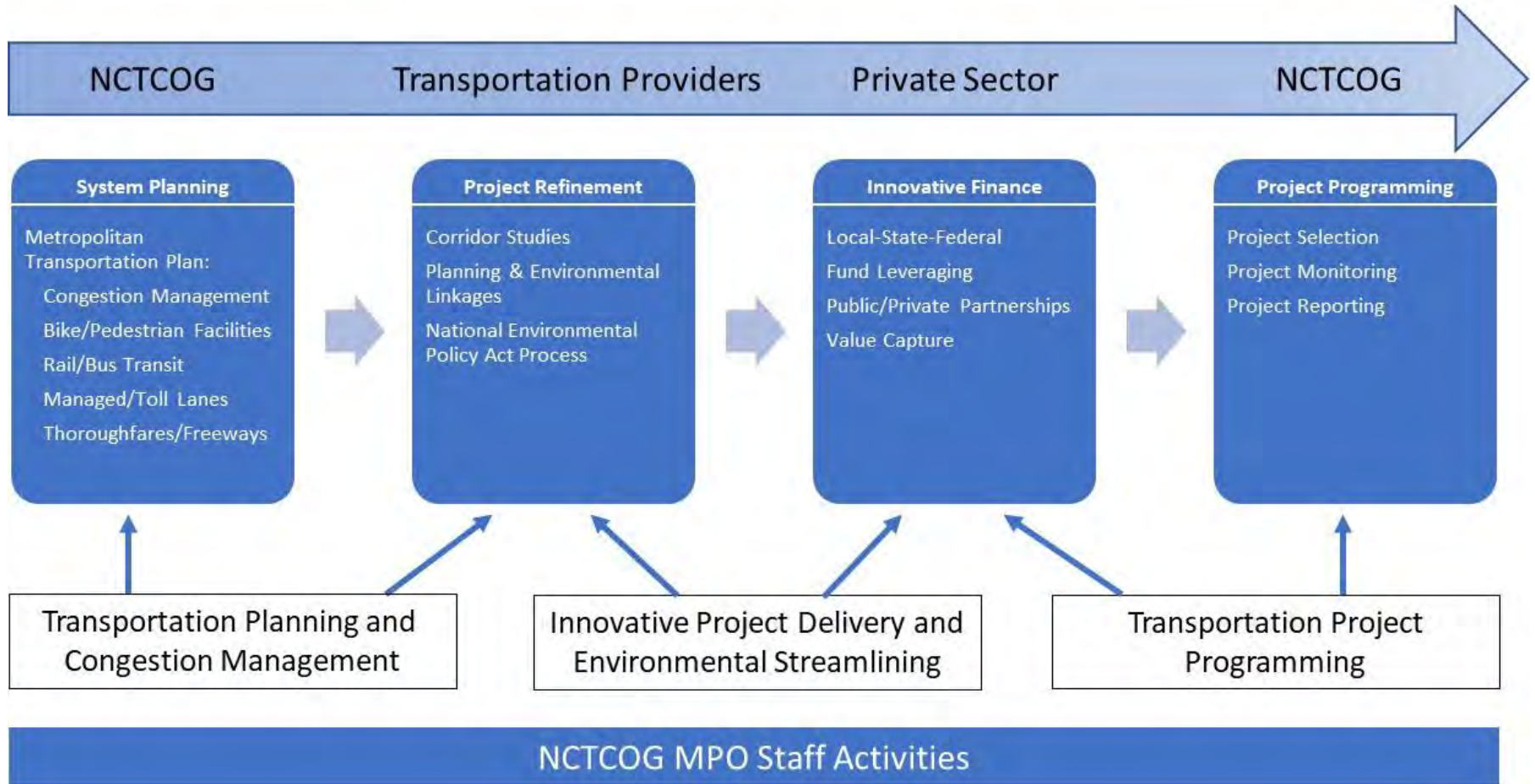
In order to conduct the metropolitan transportation planning process, the State of Texas, acting through the Texas Department of Transportation (TxDOT), and NCTCOG as the MPO, have entered into an agreement referred to as the Metropolitan Transportation Planning Contract. This agreement serves to delineate the responsibilities of each organization, TxDOT in the administration of federal and State funds to support the planning process, and NCTCOG in carrying out the responsibilities of the MPO.

Under federal law (23 USC 134 and 49 USC 5303, as amended), the MPO designated for each urbanized area is to carry out a “continuing, cooperative, and comprehensive multimodal transportation planning process,” including the development of a Metropolitan Transportation Plan (MTP) and a Transportation Improvement Program (TIP). This process should encourage and promote the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities). The process should also foster economic growth and development (including travel and tourism), improve resiliency and reliability, while minimizing transportation-related fuel consumption, stormwater impacts, and air pollution. The Unified Planning Work Program (UPWP) is prepared every two years by NCTCOG in accordance with current surface transportation legislation, the Fixing America’s Surface Transportation Act,

adopted by Congress and signed by the President on December 4, 2015, and extended by a Continuing Resolution on October 1, 2020. This legislation continues the concepts of a continuing, cooperative, and comprehensive planning process identified in previous legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA); the Transportation Equity Act for the 21st Century (TEA-21); the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and Moving Ahead for Progress in the 21st Century (MAP-21). The UPWP is developed in cooperation with TxDOT, transportation authorities, toll authorities, the Dallas Fort Worth International Airport, and local governments in the Dallas-Fort Worth Metropolitan Area. Specific planning needs for the region are identified through requests solicited from representatives of these agencies and local governments. This information is combined with regional needs identified by NCTCOG and, after allocating funds from available resources, presented as a proposed Work Program for the upcoming fiscal years.

The metropolitan planning process consists of four phases: system planning, project refinement, innovative finance, and project programming. The process is outlined in Exhibit I-1. System planning is a primary function of the MPO, and as such, NCTCOG takes the lead in the development of the MTP. As projects contained in the MTP undergo more detailed analyses, the transportation providers in the region assume leadership roles for specific projects, as applicable, with support from NCTCOG. The private sector may join in the planning process as revenue sources for the projects are investigated and identified. With the decline in revenue from traditional funding sources, participation from the private sector continues to be relied upon in order to identify revenue streams to expeditiously implement viable transportation projects. Once project funding has been identified, NCTCOG, in carrying out another primary responsibility, reassumes the lead in the planning process and includes the projects in the TIP.

EXHIBIT I-1
Metropolitan Planning Process for Delivering Transportation Projects



The draft UPWP document is reviewed by the Surface Transportation Technical Committee and is presented for comment at public meetings. The UPWP is then presented for approval to the Regional Transportation Council (RTC) and the NCTCOG Executive Board.

In addition to working cooperatively to develop the UPWP, NCTCOG, as the MPO, works with TxDOT and the transportation operators to carry out the metropolitan planning process within the region. Exhibit I-2 illustrates the respective responsibilities of NCTCOG; TxDOT; the North Texas Tollway Authority (NTTA); the Collin County Toll Road Authority (CCTRA); Dallas Area Rapid Transit (DART); Trinity Metro (also known as the Fort Worth Transportation Authority); the Denton County Transportation Authority (DCTA); the cities of McKinney, Mesquite, Arlington, and Grand Prairie; and the Dallas Fort Worth International Airport (DFW Airport) with regard to the development of financial forecasts, the Metropolitan Transportation Plan, the Metropolitan Transportation Improvement Program, the Annual Listing of Obligated Projects, the Congestion Management Process, Air Quality Conformity, Corridor and Subarea Studies, Performance Measures, and Performance-based Planning. Appendix H contains a Memorandum of Understanding between the above entities demonstrating each entity's commitment to work cooperatively.

As noted previously, there is also a Metropolitan Planning Organization Agreement, which is executed every six years related to the roles and responsibilities between TxDOT, the RTC as the MPO Policy Committee, and NCTCOG as the MPO Fiscal Agent. This Agreement is the conduit for TxDOT to provide transportation planning funds to NCTCOG. From time to time, NCTCOG staff work activities require out-of-state travel. Approval from TxDOT will be sought in advance as outlined in the Agreement.

**EXHIBIT I-2
Metropolitan Transportation Planning Process Responsibilities**

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
<p>Financial Forecasts 23 CFR 450.324(f)(11)</p>	<p>Develop alternative financial forecasts based on policy variables.</p> <p>Develop forecasts for locally generated and local option revenue.</p>	<p>Provide estimate of statewide revenue projections for statewide sources such as federal/state fuel tax, vehicle registrations, and state discretionary programs.</p> <p>Develop and maintain revenue forecasting model for federal/state revenue sources, including local option alternatives.</p> <p>Provide estimates of revenue by year for each Statewide Transportation Improvement Program category.</p>	<p>Provide estimate of agency revenue projections for local, state, and federal sources such as local sales tax, federal and state formula funds, and discretionary programs.</p> <p>Provide financial plan information regarding allocation of revenue sources to project types such as rail capital, bus capital, and maintenance and operations.</p>	<p>Provide any locally derived revenue estimates as appropriate.</p>
<p>Metropolitan Transportation Plan Development 23 CFR 450.324</p>	<p>Develop system revenue forecasts.</p> <p>Develop systemwide alternative scenarios.</p> <p>Develop systemwide travel forecasts and performance reporting.</p>	<p>Provide roadway project status and cost information, including revenue source.</p> <p>Provide potential project staging and phasing, including expected opening year.</p>	<p>Provide transit project status and cost information, including revenue source.</p> <p>Provide potential project staging and phasing, including expected opening year.</p>	<p>Provide project status and cost information, including revenue source for major airport projects that are locally funded.</p> <p>Provide potential project staging and phasing, including expected opening year for major locally funded projects.</p>

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
	<p>Coordinate public and transportation partner involvement activities regarding MTP development.</p> <p>Develop regionwide demographic information.</p>			
<p>Metropolitan Transportation Improvement Program</p> <p>23 CFR 450.326</p>	<p>Compile and maintain list of funded projects by year and funding source, including basic scope, limits, and total project cost/funding details.</p> <p>Submit metropolitan Transportation Improvement Program for inclusion in the Statewide Transportation Improvement Program.</p> <p>Draft and submit quarterly TIP modifications and Statewide Transportation Improvement Program revisions to the TxDOT districts (includes review for Metropolitan Transportation Plan and Air Quality Conformity consistency and requisite public involvement).</p>	<p>Provide list of projects implemented by own agencies to NCTCOG for inclusion in the metropolitan and Statewide Transportation Improvement Program in the metropolitan area. TxDOT submits rural projects to the Statewide Transportation Improvement Program.</p> <p>Provide updated status, costs by phase, and dollar amounts by funding category and year.</p> <p>Submit locally funded, regionally significant projects for inclusion in the TIP/Statewide Transportation Improvement Program.</p>	<p>Provide list of projects implemented by own agencies to NCTCOG for inclusion in the metropolitan and Statewide Transportation Improvement Program.</p> <p>Provide updated status, costs by phase, and dollar amounts by funding category and year for each federal, state, or locally funded project.</p> <p>Submit locally funded, regionally significant projects for inclusion in the TIP/Statewide Transportation Improvement Program.</p>	<p>Provide list of locally funded, regionally significant projects implemented by Dallas Fort Worth International Airport for inclusion in the metropolitan and Statewide Transportation Improvement Program.</p> <p>Provide updated status, costs by phase, and dollar amounts by funding category and year for each federal, state, or locally funded project.</p> <p>Submit TIP modifications/ Statewide Transportation Improvement Program revisions for own agency's projects to NCTCOG.</p>

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
		<p>Submit TIP modifications/ Statewide Transportation Improvement Program revisions to own agency's projects for NCTCOG processing and review.</p> <p>TxDOT districts submit final Statewide Transportation Improvement Program revision packet to TxDOT in Austin for review and approval.</p>	<p>Submit Transportation Improvement Program modifications/Statewide Transportation Improvement Program revisions for own agency's projects to NCTCOG.</p>	
<p>Annual Listing of Obligated Projects</p> <p>23 CFR 450.334</p>	<p>Compile list of obligated projects for each fiscal year with data from the Federal Transit Administration information system, transit agencies, and the Texas Department of Transportation.</p>	<p>Provide list of obligated projects (including project status and obligation amounts) to NCTCOG at the end of each fiscal year.</p>	<p>Provide transit grant numbers to NCTCOG to enable collection of transit funding obligations to the transit authorities and local governments.</p>	<p>N/A</p>
<p>Congestion Management Process</p> <p>23 CFR 450.322</p>	<p>Develop multimodal, systemwide monitoring and evaluation performance process.</p> <p>Develop, coordinate, and collect regional transportation data for inclusion in asset information planning tool.</p>	<p>Provide collected transportation data for inclusion in asset information planning tool.</p> <p>Identify, select, and implement congestion management strategies.</p> <p>Provide evaluation of effectiveness of implemented strategies.</p>	<p>Provide collected transit data for inclusion in asset information planning tool.</p> <p>Identify, select, and implement congestion management strategies, as appropriate.</p> <p>Provide evaluation of effectiveness of implemented strategies.</p>	<p>Provide collected transportation data for inclusion in asset information planning tool.</p> <p>Identify, select, and implement congestion management strategies.</p> <p>Provide evaluation of effectiveness of implemented strategies.</p>

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
	<p>Identify, select, implement, and coordinate congestion management strategies.</p> <p>Provide and coordinate evaluation of effectiveness of implemented strategies.</p> <p>Coordinate public involvement activities regarding Congestion Management Process development.</p>			
<p>Air Quality Conformity 40 CFR Part 93</p>	<p>Develop and coordinate the transportation conformity analyses for the nonattainment area within the Metropolitan Planning Area.</p> <p>Enter into a Memorandum of Agreement with TxDOT, in the event the nonattainment area extends beyond the Metropolitan Planning Area, for cooperative planning and air quality analysis of projects to reach a positive conformity determination.</p>	<p>TxDOT: Enter into a Memorandum of Agreement with NCTCOG, in the event the nonattainment area extends beyond the Metropolitan Planning Area boundary, for cooperative planning and air quality analysis of projects to reach a positive conformity determination.</p> <p>Participate as one of the interagency consultation partners for the conformity determination process, review conformity analyses, and provide comments.</p>	<p>Review conformity analysis, if applicable; provide comments during public participation process.</p>	<p>Review conformity analysis, if applicable; provide comments during public participation process.</p>

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
	<p>Coordinate with consultation partners (Federal Highway Administration, Federal Transit Administration, Environmental Protection Agency, the Texas Commission on Environmental Quality, and the Texas Department of Transportation) regarding review of the conformity analysis.</p> <p>Transmit the joint Federal Highway Administration/ Federal Transit Administration conformity determination to affected entities.</p>	<p>Provide consent to the Federal Highway Administration on the transportation conformity determination.</p> <p>NTTA/CCTRA: Review conformity analysis, if applicable; provide comments during public participation process.</p>		
<p>Corridor and Subarea Studies</p> <p>23 CFR 450.318</p>	<p>Lead corridor studies agreed upon by partner agencies.</p> <p>Support partner agency corridor studies by providing travel forecasts for alternative scenarios.</p> <p>Provide Mobile Source Air Toxics and environmental justice analysis, as appropriate, to support National Environmental Policy Act documents.</p>	<p>Lead corridor studies agreed upon by partner agencies.</p> <p>Provide funding support for travel forecasting support as agreed upon between lead agency and NCTCOG.</p> <p>Provide design concept and scope information for potential project alternatives, as necessary, to perform travel forecasts.</p>	<p>Lead corridor studies agreed upon by partner agencies.</p> <p>Provide funding support for travel forecasting support as agreed upon between lead agency and NCTCOG.</p> <p>Provide design concept and scope information for potential project alternatives, as necessary, to perform travel forecasts.</p>	<p>Provide support for major roadway and transit corridor studies impacting the Dallas Fort Worth International Airport.</p>

Planning Activity	NCTCOG/RTC	TxDOT/NTTA/CCTRA	DART/Trinity Metro/ DCTA/McKinney/ Mesquite/Arlington/ Grand Prairie	Dallas Fort Worth International Airport
<p>Performance-Based Planning</p> <p>23 CFR 450.306(d)(1)</p>	<p>Continue enhancements to performance-based planning and decision-making processes in the Metropolitan Transportation Plan, Transportation Improvement Program, Congestion Management Process, and other documents and processes, specifically strengthening ties between performance data and project selection.</p>	<p>Coordinate on project selection processes for the Unified Transportation Program (UTP). Provide performance data, assistance, and comments as needed.</p>	<p>Provide comments, feedback, and data as needed.</p>	<p>Provide comments, feedback, and data as needed.</p>
<p>Performance Measures</p> <p>23 CFR 450.306(d)(2) 23 CFR 490 49 CFR 625 49 CFR 673</p>	<p>Adopt targets for Federal performance measures as required. Monitor progress towards achieving targets over time.</p> <p>Adopt and monitor additional performance measures as needed to track progress towards achieving goals of various planning processes.</p>	<p>TxDOT: Provide data and information related to statewide performance measure target-setting processes. Coordinate MPO target-setting across the state as needed.</p> <p>NTTA/CCTRA: Provide comments, feedback, and data as needed.</p>	<p>Adopt targets for Transit Asset Management (TAM) and Transit Safety (PTASP) performance measures as required. Provide data and information related to these measures as needed.</p>	<p>Provide comments, feedback, and data as needed.</p>

The North Central Texas Council of Governments has received designation as a Regional Economic Development District. It is anticipated that data available through the metropolitan planning process may be utilized to help support the Agency in the development of Comprehensive Economic Development Strategies for the region.

NCTCOG and the RTC have also executed five Memorandums of Understanding (MOUs) with regions beyond the Metropolitan Planning Area for interregional and interstate cooperation on transportation issues that are of mutual interest to the North Central Texas region and the respective region. These MOUs have been executed with the East Texas Council of Governments and East Texas Corridor Council; the East Texas Council of Governments, East Texas Corridor Council, and the Northwest Louisiana Council of Governments; the East Texas Council of Governments, East Texas Corridor Council, Northwest Louisiana Council of Governments, and the North Delta Regional Planning and Development District/Ouachita Council of Governments; the Heart of Texas Council of Governments and the Waco Metropolitan Planning Organization; and Metroplan (five-county area designated as the Metropolitan Planning Organization for the Central Arkansas Regional Transportation Study Area). To advance high-speed rail planning efforts, NCTCOG and the Association of Central Oklahoma Governments, the Metropolitan Planning Organization for the Oklahoma City Metropolitan Area, documented an agreement to work cooperatively to evaluate and plan for potential rail service between the Houston and Oklahoma City Metropolitan Areas. Additionally, NCTCOG and the RTC executed an MOU with the Lone Star Rail District, a governmental entity planning and developing rail passenger service and freight rail improvements in the Central Texas region, to assist with and coordinate rail planning activities in the Dallas, Fort Worth, Austin, and San Antonio regions.

Locally, NCTCOG entered into an MOU with Texas Central Partners to cooperatively develop a high-speed rail system from Houston to Fort Worth.

The UPWP has been prepared using the standard format for MPOs provided by TxDOT. The remaining portion of this chapter summarizes the overall purpose of the UPWP; the geographic area identified as the Metropolitan Area for Transportation Planning; the organizational structure for conducting regional transportation planning in the Dallas-Fort Worth Metropolitan Area; ongoing activities related to private-sector involvement; and an overview of planning issues and emphasis areas for Fiscal Years 2022 and 2023.

Chapters II through VI include project descriptions, funding levels, sources of funding, and anticipated products for each planning subtask to be carried out by NCTCOG. Work completed during the previous two fiscal years is also highlighted. In addition to planning activities, initiatives being carried out by NCTCOG to implement transportation programs in the region are identified. These Management and Operations initiatives are being included to provide a complete inventory of NCTCOG staff activities. Chapter VII contains strategic regional initiatives to investigate non-traditional funding methods for transportation projects due to the decline in traditional funding sources. Funds will be sought from varying sources to support these strategic initiatives. Chapter VIII provides a summary of overall funding levels and the sources of funding for each task. Included in Chapter IX is an inventory of other transportation planning activities across the region submitted by local governments and transportation providers. Appendix A provides a summary of policy and technical committee membership, as well as an MPO staff roster; Appendix B illustrates the Metropolitan Area boundary; Appendix C contains the NCTCOG Debarment Certification; and Appendix D provides the Lobbying Certification for contracts, grants, loans, and cooperative agreements. Appendix E contains the Contract and Procurement Procedures Certification of Compliance; Appendix F contains the Ethics and Compliance Certification; Appendix G contains the NCTCOG Transportation Public Participation Plan; and Appendix H contains the Metropolitan Planning Agreement. RTC-approved transportation performance measures are contained in Appendix I.

A. Purpose

The UPWP is the instrument for coordinating metropolitan transportation and air quality planning activities in North Central Texas. This Work Program includes a description of proposed work submitted to State and federal agencies that are the financial sponsors of the program. This UPWP describes the transportation and air quality planning efforts in the North Central Texas region for the period of October 1, 2021 to September 30, 2023.

Consistent with the standard UPWP format provided by TxDOT, the following five tasks have been identified to guide transportation planning activities in the NCTCOG Metropolitan Area:

- 1.0 Administration and Management
- 2.0 Transportation Data Development and Maintenance
- 3.0 Short-Range Planning and Programming, and Air Quality and Transit Operations
- 4.0 Metropolitan Transportation Plan
- 5.0 Special Studies and System Operation

Exhibit I-3 identifies the 10 planning factors that must be considered in the metropolitan transportation planning process per 23 USC 134(h).

EXHIBIT I-3
10 Factors to be Considered in the Planning Process

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and nonmotorized users.
- Increase the security of the transportation system for motorized and nonmotorized users.
- Increase the accessibility and mobility of people and freight.
- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Enhance travel and tourism.

Transportation Performance Management

Transportation performance management is now used as a strategic approach to making investment and policy decisions, utilizing system information to achieve the national performance goals of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays established through Moving Ahead for Progress in the 21st Century, and as further defined by the Fixing America’s Surface Transportation Act. The North Central Texas Council of Governments publishes *Progress North Texas*, a state-of-the-region report that focuses on establishing measures of system performance. Data on demographics, congestion, air pollution, safety, and project development are gathered annually and are used to determine the performance of the transportation system.

NCTCOG has utilized performance-based planning as an integral part of the metropolitan transportation planning process since enactment of the Intermodal Surface Transportation Efficiency Act of 1991. Federal guidance regarding performance-based planning assists states

and MPOs with integration of performance-based planning in the transportation planning and programming processes. As part of this UPWP, NCTCOG will continue dialogue with TxDOT and other MPOs on how to best implement federal guidance. NCTCOG will continue its efforts on performance-based planning process to ensure federal, State, and local consistency. More importantly, this will ensure that data being collected supports these measures and corresponds with federal guidance. This increased emphasis on performance-based planning will translate into increased dialogue with policy officials and transportation partners in the region regarding the use of performance measures and associated data collection and analysis in both planning and project programming efforts. There will be an increased focus on the consistent use of performance measures to achieve the regional goals. Included in Appendix I are the performance measures approved by the RTC related to Safety; Pavement and Bridge Condition; System Performance, Freight, and Congestion Mitigation and Air Quality; and Transit Asset Management.

Public Involvement

Additionally, Metropolitan Planning Organizations shall develop and adopt a proactive public involvement process. NCTCOG's public involvement process incorporates environmental justice and Title VI considerations. Public participation is solicited and strongly encouraged in NCTCOG's Transportation Planning Program. Increasing communication among cities, elected officials, and technical staff permit these entities to work together to achieve desired goals and objectives. The public outreach and involvement programs emphasize the importance of participation at all levels, from government agencies to the individual. When the public is informed and involved, planning efforts are more likely to address the wide range of issues that impact the region. Including the public during the planning phase of any project will reduce the time and cost of eventual project implementation.

The public outreach initiative is a major ongoing program to increase the level of interaction with the general public regarding transportation planning activities being carried out by the MPO. A wide variety of strategies have been developed to address the goal. Different strategies may be employed for different projects and activities, depending on specific project needs, available time, and project budgets.

Formal public involvement procedures to be used in the metropolitan transportation planning process were originally adopted by the RTC on June 1, 1994, and subsequently revised May 10, 2007; March 11, 2010; February 12, 2015; and November 8, 2018, to increase the public's access to information related to the MPO planning process, as well as opportunities for public participation in the overall decision-making process. The current Public Participation Plan approved by the RTC is included in Appendix G. The most recent revisions addressed new federal requirements for stakeholders, more efficient public input opportunities, increased emphasis on livestreaming, and outreach to and through community groups. The Public Participation Plan, as approved by the RTC in November 2018, also includes, as attachments, a Language Assistance Plan and Title VI Complaint Procedures. The Language Assistance Plan outlines how people with limited proficiency in English have access to information and the ability to participate in NCTCOG Transportation Department programs. Title VI Complaint Procedures outline the NCTCOG policy, how an individual may submit a complaint, how the complaint will be investigated, and potential resolution scenarios. The public involvement procedures represent the required public involvement process for involving the public in the various aspects of the regional transportation planning process; additional strategies are often pursued through public outreach activities that are also identified in Appendix G. NCTCOG staff continually reviews requirements for, and guidance on, public participation from the Federal Highway Administration and the Federal Transit Administration and maintains public involvement procedures consistent with requirements and guidance.

Guidance received from federal and State transportation funding agencies in the past requested MPOs to include activities to ensure and enhance the compliance of the metropolitan transportation planning process with Title VI of the Civil Rights Act of 1964. Title VI states that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. The Civil Rights Restoration Act of 1987 expanded the prohibition of discrimination to include religion, sex, age, or disability and clarified the intent of Title VI by including the following language, “Nondiscrimination programs require that federal-aid recipients, sub-recipients, and contractors prevent discrimination and ensure nondiscrimination in all of their programs and activities, whether those programs and activities are federally funded or not.” Executive Order 12898 mandates that federal agencies also incorporate environmental justice principles by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations. Periodically, the Texas Department of Transportation requests a Title VI Compliance Review of NCTCOG’s metropolitan planning process. During the review, NCTCOG gives TxDOT documentation of how the Agency is complying with nondiscrimination requirements in the outreach and planning processes. On May 9 and May 23, 2019, respectively, the RTC and the NCTCOG Executive Board approved an update to NCTCOG’s Title VI Program. Initiatives to maintain compliance with applicable regulations and orders will continue to be pursued as part of the Fiscal Year (FY) 2022 and FY2023 Unified Planning Work Program.

In June 2021, an online public outreach effort was initiated to present to the public the draft FY2022 and FY2023 UPWP for comments prior to requesting technical committee and RTC approval of the Work Program. An audio presentation was posted on NCTCOG’s public involvement webpage, along with a draft copy of the Work Program document. A copy of the draft

Work Program document was also posted on the NCTCOG UPWP webpage for public reference. Other methods to access the information were made available upon request.

B. Definition of Area

North Central Texas Region

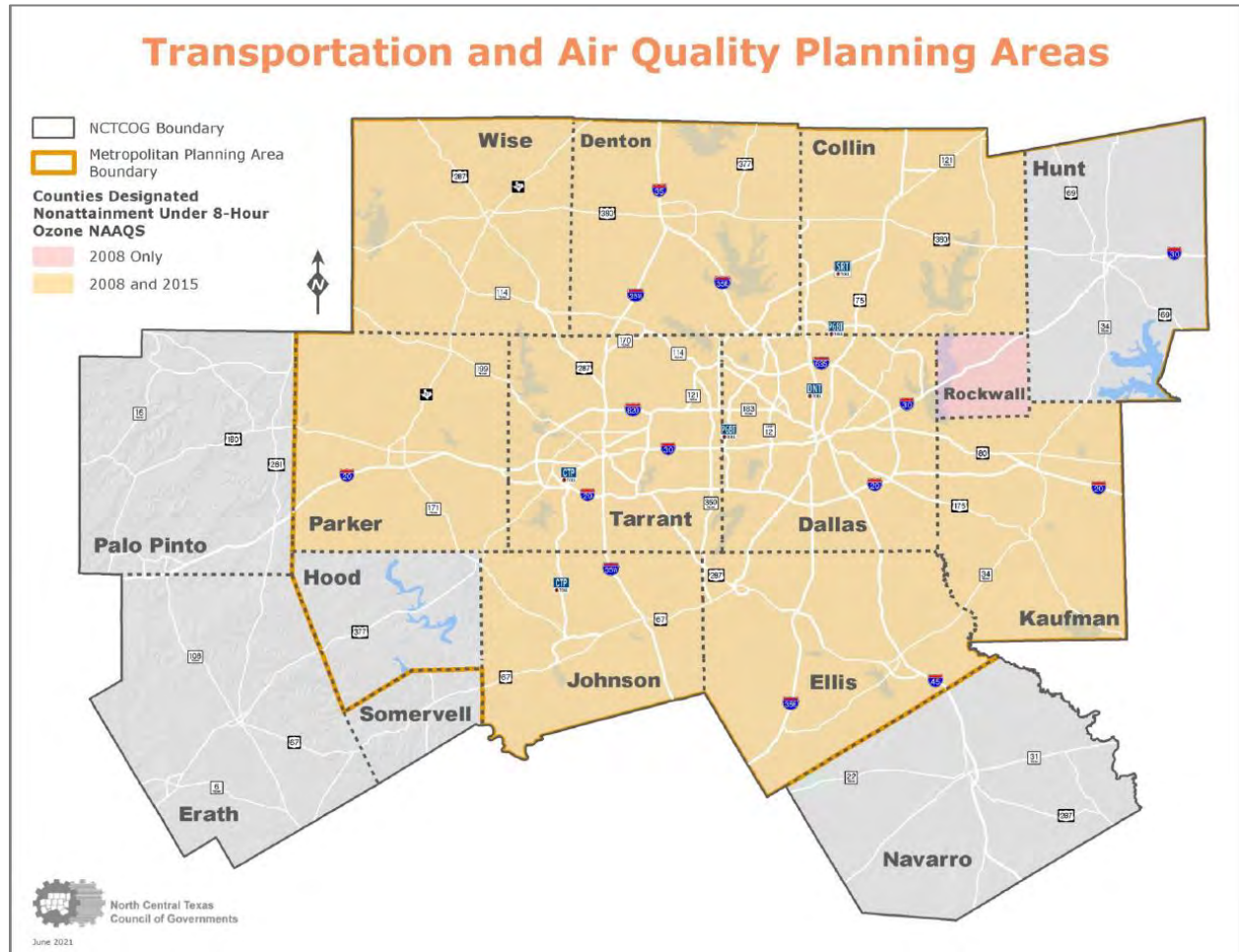
The North Central Texas region is the 16-county area within which the North Central Texas Council of Governments (NCTCOG) is responsible for coordinating regional planning activities that address the common needs of its constituents. Counties encompassed by NCTCOG for regional coordination are Collin, Dallas, Denton, Ellis, Erath, Hood, Hunt, Johnson, Kaufman, Navarro, Palo Pinto, Parker, Rockwall, Somervell, Tarrant, and Wise. The region was designated as the North Central Texas State Planning Region by Executive Order of the Texas Governor, Dolph Briscoe, on August 28, 1973.

Dallas-Fort Worth Metropolitan Area

The Texas Department of Transportation (then known as the Texas Highway Department) initiated comprehensive transportation planning in North Central Texas in July 1967 as the Dallas-Fort Worth Regional Transportation Study. These early planning efforts set the foundation for subsequent transportation planning in the region and defined the area of primary interest for such work. Since then, extensive growth in population, employment, and travel has resulted in several expansions of the study area for transportation and air quality planning activities. The study area includes current urbanized areas and areas expected to be principally urbanized during the planning horizon (approximately 20 years). Following action by the Regional Transportation Council (RTC), the NCTCOG Executive Board, and the Texas Transportation Commission in 2009, the Metropolitan Planning Area boundary now includes the 12 counties of Collin, Dallas,

Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise. This total area is approximately 9,441 square miles, as shown in Exhibit I-4.

EXHIBIT I-4



Per federal legislation, the Metropolitan Area also has been designated as a Transportation Management Area.

Federal planning regulations require that if any federal public lands and/or Indian tribal lands are included within the Metropolitan Planning Area, the affected federal agencies and Indian tribal governments shall be involved appropriately in the development of transportation plans and programs. NCTCOG includes federally recognized tribal nations that have areas of interest in the

North Texas region as stakeholders in the transportation planning process. Tribal groups are also included in the 13,500-record public involvement database.

Air Quality Nonattainment Area

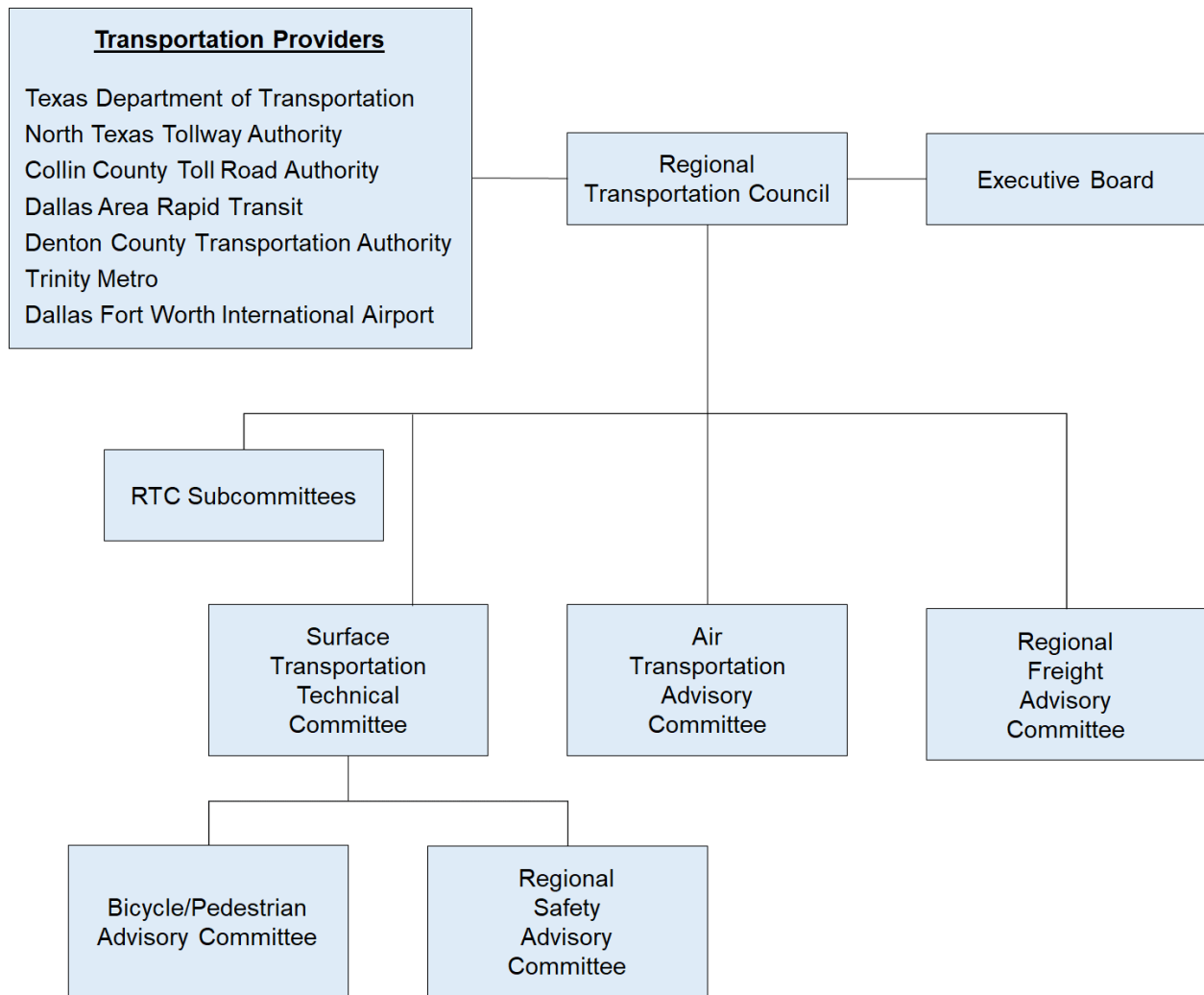
With the passage of the Clean Air Act Amendments of 1990, the counties of Collin, Dallas, Denton, and Tarrant were originally designated as a nonattainment area for being in violation of the 1-hour ozone standard. In 2008, a new, stricter 8-hour ozone standard was implemented that expanded the ozone nonattainment area to 10 counties, including Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise. The ozone standard was then strengthened again in 2015, resulting in nonattainment designation for 9 counties, including Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Tarrant, and Wise. Currently, both the 2008 and 2015 8-hour ozone standards are in effect and require attention in transportation planning. In addition, Hood County has remained in attainment but is partnering with the Environmental Protection Agency through the Ozone Advance Program. Under this program, organizations in Hood County took proactive actions that reduced ozone precursor emissions to enable continued compliance in meeting the ozone standard. Air quality planning activities to be conducted as part of the FY2022 and FY2023 Unified Planning Work Program are described within Task 3 of the Work Program.

C. Organization

Multimodal transportation planning and development, facilitated through a single policy direction for all modes of travel, ensures that plans and programs are coordinated across various city, county, and agency jurisdictional boundaries and that implementing agencies are cooperating. In North Central Texas, this direction is provided through an extensive committee structure forming partnerships in regional transportation planning and implementation, as illustrated in Exhibit I-5. This structure consists of the North Central Texas Council of Governments (NCTCOG) Executive Board and the Regional Transportation Council (RTC), comprised primarily of local elected

officials, transportation providers, and technical or advisory committees comprised of staff involved in the planning for various modes of travel. A variety of task forces also support planning initiatives as needed.

EXHIBIT I-5
Partnership in Regional Transportation Planning



North Central Texas Council of Governments Executive Board

The NCTCOG Executive Board, consisting of 17 locally elected officials and one ex-officio non-voting member of the Texas legislature, establishes overall policy for comprehensive planning and coordination in the North Central Texas region. The Executive Board sets policy for the

administration of funds granted to the Metropolitan Planning Organization (MPO), as well as NCTCOG staff in carrying out the day-to-day responsibilities of the MPO. NCTCOG is the overall umbrella under which the regional transportation planning process functions. The Executive Board meets monthly at the NCTCOG offices.

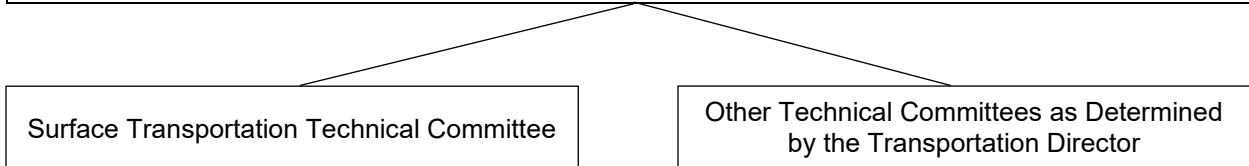
Regional Transportation Council

The RTC, consisting of 44 members, serves as the independent policy body for regional transportation decisions. The RTC provides guidance for multimodal transportation planning and ensures coordination among transportation modes, local government entities, and planning activities. The RTC is responsible for direction and approval of the Metropolitan Transportation Plan, the Transportation Improvement Program, the Congestion Management Process, the Unified Planning Work Program, and the Public Participation Plan, and for satisfying and implementing federal and State laws and regulations pertaining to the regional transportation planning process.

The RTC meets monthly at the NCTCOG offices. The RTC meetings have been streamed live over the internet since September 2015. Video recordings of the proceedings are available online within 24 hours of each meeting. The organizational structure of the RTC is shown in Exhibit I-6, and current membership is shown in Appendix A. Public transportation agencies have long been represented on the RTC, as is now required by the Fixing America's Surface Transportation Act. At the discretion of the RTC officers, RTC members also serve on Standing and Ad Hoc Subcommittees formed by the officers to respond to specific issues that come before the Council.

EXHIBIT I-6
Regional Transportation Council Organizational Structure

City of Arlington	2
Cities of Carrollton and Farmers Branch	1
Cities of Dallas, Highland Park, and University Park	6
Cities of Denton, Sanger, Corinth, and Lake Dallas	1 (urbanized area)
Cities of Duncanville, DeSoto, Lancaster, Cedar Hill, Glenn Heights, and Hutchins .	1
City of Fort Worth	3
City of Garland	1
City of Grand Prairie	1
Cities of North Richland Hills, Richland Hills, Haltom City, Watauga, White Settlement, River Oaks, Lake Worth, Westworth Village, Saginaw, Azle, Keller, and Sansom Park	1
Cities of Irving and Coppell	1
Cities of Lewisville, Flower Mound, and Highland Village	1 (urbanized area)
Cities of Mansfield, Benbrook, Forest Hill, Crowley, Everman, and Kennedale	1
Cities of Mesquite, Balch Springs, Seagoville, and Sunnyvale	1
Cities of Grapevine, Southlake, Colleyville, Westlake, Trophy Club, Roanoke, Bedford, Euless, and Hurst	1
Cities of McKinney, Fairview, Anna, Princeton, and Melissa	1 (urbanized area)
City of Plano	1
Cities of Richardson and Addison	1
Cities of Frisco, Prosper, Little Elm, The Colony, Celina, and Providence Village	1
Cities of Allen, Lucas, Wylie, Rowlett, Sachse, and Murphy	1
Collin County	1
Dallas County	2
Denton County	1
Ellis County and the cities of Waxahachie, Midlothian, Ennis, and Red Oak, and Kaufman County and the cities of Forney, Terrell, and Kaufman	1
Johnson County and the cities of Burleson, Cleburne, Keene, and Joshua, and Hood County and the city of Granbury	1
Rockwall County and the cities of Rockwall, Heath, Royse City, and Fate, and Hunt County and the cities of Greenville and Commerce	1
Parker County and the cities of Weatherford, and Mineral Wells, and Wise County and the cities of Decatur and Bridgeport	1
Tarrant County	2
District Engineer, Dallas District, TxDOT (also represents the TxDOT Paris District's interests)	1
District Engineer, Fort Worth District, TxDOT	1
Policy Representative, Dallas Area Rapid Transit	1
Policy Representative, Trinity Metro	1
Policy Representative, Denton County Transportation Authority	1
Policy Representative, North Texas Tollway Authority	1
Policy Representative, Dallas Fort Worth International Airport	1
Total	44



Transportation Technical and Advisory Committees

Technical and advisory committees provide advice to the RTC and guidance for NCTCOG staff. Committee members may be called upon to provide the RTC with information about the concerns and priorities of the individual local entities they represent. They also provide specialized expertise and serve as a means of facilitating communication and coordination between the regional planning process and individual local agencies. Representatives on these committees may include staffs of local governments, transportation providers in the region, private-sector representatives, personnel from State and federal agencies, or citizens.

Surface Transportation Technical Committee

The Surface Transportation Technical Committee (STTC) reviews, comments on, and prepares recommendations regarding surface transportation planning and development in the Dallas-Fort Worth Metropolitan Area. Current members of the Surface Transportation Technical Committee are listed in Appendix A. The Committee meets monthly at the NCTCOG offices.

Air Transportation Advisory Committee

The Air Transportation Advisory Committee (ATAC) provides technical expertise and review for the general aviation system planning process to the RTC and NCTCOG Executive Board. The general aviation system is the system of airports and heliports in the region that provide for general aviation and air cargo activity. The Committee meets quarterly at the NCTCOG offices.

Regional Freight Advisory Committee

The Regional Freight Advisory Committee (RFAC) provides technical expertise, review of and input on Freight North Texas products, recommendations for freight project funding, review of freight-related publications, and review of and contributions to freight forecasting efforts to the

RTC. Freight North Texas is the regional freight system inventory for the NCTCOG region. The Committee meets biannually at the NCTCOG offices.

Bicycle and Pedestrian Advisory Committee

The Bicycle and Pedestrian Advisory Committee (BPAC) provides technical expertise, public outreach support, review of regional bicycle and pedestrian planning, and assistance in the selection of bicycle and pedestrian projects funded by the RTC and the NCTCOG Executive Board. The Committee meets quarterly at the NCTCOG offices.

Regional Safety Advisory Committee

The Regional Safety Advisory Committee (RSAC) assists in the development of policies, programs, procedures, projects, and activities that help improve traffic safety throughout the region. The Committee also provides technical expertise, public outreach support, review of regional safety planning, and assistance in the selection of safety projects funded by the RTC and the NCTCOG Executive Board. The Committee meets quarterly at the NCTCOG offices.

D. Private-Sector Involvement

The private sector is encouraged, to the maximum extent feasible, to participate in the North Central Texas Council of Governments' (NCTCOG's) metropolitan transportation and air quality planning process. Private/public-sector partnerships are playing an important role in the development and implementation of strategies to reduce congestion and improve air quality, as well as in the joint funding of transportation improvements. Private-sector representatives serve as members on various planning task forces and coalitions. The NCTCOG Transportation Public Participation Plan involves the private sector through various mailings of meeting notices and publications. Additionally, many air quality initiatives seek to include the private sector in helping the region meet federal requirements.

In support of the region's Sustainable Development initiatives, since 2011, the Regional Transportation Council (RTC) has allocated RTC Local, Regional Toll Revenue, Congestion Mitigation and Air Quality Improvement Program, and Surface Transportation Block Grant Program funds to transportation improvements. Private-sector participation is essential to the funding and implementation of these projects. This program forms the foundation for an ongoing dialogue with the private-sector development community regarding opportunities for coordinating transportation and land-use investment decisions to improve mobility and air quality. These discussions are taking place in part through the ongoing process of working with the project developers and local governments toward implementation of these specific projects.

The Unmanned Aircraft Systems (UAS) Safety and Integration Task Force involves significant private-sector involvement as the region seeks to mitigate reckless UAS operation and promote the safe integration of UAS technology into the Dallas-Fort Worth regional airspace. Working groups have been formed to address education and public awareness, legislation, training, and integration related to UAS. The task force is comprised of public-sector representatives at the federal, State, and local levels, as well as private-sector representatives from the aviation and UAS industries, academia, military, and others.

NCTCOG also serves as ex-officio representatives to the Dallas Regional Mobility Coalition and the Tarrant Regional Transportation Coalition, which assist local governments, the Texas Department of Transportation (TxDOT), Dallas Area Rapid Transit, Denton County Transportation Authority, and Trinity Metro with implementation of transportation improvements in the TxDOT Dallas and Fort Worth districts.

Additionally, third-party private contractors provide significant technical support for work contained in the Unified Planning Work Program (UPWP). The contracting procedures used by

NCTCOG establish standards and guidelines for the procurement of services through third-party contracts. TxDOT has approved NCTCOG's procedures for procuring consultants to assist with implementation of the transportation and air quality planning projects included in the UPWP. Copies of NCTCOG's contracting procedures are available upon request. Appendix E contains a current certification of compliance for NCTCOG's contract and procurement procedures.

As part of the development and implementation of the UPWP, NCTCOG staff, in cooperation with local governments, TxDOT, and transportation providers, identifies those work subtasks in which consultant assistance will or may be desired. As individual projects move forward, a Request for Proposals (RFP), which includes an overview of the work to be competed, is issued for each of these projects. NCTCOG maintains a list of prospective consultants by area of specialization and uses it to guide the distribution of RFPs. Firms wishing to be included on the list of prospective consultants are encouraged to provide information to NCTCOG. A notice of intent to retain consultant services for each project is also published in the Texas Register, on the NCTCOG website, and in local newspapers, two of which are targeted for ethnic minorities. Consultants may obtain a copy of the RFP through the NCTCOG website. A review committee is established for each project to review proposals and provide recommendations to NCTCOG's Executive Board regarding the firm(s) to conduct the work.

Additionally, transportation providers and local governments in the region retain consultants to assist with planning efforts. Transportation providers also increasingly seek to form project implementation partnerships through a variety of innovative project development and financing tools authorized by federal and State legislation and regulation. During these efforts, the North Central Texas Council of Governments' assistance is often requested. Staff participates in meetings, provides data, and performs specialized planning work to support the efforts of the transportation provider and local governments, as well as potential private transportation project

developers to ensure potential projects are consistent with adopted regional policies, plans, and programs.

E. Planning Issues and Emphasis

The Federal Highway Administration and the Federal Transit Administration have jointly issued Planning Emphasis Areas to be addressed in the Unified Planning Work Program (UPWP). These three emphasis areas are identified in Exhibit I-7 and include: 1) Transition to Performance-Based Planning and Programming; 2) Regional Models of Cooperation – Ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination Across Transit Agency, Metropolitan Planning Organization, and State Boundaries; and 3) Ladders of Opportunity – Access to Essential Services. Included in this exhibit are examples of how the North Central Texas Council of Governments (NCTCOG) is addressing or plans to address each of these areas.

EXHIBIT I-7
Planning Emphasis Areas

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
<p>Transition to Performance-Based Planning and Programming</p> <p>Further develop performance management approach to transportation planning and programming. Performance-based planning and programming includes using transportation performance measures, setting targets, reporting performance, and programming transportation investments directed toward the achievement of transportation system performance outcomes. Appropriate UPWP work tasks could include working with local planning partners to identify how to implement performance-based planning provisions such as collecting performance data, selecting and reporting performance targets for the Metropolitan Area, and reporting actual system performance related to those targets. The MPOs might also explore the option to use scenario planning to develop their Metropolitan Transportation Plan.</p>	<p>1.01 Community Outreach: Performance measures are reported for the department through the <i>Progress North Texas</i> state-of-the-region annual report.</p> <p>1.01 Transportation and Air Quality Education and Outreach: It is important to receive feedback from the customers served to ensure overall effectiveness and audience interests. Outcomes from Google analytics, social media statistics, and direct participant participation at events help refine and shape future endeavors.</p> <p>2.01 Travel Forecasting Support: Data collection programs and modeling activities are ongoing to benchmark travel behavior of users, including several transportation system usage statistics.</p> <p>2.02 Transportation Data Development: Performance data such as traffic counts, travel times, transit ridership, and gasoline consumption are organized and archived for use in reporting.</p> <p>3.01 Transportation Project Programming: Many system and project performance factors such as level-of-service and cost/benefit calculations are considered in selecting projects and programs. Project tracking activities have increased substantially, which will be an integral part of the performance management approach. Performance measures adopted by the Regional Transportation Council and activities underway in order to reach those targets are documented in the Transportation Improvement Program.</p> <p>3.02 Regional Air Quality Planning: In order to make sound emission reduction control strategy decisions, it is critical to have accurate fundamental building blocks that go into those decisions. Successful transportation conformity determinations are a primary performance measure to ensure the region's short- and long-range planning are consistent with air quality goals. In addition, analyzing a variety of emission, vehicle, and activity trends that are a direct output from many of the tools utilized in traditional air quality planning helps to ensure quality transportation information for application into other efforts.</p> <p>3.03 Air Quality Management and Operations: Performance measures are heavily relied upon to make decisions regarding the selection and implementation of air quality improvement projects to meet three elements: successful transportation conformity determination, State Implementation Plan support, and ultimately, regional compliance to the Environmental Protection Agency's National Ambient Air Quality Standards as measured by the regional ozone design value.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>It is also important to verify information provided by a performing party to ensure grant-funded activities are used in accordance with the performing party agreement. Field inspections of subgrantees will be conducted by staff to verify various grant requirements. Outcomes will help refine the field inspection process.</p> <p>3.05 Transit Management and Operations: Performance measures are included in project management and program oversight for federal formula and discretionary funds for public transportation. Measures for both operations and capital grants are used in the decision-making process to maximize program outcomes with available funding.</p> <p>4.01 Metropolitan Transportation Plan: Performance measures such as level-of-service analysis and congestion assessments are outputs of the current planning processes and are documented throughout the Metropolitan Transportation Plan. Staff are implementing rules related to performance measures and targets required by the Fixing America’s Surface Transportation Act. NCTCOG has coordinated with the Texas Department of Transportation to establish measures and targets appropriate for the regional transportation system. With the development and adoption of the new long-range transportation plan, Mobility 2045 Update, sustainable performance measures and supplemental measures will be incorporated to allow for the tracking of the region’s transportation system performance.</p> <p>5.01 Regional Transportation Studies: Consistent with federal legislation and guidance, the Corridor Studies/Environmental Study Support element will continue to be a performance-driven and outcome-based program providing support in the development of corridor studies throughout the region.</p> <p>Performance measures such as report of daily volumes, peak-hour volumes, level-of-service, vehicle miles traveled, ridership totals, boarding and alighting figures, and other travel model data for ongoing corridor studies are evaluated for Metropolitan Transportation Plan recommendations and inclusion.</p> <p>5.01 Regional Passenger Rail Innovative Finance Initiative: This initiative incorporates various performance measures to determine optimum funding and financing strategies for regional passenger rail corridors.</p> <p>5.01 Regional Automated Transportation System Initiative: This initiative examines the feasibility of using automated transportation systems to connect various land uses within mixed-use developments. Performance measures are utilized extensively to determine optimum alignment and operational conditions for these important “last mile” connections.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>5.01 High-Speed Passenger Technology: NCTCOG staff utilizes performance measures extensively in this effort examining high-speed transportation alternatives within the Dallas-Fort Worth region. Performance measures are a critical component for the alignment, operation, and transportation system connectivity analyses.</p> <p>5.02 Subarea Studies and Local Government Assistance: This subtask provides an evaluation of multimodal transportation needs within a specific geographic area or along an arterial or transit corridor. These projects are designed to study a specific issue and allow for a comprehensive assessment of general transportation needs within an area prior to examining system alternatives. The anticipated performance-based products of this subtask can include:</p> <ul style="list-style-type: none"> • Travel demand modeling for study alternatives and alignment analysis. • Report of daily volumes, peak-hour volumes, level-of-service, vehicle miles traveled, ridership totals, boarding and alighting figures, the collection and transmittal of travel model networks, and performance report model outputs. • Identification of recommendations and incorporation of said recommendations in the next Metropolitan Transportation Plan. <p>5.03 Land-Use/Transportation Initiatives: The Sustainable Development Livability Program is developing performance measures that look at the impact of program investments from three Calls for Projects that have occurred since 2001. Staff are tracking the number of infrastructure and planning projects funded and completed through the program and their impact, along with the number of projects within one-half mile from a transit station, to evaluate the impact of transit-oriented development funding. Additionally, efforts continue to measure the success of bicycle and pedestrian modes of alternative transportation and to determine any commuting patterns that may exist. Staff monitors the volume of trips, directional and time-of-day information for various locations in the Dallas-Fort Worth region in order to better evaluate facility use and other patterns within the region. A network of regionally significant bicycle and pedestrian corridors, and their nearby access to development, are important quality-of-life components to sustainable development and effective mixed-use development. Daily counts of bicycle and pedestrian users are conducted in various locations in the Dallas-Fort Worth area in order to better evaluate facility use and other regional patterns.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>5.04 Transportation Asset Management: This program focuses on maximizing the current system and capacity, and the use of strategic investments in the transportation system, to extend its operating life. Doing so can help preserve limited resources. Observed and planning performance measures are used to determine when to preserve, upgrade, or replace existing transportation assets. These performance dimensions include traffic volumes, infrastructure conditions, traffic control devices, geometric design elements, safety, land use, and congestion.</p> <p>5.05 Congestion Management Planning and Operations: NCTCOG’s Congestion Management Process, in place since 1994, relies heavily on various performance measures as the primary mechanisms for assessing levels of congestion and recommended strategies for alleviating congestion. Both observed and planning performance measures are utilized to score and rank corridors for inclusion in the Congestion Management Process. The evaluation is based on four categories, including alternative roadway infrastructure, modal options, system demand, and system reliability.</p> <p>NCTCOG staff prepares an annual report for Travel Demand Management programs based on observed data collected by NCTCOG and partner agencies; this includes the Vanpool Program and the Regional Trip Reduction Program. Observed data is also collected and utilized to report performance measures for the Regional Traffic Signal Program.</p> <p>5.06 Regional Freight Planning: Regional freight planning efforts assess the impact of truck traffic, rail freight, and other freight movement issues within and through the Dallas-Fort Worth region. This task includes the collection and analysis of data pertaining to freight mobility and safety. The analysis also includes gathering performance measures useful in monitoring changes in the freight system over time. These tasks will include continued coordination with private-sector partners in the trucking, rail, and freight forwarding businesses. The Regional Transportation Council adopted targets for freight system reliability measures and will monitor progress towards meeting those targets.</p> <p>5.08 Railroad Crossing Coordination: Railroad crossing coordination efforts collect and tabulate railroad crossing safety and performance measures regarding the Regional Railroad Banking Program, including a closed-crossing tracking system and a database to collect credits for railroad crossing closure projects. This effort also uses performance measures to identify target areas for railroad safety education efforts.</p> <p>5.08 Transportation Safety Planning: An annual report of observed safety data, including crash data, Traffic Incident Management Program data, and Mobility Assistance Patrol Program data for the Dallas-Fort Worth region is developed.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>5.11 Connected and Automated Vehicles: In a current transportation technology project designed to optimize flow of freight vehicles through signalized intersections, NCTCOG is incorporating benefit-cost analysis (BCA) tools to plan where most effectively to install the technology. NCTCOG intends to employ such BCA tools in future planning and other projects involving connected and automated vehicle technology.</p>
<p>Regional Models of Cooperation</p> <p><i>Ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination Across Transit Agency, MPO, and State Boundaries.</i></p> <p>To improve the effectiveness of transportation decision making, state Departments of Transportation, MPOs, and providers of public transportation are encouraged to think beyond traditional borders and adopt a coordinated approach to transportation planning. A coordinated approach supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across boundaries. Improved multi-jurisdictional coordination by state Departments of Transportation, MPOs, providers of public transportation, and Rural Planning Organizations can reduce project delivery times and enhance the efficient use of resources, particularly in urbanized areas that are served by multiple MPOs. The MPOs can revisit their Metropolitan Area planning agreements to ensure that there are effective processes for cross-jurisdictional communication among state Departments of Transportation, MPOs, and providers of public transportation to improve collaboration, policy implementation, technology use, and performance management. State Departments of Transportation and MPOs can explore the opportunity to partner with Rural Planning Organizations to conduct transportation planning in nonmetropolitan areas.</p>	<p>1.01 Community Outreach: Staff coordinate with transportation providers and surrounding regions to develop joint communications opportunities to improve information provided to the public.</p> <p>1.01 Transportation and Air Quality Education and Outreach: NCTCOG's Clean Cities Program coordinates with other regional Clean Cities programs, and communications occur between the region's general public awareness program, Air North Texas, and other state and regional air quality awareness campaigns to ensure consistency.</p> <p>2.01 Travel Forecasting Support: NCTCOG develops analytical tools that cover the entire Metropolitan Planning Area and provide an environment for technical cooperation and coordination among various entities in the region. These analytical tools include the regional travel model, and regional data collection and travel surveys.</p> <p>2.02 Transportation Data Development: A data repository is provided and maintained for standardized transportation-related data. These services require cooperation and standardization among agencies and entities in the region. NCTCOG also provides dissemination tools to the general public for the stored data, including websites and technical services.</p> <p>2.03 Demographic Data and Forecasts: Demographic forecasts are developed for the entire region. This is a continuous project that involves virtually all local government entities for the exchange and standardization of land use, housing, household, and employment data.</p> <p>3.01 Transportation Project Programming: Periodic coordination with other Metropolitan Planning Organizations regarding their processes, procedures, and new developments in transportation project programming improves regional, state, and national efforts.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>3.02 Regional Air Quality Planning: NCTCOG staff actively participates in the Statewide Technical Working Group for Mobile Source Emissions. This initiative, that has been in existence since the early 1990s, includes quarterly discussions with federal and state conformity consultation partners (FHWA, FTA, EPA, TxDOT, the TCEQ), regional COGs/MPOs, TTI, and other relevant partners to ensure coordination and ultimate success to appropriate rules and regulations. In addition, direct air quality collaboration continues to be provided to Hood County resulting in its inclusion into EPA’s Ozone Advance Program, in addition to other regions across the state as they expand air quality activities.</p> <p>3.03 Air Quality Management and Operations: The following programs highlight coordination and cooperation across various boundaries.</p> <ul style="list-style-type: none"> • Management and Operations Emissions Enforcement: Efforts continue for local law enforcement, and the Houston and Austin areas, for both training and access to NCTCOG databases containing statewide information. • Diesel Inspection and Maintenance: Coordination with the Austin and Houston areas, in addition to the Department of Public Safety and the Texas Department of Transportation, to ensure efforts meet all needs. Multistate and international communications are occurring. • Freight Efficiency and SmartWay Efforts: Coordination with the trucking industry to reduce emissions, which affects a large region. Much of the affected truck traffic is long haul; encouraging other agencies throughout Environmental Protection Agency Regions 6 and 7 to become engaged in promoting SmartWay strategies. • Electric Vehicles North Texas: Carrying NCTCOG local efforts to those that comprise the Texas Triangle (Dallas, Fort Worth, Austin, San Antonio, and Houston) for broader implementation. • Engine Off North Texas/Anti-Idling Efforts: Through the coordination of statewide conference calls with partner agencies across the state, resources have been developed to assist regional agencies minimize excessive engine idling that contributes to air pollution. • Alternative Fuel Corridors: In conjunction with work as Dallas-Fort Worth Clean Cities, coordinating with fellow Clean Cities coalitions, Councils of Governments, and the Texas Department of Transportation to develop consensus around submittal of a network of roadways under Section 1413 of the Fixing America’s Surface Transportation Act. • Volkswagen Settlement: Networking, communicating, and assisting regional partners to take advantage of funds made available by the Texas Commission on Environmental Quality.

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>3.05 Transit Management and Operations: Coordination is a high priority for public transportation within the NCTCOG region and across boundaries. Focusing on seamless public transportation services, planners facilitate partnerships and support scalable, regionwide programs for travel training, public information about transit options, and best practices for transit operations.</p> <p>5.03 Land-Use/Transportation Initiatives: Staff participate in bicycle and pedestrian planning peer exchanges in other states to provide information about various funding programs and NCTCOG initiatives.</p> <p>5.06 Regional Freight Planning: NCTCOG staff serves as a technical advisor and supporter to the Texas Department of Transportation for the Texas Statewide Freight Plan. NCTCOG staff also closely coordinates with the Association of Texas Metropolitan Planning Organizations regarding freight topics germane to freight movement within Texas.</p> <p>5.11 Connected and Automated Vehicle Planning: NCTCOG staff has provided technical support for local partners considering submitting applications for funding under AV2.2/2.3 programs for automated vehicle deployments. Staff will continue to actively support the project sponsors as they implement the projects.</p>
<p>Ladders of Opportunity</p> <p><i>Access to Essential Services</i></p> <p>State Departments of Transportation, MPOs, and providers of public transportation, as part of the transportation planning process, are encouraged to identify transportation connectivity gaps in accessing essential services.</p> <p>Essential services include employment, health care, schools/education, and recreation. Suggested UPWP work tasks include developing and implementing analytical methods to identify gaps in the connectivity of the transportation system and developing infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to essential services. Other effective work tasks could include evaluating the effectiveness of public participation plans for engaging transportation disadvantaged communities in the transportation decision-making process; updating the Section 5310 Coordinated Human Service Public Transportation plans; assessing the safety and condition of pedestrian and bicycle facilities; and evaluating compliance with the Americans with Disabilities Act, particularly</p>	<p>1.01 Transportation and Air Quality Education and Outreach: Efforts are made to inform the region of solutions for addressing gaps in transportation system connectivity, with continued focus on traditionally underserved populations. Different forms of translation, media type, and format will be utilized. Results will be tied back to performance evaluation to determine effectiveness and future directions.</p> <p>2.01 Travel Forecasting Support: Analytical tools and data collection programs are designed to forecast ridership and roadway facilities demand. The transit travel survey will capture a comprehensive picture of transit usage in the region. Nonmotorized travel is programmed to be added to the regional travel model. Analytical tools for environmental justice analysis are created for planning applications.</p> <p>3.01 Transportation Project Programming: NCTCOG has used criteria to boost opportunities via project selection for many years. For example, project selection criteria often include filling in service gaps, implementing projects in traditionally underserved communities, etc.</p> <p>3.02 Regional Air Quality Planning: National Ambient Air Quality Standards are set for pollutants considered harmful to public health and the environment. They are intended to protect the health of asthmatics, children, and the elderly. NCTCOG will continue to utilize actual emissions data collected from the robust monitoring network existing in North Central Texas. This information will be monitored in</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
<p>around schools, concentrations of disadvantaged populations, social services, medical, and transit facilities.</p>	<p>analyzing spatially (where) and temporally (when) emissions, peaks, trends, locally generated, or transported, to name a few. NCTCOG will also continue to assist with new ground-level monitor expansion, keeping in mind elements such as traffic patterns, terrain, meteorological conditions, and low-income residencies. In addition, efforts continue to expand the region’s multi-pollutant inventory of emissions, including greenhouse gas.</p> <p>3.03 Air Quality Management and Operations: Field inspections on performing parties and consultants are performed to ensure activities meet agreements as intended which were implemented to assist or expedite air quality needs for the region. Staff will continue to refine performance measures and the data utilized to help identify traditionally underserved populations and their connections to essential services and programs such as rural transit, alternative transportation modes, and availability of financial incentives. Geographic Information System-based analysis is used to identify gaps in networks of emissions-reducing activities such as deployment of electric vehicle supply equipment and electrified truck parking. NCTCOG continues to embrace opportunities where the existing transportation system can be enhanced to minimize exposure to harmful pollutants such as near schools, truck stops, hospitals, low-income residencies, high-volume truck activities, and others.</p> <p>3.04 Public Transportation Planning: The Regional Public Transportation Coordination Plan specifically concentrates on access to essential services throughout the region and identifies strategies to address service gaps. This planning process also informs funding decisions for public transportation and pinpoints areas where additional coordination could increase access to services for underserved populations.</p> <p>4.03 Ensuring Equity, Nondiscrimination and Environmental Justice in MPO Planning/Program Activities: During the development of each long-range transportation plan, NCTCOG conducts an analysis of the impacts of the roadway and transit recommendations on the region’s population as part of a comprehensive environmental justice analysis. These measures indicate whether there are disproportionate impacts to traditionally underserved populations such as low-income and minority groups. Among these measures is access to special generators, including universities, hospitals, and regional shopping centers.</p> <p>5.03 Land-Use/Transportation Initiatives: The Transit-Oriented Development Program uses data collection and various evaluation techniques of sidewalk and bicycle infrastructure to identify connectivity gaps between more than 70 active rail stations in the Dallas-Fort Worth region and various nodes of employment and housing.</p>

Emphasis Area	Work Program Subtasks Addressing Emphasis Area
	<p>5.11 Connected and Automated Vehicles: The Regional Transportation Council adopted a policy in connection with its approval of Automated Vehicle Program 2.0 that commits NCTCOG to provide support so resource-poor communities can participate in automated vehicle deployment projects and to focus public investment in AV projects that support the needs of disadvantaged communities.</p>

Key Highway and Transit Planning Issues

The Metropolitan Planning Organization (MPO) has the continued responsibility of preparing and maintaining the federal planning requirements, including the Metropolitan Transportation Plan, the Congestion Management Process, the Transportation Improvement Program, the Public Participation Plan, and the UPWP. Combined with travel forecasting, information systems, and air quality planning, these areas represent core planning functions of the MPO. The FY2022 and FY2023 UPWP addresses many interrelated multimodal transportation issues aimed at facilitating the implementation of transportation projects and programs to reduce congestion and improve mobility, air quality, and safety and are highlighted below.

The Metropolitan Transportation Plan

Mobility 2045: The Metropolitan Transportation Plan for North Central Texas was approved by the Regional Transportation Council (RTC) in June 2018, followed by a US Department of Transportation conformity determination in November 2018. The focus for FY2022 and FY2023 will be the adoption of a new metropolitan transportation plan, Mobility 2045 Update, and implementing projects, programs, and policies while continuing to coordinate with federal, state, and local transportation providers. As the region, state, and country continue the struggle to adequately fund needed transportation improvements, planners and policymakers will focus on innovative ways to finance projects and opportunities to make strategic improvements to the existing transportation system to allow them to function more effectively and to provide targeted capacity improvements where necessary. Additionally, performance measures and metrics will be used to inform the future of planning emphasis.

Transportation Funding Initiatives, Partnership Programs, and Innovative Financing Strategies

Lack of available funding to meet critical regional transportation needs remains a significant issue. NCTCOG will identify opportunities for increased revenue for the implementation of transportation

improvements that result in enhanced regional mobility. One example is working with the region's transportation providers to implement transportation financing tools authorized by the Texas Legislature. Additionally, NCTCOG is incorporating a project in FY2022 to better understand the public's return on investment for transportation funding. Advancing the RTC's partnership programs with transportation providers and local governments will be pursued, including various Calls for Projects, in conjunction with funding available from federal legislation and available revenue from the innovative financing tools authorized by the legislature.

Transportation System Operation

Commuter traffic is a major concern of area travelers. Increasing traffic congestion and the resulting vehicle emissions are major problems in the region. Faced with growing travel demand and limited resources, planners and policymakers are utilizing strategies intended to lead to improved operation of the system and reduced travel demand. Although major capital investments are needed to meet the growing travel demand, operational management and travel demand reduction strategies (such as encouraging carpools and vanpools and working with regional employee trip reduction coordinators) complement major capital recommendations. The results are a more efficient and effective transportation system, increased mobility, and leveraging of resources.

Data Collection and Enhanced Travel Models

Travel-related data and models are building blocks in NCTCOG's metropolitan planning process. The data and models provide analytical capability to objectively analyze different project plans and create consistent and meaningful information about future plans. The information provides insights for the planning process, which leads to creating consensus among decision makers. During FY2022 and FY2023, the emphasis on data collection and improvements to the travel model will continue. The data collection initiatives include the following:

- Transit travel survey;
- Limited access facility user survey;
- Various types of traffic counts;
- Travel time and speed data; and
- Transit ridership data

The following model improvements will be made as a result of these data collection efforts:

- Model for transit on-demand services;
- Enhanced transit and price facility models; and
- Dynamic network modeling.

Expedited Project Delivery

As regional roadway and freight/passenger rail projects continue to increase in complexity, scope, and impacts, the MPO has expanded its involvement to help improve project delivery in the region. In FY2022 and FY2023, NCTCOG will continue providing technical assistance for local, regional, State, and federal partners to expedite the environmental clearance and implementation of major transportation projects, particularly those that deal with multiple transportation modes concurrently.

Coordination of Transportation and Environmental Planning Processes

Environmental stewardship in transportation is a key emphasis of the Fixing America's Surface Transportation (FAST) Act and is reflected through NCTCOG's efforts to improve coordination between the long-range transportation planning and conservation planning processes. These efforts are intended to achieve benefits by incorporating environmental and community values into transportation decisions early in the planning process and identify strategies to carry these considerations through project development, design, construction, and operations. By reviewing potential environmental impacts earlier in the transportation planning process, NCTCOG can

promote a more efficient decision-making process that minimizes duplication of effort, promotes environmental stewardship, and reduces delays in project implementation. In FY2022 and FY2023, NCTCOG will consult with resource agencies and stakeholders to identify key environmental issues (related to both the natural and built environs), identify mitigation strategies for transportation impacts, and build partnerships with external entities aimed at environmental stewardship.

Bicycle and Pedestrian Planning

The Bicycle and Pedestrian Program provides technical assistance for the development of bicycle and pedestrian plans and facilities to local governments throughout the Dallas-Fort Worth Metropolitan Area. The program will provide safety and education outreach materials to the public and interested parties and assist with data and mapping. The Regional Veloweb and other maps included in the Metropolitan Transportation Plan will be maintained and updated. In addition, a comprehensive, regionwide approach for planning and implementing additional bicycle and pedestrian facilities across the region will be used to guide local governments in future planning efforts.

Transit Planning and Implementation

Public transportation is no longer just considered traditional rail and bus modes. Today's commuting trends include high intensity bus, meaning higher levels of service with a guaranteed travel time, as well as people movers, intercity bus, transportation network companies, micro-transit opportunities, on-demand technology, and emerging modes under the umbrella concept of mobility as a service. Various issues restrict commuter rail from being implemented along Class I railroad corridors including the ability for transit agencies to obtain rail liability insurance as the market continues to narrow. Planning in this area is ongoing and will continue in FY2022 and

FY2023 to ensure that technology and freight corridors are part of the solution in how public transportation is implemented in the Dallas-Fort Worth area.

Transportation Asset Management

Transportation facilities throughout the region will experience increasing deterioration over time due to usage, age, damage from accidents, and changes in various environmental conditions. With limited dollars available for system expansion and reconstruction, limitation on available right-of-way, and growing concerns regarding the environmental mitigation of major transportation improvements, this emphasis area of Transportation Asset Management will focus on identifying strategies to extend the operational life of transportation facilities by promoting the use of strategic maintenance, repair, sustainability, and expansion in transportation corridors. While it is anticipated that substantial costs savings can be achieved or costs deferred, the complexity of this approach will require a high degree of cooperation among the region's transportation partners.

Regional Freight Planning

Dallas-Fort Worth is the largest Metropolitan Area of the United States without direct access to a seaport. As a result, a much greater burden is placed on the rail, trucking, and aviation modes for the shipment of commodities to, from, and through the area. NCTCOG will continue to implement the recommendations of Freight North Texas and other documents that have been completed. This emphasis area will build on previous work to address the impact of truck traffic, rail freight, and other freight movement issues in and throughout the region. An exciting new technology will also be developed and implemented to monitor and coordinate freight and passenger rail train movements throughout the region.

Safety and Security in the Transportation Planning Process

Safety and security of the transportation system is a national priority and an emphasis of the FAST Act. Data collection, analysis, training, education, and enforcement are key aspects of improving transportation system safety and security. The FY2022 and FY2023 UPWP includes activities intended to reduce injuries and fatalities, improve overall system security, and reduce incident clearance times on freeways and tollways.

Management and Operations

Since the RTC began funding of Management and Operations initiatives in 1999, the MPO's role in this area has continued to expand. These projects address the need for reducing traffic congestion and improving air quality and safety, while focusing on using existing resources more efficiently to address regional transportation needs. A continued emphasis of NCTCOG staff in FY2022 and FY2023 will be on the implementation of the Management and Operations initiatives.

High-Speed Rail and Hyperloop

As metropolitan regions in Texas continue to grow and highways between regions become increasingly congested, alternative modes of transportation will be needed to facilitate the movement of people and goods around the state. Planning efforts for technology such as high-speed rail and hyperloop (a passenger pod transported in a low-pressure tube system) are underway, both within Dallas-Fort Worth and connecting to other regions and will continue in FY2022 and FY2023.

Unmanned Aircraft Systems

The use of unmanned aircraft systems (UAS) is growing, both for commercial and recreational purposes. There is great potential for UAS to provide services such as package delivery, bridge and pavement inspections, and personal mobility, and NCTCOG will work to assist in the

integration of UAS into existing airspace and with surface transportation. An additional focus will be on planning to reduce reckless use of UAS that could create a safety concern. The UAS Safety and Integration Task Force will assist NCTCOG staff in this area during FY2022 and FY2023.

Connected and Automated Vehicle Technology

There is a substantial level of interest in automated vehicles and the potential impacts of this technology on the transportation system. Activities in FY2022 and FY2023 will identify the preferred vehicle technology for various regional applications, including passenger and freight movements; will develop infrastructure guidelines for implementation; will explore inductive charging capabilities; and will continue to evaluate potential locations throughout the region for implementation, while progressing project development for certain pilot projects. In addition, in early FY2021, NCTCOG kicked off its AV2.1 regional planning project, a comprehensive regional planning exercise designed to prepare the DFW region for connected and automated vehicles and related technologies. Staff will provide technical planning assistance to project teams that are implementing automated vehicle deployments under the AV2.2/2.3 program.

Military-Community Planning

A major economic generator in the Dallas-Fort Worth region is military and defense spending, anchored by Naval Air Station (NAS) Joint Reserve Base (JRB), Fort Worth, but also includes several Texas Military Department installations and ancillary facilities. The US Department of Defense funds compatible use efforts with the goals of helping communities grow in a way that preserves the military mission while also enhances quality of life for surrounding communities that may be impacted by the military installations. The Regional Coordination Committee is a group of elected and appointed officials around NAS JRB Fort Worth that meet regularly to discuss compatible use efforts. During FY2022 and FY2023, work will continue to administer the Regional

Coordination Committee and implement recommendations from a recent study of military installations in the region.

Funding and Technical Assistance Policies

As part of the FY2022 and FY2023 UPWP approval process, the Regional Transportation Council and the North Central Texas Council of Governments Executive Board reaffirmed the policies shown in Exhibit I-8 to guide the allocation of transportation planning funds.

Metropolitan Planning Organization Staff Organization

To conduct this comprehensive, multimodal transportation and air quality planning process, the NCTCOG Transportation Department, serving as the staff of the Metropolitan Planning Organization, is organized into functional areas as shown in Exhibit I-9. Each of these functional areas is assigned staff in areas of expertise, skill, and specialization to best facilitate its needs. Program Managers oversee the activities in these areas and serve as the principal points of contact with the public, local governments, and transportation agencies.

EXHIBIT I-8
Unified Planning Work Program Policies

- The emphasis of the Unified Planning Work Program (UPWP) is on planning activities. Projects that require preliminary engineering or design services are not eligible for UPWP Transportation Planning Funds. Such projects should be funded through the Transportation Improvement Program process.
- Twenty-five percent of Federal Transit Administration Section 5303 Planning Funds will be reserved for transit planning and management studies with the funds distributed to the Eastern and Western Subregions based on the formula used for the annual sub-allocation of Transit Formula (5307) Program funds.
- The Texas Department of Transportation (TxDOT) will assist the North Central Texas Council of Governments (NCTCOG) in funding activities related to the preparation of travel forecasts to support TxDOT freeway and high-occupancy vehicle lane studies.
- The North Texas Tollway Authority (NTTA) will assist NCTCOG in funding activities related to the preparation of travel forecasts to support NTTA feasibility studies.
- The transportation authorities will assist NCTCOG in funding activities related to the preparation of travel forecasts to support rail and high-occupancy vehicle lane studies.
- Assistance in Transportation Subarea Studies, Comprehensive/Thoroughfare Planning, Local Technical Assistance, and TransCAD Support will represent approximately 20 percent of the UPWP. Priority will be given to these subtasks identified in the UPWP.
- NCTCOG assistance to local governments in Thoroughfare Planning will be limited to providing travel forecasts to determine facility sizing and lane warrants, in Comprehensive Planning to providing travel forecasts and technical support, in Bicycle/Pedestrian Planning to providing technical guidance on plan and facility development, and in Travel Model Support (TransCAD) to providing model input data and application support. Local governments will be responsible for consultant assistance funding.
- For projects not specified in the UPWP, the requesting entity may be asked to assist in project funding. Scheduling of the planning study is contingent on NCTCOG staff availability. Reprioritization of tasks for that entity using existing commitments in the UPWP is feasible. Work will not be done at the expense of other commitments in the UPWP.
- Entities with consultants requesting work from NCTCOG must follow the same policy as above. Consultants working for an entity need the approval of that entity prior to NCTCOG providing assistance. Consultants shall not commit NCTCOG services without NCTCOG's prior approval.
- Requests by nongovernmental entities will be conducted at full cost upon approval from the impacted local government and permitting staff availability.
- In the event that a requested planning study is similar to a previous study conducted by NCTCOG, the participating entity may be asked to provide financial support for the project.
- Surface Transportation Block Grant Program funds, Congestion Mitigation and Air Quality Improvement Program funds, Regional Toll Revenue funds, and Regional Transportation Council Local funds may be used by NCTCOG to augment UPWP funds.

EXHIBIT I-9
NCTCOG Transportation Functional Areas

Air Quality Technical Planning and Analysis
Automated Vehicle Program
Aviation
Bicycle/Pedestrian Planning
Clean Fleet Improvements and Energy
Congestion Management
Data Development
Data Management
Defense Planning
Fiscal Management
Freight Planning
Innovative Project Delivery
Legal Services
Metropolitan Transportation Plan
Program Administration
Public Involvement and Government Relations
Roadway Corridor and Subarea Studies
Safety
Streamlined Project Delivery
Sustainable Development
Transit Operations
Transit-Oriented Development
Transit Planning
Transportation Asset Management
Transportation Education and Outreach
Transportation Project Programming
Travel Model Development

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II. Task 1 – Administration and Management

A. Objective

Coordination, communication, and management tasks essential to maintaining the planning process are included in Administration and Management. The preparation and circulation of information relevant to regional transportation policy are major components of this task. Current legislation, the Fixing America's Surface Transportation Act, places emphasis on public involvement in the metropolitan transportation planning process, including Metropolitan Transportation Plan and Transportation Improvement Program development, which is addressed in this Work Program area. Appendix G contains the Public Participation Plan, which includes a summary of ongoing public outreach activities, many of which are funded through this task, as are the outreach efforts to ensure compliance with Title VI of the 1964 Civil Rights Act.

Publication of *Regional Mobility Initiatives*, an educational report series begun in Fiscal Year (FY) 1996 aimed at informing the public about the ongoing transportation planning activities and air quality programs of the Metropolitan Transportation Organization (MPO), is anticipated to continue in FY2022 and FY2023, as is the publication of *Progress North Texas*, the department's annual state-of-the-region report. Various other public information documents are also published under this Work Program task. Activities also include efforts to market and promote the various transportation and air quality improvement programs and engage the region, as well as development and maintenance of web resources for efficient dissemination of electronic information.



Development and maintenance of the Unified Planning Work Program (UPWP) and annual reports documenting MPO work performance and project expenditures, as well as support to the Regional Transportation Council (RTC), the North Central Texas Council of Governments' (NCTCOG) Executive Board, and associated technical committees are also components of this task.

Overall direction of planning activities is included in this task, together with necessary grant administration functions, including personnel management and training, purchasing, risk assessment, contract development, auditing, and internal legal services. Also included is management of computer resources and computer hardware requests necessary for transportation planning at the local level, as well as coordination activities related to the use of Geographic Information System technologies and aerial photography to support planning efforts. Management of the University Partnership Program, which draws upon the State's academic institutions to assist MPO staff in addressing transportation and air quality planning initiatives in North Central Texas, is also included in this Work Program task.

Although not a requirement in the UPWP, management and operations projects that are being managed or carried out by MPO staff are included in the document, in addition to planning activities. These projects are included in order to provide a more complete inventory of staff activities. These implementation projects or programs are aimed at reducing congestion and improving air quality in the Dallas-Fort Worth Metropolitan Area. Included in Task 1 are staff activities to coordinate, administer, and oversee these transportation and air quality initiatives.

B. Expected Products

Products from this task are those items needed to conduct the day-to-day operations of NCTCOG's Transportation Department in facilitating a continuous, cooperative, and

comprehensive regional transportation planning process for the Dallas-Fort Worth Metropolitan Area. Committee meetings, correspondence, progress reports, financial summaries, agreements, publications, and the various documentation needed to support this process are included in this task. Specific products are included in the subtask descriptions.

C. Previous Work

Routine Work Efforts – During FY2020 and FY2021, daily operations of NCTCOG's Transportation Department were supported by efforts within the areas of public outreach, program administration and office management, grant and contract management, internal legal services, and computer systems management. These efforts will carry on throughout FY2022 and FY2023. Staff supported monthly policy and technical committee meetings, which included the provision of notices, agendas, minutes, and supporting materials, and responded to requests for additional information as needed. Policy and technical committees, along with other transportation partners, were also kept updated on federal and State legislative initiatives and priorities relevant to MPO functions, and NCTCOG staff continued to serve as a liaison to legislative and congressional offices requesting information.

Communication and outreach efforts continued to inform and involve the public before and during the COVID-19 pandemic, including 3 public meetings, more than 12 on-line input opportunities, 3 community events, an active presence on 4 social media platforms, regular publications, and proactive media outreach efforts to more than 200 reporters at local media outlets. Enhanced regional understanding of the work done to improve transportation and air quality through publication of print and online versions of *Progress North Texas*, the Transportation State of the Region annual report, widely distributed to residents, businesses, civic groups and elected officials to encourage active participation in the transportation planning process.

Legal staff worked on innovative funding agreements to memorialize RTC-approved funding strategies, including agreements related to Klyde Warren Park Expansion, City of North Richland Hills Landbanking, City of Fort Worth Trinity River Bridges Funding Partnership, Fort Worth Multi-Modal Improvements Projects, Collin Creek Mall Redevelopment/Parking Garage Project, Old Weatherford Road/Aledo ISD Funding Partnership, Weatherford Outer Loop Funding Partnership, SH 183 Segment 2 Design Financial Backstop, and SH 360 South Financial Backstop Termination.

Five amendments to the FY2020 and FY2021 UPWP were processed and received NCTCOG committee, State, and federal funding agency approvals. A sixth amendment was initiated, made available to the public for comment, presented to NCTCOG's policy and technical committees for approval, and submitted to the Texas Department of Transportation (TxDOT) for review. The FY2022 and FY2023 UPWP was developed, made available to the public for comment, presented to NCTCOG's policy and technical committees for approval, and provided to State and federal funding partners for final approvals. Accounting support for transportation projects and the department's annual budget preparation and monitoring was also provided. Policy and institutional discussions were coordinated between the Texas Transportation Commission, the Texas Department of Transportation, and the Regional Transportation Council. NCTCOG staff continued to support the Texas Association of Metropolitan Planning Organizations, and the national Association of Metropolitan Planning Organizations. Administration of the University Partnership Program continued.

Efforts to maintain, protect, and enhance computer resources such as computer deployment, software installations and updates, and inventory documentation, supported the entire department. Web applications and resources on the internet and intranet were created, maintained, and modernized. Staff performed the activities of website management, strategic

development coordination, training, auditing, and technical assistance in support of departmental projects and priorities. Technical assistance with Geographic Information System (GIS) data analysis and mapping was provided. The GIS Strategic Plan was developed, and the GIS transportation database maintained. Aerial photography was processed and distributed by NCTCOG's Research and Information Services Department and made available internally to all NCTCOG departments and delivered to each TxDOT district within the Metropolitan Planning Area boundary.

D. Subtasks

1.01 Community Outreach

This annual Work Program subtask will be conducted in FY2022 and FY2023 and includes staff activities in support of NCTCOG's Transportation public involvement, outreach, and education program; monitoring of the regional transportation system performance and reliability; business community outreach; legislative outreach; internet/intranet outreach and support improvements; and public education campaigns and services to support transportation and air quality programs/policies. Communications outreach tools such as stock images, video subscriptions for music beds, video hosting and editing platforms, survey tools, a digital asset management tool to store and tag photos and videos, communications campaign analysis software, and an email campaign subscription are included in a cost allocation plan. Costs are allocated to all projects, including projects funded with Transportation Planning Funds and other funding sources. These costs are included in the funding summaries for each Task. Efforts described below include activities that may be excluded from the cost allocation plan and charged directly to the funding sources identified.

Public Involvement, Publications, and Legislative Support

Transportation Planning Funds

Staff will appear regularly at community and business events to discuss transportation and air quality matters. Efforts to ensure full and fair participation in the transportation decision-making process consistent with Title VI and Environmental Justice principles are implemented through a Public Participation Plan. Anticipated products include:

- Regular opportunities, including public meetings, online opportunities, stakeholder engagement, a virtual public engagement platform, and listening sessions, among others, for North Texans to learn about and provide input on transportation and air quality plans, programs, and policies;
- Summaries of public input provided to the Regional Transportation Council (RTC);
- Appearances at neighborhood meetings, professional association meetings, business community/chamber of commerce meetings, and other events;

- Dynamic outreach and communications plans to continually enhance public involvement;
- Enhanced multimedia and social media presence;
- Communications through email services on transportation planning projects as well as other projects supported through the Unified Planning Work Program (UPWP);
- Press releases and other media relations activities;
- Department newsletters including Local Motion and Mobility Matters, among others;
- Progress North Texas state-of-the-region report and other reports and brochures;
- Contributions to agency newsletters;
- Communications pieces that explain the transportation planning process and opportunities to provide input;
- Summaries of activity in the Legislature and Congress relating to Metropolitan Planning Organization functions;
- Legislative testimony as a resource witness;
- RTC State and federal legislative programs; and
- Regular updates to policy and technical committee members on legislative initiatives related to RTC priorities.

Other Funding Sources

NCTCOG local funds will be utilized to support activities that are not eligible for federal reimbursement. Such items may include:

- Meal expenses;
- Travel expenses; and
- Special meetings with State or federal elected officials.

Internet/Intranet Outreach and Support

Transportation Planning Funds

This element is ongoing throughout both FY2022 and FY2023, providing technical support for regional committees, public information and participation efforts and the transportation planning process. This includes the ongoing creation, maintenance and modernization of Web resources presented externally and internally on the Internet/Intranet sites. Anticipated products include:

- Website assessment and improvement of visual architecture, accessibility, and usability;
- Website edits, updates, and maintenance;
- Website content development, including articles, public information resources and program area updates;
- Websites and applications available on the most common browsers and an improving mobile experience;
- Web pages and applications audited and reviewed for internal standards/branding and security (QA/QC);
- Web page performance reports, including analytic assistance;
- Web application development and support;
- Standards for search engine optimization;
- Software upgrades, including evaluation and migration of web assets and content to new Kentico content management platform;
- Microsoft ERP: CRM and SharePoint Online D365 development/administration; and
- Internal training opportunities.

Transportation and Air Quality Education and Outreach

Other Funding Sources

The North Central Texas Council of Governments (NCTCOG) will continue to implement strategic communications efforts to educate and inform the region on transportation- and air quality-related issues, including improvement strategies, funding opportunities, training initiatives, and new programs/policies. Major efforts will focus on transportation and air quality education, outreach, and engagement programs. This work element will be supported through Surface Transportation Block Grant Program funds, Congestion Mitigation and Air Quality Improvement Program funds, and Transportation Development Credits. Paid media will be utilized when needed. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Regional air quality and transportation campaigns (including Air North Texas and other efforts that support transportation and air quality improvement strategies) utilizing communication strategies including, but not limited to, website/web pages, paid education campaigns, social and electronic media, videos, photography, email and blog updates, air pollution alerts, flyers, brochures, and outreach and associated displays;
- Integrated campaign resources for use by local governments, the business community, education institutions, and other stakeholders/interested parties;
- Communication and education/outreach services for local governments, as well as other NCTCOG Transportation Department programs/campaigns;
- Procurement, inventory, and distribution of educational items;
- Performance measure strategies and analytics for transportation and air quality communication initiatives;
- Regional growth of overall efforts through regular meetings and conference calls with the Air North Texas Coalition, stakeholder groups, and other partners including State, federal, and local interest groups about the campaign and other air quality education initiatives;
- New partner recruitment for transportation and air quality campaigns; and
- Partner recognition for work on programs, such as Air North Texas.

1.02 Program and Policy Administration

Management and administrative activities conducted by the MPO staff support operations of the NCTCOG Transportation Department and implementation of all projects. Activities such as development, monitoring, and coordination of the Unified Planning Work Program and necessary modifications; preparation of the Annual Performance and Expenditure Report; personnel and recruitment support; risk assessment; process development; committee support; legal review of agreements and policies; provision of furniture and consumable supplies for staff; and general office management are included in a cost allocation plan. Costs are allocated to all projects, including projects funded with Transportation Planning funds and other funding sources. These costs are included in the funding summaries for each Task. Program administration efforts described below include activities that may be excluded from the cost allocation plan and charged directly to the funding sources identified.

Program Administration

Transportation Planning Funds

This element includes management and administrative activities that directly support the NCTCOG Transportation Department's role as the Metropolitan Planning Organization and fulfillment of responsibilities outlined in regulations governing the administration of Federal Highway Administration Transportation Planning Funds. This element is ongoing throughout Fiscal Years 2022 and 2023 and includes participation in and support for the Association of Metropolitan Planning Organizations (AMPO), the Texas Metropolitan Planning Organization (TEMPO), and the Transportation Research Board (TRB). Additionally, this subtask includes oversight and coordination of the NCTCOG University Partnership Program. Consultant assistance may be utilized to assist with this element. Anticipated products include:

- NCTCOG representation at AMPO and TEMPO meetings;
- NCTCOG management participation in the TRB annual meeting and other conferences and professional development opportunities;
- Hosting and provision of training opportunities for local government, transportation providers, and/or planning agency staff;
- Appropriate office accommodations for staff and guests, including provision of consumable supplies, furniture, and leasehold improvements;
- Project topics for participation in the University Partnership Program;
- Assistance to the Texas Transportation Commission, as requested;
- Participation on and support for special task forces;
- Video/web hosting services; and
- Eligible and accurate billings within identified budgets.

Other Funding Sources

NCTCOG local, Regional Transportation Council Local, and other local funds will be utilized to support activities in Program Administration that may not be eligible for federal reimbursement. Such items may include, but are not limited to:

- Small stipend and travel expenses for a minority student and supporting professor to attend annual TRB meeting to represent work conducted on behalf of NCTCOG under the TRB Minority Student Fellowship Program partnership;
- Meal expenses;
- Individual staff memberships in professional organizations;
- Service awards;
- Travel expenses for foreign applicants;
- Legal and application filing fees for foreign employees;
- Audio/video expenses (i.e., equipment, updates, and maintenance) in the Transportation Council Room;
- Furniture;
- Consumable supplies;
- Travel expenses; and
- Other special projects.

Policy and Project Coordination

Other Funding Sources

This element will be ongoing throughout both FY2022 and FY2023, providing contract management and legal support. Among these activities is staff legal assistance relative to coordination for Regional Transportation Council policies and projects, enhancements of resources and compliance mechanisms related to the Disadvantaged Business Enterprise (DBE) Program, outreach to the vendor community to raise awareness of the DBE program, and development of new partnerships with regional and State certification agencies. Surface Transportation Block Grant Program funds, supported by Transportation Development Credits, will be used for this effort. Anticipated products include:

- Assistance to the Texas Department of Transportation, as requested;
- Participation on and support for special task forces;
- Identification of federal and State laws to support policy decisions;
- Review of associated Transportation funding and other associated policies;
- Education, outreach, events, and workshops with potential bidders/consultants, including partnerships with various contracting associations;
- Website content updates, including traditional and new media tutorials for potential bidders/consultants;
- Collaboration and new partnerships with regional and State DBE certification agencies, such as the North Central Texas Regional Certification Agency.

1.03 Fiscal Management and Information Systems

The North Central Texas Council of Governments staff continues to support diverse programs, providing opportunity to facilitate projects with unique and innovative funding methodologies. This subtask includes work activities and strategies to enable effective fiscal coordination and streamlined accounting. Some fiscal management and information systems activities, such as accounting support for Transportation projects; enhancement of procedures; development of financial management tools; compilation, assessment, and coordination of the NCTCOG Transportation Department annual budget; and financial assessment, monitoring, and reporting, are included in a cost allocation plan. These costs are included in the funding summaries for each Task. The fiscal-related activities described below may be excluded from the cost allocation plan and charged directly to the funding sources identified.

Local Funding Commitments

Other Funding Sources

During FY2022 and FY2023 NCTCOG local, Regional Transportation Council Local, and other local funds will be utilized to support certain fiscal processes and fulfill financial commitments. Such items may include:

- Local match to support TxDOT Direct State Costs for State-administered projects; and
- Other costs to supplement project implementation.

Innovative Transportation Financing Strategies

Other Funding Sources

Ongoing throughout FY2022 and FY2023, activities under this work program element explore innovative transportation financing and funding strategies as authorized by State and federal law. Innovative funding tools allow for enhanced flexibility in meeting critical transportation needs. The Regional Transportation Council, in partnership with transportation providers in the Dallas-Fort Worth area, is pursuing many of these strategies including the use of innovative public and private partnerships, State Infrastructure Bank loans, Transportation Infrastructure Financing and Innovation Act loans, tax increment financing, transportation reinvestment zones, and value capture mechanisms through municipal land-use authority. In addition, staff will explore the institutional structures, partnerships, and agreements necessary to leverage these innovative financing and funding tools in the Dallas-Fort Worth region. Lastly, staff will continue to monitor and track existing and proposed innovative financing partnerships and funding. Regional Toll Revenue funds will support work activities. Anticipated products include:

- Innovative finance policies and strategies;
- Assessments of State and federal legal authority;
- Development of funding partnership agreements; and,
- Presentations and informational materials.

1.04 Computer System Applications and Data Management

The overall goal of this subtask is to provide NCTCOG staff with the tools and technical support needed to complete work tasks in an efficient and timely manner. Computer resource management activities are conducted by the MPO staff in support operations of the NCTCOG Transportation Department and implementation of all projects. Activities such as planning for, monitoring, and coordinating computer and software replacements and upgrades, as well as various audio/video, computer and computer-related staff support and system maintenance functions are included in a cost allocation plan. Costs are allocated to all projects, including projects funded with Transportation Planning Funds and other funding sources. These costs are included in the funding summaries for each Task. Efforts described below include activities that may be excluded from the cost allocation plan and charged directly to the funding sources identified.

Computer Resource Management and Equipment Purchases

Transportation Planning Funds

This subtask is ongoing throughout FY2022 and FY2023 and includes the purchase or lease of computer equipment such as software and associated maintenance/support, licenses, and application subscriptions to support NCTCOG department staff in the fulfillment of their job responsibilities. A list of equipment and software purchases/leases anticipated to be obtained during the time period of this Work Program, including the identified funding sources, is provided as Exhibit VIII-3 in Chapter VIII, Overview of Work Program Funding. Equipment and software purchases over \$5,000 per unit that are being obtained with Transportation Planning Funds

require prior State and federal approval. Consultant assistance may be pursued to assist with this task. Anticipated products include:

- Software licenses;
- New and upgraded software and associated maintenance/support;
- Video equipment and supplies;
- Air cards;
- Application subscriptions; and
- Associated equipment necessary to support activities.

Other Funding Sources

Regional Transportation Council Local funds will be utilized to purchase or lease computer systems and related equipment/hardware that may not be eligible for federal reimbursement. Such items may include, but are not limited to:

- Desktop, portable and tablet computers (i.e., replacement of computers that are out of warranty and new computers to support staff needs);
- Monitors/televisions;
- Printers and scanners;
- Audio/video equipment, and updates, and maintenance for the Transportation meeting rooms
- Voice-Over-Internet-Protocol phone devices; and
- Associated equipment necessary to support activities.

Database and Geographic Information Systems Management

Transportation Planning Funds

This element is ongoing throughout both FY2022 and FY2023 among efforts to inventory, develop, maintain, consolidate, and optimize the numerous internal and external data sources, hardware/software tools, and various computer or web-based applications critical for the comprehensive processing of NCTCOG transportation projects, programs, and stakeholder services. This includes the management, coordination, and more effective utilization of Geographic Information System (GIS) technologies, due not just to the spatial references tied to most databases relevant to transportation-related activities and effects, but also to their potential for increased visualization, communication, and performance tracking opportunities. This work will support the establishment of seamless multi-disciplinary linkages, improved productivity and analysis capabilities, expanded venues for public/agency interaction and consumption, and enhanced inter-relationships in identifying, tracking, and reporting on transportation needs, impacts, and outcomes. These objectives will be accomplished through extensive investigations, collaboration, training, and technical development among Transportation Department program areas, other NCTCOG departments, and external partnering agencies.

Resulting databases and applications will integrate the following information, including, but not limited to:

- Transportation Improvement Program (TIP) projects and programs;
- Metropolitan Transportation Plan (MTP) projects and programs;
- Multi-modal transportation networks and attributes (roadway, rail, bicycle/pedestrian, etc.);

- Infrastructure support systems/operations networks and attributes;
- NCTCOG Travel Demand Model attributes and outputs;
- National Environmental Policy Act (NEPA) effects and constraints;
- Safety, security, and sustainability qualities;
- Demographic and environmental justice properties; and
- GIS features and outputs.

Anticipated products include:

- Multi-variate databases and application tools, including GIS datasets and maps;
- Online data and GIS services;
- GIS and database management training;
- Technical templates, manuals, and protocols for data coding, storage, manipulation, linkages, and visualization;
- Data collection, quality control/assurance processes, and analysis services;
- Open-source and/or web-based information sharing; and
- Performance measure/target tracking and reporting.

Regional Digital Aerial Imagery

Other Funding Sources

During FY2022 and FY2023, this project will obtain high-resolution color digital imagery for areas of North Central Texas. The aerial photography and Light Detection and Ranging (LiDAR) imagery obtained will be high-resolution and geocoded with high-accuracy Global Positioning System coordinates (latitude, longitude, and elevation). The digital imagery will align with industry-accepted procedures and standards, and image accuracy will be ensured through ground control and surface integration. The resulting imagery will be used for a wide variety of planning purposes, including improvements to travel demand modeling, corridor alignment planning and engineering analysis (including for the Regional Outer Loop), watershed hydrology modeling, environmental support, and tracking for changes in population/employment, land uses, and impervious surface cover. This work will be supported through Surface Transportation Block Grant Program funds and Texas Department of Transportation funds. Anticipated products include:

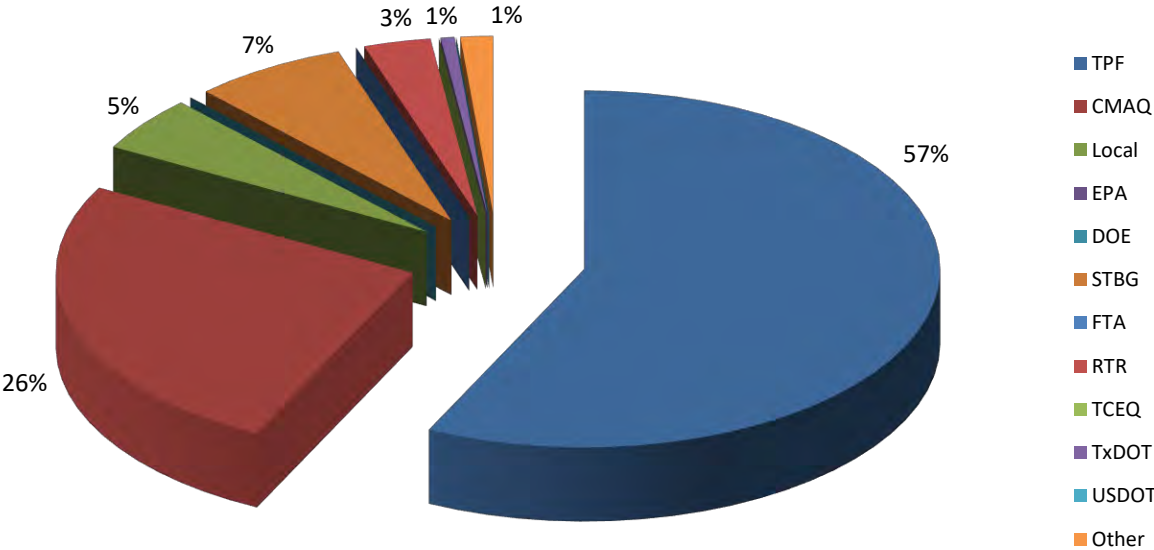
- Digital aerial imagery for use in a wide variety of planning purposes.

E. Funding Summary

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
1.01	\$4,384,900	\$2,503,200	CMAQ	
		\$4,000	NCTCOG Local	
		\$245,000	STBG	
Subtotal				\$7,137,100
1.02	\$561,600	\$183,900	Local	
		\$119,800	NCTCOG Local	
		\$189,300	STBG	
Subtotal				\$1,054,600
1.03		\$6,000	Local	
		\$20,000	NCTCOG Local	
		\$295,600	RTR	
Subtotal				\$321,600
1.04	\$615,900	\$243,000	STBG	
		\$295,800	Local	
		\$60,750	TXDOT	
Subtotal				\$1,215,450
Total	\$5,562,400	\$4,166,350		\$9,728,750

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor person hours, they are not reflected in the funding tables.

Task 1.0 Funding Summary



III. Task 2 – Transportation Data Development and Maintenance

A. Objective

The objective of this task is to produce analytical tools to support transportation planning, air quality conformity, congestion management, and transportation project studies, and to provide technical assistance to local governments for demographic and travel forecasting. The activities in this task also intend to make the analytical tools available to wider groups of potential users such as the general public and other local entities.

Analytical tools include forecasting models and the compilation of data from different sources. These data sources are associated to a wide variety of aspects that include transportation demand, infrastructure, land use, population, and employment, among others. The tasks performed include development of simulation tools used in forecasting and the dissemination of results and data. The results from forecast models are used in the decision-making process associated to current and future investments. These models are built based on the data sources and are sensitive to the planning policies under consideration.

The data sources cover a wide range of system and user data. The system data has two components: 1) data collected about usage of the transportation system such as traffic counts, delay, congestion, location of signals, transit boarding, high-occupancy vehicles, travel time, and truck volumes; and 2) geographically referenced information such as physical and political boundaries, roadway network, Census data, and aerial photography. The user data encompasses items that are associated with the demand for the existing transportation system which are often obtained through interviews and surveys. These surveys intend to capture trip characteristics data such as travel pattern of the residents, mode of travel in the region, time of travel, travel demand

for businesses, and truck demand by establishment type. The data inventory for both of these components is a major part of this task.

There are two major sets of forecasting models as part of this task. The first set corresponds to transportation models that encompass the majority of the modeling activities which are mainly associated to long-range planning, but that can also be useful in some short-range planning practices, detailed analysis, and operational studies.

The second set of models is those related to the demographic forecasting process. The main output of these models is the geographically referenced demographic forecast that is used in long-range planning and air quality conformity. These models can also provide intermediate and short-range demographic data for staging the long-range plan and for the determination of air quality emission budgets.

Other activities in this task also cover the maintenance, training, dissemination of data, and model products for application by specific analyses that include programming, website creation, and database implementation; the required management and maintenance of these products is also considered.

B. Expected Products

The products of this task include a set of computer application programs, training material, databases, reports, and websites that enable the North Central Texas Council of Governments (NCTCOG) staff, member agencies, local governments, consultants, and the general public to review transportation studies. To provide meaningful information for the public, the websites are designed to be intuitive and simple to use, allowing access to large and detailed datasets. Specific products from each subtask are provided in the following descriptions.

C. Previous Work

Routine Work Efforts – The collection and preparation of data, development of analysis tools, tool and program training, and database maintenance are ongoing activities in Task 2. These efforts will continue in Fiscal Year (FY) 2022 and FY2023. The regional travel demand model served as a resource for numerous activities conducted by staff and by partner agencies, including the Metropolitan Transportation Plan, the Transportation Improvement Program, and transit agency planning, among others. The model was maintained operationally, and technical support was provided for users. Maintenance and technical support of databases for performance measures, traffic counts, and speed data continued. A next generation regional travel model was developed and made available to NCTCOG Transportation staff. Notable elements and surveys for Transportation Data Development and Maintenance are listed in the table below.

Non-Routine Work Efforts – The status of significant or one-time work efforts contained in Task 2 is provided in the table below.

Project	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Next Generation of the Regional Travel Model	A 2014 validation of roadway and transit was performed. A presentation of the model and user training was provided to users.	Multiyear project	N/A
Dallas-Fort Worth Regional Travel Model for the Expanded Area	Maintained the travel model application components and programs. Maintained DFX application version library and preserved model runs in archive. Provided internal and external user support.	Multiyear project	N/A
Household Travel Survey	Initial analysis of the National Highway Transit System 2017 data has been performed.	Multiyear project	2022

Project	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Innovative Data Collection Method and Data Analytics	Reviewed commercial data sources for travel and traffic data. Coordinated efforts with Texas A&M Transportation Institute for data source suitability investigation.	Multiyear project	2023
Transit Travel Survey	Coordinated with transit agencies for transit travel survey effort. Data collection effort began but was halted due to the COVID-19 pandemic. Began coordination for a supplemental Dallas Area Rapid Transit Fare Equity survey.	Multiyear project – data collection for the full survey will resume when regular travel patterns return in the region.	2023
Supplemental Transit Surveys	Work has not begun on this project due to the COVID-19 pandemic. The need for this project is being evaluated.	Multiyear project	N/A
Improving Behavioral Estimation of Origin-Destination Matrix Estimation	The University Partnership Program project was completed in FY2021. The final report has been received.	N/A	Complete
Toll Road User Survey	The literature review, study plan, and request for proposals was completed for the limited access facility user survey.	Multiyear project	2023
Sketch Planning Tool for Transit Ridership Estimation	The Transit Ridership Estimator project was completed in FY2021.	N/A	Complete
Travel Model Network Development and Maintenance	Maintained travel model networks for use in transportation studies. Continued update of a current year reference network.	Multiyear project	N/A
Integration of Data	643 new locations and 6.9 million records were added to the traffic count database.	Multiyear project	N/A
Dissemination of Data	The new traffic counts webpage was launched in January 2020.	Multiyear project	N/A
Analysis of Data	The seasonal and weekday traffic counts factors were calculated for Air Quality Conformity.	Multiyear project	

Project	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
D-STOP in the Dallas-Fort Worth Area	As part of the University Partnership Program, the project on Travel Modelling in an Era of Connected and Automated Transportation Systems concluded. The evaluation and prediction of traffic flows in Year 2045 under three scenarios was completed.	N/A	Complete
Inventory of Land Use and Demographic Data	Sub-county estimates of households, and population and employment for 2000, 2005, 2010, and 2015 were completed.	N/A	Complete
Development of a Regional Land Use and Demographic Model	Regional Land Use and Demographic Model built and validated.	N/A	Complete
Participant Statistical Area Program	Census 2020 Block Groups, Tracts, Census Designated Places, and Census County Divisions were reviewed, modified, and validated through discussions with the Census Bureau and in coordination with local stakeholders.	N/A	Complete

D. Subtasks

2.01 Travel Forecasting Support

The purpose of this subtask is to provide analytical tools for travel forecasting within the Metropolitan Planning Area (MPA). The regional travel model includes Hill County in addition to the 12 counties that comprise the MPA due to the fact that the southern split of IH 35 is located within the boundary of Hill County and because of the impact that the IH 35 facility has on transportation planning within the MPA. The forecasting tool set includes various arrays of data, mathematical models, computer programs, and information system products. These tools are used in essential functions of the Metropolitan Planning Organization. These functions include the long-range metropolitan transportation plan, transportation improvement program, congestion management process, safety and security program, air quality conformity analysis, roadway and transit alternative analyses, subarea studies, thoroughfare planning, environmental statements, and technical assistance to local public agencies. This subtask is closely complemented by Subtasks 2.02 and 2.03, which are related to data management and demographic forecasting, respectively. The components of this subtask are described below.

Dallas-Fort Worth Regional Travel Model for the Expanded Area

Transportation Planning Funds

This component covers activities related to the maintenance of the Dallas-Fort Worth Regional Travel Model for the Expanded Area (DFX). DFX is a collection of computer program software applications, training materials, and documents used by transportation analysts for planning the projects and policies in the region; this regional travel model was originally developed in 2009. With the release of the Transportation Analytical Forecasting Tool (previously referred to as the Next Generation Regional Travel Model) in FY2020, DFX will not be the primary model used in the Dallas-Fort Worth region. DFX will be maintained and updated to support existing projects and maintain consistency in project analysis. The tasks related to DFX include software updates, version maintenance, file backup and archiving, and technical support. The technical support may include internal support to users within NCTCOG, responding to questions about DFX, and enabling member local governments or agencies to have access to DFX. The DFX maintenance and operations project is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Model software application and component programs;
- DFX version library;
- Model run archive database; and
- Technical support.

Transportation Analytical Forecasting Tool

Transportation Planning Funds

The Transportation Analytical Forecasting Tool (TAFT) is the latest regional travel model for the Dallas-Fort Worth metropolitan area that was released in September 2020. TAFT is a collection of computer program software applications, training materials, and documents used by transportation analysts for planning projects and policies in the region. Development and maintenance of a regional travel model is a multi-year project with several subtasks that will incrementally complement each other to create a mature analytical tool. TAFT will gradually replace DFX as the main regional travel model (RTM). Work activities include software component and application development, visualizations, required documentation, maintenance and updates, and management activities. These activities will continue through FY2022 and FY2023. Anticipated products include:

- TAFT software application improvements and maintenance; and
- TAFT documentation update.

Regional Travel Model Application Support

Transportation Planning Funds

This component covers activities related to the support for regional travel model (RTM) application work, both internal and external of the agency. The tasks in this component are categorized in four perspectives. First, general model application support includes RTM planning application activities, technical support, and the model's functions clarification. Second, project-based model application support is related to certain projects that involve more comprehensive model

application support, including analysis of the projects, modification of the RTM to satisfy the projects' requirements, and review of the new analytical tool based on the RTM. Third, general model trainings are provided to model users as scheduled and requested. The training topics can be the model's usage, concept, and report. Fourth, coordination with model users that includes meeting with model users and collecting questions and feedback from model users. Regional travel model application support is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Coordination meetings;
- Technical support; and,
- Training sessions.

Household Travel Survey

Other Funding Sources

NCTCOG, in collaboration with the Texas Department of Transportation, has been a part of the National Household Travel Survey (NHTS) 2017 project. NCTCOG staff will analyze and summarize NHTS 2017 and participate in other activities related to NHTS NextGen efforts. Surface Transportation Block Grant Program and Transportation Development Credits will be utilized to support work efforts. Anticipated products during FY2022 include:

- Summary tables of NHTS 2017 analysis.

Innovative Data Collection Method and Data Analytics

Other Funding Sources

This component includes investigation of newly available data sources such as social media and big data for application in transportation planning. These emergent technologies may have a substantial effect on existing data collection and analytical tools. This element may also include providing assistance to other NCTCOG program areas for the acquisition and purchase of data. Surface Transportation Block Grant Program and Transportation Development Credits will be utilized to support work efforts. The anticipated products during FY2022 and FY2023 include:

- Documentation of results of the investigations of data sources and vendor products.

Regional Dynamic Traffic Assignment Model

Other Funding Sources

Dynamic Traffic Assignment (DTA) represents a more realistic and accurate assignment method superior to the existing time-of-day static assignment. DTA captures the interaction between travelers' route choices, traffic congestion, and time-dependent travel time in a temporally coherent manner. Specifically, DTA models aim to describe such time-varying network and demand interaction using a behaviorally sound approach. NCTCOG will administer a Request for Information (RFI) to gather from suppliers/vendors/universities their capabilities regarding DTA solutions that they can provide. Based on the results of the RFI, NCTCOG will either develop a

DTA solution in-house with purchased software, or contract with suppliers/vendors/universities to proceed with DTA development. This may require utilization of consultant services through the Request for Proposal process. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support work efforts. The regional DTA project will take place in FY2022 and FY2023. Anticipated products include:

- Summary of findings and staff recommendations based upon responses to RFI;
- Scope of services for consultant;
- Preliminary implementation of a regional DTA model; and
- Calibration and validation report of the developed regional DTA model.

Development of Non-Motorized Trip Model

Other Funding Sources

This component's main purpose is to develop a non-motorized trips module to represent the travel behavior of non-motorized trips in the RTM. Work activities include investigating existing methods, coding networks, restructuring zones, systemizing bike and person counts, developing travel behavior models, developing software applications, and file system development, documentation, and training. Consultant assistance may be utilized. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support work efforts. The development of non-motorized trips model will take place in FY2022 and FY2023. Anticipated products include:

- Non-motorized trip model;
- Final report of the model; and
- User guide and model description.

Transit Travel Survey

Other Funding Sources

NCTCOG, in coordination with Dallas Area Rapid Transit, the Denton County Transportation Authority, and Trinity Metro, will re-initiate activities paused in FY2020 due to the COVID-19 pandemic and conduct a regional transit onboard survey in FY2022 and FY2023. This project will include a survey of transit routes as identified by the three transit agencies. The resulting data will be heavily used in updating the regional travel demand model. This project includes supplemental transit surveys, such as an automatic passenger count validation study for Trinity Metro. Consultant assistance will be utilized. Surface Transportation Block Grant Program funds, local funds, and Transportation Development Credits will be utilized to support work efforts.

- Transit Travel Survey final report;
- Transit Travel Survey databases; and
- Trinity Metro automatic passenger count validation study report.

Limited Access Facility User Survey

Other Funding Sources

In cooperation with the North Texas Tollway Authority, Texas Department of Transportation, and managed lane operators, NCTCOG will continue a survey initiated in FY2021 of limited access facility (LAF) users in six segments of regional corridors. The survey, previously referred to as the Toll Road User Survey, focuses on the socio-economic characteristics of the travelers, their trip patterns, their trip-making behavior and willingness to pay for use of the limited access facilities. This study will also be used in an evaluation of environmental justice related to building the tolled facilities. Final survey results are expected during FY2023. Consultant assistance will be utilized. Work efforts will be supported through Surface Transportation Block Grant Program funds and Transportation Development Credits. Anticipated products during FY2022 and FY2023 include:

- Intermediate progress reports and final report; and,
- LAF user survey database.

Connected Vehicle Data in Transportation Planning

Transportation Planning Funds

Connected vehicle data has been made available recently by several companies for its use in transportation planning and traffic engineering. The data delivered by these companies provide important spatial-temporal characteristics of a significant sample of the vehicles that travel in the NCTCOG area. As part of this element, the following potential uses of connected vehicle data will be explored: validation of radar traffic counters, development of an innovative framework for travel demand and estimation of congestion level and traffic signal performance at intersections on arterials. For this effort, university assistance through the University Partnership Program (UPP) will be utilized. Anticipated products include:

- Reports, analyses, trip matrices, and traffic profiles.

Travel Model Network Development and Maintenance

Transportation Planning Funds

Included in this element are the development and maintenance of geographic electronic roadway and transit network files used in travel demand modeling. Staff will monitor local and regional transportation improvements in order to develop and maintain a current-year network and various forecasted networks. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Current-year transportation network;
- Roadway and transit networks for the Metropolitan Transportation Plan and Air Quality Conformity analysis;
- Roadway and transit networks for specific roadway and transit corridor studies;
- Network Development and Maintenance Program that is administered to continually evaluate network quality control through the review of existing and proposed transportation networks; and

- GIS-based roadway and transit networks for use in roadway corridor, transit corridor, and thoroughfare studies and as a response to technical assistance requests.

2.02 Transportation Data Development

Enhancement of Quality of Data Collected by Radar Vehicle Detectors

Other Funding Sources

The purpose of this element is to enhance the base-line quality of data collected by existing vehicle detectors (also known as side-fire devices) in the Dallas-Fort Worth region and to measure the accuracy and reliability for use in several transportation planning activities. Consultant assistance will be utilized. Work activities will take place during FY2022 and FY2023. Surface Transportation Block Grant Program funds and Texas Department of Transportation funds will be utilized to support work efforts. Anticipated products include:

- Geographic dataset containing an inventory of existing side-fire devices in the Dallas-Fort Worth area;
- Consultant/vendor selection process to perform validation of a portion of the side-fire devices;
- Diagnostic of the side-fire devices based on the data collected at each vehicle detector identifying its level of accuracy and quality; and,
- A database of the collected traffic data with acceptable accuracy and quality.

Maintenance of Existing Datasets

Transportation Planning Funds

During FY2022 and FY2023, NCTCOG staff will carry out activities related to the maintenance of existing datasets. Efforts will include coordination with data providers, integration of data, dissemination of information in the form of services and websites, and analysis of data. Coordination with internal and external entities plays an important role in the efficiency of data products and activities. Anticipated products include:

- Database of contact information;
- Agreements with agencies, as necessary;
- Databases of compiled data provided by partner agencies and cities, including, but not limited to, traffic counts, transit ridership, travel times, speeds, lane occupancy, vehicle occupancy on special purpose lanes, airport movements, toll transactions, vehicle registrations, inventories, and vehicle miles traveled;
- Websites and other graphic user interfaces that allow users to see relevant and detailed data at different levels of accessibility; and
- Summaries, reports, and charts of the analyses done on the data.

Technical Assistance and Services

Transportation Planning Funds

Throughout FY2022 and FY2023, NCTCOG staff will provide technical assistance, services, and training to other program areas in the Transportation Department on latest data sets and interfaces. Anticipated products include:

- Databases of transportation planning data;
- Investigation and identification of new sources of transportation data and analysis tools;
- Analyses, reports, maps, and charts; and
- Training sessions.

2.03 Demographic Data and Forecasts

This subtask focuses on creating data products and models related to land use and demographic data in the region. These products will be used for planning and transportation projects. The subtask is closely associated with Subtask 2.01 for compatibility of data. The activities related to this subtask are grouped into inventory of land use and demographic data, improvement and maintenance of a regional land use and demographic model, development of a regional demographic forecast, improvement and maintenance of a large employer geographic database, and development of auxiliary geographic databases. Data acquisition and purchases may be needed for this subtask.

Inventory of Land Use and Demographic Data

Transportation Planning Funds

An inventory of land-use and demographic data will be created through communications with local agencies and government entities. Various datasets, including up-to-date city boundaries, land inventory, Census 2020 and American Community Survey databases, and sub-county area employment estimates will be compiled. Technical support regarding access and use of the data will be provided. Ongoing throughout FY2022 and FY2023, anticipated products include:

- Geographic Information System Layer of updated city boundaries annually for FY2021 and FY2022;
- An information system of the inventory of land-use data, based on uses such as residential, commercial, and industrial with a reference year of 2020;
- Processed subsets of decennial US 2020 Census data and American Community Survey data;
- Standardization of small area estimates of population and jobs by industry sector for sub-county areas including 2020 Census tracts and block groups or updated transportation analysis zones; and
- Technical assistance in response to a variety of inquiries by phone or email.

Improvement and Maintenance of a Regional Land Use and Demographic Model

Transportation Planning Funds

Efforts will continue on the improvement and maintenance of the current regional land-use and demographic forecast model. Activities include compilation of various data sources into estimation datasets, and improvement of the calibration of the forecasting model. The regional land-use and demographic model forecasts will be used by the regional travel model, as well as local transportation projects. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Model improvement progress reports;
- Validation results; and
- An updated set of programs and procedures for demographic forecasting.

Development of Regional Demographic Forecasts

Transportation Planning Funds

Regional demographic forecasts will be developed in consultation and coordination with local government agencies. Attention will be placed on the evaluation of possible methodologies for the demographic forecasting process. Specific demographic datasets may be generated for various projects. This effort will support the regional demographic model. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Forecasts of population, households and employment for sub-county geographies such as transportation analysis zones;
- Downloadable forecast data for identified plan years;
- Documentation providing general understanding of the forecasting process and specific descriptions of available forecast data.

Improvement and Maintenance of a Large Employer Geographic Database

Transportation Planning Funds

This element includes improvement and maintenance of a large employer geographic database. Large employers are defined based on number of employees and development size. This database will enhance quality control in local transportation projects and studies. When purchasing or evaluating new data sources, this database may also serve as a useful benchmark. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Information system of the large employers including specific location, type of activity, and number of employees on site.

Development of Auxiliary Geographical Databases

Transportation Planning Funds

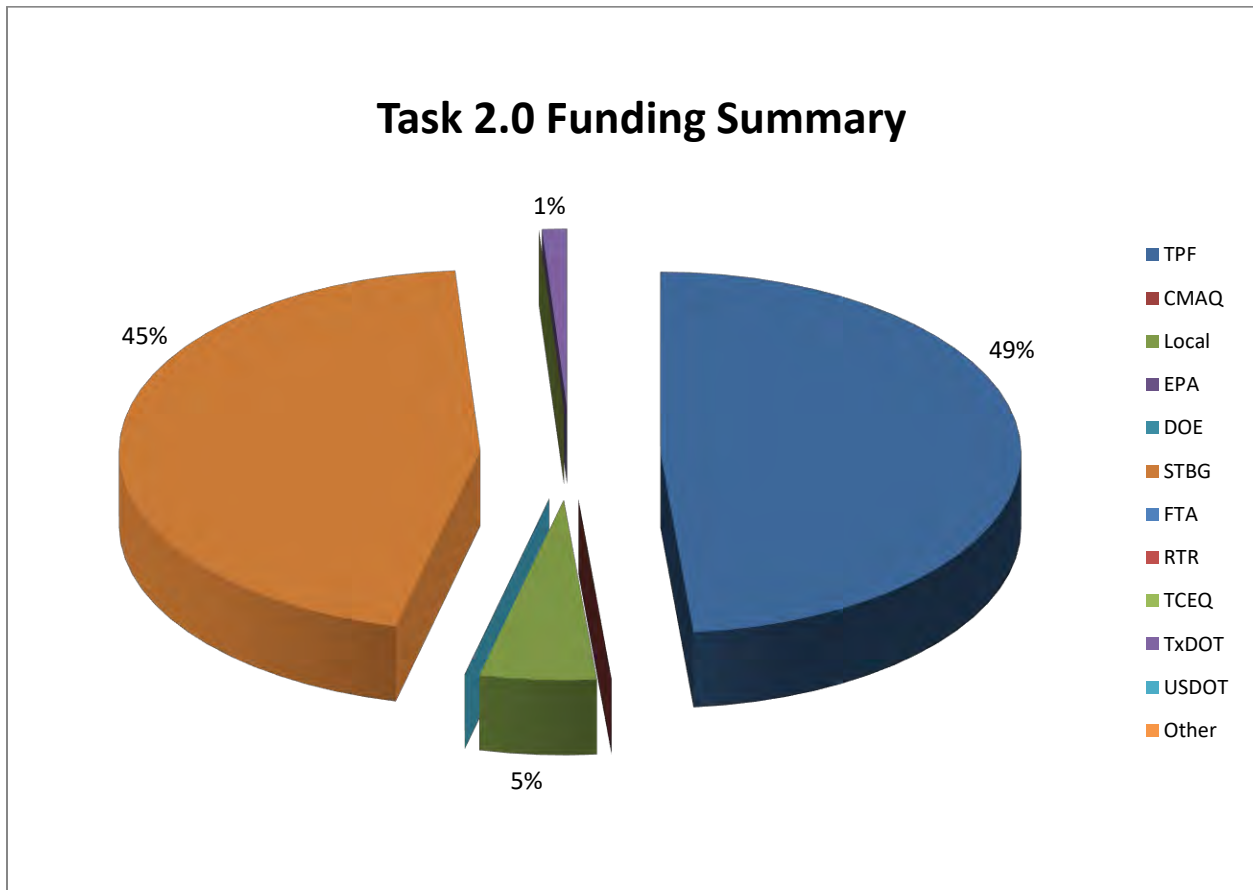
This element involves creation of auxiliary geographic databases including, but not limited to, inventories of pertinent features and development (schools, hospitals, offices, cemeteries, shopping malls, etc.) and major employers. Purchase or acquisition of datasets may be needed for this task. These databases are planned to be used in the regional travel demand model and will also be used in local transportation projects. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Databases of requested auxiliary datasets.

E. Funding Summary

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
2.01	\$1,922,800	\$2,913,000	STBG	
		\$373,000	Local	
Subtotal				\$5,208,800
2.02	\$458,400	\$319,000	STBG	
		\$79,800	TxDOT	
Subtotal				\$857,200
2.03	\$1,094,900			
Subtotal				\$1,094,900
Total	\$3,476,100	\$3,684,800		\$7,160,900

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man hours, they are not reflected in the funding tables.



IV. Task 3 – Short-Range Planning and Programming, and Air Quality and Transit Operations

A. Objective

The Metropolitan Planning Organization (MPO) continues to serve as a cooperative partner with the Texas Department of Transportation, local governments, the North Texas Tollway Authority, Collin County Toll Road Authority, and transportation providers to identify, evaluate, select, and prioritize transportation projects to be included in the Transportation Improvement Program (TIP). Regional Transportation Council (RTC) and North Central Texas Council of Governments staff will be involved in the creation, modification, monitoring, and implementation of the TIP, as well as in funding initiatives in which Surface Transportation Block Grant (STBG) Program funds and Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds will be programmed. In addition, the MPO coordinates the selection of projects funded with Metro Corridor and Texas Mobility funds, along with the proceeds of public-private toll projects (Regional Toll Revenue funds). An anticipated element will be the further refinement and monitoring of projects funded through these programs.

The Clean Air Act Amendments of 1990 and federal surface transportation legislation integrate transportation and air quality planning activities at local, state, and federal levels. Effective September 2019, the Environmental Protection Agency reclassified 10 counties in North Central Texas from “moderate” to “serious” nonattainment for the pollutant ozone. When a reclassification occurs, a revised State Implementation Plan (SIP) is developed and includes new motor vehicle emissions budgets. A favorable transportation conformity determination must be provided for implementation of transportation projects and programs utilizing federal funds two years following Environmental Protection Agency approval of these budgets. Transportation Control Measures that are contained in the SIP must be evaluated for timeliness through transportation conformity. Monitoring and reporting systems will be employed to ensure air quality objectives are met.

Programs addressing the demand for mobility, the transportation supply, and the importance of new technology are included as part of a coordinated and comprehensive planning approach to the region's air quality problem. In addition to Federal Highway Administration and Federal Transit Administration support, funding from the Texas Commission on Environmental Quality is also provided to support air quality planning.

In addition, a significant portion of the Fiscal Year (FY) 2020 and FY2021 Unified Planning Work Program (UPWP) is dedicated to providing continued support for planning associated with improving and expanding public transportation in the Dallas-Fort Worth area. These efforts include projects in support of Dallas Area Rapid Transit, Trinity Metro, and the Denton County Transportation Authority, as well as planning initiatives directed toward new transit services in the region.

Although not a requirement in the UPWP, this task also includes management and operations projects that are being carried out by MPO staff in addition to the planning activities. These projects are included in order to provide a more complete inventory of staff activities. Several of these implementation initiatives are aimed at helping the region reach attainment of the 8-hour ozone standards and are primarily funded through STBG and CMAQ funds authorized by the RTC. US Department of Energy funds, Environmental Protection Agency funds, Transportation Commission on Environmental Quality funds, and local funds are also used in attainment initiatives. In addition to air quality initiatives, implementation activities funded primarily by the Federal Transit Administration to support enhanced transit service in the region are also included.

B. Expected Products

Products of Task 3, Short-Range Planning and Programming, and Air Quality and Transit Operations, are the result of ongoing transportation planning, air quality planning, and

transportation improvement programming activities such as the preparation of the TIP, transportation conformity analysis and emission inventories, and support of various air quality improvement initiatives. Detailed products from the subtasks are included in each of the following subtask descriptions.

C. Previous Work

Routine Work Efforts – Activities in support of the TIP, air quality planning and operations, the promotion of transportation and air quality programs, and transit planning and operations are ongoing and continued throughout FY2020 and FY2021. The 2021-2024 Transportation Improvement Program/Statewide Transportation Improvement Program (STIP) was finalized and submitted to the Texas Department of Transportation (TxDOT). Approximately 500 quarterly modifications were processed for the TIP/STIP. The RTC approved \$356.4 million worth of projects through the COVID-19 Infrastructure Program. An update to the Regional 10-Year Plan was also approved by the RTC with \$9.91 billion of projects funded through the plan. The Annual Transportation Development Credit utilization report was submitted to TxDOT.

North Central Texas Council of Governments (NCTCOG) staff completed a Transportation Control Measures (TCM) substitution by replacing three high-occupancy vehicle TCM commitments with traffic signalization projects. Planning began for the region's reclassification under the 2008 and 2015 ozone standards and for development of the 2022 Transportation Conformity analysis. Technical assistance was provided to the Texas Commission on Environmental Quality, Environmental Protection Agency, local governments, and others with the development, analysis, and monitoring of elements contained in and required of the SIP. Regional emissions inventories were conducted for the Dallas-Fort Worth Motor Vehicle Emissions Simulator 3 (MOVES3)-Based Reasonable Further Progress On-Road Emissions Inventories and Control Strategies Reductions for Analysis Years 2011, 2017, 2018, 2020, 2023, 2026, and 2027;

the Dallas-Fort Worth Motor Vehicle Emissions Simulator 3 (MOVES3)-Based Reasonable Further Progress On-Road Emissions Inventories and Control Strategies Reductions for Analysis Years 2017, 2023, and 2024; and development of Dallas-Fort Worth Area and On-Road Emissions Inventories for 2019, 2023, and 2026. NCTCOG staff continued activities as the Dallas-Fort Worth Clean Cities Coalition, a SmartWay partner, and Texas Clean Air Working Group stakeholder. Continued emissions enforcement database enhancements. Staff partnered with State and federal agencies and other inspection and maintenance parties through the Heavy-Duty Inspection & Maintenance Working Group and launched a Try and Drive Alternative Program to allow first-hand experience with advanced vehicles on a loaner or 'extended test drive' basis.

A workshop was held with transportation providers in the region to provide training and information on updated federal regulations, updated processes, and financial planning for federal funds. In regional public transportation coordination and planning, NCTCOG staff continued to facilitate meetings, participate on task forces and working groups, coordinate committees and facilitate partnerships. The update of *Access North Texas* was initiated with NCTCOG staff conducting public outreach meetings and a survey. The preparation and submittal of competitive USDOT grants was coordinated for proposed expansion of transit service in the International Inland Port of Dallas. Transit assistance planning was provided for the High-Intensity Bus Pilot Program through coordination with Trinity Metro and the Denton County Transportation Authority. Meetings were held and early preparation tasks began for regional transit implementation studies that were initiated for Denton County and eastern Dallas, Kaufman, and Rockwall counties. Federal Transit Administration grant oversight activities were conducted on behalf of subgrantees, including reimbursements for project implementation and summary reports for project compliance, identifying any needed corrective actions for subrecipients awarded funding. A Regional Mobility Management Program was initiated to help increase transportation accessibility and coordination for transit-dependent populations. Through My Ride North Texas 2.0, a regional call center was

established for individuals to access transportation counseling services and referrals to available transit providers.

Non-Routine Work Efforts – The status of significant or one-time work efforts contained in Task 3 is provided in the table below.

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Completion
Teleworking and Telelearning: The Next Generation	University Partnership Program final report on teleworking and telelearning activities that focused on identifying locations within the region where computer and internet resources are limited, and surveying to determine if such resources limit travel flexibility, was completed.	N/A	Complete

D. Subtasks

3.01 Transportation Project Programming

The Dallas-Fort Worth Metropolitan Planning Organization (MPO) coordinates with the Texas Department of Transportation (TxDOT), transit providers, local governments, and other transportation partners to prioritize and select projects for inclusion in the Transportation Improvement Program (TIP). The Regional Transportation Council (RTC) and North Central Texas Council of Governments (NCTCOG) continue to monitor and implement projects in the TIP.

Transportation Improvement Program

Transportation Planning Funds

The Transportation Improvement Program (TIP) is a staged, multi-year program of projects approved for funding by federal, State, and local sources within the Dallas-Fort Worth area. Before transportation projects are selected and listed in the TIP, they are evaluated to ensure consistency with the current Metropolitan Transportation Plan and Air Quality Conformity Determination. These steps ensure that projects improve regional safety and mobility without detrimentally impacting air quality within the Dallas-Fort Worth area. In addition, the TIP has been analyzed to ensure that project listings are fiscally constrained to available resources, meaning that projects can only be included if federal, State, local or other funds are available to cover project costs. Every two years a new TIP document is developed to which updates are made on a quarterly basis.

As funds are made available, the Regional Transportation Council issues funding initiatives or calls for projects to local governments and transportation agencies. It is anticipated that new projects will be selected in the FY2022 and FY2023 timeframe using federal, State, and local funding. As new funding sources or additional allocations arise, appropriate project processes will be initiated. In addition, coordination will continue with the Texas Department of Transportation on the update of the region's 10-Year Plan and inclusion of projects into the Unified Transportation Program.

MPO staff will also provide general assistance to implementing agencies, elected officials, and the public regarding funded transportation projects, including the development and implementation of transportation solutions. In addition, projects will be tracked and monitored to ensure timely completion. Anticipated products in FY2022 and FY2023 include:

- A financially constrained 2023-2026 TIP document in FY2022;
- Quarterly TIP modifications in alignment with the Statewide Transportation Improvement (STIP) revision cycles;
- Calls for projects and funding initiatives as funding becomes available; and
- A report to the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and TxDOT that details the obligation of federal funds to individual projects at the end of each calendar year.

Regional Project Tracking, Monitoring, Assessment, and Software Development Project

Other Funding Sources

A series of improvements to the transportation project information system (TIP database) will continue. The goal of this project is to enable the tracking of projects by individual phase including the cost, funding, start date, and completion date of each project phase. This project was originally created in response to the federally mandated year of expenditure/total project cost requirements, as well as the increased complexity involved with funding, tracking, and monitoring transportation projects. Expansion of this data management system will reduce administrative project review time and increase the availability of timely project information. This project is funded with Surface Transportation Block Grant Program funds, and Transportation Development Credits. Anticipated products include work on the interactive, web-based interfaces noted below:

- Deployment of additional enhancements to the TIP modification editing interface expected in FY2022 and FY2023; and
- Deployment of updates to existing modules and additional modules in FY2022 and FY2023 including: TIP development, project status tracking, additional Geographic Information Systems (GIS) mapping tools, and obligations tracking.

Regional Toll Revenue Fund Management and Project Tracking Implementation

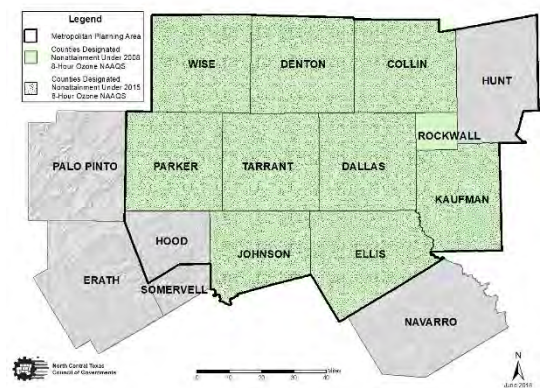
Other Funding Sources

Since 2007, MPO staff has tracked Regional Toll Revenue funds and projects, and efforts to monitor selected projects will continue. Regional Toll Revenue (RTR) funds will continue to support these activities. Anticipated products in FY2022 and FY2023 include:

- An up-to-date RTR-funded project list and account balances;
- Coordination with TxDOT and NCTCOG Administration Department on RTR fund and expenditure discrepancies;
- Tracking the status of environmental clearance for RTR-funded projects;
- Quarterly submission of RTR project changes to TxDOT for inclusion in the Texas Transportation Commission (TTC) Minute Order for authorization;
- Communication with local agencies to provide close-out information for completed RTR-funded projects;
- Updated inventory of project before-and-after pictures; and
- Tutorial videos for using the Revenue and Project Tracking System (RAPTS).

3.02 Regional Air Quality Planning

Since 1991, the North Central Texas region has been in nonattainment for the National Ambient Air Quality Standard (NAAQS) for ozone. As a result of this designation, federal and State procedures are required in order for projects identified in multimodal transportation plans to proceed to implementation. In response, a variety of air quality planning occurs to ensure these requirements are met.



Air Quality Planning

Transportation Planning Funds

The Dallas-Fort Worth State Implementation Plan (SIP) is a legal and federally enforceable plan mandated by the Clean Air Act (CAA). This plan identifies how nonattainment areas will reduce emissions from stationary, area, and mobile sources to demonstrate attainment and/or maintenance of air quality standards. In nonattainment areas, the CAA mandates federally funded and regionally significant transportation activities must conform to the SIP. Under this requirement, the Regional Transportation Council, the transportation policy body for the Metropolitan Planning Organization, is required to make an initial local-level transportation conformity determination on the Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP) before submitting recommendations to the US Department of Transportation for independent review and a final federal-level conformity determination. The conformity determination is a method to ensure federal funding and federal approval is given to transportation projects, programs, and policies consistent with regional air quality goals. In addition, many other transportation planning efforts occur throughout the year that ensure successful conformity determinations. Anticipated products in FY2022 and FY2023 include:

NCTCOG 16-County Region

10 counties: Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise, are classified as nonattainment under the 2008 8-hour ozone NAAQS, and, with the exception of Rockwall County, the remaining nine counties are classified as nonattainment under the 2015 8-hour ozone NAAQS.

- Development, analysis, and monitoring of elements contained in and required of the SIP, as necessary, to meet air quality requirements;
- Assistance with addressing specific data and technical requests;

- Tracking and responding accordingly to statewide and national rules and guidance affecting the nonattainment area and surrounding counties, such as the eight-hour NAAQS for ozone and other primary or secondary pollutants;
- Monitoring during ozone season and end-of-year summary of pollutant levels at monitoring stations located throughout the region;
- A successful regional air quality conformity analysis incorporating new or updated projects proposed for inclusion in the MTP and TIP;
- Monitoring of the timely implementation of Transportation Control Measures;
- Monitoring, collection, and update of Mobile Source Emission Reduction Strategies commitments for annual reporting requirements of emission reductions projects;
- Guidance, rules, and proposals that incorporate NCTCOG direction/expertise and/or experience related to NAAQS and mobile-source issues;
- Evaluation of technical models used in regional air quality planning, with feedback to agency developing the model(s) and, as appropriate, creation of in-house applications to successfully run models;
- Presentations for workshops, technical committees, student chapters, and training sessions; and
- Update of the NCTCOG website with latest air quality information.

Regional Greenhouse Gas Emissions Inventory Program

Transportation Planning Funds

Regional Greenhouse Gas (GHG) emissions inventories provide regions an opportunity to understand GHG origins and magnitudes. This allows sound decision making to better manage emission levels through regional GHG emissions goals; enable cities who have their own inventories to compare themselves against a regional inventory; and provide a framework upon which to evaluate, analyze, and prioritize GHG reduction actions. Work is continuing on the emissions inventory initiated in FY2021 by NCTCOG staff to understand sources and sectors contributing to regional GHG emissions and begin development of a GHG emissions reduction strategy catalog. Staff will continue identifying primary sectors that contribute to GHG emissions at the regional level by analyzing model output results, and evaluate, select, and prioritize emissions reduction measures appropriate for cities and other local governments toward creation of the catalog. Anticipated products in FY2022 and FY2023 include:

- Regional Greenhouse Gas emissions inventory;
- Report of quality assurance/control of results; and
- Regional Greenhouse Gas emissions reduction strategy catalog.

3.03 Air Quality Management and Operations

The purpose of this subtask is to identify, design, implement, and promote voluntary local strategies to reduce transportation-related emissions, energy, and air quality impacts. Emphasis is placed on achieving reductions in ozone precursor emissions to achieve compliance with federal ozone standards, but work includes efforts to comprehensively reduce emissions of other air pollutants. In all areas, NCTCOG works collaboratively with local governments, peer organizations, State and federal agencies, and other stakeholders to advance emission-reducing activities. NCTCOG also carries out responsibilities as the Department of Energy (DOE)-

designated Dallas-Fort Worth Clean Cities coalition and as an Affiliate of the Environmental Protection Agency (EPA) SmartWay Transport Program.

Air Quality Initiatives: Fleets, Consumers, and Communities

Other Funding Sources

The transportation sector contributes nearly half of all ozone-forming pollution in the Dallas-Fort Worth ozone nonattainment area. Thus, NCTCOG works to reduce emissions from the transportation sector by promoting and facilitating projects that reduce emissions from vehicles, equipment, and related sources. Efforts include promoting retirement of older, higher-polluting vehicles and equipment, adoption of cleanest available technologies that include zero-emission vehicles, and operational/behavioral strategies that ensure vehicles are operated in an efficient manner with minimized emissions (e.g., idle reduction). To reach the full spectrum of the transportation sector, efforts target all end-users – that is, both fleets and consumers. In addition, NCTCOG works toward “community readiness” by collaborating with local governments, workplaces, and others to help ensure regulatory frameworks and other factors create conditions that are supportive for end-users to adopt cleaner technologies. This work element will be supported through Surface Transportation Block Grant Program funds and Transportation Development Credits and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Funding support, technical assistance, and outreach and education to facilitate emissions-reducing projects among local vehicle fleets, including use of alternative fuel vehicles, idle reduction, and other emissions-reducing measures;
- Technical assistance, outreach and education, and promotion of financial incentives to support emissions-reducing activities among consumers, including adoption of clean vehicle technologies (e.g., electric vehicles [EVs]), proper maintenance, and vehicle operation strategies that reduce emissions (e.g. idle reduction);
- Technical support, funding assistance, and outreach and education to support community readiness efforts by local governments, workplaces, and others who wish to facilitate adoption of emissions-reducing technologies and initiatives;
- Identification and preparation of competitive grant applications to seek additional funds to support regional initiatives;
- Work associated with serving as the Dallas-Fort Worth Clean Cities Coalition; and
- Support for local government peer exchange on comprehensive air quality issues through the Regional Integration of Sustainability Efforts (RISE) Coalition, Air Quality Health Monitoring Task Force and other avenues.

Air Quality Initiatives: Alternative Fuel Vehicle Deployment Initiatives

Other Funding Sources

Fleets and consumers are often reluctant to invest in an unfamiliar technology without having some hands-on experience prior to making a purchase. The purpose of this project is to facilitate that first-hand opportunity to “try before you buy” to increase the likelihood of future clean vehicle technology purchases. This work element will be supported through Congestion Mitigation and Air Quality Improvement Program funds and Transportation Development Credits and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- The Try and Drive Alternative program, which provides opportunities for extended test drives, demonstration periods, or other short-term vehicle experiences and collects before-and-after assessments of perceptions about clean vehicle technologies; and
- Integration of clean vehicle technologies at local events, particularly EV ride-and-drive opportunities (e.g., National Drive Electric Week, Drive Electric Earth Day).

Air Quality Initiatives: Idle-Free School Zones

Other Funding Sources

Prior to the COVID-19 pandemic, school campuses could generate a substantial hotspot of air pollution due to a high concentration of idling activity, especially during student drop-off and pick-up times. Post-pandemic, the nature of idling activity on-campus may be different and may warrant different strategies to reduce idling and associated emissions. This project includes an idling assessment, as well as outreach to school campuses on best practices to help reduce unnecessary idling. This work element will be supported through Congestion Mitigation and Air Quality Improvement Program funds and Transportation Development Credits. Consultant or university assistance will be used. Anticipated products during FY2022 and FY2023 include:

- An assessment of idling activity at school campuses post-pandemic; and
- Provision of best practice guidance and other resources to help school campuses reduce idling.

Clean Fleet Technologies Program

Other Funding Sources

Emissions reductions can be achieved through use of clean vehicle technologies, including alternative fuel vehicles, new low-emitting conventional vehicles that replace older vehicles that are scrapped, and use of technologies that support idle-reduction efforts and other efficiencies. NCTCOG sometimes provides direct funding assistance when eligible technologies are available. NCTCOG also facilitates completion of emissions-reducing projects in the Dallas-Fort Worth (DFW) area by promoting incentives available from other agencies and providing technical assistance or other application support. This work element will be supported through Congestion Mitigation and Air Quality Improvement Program funds and Transportation Development Credits, and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Planning efforts to develop funding initiatives for clean vehicle technologies;
- Implementation and monitoring of funded technology projects; and
- Promotion of financial incentives for clean vehicle technologies and technical support to prospective applicants.

Alternative Fuels Corridor Study: IH 45 Corridor

Other Funding Sources

NCTCOG will develop a plan for deployment of infrastructure that supports the use of zero-emission vehicles (ZEV) along Interstate 45, with emphasis on supporting the transition of medium- and heavy-duty vehicles used in goods movement. The scope of the plan will include both EV charging and hydrogen fueling infrastructure to support both battery electric and hydrogen fuel cell electric vehicles. Development of the plan will include collaboration with stakeholders representing various industry perspectives (i.e., fuel providers, fleets, and utilities), State and federal agencies, and the Houston-Galveston Area Council. This work element will be supported through Federal Highway Administration funds and Regional Transportation Council Local funds. This element is ongoing throughout FY2022. Anticipated products include:

- Stakeholder lists and meetings;
- Case studies;
- A Zero Emissions Vehicle (ZEV) Infrastructure Deployment Plan; and
- A workshop showcasing plan elements and available vehicle technologies.

Dallas-Fort Worth Clean Cities

Other Funding Sources

Since 1995, NCTCOG has been designated by the US Department of Energy (DOE) as the host agency for the Dallas-Fort Worth Clean Cities coalition (DFWCC). DFWCC is part of a national network of local coalitions supported by national laboratories and DOE. Through DFWCC, staff works to improve transportation efficiency and reduce emissions by increasing use of alternative fuels, idle reduction, fuel economy improvements, and other measures that conserve energy or reduce emissions. The coalition includes collaboration with a range of stakeholders including fleets, consumer groups, industry representatives, local governments, utilities, and others. This work element will be supported through funds provided by the Department of Energy and private funding sources. University assistance may be used. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Participation in calls, conferences, and other coordination with DOE, national laboratory staff, and other coalitions;
- Planning assistance for alternative fuel infrastructure, both within the NCTCOG region and along highway corridors connecting North Texas to other areas;
- Meetings, workshops, events, or tours that feature alternative fuels or other clean vehicle technologies to raise awareness and understanding among consumers and fleets;
- Technical assistance and coaching to fleets with regard to use of alternative fuels and other advanced vehicle technologies;
- Training for first responders, fleet managers, local government staff and others about alternative fuel vehicle technologies and associated infrastructure; and
- Submittal of reports to DOE and national laboratory staff.

Electric Vehicle Widescale Analysis for Tomorrow's Transportation Solutions (EV-WATTS)

Other Funding Sources

In its role as the host agency of DFWCC, NCTCOG is a partner in this project to collect current, relevant, real-world data regarding use and operation of EVs and EV charging stations. Both fleets and individual drivers will be recruited to provide data, which will be anonymized as part of a nationwide project managed by Energetics, a division of Akimeka, LLC. This work element will be supported through funds provided by the Department of Energy and local funding sources, and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Participation in calls and webinars with the project team;
- Recruitment of fleets and individual EV drivers to participate in the project; and
- Distribution of project reports.

Natural Gas Vehicle Updated Performance Tracking Integrating Maintenance Expenses (NGV U.P.-T.I.M.E. Study)

Other Funding Sources

In its role as the host agency of DFWCC, NCTCOG is a partner with Clean Fuels Ohio to recruit local freight and goods movement fleets to participate and provide repair and maintenance data for an analysis project, Natural Gas Vehicle (NGV) Updated Performance Tracking Integrating Maintenance Expenses (UP-TIME). This project will provide fleets and natural gas vehicle industry stakeholders relevant, real-world information about NGV maintenance costs. The project will help improve total cost of ownership calculations and determine the maintenance cost differences between NGV technology generations and current advanced clean diesel engines. This work element will be supported through funds provided by the Department of Energy and local funding sources and will be ongoing throughout FY2022. Anticipated products include:

- Participation in calls and webinars;
- Recruitment of fleets and drivers to participate in the project; and
- Distribution of project reports.

Regional Energy Management

Other Funding Sources

In collaboration with the NCTCOG Environment and Development Department and funded through the State Energy Conservation Office (SECO), NCTCOG Transportation staff has launched efforts to increase the capacity and resources of local governments with regard to energy management, including energy efficiency, energy conservation, and use of renewable energy. Reduction in energy consumption helps improve air quality by reducing emissions associated with energy generation, or at least mitigating increased demand associated with population and economic growth. As EV adoption grows and the transportation system and energy grid become more integrated, this work will grow in importance. This work element will be supported through funds provided by the Department of Energy and Regional Transportation Council Local funds and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Technical support, outreach and education to local governments with regard to energy management, renewable energy, energy efficiency, and energy diversification/redundancy for emergency response;
- Engagement with local governments and SECO with regard to required annual energy reporting;
- Maintenance of websites at www.gosolartexas.org and www.conservenorthtexas.org;
- Engagement with utilities; and
- Submittal of reports to SECO.

Air Quality Initiatives: Energy Efficiency

Other Funding Sources

Certain air quality initiatives cross into sectors outside of transportation. Occasionally, staff efforts are devoted to work associated with the built environment, including renewable energy and energy efficiency efforts, and utility engagement. This is becoming more common with the growth of EVs and the deepening relationship between the transportation sector and energy grid. This work element will be supported through Regional Transportation Council Local funds and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Technical support, outreach and education to local governments with regard to energy management, renewable energy, energy efficiency, and energy diversification/redundancy for emergency response;
- Engagement with local governments and the State Energy Conservation Office (SECO) with regard to required annual energy reporting;
- Maintenance of websites at www.gosolartexas.org and www.conservenorthtexas.org;
- Engagement with utilities;
- Evaluation of emissions associated with energy generation; and
- Evaluation of opportunities for on-site renewables at NCTCOG offices.

Clean Diesel Grants: Clean Fleets North Texas

Other Funding Sources

NCTCOG was successful in competing for grant funding from the Environmental Protection Agency (EPA) Diesel Emission Reduction Act (DERA) National Grants Program for two consecutive years to subaward projects for local government fleets to replace older, high-emitting diesel vehicles and equipment. NCTCOG has distributed funding through open, competitive calls for projects and continues working with partners to implement awarded projects. This work element will be supported through Environmental Protection Agency funds and local funds provided by subrecipient partners. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Replacement of older, heavy-duty diesel vehicles and equipment, including purchases of new units and scrappage of replaced units;
- Management of subaward implementation, including funding disbursement and oversight and compliance activities; and
- Submittal of reports to EPA.

EPA DERA 2018: North Texas Freight Terminal Electrification

Other Funding Sources

NCTCOG was awarded grant funding from the Environmental Protection Agency (EPA) Diesel Emission Reduction Act (DERA) National Grants Program to award rebates for idle reduction technology and eligible equipment at freight distribution centers and terminals. The funding is for installation of EPA SmartWay verified electrified parking spaces to reduce idling from transport refrigerated units (TRUs) of heavy-duty diesel trucks and trailers. NCTCOG has opened competitive calls for projects and continues to promote and implement awarded funds. This work element will be supported through Environmental Protection Agency funds and local funds provided by subrecipient partners. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Installation of EPA SmartWay verified electrified parking spaces and eligible equipment to reduce diesel engine idling from TRUs;
- Management of rebate implementation, including funding disbursement and oversight and compliance activities; and
- Submittal of reports to EPA.

EPA DERA 2019: North Texas Emissions Reduction Project

Other Funding Sources

NCTCOG was awarded grant funding from the Environmental Protection Agency (EPA) Diesel Emission Reduction Act (DERA) National Grants Program to award rebates for vehicle and equipment replacement including electrification equipment and rail idle reduction technology. NCTCOG has opened a competitive call for projects and continues to promote and implement awarded funds. This work element will be supported through Environmental Protection Agency funds and local funds provided by subrecipient partners. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Replacement of older, heavy-duty diesel vehicles and equipment, including purchases of new units and scrapping of replaced units;
- Installation of rail idle-reduction technologies;
- Management of rebate implementation, including funding disbursement and oversight and compliance activities; and
- Submittal of reports to EPA.

EPA DERA 2020: North Texas Clean Diesel Project

Other Funding Sources

NCTCOG was awarded grant funding from the Environmental Protection Agency (EPA) Diesel Emission Reduction Act (DERA) National Grants Program to award rebates for replacing diesel vehicles, equipment, or engines; installing electric recharging infrastructure if necessary; and/or installing idle-reduction technology. One approved project replaces diesel transport refrigerated units (TRUs) with electric zero-emission TRUs. NCTCOG works to implement the approved project and plans to open a competitive call for projects to award remaining funds. This work

element will be supported through Environmental Protection Agency funds and local funds provided by subrecipient partners. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Replacement of diesel TRUs with electric zero-emission TRUs;
- Replacement of older, heavy-duty diesel vehicles and equipment, including purchases of new units and scrappage of replaced units;
- Installation of idle-reduction technologies;
- Management of rebate implementation, including funding disbursement and oversight and compliance activities; and
- Submittal of reports to EPA.

North Central Texas Clean School Bus Program

Other Funding Sources

NCTCOG has been approved as a third-party administrator of Supplemental Environmental Project (SEP) funds by the Texas Commission on Environmental Quality (TCEQ). NCTCOG receives SEP contributions when the TCEQ enters a settlement with a respondent related to certain enforcement actions. NCTCOG uses SEP funds to support replacement of old, high-polluting school buses with newer, cleaner-burning buses. This work element will be supported through the TCEQ from local or private funding sources as SEP contributions, and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Replacement of old diesel school buses, including purchase of new units and scrappage of replaced units;
- Management of award implementation, including funding disbursement and oversight activities; and
- Submittal of reports to the TCEQ.

University Partnership: Transportation Health Risks

Other Funding Sources

Health impacts associated with pollution from the transportation system are a growing concern for local governments in the NCTCOG region. NCTCOG funded a study through the University Partnership Program to assess what these impacts may be to inform future development of potential control strategies to reduce exposure and impacts. This work element will be supported through Regional Transportation Council Local funds. University assistance will be used. This element is ongoing throughout FY2022. Anticipated products include:

- A report assessing health impacts associated with transportation, conducted under the University Partnership Program.

Transportation Low-Emissions Vehicle

Other Funding Sources

The NCTCOG Transportation Department provides a low-emission vehicle for staff use in carrying out NCTCOG business, such as attending meetings, site visits, or outreach events and transporting employees, committee members, and other individuals attending meetings at NCTCOG or other locations. This work element will be supported through Regional Transportation Council Local funds and will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Purchase or lease, operation, and maintenance of low-emission vehicle(s).

On-Road Vehicle Emissions Project

Other Funding Sources

NCTCOG works to reduce emissions from the transportation sector and related emissions sources by facilitating projects that reduce emissions from vehicles. Efforts include developing and implementing a mobile emissions enforcement task force to combat the prevalence of fraudulent Texas temporary paper plates, fraudulent vehicle inspections, and emissions component tampering in vehicles. These efforts will help ensure vehicles are not circumventing the State's vehicle Inspection and Maintenance (I/M) Program. Another strategy will include collecting exhaust emissions data from vehicles to validate regional modeling efforts and identify high-emitting vehicles in order to develop air quality planning strategies in the nonattainment area. This work element will be supported through Surface Transportation Block Grant Program funds and Transportation Development Credits. Consultant and partner assistance may be used. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Establishment of a mobile emissions enforcement task force;
- Collection of tailpipe emissions data from vehicles to develop air quality planning strategies;
- Consultant and partner agreement(s); and
- Data analysis and final report.

3.04 Public Transportation Planning

This Work Program subtask provides funding to assist local governments and transportation providers with public transportation funding and planning activities that focus on identifying opportunities for increased service in the region, as well as improving the efficiency and effectiveness of current systems.

Trinity Metro Pedestrian Improvement Plan

Transportation Planning Funds

In FY2022 and FY2023, staff will oversee the development of a Pedestrian Improvement Plan for the Trinity Metro service area consistent with the City of Fort Worth's *Transit Moves Fort Worth* plan. The Plan will review and identify pedestrian and other active transportation gaps and barriers

to transit access along high-frequency (15-minute) routes and near existing transfer centers, park-n-ride lots and rail stations. Considerations will also be reviewed for potential wayfinding signage improvements. Anticipated products include:

- Gaps analysis related to existing pedestrian and active transportation infrastructure;
- Recommended improvements to infrastructure;
- Opinions of probable construction costs; and
- Plan with recommended priorities for implementation.

Public Transportation Funding and Administration

Transportation Planning Funds

This planning activity is ongoing throughout both FY2022 and FY2023, supporting the efforts of metropolitan, urban and rural transit providers in the North Central Texas region. General responsibilities include monitoring transit appropriations, grant activities and funding issues; identifying and monitoring transit-related issues of local, regional, and national interest; and responding to citizen, consultant, State, and federal requests for data, information, or assistance. Additional responsibilities include providing technical assistance to providers by coordinating the dissemination of technical information, federal regulations, and grant requirements. Anticipated products include:

- Planning for financial needs in coordination with local public transit providers; and
- Assistance to transit providers in the development of the annual program of projects and coordination of the programming of funds in an approved Statewide Transportation Improvement Program (STIP).

Regional Public Transportation Coordination

Transportation Planning Funds

This planning activity is ongoing throughout both FY2022 and FY2023, supporting activities that further a coordinated and seamless public transportation system. This activity includes the Access North Texas Plan, which outlines coordination goals, policies, and strategies to move the North Central Texas region toward more coordinated, efficient, and seamless transportation services. Other initiatives include providing planning assistance to partner agencies as they implement identified strategies and recommendations and gathering data on the implementation of micro-transit and on-demand services to improve transportation planning in the region. Regional coordination activities will primarily focus on the counties that comprise the Metropolitan Planning Area. Coordination with surrounding areas will be included based on the impact that public transportation connections have within the planning area boundary. University assistance will be utilized. Anticipated products include:

- An adopted update to the Access North Texas Plan;
- Implemented coordination strategies identified in the Access North Texas Plan;
- Developing transit options for the transportation needs of the disadvantaged, including low income, seniors, and individuals with disabilities, to increase opportunities and access to public transportation;

- University Partnership Program report related to the implementation of micro-transit and on-demand services;
- Coordination meetings that engage and ensure disadvantaged populations are included in planning efforts; and
- Support for transit system improvements resulting in seamless regional connectivity.

Regional Transit Planning Assistance

Transportation Planning Funds

This planning activity is ongoing throughout both FY2022 and FY2023 supporting activities that encourage short- and long-term transit planning for local governments and transit providers. Activities include providing technical assistance and general planning support to local governments with implementation options and investigating innovative funding and implementation opportunities for regional transit systems, including fixed guideway alternatives. Other initiatives include technical assistance and general planning support to the transportation authorities in the region, as well as smaller transit agencies, and oversight of federally required transit performance measures in support of the data-driven planning process. Anticipated products include:

- Planning conducted on behalf of partner agencies based on identified needs;
- Support to transit agencies including travel demand model data, ridership projections, financial modeling, planning studies, and technical assistance;
- Assistance for transit system improvements resulting in seamless regional connectivity; and
- Documentation of analysis methodologies, tracking and monitoring of transit system performance documentation.

Denton County Transit Planning Study

Other Funding Sources

This element is ongoing throughout both FY2022 and FY2023, providing support in the development of transit studies. Activities include developing a comprehensive approach to planning and implementing transit services outside of the Denton County Transportation Authority service area. Other initiatives include investigation of local and regional connections, focus on strategic implementation, near-term implementation strategies, increased transportation options, innovative funding opportunities, mobility transportation hubs for existing service, private-sector involvement, and potential options for inclusion in future transportation plans. Efforts will include a comprehensive transit study for Denton County. Federal Transit Administration funds, as well as Transportation Development Credits, will support these activities. Consultant assistance will be utilized. Anticipated products include:

- Coordination meetings with transit partners, local governments, and stakeholders that monitor and ensure the continued progress of study completion;
- Procurement and executed agreements for consultant assistance;
- Mapping of potential alignment alternatives;
- Strategic implementation plans of recommended transit infrastructure and services; and

- Technical reports on transit implementation options in identified subregions that may include potential public transit implementation options, funding sources (public and private), and increased regional connections.

East Dallas, Kaufman, and Rockwall Counties Transit Planning Study

Other Funding Sources

This subtask is ongoing throughout both FY2022 and FY2023, providing support in the development of transit studies. Activities include developing a comprehensive approach to planning and implementing transit services outside of transit agency service areas. Other initiatives include investigation of local and regional connections, focus on strategic implementation, near-term implementation strategies, increased transportation options, innovative funding opportunities, private-sector involvement, and potential options for inclusion in future transportation plans. Efforts will include, but are not limited to, a comprehensive transit study for Eastern Dallas, Kaufman, and Rockwall Counties. Surface Transportation Block Grant Program funds and Transportation Development Credits will support these activities. Anticipated products include:

- Coordination meetings with transit partners, local governments, and stakeholders that monitor and ensure the continued progress of study completion;
- Procurement and executed agreements for consultant assistance;
- Mapping of potential alignment alternatives;
- Strategic implementation plans of recommended transit infrastructure and services; and
- Technical reports on transit implementation options in identified subregions that may include potential public transit implementation options, funding sources (public and private), and increased regional connections.

Intermodal Transportation Hub for Colleges and Universities Study

Other Funding Sources

During FY2022 and FY2023, in coordination with local governments, NCTCOG will assist colleges and universities in the North Central Texas region with planning potential intermodal transportation hub locations and associated traffic pattern impacts. Activities will include the impact to transit ridership, bicycle and pedestrian mobility, and other modes used for on-campus traffic circulation. Consultant assistance will be utilized. Work activities will be supported by Surface Transportation Block Grant Program funds and Transportation Development Credits. Anticipated products include:

- Coordination meetings with transit partners, local governments, colleges/universities, and stakeholders that monitor and ensure the continued progress of study completion;
- Public involvement activities;
- Procurement and executed agreements for consultant assistance;
- Strategic implementation plans of recommended transit infrastructure and services;
- Planning of intermodal transportation hubs, transit service, and other transportation infrastructure; and

- Technical reports on mobility options for colleges and universities, including options for public transit, bicycle and pedestrian mobility, and other modes used for on-campus traffic circulation along with regional connections.

3.05 Transit Management and Operation

This Work Program subtask provides funding primarily for the implementation of projects that focus on eliminating gaps in services, reducing duplication of services, enhancing coordination, and improving the efficiency and effectiveness of the region’s existing services.

FTA Urban Funding Grant Administration

Other Funding Sources

This implementation activity is ongoing throughout FY2022 and FY2023, supporting all responsibilities NCTCOG assumes as the designated recipient for Federal Transit Administration (FTA) grant funds received for urbanized areas in the region. General responsibilities include program administration, project implementation, grant management and program oversight for all subgrantees who receive funds through the Bus and Bus Facilities Program, Congestion Mitigation and Air Quality Improvement Program, Enhanced Mobility of Seniors and Individuals with Disabilities Program, Job Access/Reverse Commute Program, New Freedom Program and the Urbanized Area Formula Program. Activities will also include the administration of emergency assistance funding made available by FTA to subgrantees in response to COVID-19 including the Coronavirus Aid, Relief, and Economic Security (CARES) Act and American Rescue Plan (ARP) Act of 2021, which are expected to be administered through FY2023. Federal Transit Administration funds, subgrantee local funds, and Transportation Development Credits will support these activities. Consultant assistance may be used. Anticipated products include:

- FY2022 and FY2023 funding allocations;
- CARES Act funding allocations;
- ARP Act funding allocations;
- Grant and agreement management;
- Application of oversight and compliance initiatives;
- Funding disbursement of reimbursable project expenses to subgrantees;
- Administration of a vehicle loaner program;
- Submittal of coordinated reports on behalf of subgrantees; and
- Procurements for services and equipment, including buses, on behalf of subgrantees.

Sustainability and Innovative Solutions for Transit

Other Funding Sources

This implementation activity is ongoing throughout both FY2022 and FY2023, supporting coordination and implementation of sustainable transit initiatives and innovative solutions. The Program supports Chapter 461 of the Texas Transportation Code that focuses on maximizing the benefits of the State’s investment in public transit through the coordination of services and other innovative transit-related projects. Activities include developing projects to encourage access to public transportation, implementing a regional equitable transit fares program and gathering data

to improve transportation planning efforts for older adults, individuals with disabilities, individuals with low incomes, and additional environmental justice populations. University assistance will be utilized. Regional Toll Revenue funds and Regional Transportation Council Local funds will support these activities. Anticipated products include:

- Implementation of an equitable transit fare program to be coordinated with transit authorities, NCTCOG, and private partners;
- Coordination with transit agencies, community colleges, colleges, and universities to provide students with transit passes;
- University Partnership Program final report related to use of an app-based technique for assessing the transportation gaps of environmental justice populations.
- Short- and long-range solutions that move the region toward more comprehensive, coordinated, accessible, efficient, and effective public transit services; and
- Policies, programs, and projects that support and encourage sustainable transportation options around the region while elevating customer service and air quality.

Mobility Management

Other Funding Sources

These planning and coordination activities are ongoing for FY2022 and FY2023, supporting mobility management and mobility as a service (MaaS) initiatives to improve the coordination of transportation services in the Metropolitan Planning Area. Activities include the implementation of the Mobility on Demand (MOD) workgroup, monitoring MaaS platform integration, providing support to transit providers for improved operational planning through use of technologies, and creating new innovative partnerships with local governments, and private and non-profit stakeholders who hold key connections or interest in increasing mobility options in the region. Federal Transit Administration funds, Regional Transportation Council Local funds, and Transportation Development Credits will support these activities. Consultant assistance may be used. Anticipated products include:

- Strengthened mobility management activities with transit partners for the management and delivery of coordinated transportation services to transit-dependent populations;
- MOD workgroup meetings to document best practices and promote partnerships in the region;
- Resources to assist local governments, transit providers, healthcare providers, community service agencies, and the public on available transit options; and
- Execution of subrecipient agreements and documentation of subrecipient compliance to grant requirements through monitoring and on-site reviews.

My Ride North Texas Program

Other Funding Sources

These planning and coordination activities are ongoing for FY2022 and FY2023, supporting implementation of the My Ride North Texas program to identify gaps in service and improve the coordination of transportation services in the Metropolitan Planning Area. Activities include coordinating the Regional Mobility Managers advisory group, extending mobility management services, and providing assistance to local governments, transit providers, healthcare providers,

community service agencies, and the public to increase access to transportation and improve regional mobility. Enhancements of the program may include pilot of regional mobility management trainings; development of a website; and greater outreach to older adults, people with disabilities, and individuals with lower incomes. Federal Transit Administration funds, Regional Transportation Council Local funds, and Transportation Development Credits will support these activities. Subrecipient assistance may be used. Anticipated products include:

- Enhancements to My Ride North Texas, with transit partners, to enable low-income seniors and individuals with disabilities access to healthcare, wellness trips, and jobs;
- Support of regional call center for individuals to access transportation counseling services and referrals to available transit providers;
- Regional Mobility Managers meetings to document best practices and promote partnerships in the region; and
- Resources to assist local governments, transit providers, healthcare providers, community service agencies, and the public on available transit options.

Strategic Partnership Program

Other Funding Sources

This implementation activity is ongoing for FY2022 and FY2023, supporting coordination with strategic partners to develop transit projects that meet the transit needs of seniors, individuals with disabilities, and low-income populations for job access. Transit projects will be developed based on several factors including, but not limited to, previously identified strategies in Access North Texas, environmental justice impact, accessibility, strategic value in the region, innovation, and sustainability. These efforts will generate projects that are responsive to needs of transit-dependent populations, address gaps in service, and contribute to the coordination of services among transit providers. Federal Transit Administration funds and Transportation Development Credits will support these activities. Anticipated products include:

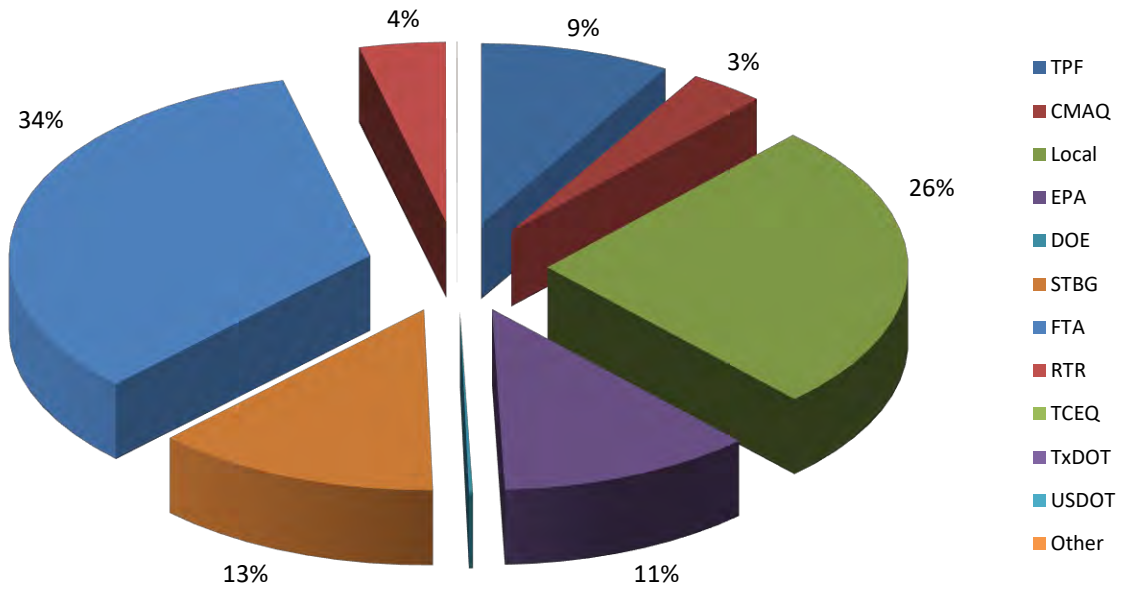
- Implementation of Strategic Partnerships process for review of requests;
- Coordination with local governments, transit providers, community service organizations, and other stakeholders to evaluate requests;
- A mobility toolbox to provide local governments with resources on transit project development;
- Programs and projects through Strategic Partnerships to improve transit access for seniors, individuals with disabilities, and low-income populations;
- Implementation of projects that address gaps in service and integrate recommendations from recent transit studies including Cedar Hill, other local governments, and partner agencies; and
- Execution of subrecipient agreements and documentation of subrecipient compliance with grant requirements through monitoring and on-site re

D. Funding Summary

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
3.01	\$2,904,200	\$1,037,400	RTR	
		\$918,200	STBG	
Subtotal				\$4,859,800
3.02	\$980,700			
Subtotal				\$980,700
3.03		\$2,189,400	CMAQ	
		\$113,900	DOE	
		\$7,402,250	EPA	
		\$12,300	FHWA	
		\$16,220,379	Local	
		\$6,562,000	STBG	
Subtotal				\$32,500,229
3.04	\$1,650,900	\$928,400	FTA	
		\$816,800	STBG	
Subtotal				\$3,396,100
3.05		\$20,919,650	FTA	
		\$694,500	Local	
		\$1,469,000	RTR	
Subtotal				\$23,083,150
Total	\$5,535,800	\$59,284,179		\$64,819,979

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man hours, they are not reflected in the funding tables.

Task 3.0 Funding Summary



V. Task 4 – Metropolitan Transportation Plan

A. Objective

Since the early 1970s, Metropolitan Planning Organizations have had the responsibility of developing and maintaining a Metropolitan Transportation Plan (MTP). With the passage of the Intermodal Surface Transportation Efficiency Act of 1991, the role of the MTP in the overall transportation planning process was greatly advanced. The current funding bill, the Fixing America’s Surface Transportation (FAST) Act, continued the role of the plan as a central mechanism for the decision-making process regarding investments to develop the metropolitan transportation system. Federal transportation legislation requires transportation plans within metropolitan areas greater than 200,000 in population and in nonattainment areas to be reviewed every four years.

Mobility 2045: The Metropolitan Transportation Plan for North Central Texas was developed and approved by the Regional Transportation Council in June 2018. The plan serves as the defining vision for transportation systems and services in the Dallas-Fort Worth Metropolitan Area and incorporates updated corridor recommendations, addresses regional financial shortfall concerns,



and includes new innovative funding and project implementation strategies. It was developed to meet FAST Act planning requirements as provided by the Federal Transit Administration and Federal Highway Administration and incorporates performance measures and includes emphasis

on emerging transportation technologies and trends. Efforts in Fiscal Year (FY) 2022 and FY2023 will focus on adoption of a new metropolitan transportation plan, Mobility 2045 Update, and implementing projects, programs, and policies, while continuing to coordinate with federal, State, and local transportation providers. In addition, elements in this Work Program task also contain

funding to evaluate policies and strategies directed at reducing congestion and improving air quality, to link the transportation and environmental planning processes, and to ensure that nondiscrimination and the principles of equity and environmental justice are incorporated in NCTCOG's transportation plans, programs, policies, and activities.

B. Expected Products

Products from Task 4, Metropolitan Transportation Plan, will include public meetings and public outreach activities, committee briefings, the screening and evaluation of system alternatives, travel forecasts, updating and reviewing financial forecasts, and transportation system performance summaries. Numerous presentations to local elected officials, transportation interest groups, and participating agencies will be conducted, and written materials documenting the plan's analysis and recommendations will be prepared. Adoption of the Mobility 2045 Update is expected. Specific products for each subtask are included in each subtask description.

C. Previous Work

Routine Work Efforts – In FY2020 and FY2021, NCTCOG staff monitored the development of projects recommended in the Metropolitan Transportation Plan (MTP). Demographics, project costs, potential revenue available, and other planning factors were reviewed in preparation for development of the next MTP. Regionally Significant Arterials were also monitored and updated based on active programming. The Regionally Significant Arterials database was revised according to National Highway System updates. Local government throughfare plans were reviewed, and new plans and changes to existing plans were catalogued. The Dallas-Fort Worth region's Federal Functional Classification System (FFCS) was maintained. Staff completed a universal National Highway System update which produced numerous changes to the FFCS.

The North Central Texas Council of Governments (NCTCOG), through its partnership with the US Army Corps of Engineers, continued to carry out activities in support of expedited environmental permitting for regionally significant transportation projects with completion of 23 permit decisions and over 350 final actions. The Environmental Stewardship Program continued with staff reviewing the purchase and planting of trees to combat urban heat island.

Staff continued focus on the “Blue-Green-Grey” initiative to address traditional transportation planning techniques that can result in “silos”, which cause disjointed communication and coordination amongst planners or project champions. Blue-Green-Grey is a unique silo busting initiative that focuses on three elements – water (blue), environment (green), and transportation infrastructure (grey). Five projects were completed through this initiative: City of Southlake Burney Lane Biofiltration System, City of Farmers Branch Bus Stop Design Guidelines, Dallas Area Rapid Transit Community Gardens Hatcher Station Pilot, Retrofitting Neighborhood Commercial Green Bicycle Park, and a Micro-Detention Storage System.

Activities in Task 4 related to Title VI and environmental justice continued. Data updates were made to the Environmental Justice Index and Transit Accessibility Improvement Tool. New analysis and needs assessment methodologies were developed. Data requests from staff and transportation partners were fulfilled. Title VI training was provided to transit agencies. Best Practices Guide was drafted to train staff to incorporate environmental justice analysis into programs and projects. The Title VI/environmental justice webpage was updated.

Finally, in performance-based planning and coordination, NCTCOG staff coordinated analysis for federal and local performance measures and targets. Data display and analysis applications were developed for staff use. Performance measures activities were coordinated with the Metropolitan Transportation Plan and Transportation Improvement Program.

Non-Routine Work Efforts – The status of significant or one-time work efforts contained in Task 4 is provided in the table below.

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Completion
Denton Greenbelt Project	Meetings regarding a potential additional crossing of the Denton Greenbelt were held with the Texas Department of Transportation. A Geographic Information System method was developed to the most sustainable alternative.	Multiyear project	FY2022

D. Subtasks

The following subtasks address the Metropolitan Transportation Plan:

4.01 Metropolitan Transportation Planning



This subtask encompasses the development of the metropolitan area’s long-range transportation plan and related documentation of the region’s transportation system. As corridor studies contained in the Metropolitan Transportation Plan advance to final recommendations, periodic amendments and updates to this plan may be required. Additionally, the arterials contained in the plan fall into several categories detailed below, which are monitored and amended as necessary to meet transportation conformity and funding requirements.

Metropolitan Transportation Plan Development and Monitoring

Transportation Planning Funds

This subtask is ongoing throughout FY2022 and FY2023. The Metropolitan Transportation Plan (MTP) provides a blueprint for a multimodal transportation system and responds to broad transportation-oriented goals for the region. These goals include enhancing mobility, improving access, and reducing congestion; quality-of-life goals such as encouraging balanced land use, promoting orderly economic development, and improving air quality; and financial goals such as identifying and pursuing long-term stable sources of funding. The MTP must also meet financial constraint goals where project and program costs must not exceed anticipated revenue.

At any given time, the MTP is being monitored, developed, or modified. Staff will work in cooperation with the Texas Department of Transportation (TxDOT), Dallas Area Rapid Transit (DART), Trinity Metro, the Denton County Transportation Authority (DCTA), the North Texas Tollway Authority (NTTA), the Collin County Toll Road Authority (CCTRA), local governments, and other public agencies as needed to monitor programs and projects recommended in the current MTP, Mobility 2045, to ensure they reflect the latest planning assumptions, allowing those

programs and projects to proceed through the planning and environmental stages of project development.

It is anticipated that a plan update of Mobility 2045 will receive local approval during FY2022 and will include any corridor adjustments needed to meet federal requirements for air quality determination. Staff will continue to coordinate with transportation partners and the public during the development of the long-range plan. This update to Mobility 2045 will factor in planning efforts for the horizon year, demographics, financial assumptions, and other planning requirements. Planning efforts will also include any recommendations from Subtask 5.01, Regional Transportation Studies, Regional Automated Transportation System Initiative. The update to Mobility 2045 will be developed in accordance with the rules outlining the contents of the MTP under the policy direction of the Regional Transportation Council, technical guidance of NCTCOG's technical committees, and public involvement efforts. Changes to the MTP will be made in coordination with local transportation providers and partners.

Moving Ahead for Progress in the 21st Century (MAP-21) introduced a new requirement to incorporate a performance-based approach in the transportation planning process. In response to this requirement, staff coordinated with TxDOT to establish regional transportation system performance measures and targets. Staff will continue to monitor and assess the performance of the transportation system and its effect towards meeting federally required performance targets according to guidance from the Fixing America's Surface Transportation Act. Additional locally developed performance measures and metrics will also be evaluated. Anticipated products of this subtask include:

- Presentations utilizing MTP data and information;
- Maps;
- Collection and transmittal of travel model networks, GIS shapefiles, and performance reports as model outputs;
- Periodic reports to the Regional Transportation Council (RTC) and the Surface Transportation Technical Committee (STTC) documenting status of MTP implementation;
- Coordination meetings to monitor and ensure the continued progress of project recommendations; and
- Mobility 2045 Update document.

Regionally Significant Arterials (RSA)

Transportation Planning Funds

North Central Texas Council of Governments (NCTCOG) staff will work in cooperation with the Texas Department of Transportation, transportation agencies, and local governments to monitor the Regionally Significant Arterial system. The RSA database and listing will be amended to be consistent with the revised National Highway System and local planning efforts. Activities will be ongoing throughout FY2022 and FY2023 to monitor and amend the RSA system as needed. Anticipated products include:

- RSA database in both ArcGIS and TransCAD applications;
- Coordination with transportation partners and local governments in the planning and staging of transportation improvements; and
- A listing of existing and planned RSAs to be included in the Metropolitan Transportation Plan and transportation conformity analysis.

Regional Thoroughfare Plan Inventory (RTPI)

Transportation Planning Funds

In conjunction with the continual development of the Metropolitan Transportation Plan, North Central Texas Council of Governments staff will collect, translate, and inventory local government thoroughfare plans and provide planning support from a regional perspective. Once the thoroughfare plans are combined and compared, some instances will require resolution of boundary disputes to ensure a high degree of consistency and continuity between local government planning efforts and regional planning efforts. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Documented inventory of thoroughfare plans that were collected and included in transportation networks; and
- A Geographic Information System (GIS)-based regional arterial system map.

Federal Functional Classification System (FFCS)

Transportation Planning Funds

Staff will continue to work in cooperation with federal partners and the local Texas Department of Transportation districts to maintain the FFCS for the Dallas-Fort Worth Metropolitan Area. This element includes monitoring roadway system function to determine the necessary mid-cycle amendments, as needed, to the FFCS. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Participation in an anticipated nationwide universal update of the system;
- Electronic transportation network of FFCS roadways;
- Coordination with local governments in the planning and staging of transportation improvements;
- Amendments, as needed, to the roadway system to correct, remove, or add roadways; and
- Maps and presentations demonstrating location, function, and justification for amendments.

4.02 Coordination of Transportation and Environmental Planning Processes

Linking transportation planning and environmental planning represents a collaborative and integrated approach to transportation decision making. The following elements link development of data, processes and frameworks, and mitigation outcomes to enhance and support metropolitan transportation planning and project development activities.

Planning and Environment Linkages (PEL)

Transportation Planning Funds

This element will support a framework to consider environmental, community, and economic goals early in the transportation planning stage, then carry the goals through the corridor and project development phases into construction and mitigation efforts. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Metropolitan Transportation Plan environmental scoring and mitigation documentation;
- Outreach and technical assistance supporting stakeholder participation in transportation planning processes;
- Partnerships and agreements to expand or improve regional data needs and other partner agreements;
- Documentation and presentation material for coordination meetings, workshops, and training sessions; and
- Technical papers, as needed.

Army Corps of Engineers Section 404 and 408 Permitting

Other Funding Sources

In FY2022 and FY2023, staff will continue activities associated with the Water Resources Development Act Section 214 Memorandum of Agreement between the United States Army Corps of Engineers (USACE) and NCTCOG. This agreement was formed to expedite the evaluation of Section 404 permits for regional priority transportation projects. Staff will monitor the progress of permitting for specific projects identified by transportation partners. The performance and the cost-effectiveness of the USACE under this agreement will be evaluated by using specific performance measures identified by staff. Regional Toll Revenue funds and local funds will support Section 404 activities.

Additionally, staff will continue to monitor and aid in Section 408 permitting activities for major transportation projects. This effort could include attendance at meetings and coordination with resource agencies. Regional Toll Revenue funds will be utilized, and other funds may be sought to support this initiative. This effort will include the following products:

- USACE-reported performance metrics;
- Presentations, meetings, and annual reports; and
- Clean Water Act Section 404 and 408 finalized permit decisions.

Environmental Stewardship Program

Other Funding Sources

The Environmental Stewardship Program will fund engineering studies for constructed wetlands. Consultants may be procured for these efforts. Staff will educate the private sector about mitigation needs in the region. Regional Toll Revenue funding will enable the procurement of trees to be planted to help mitigate the urban heat island effect. This element is ongoing throughout FY2022 and FY2023. Anticipated products include:

- Agreements with external partners;
- Updates of data relevant to stewardship or mitigation; and
- Documentation and presentation material for coordination meetings, workshops, and training sessions.

Denton Greenbelt Project

Other Funding Sources

The Denton Greenbelt Project will address sustainability for a planned roadway expansion through the Denton Greenbelt. Staff will prepare a sustainability assessment and will educate stakeholders about indirect and cumulative effects the roadway expansion may have. This element is ongoing throughout FY2022 and will utilize Regional Transportation Council Local funds. Anticipated products include:

- Sustainability assessment; and
- Documentation and presentation material for coordination meetings, workshops, or outreach efforts.

Blue-Green-Grey Silo-Busting Initiatives

Other Funding Sources

The focus of the “Blue-Green-Grey” initiative is to help address traditional transportation planning that can result in “silos” which cause projects to be disjointed due to lack of communication or coordination amongst planners or project champions in various disciplines. Blue-Green-Grey is an initiative to identify “silo-busting” projects that focus on three elements – blue (water), green (environment), and grey (transportation infrastructure). Selected projects will continue in FY2022 and FY2023. Additionally, staff will advance additional funding rounds throughout FY2022 and 2023 to help develop new ideas that engage multiple disciplines and implement projects that could be further developed and replicated regionwide. Through the 2017 solicitation, three projects were selected for funding: City of Southlake Burney Lane Biofiltration System, the City of Farmers Branch Green Bus Stop Design Guidelines, and the Dallas Area Rapid Transit Community Gardens Hatcher Station Pilot. Through the 2018 solicitation, three projects were selected for funding: Hightower Drive Biofiltration Rain Gardens, Retrofitting Neighborhood Commercial Green Bicycle Park, and Micro-Detention Storage System. Five of these six projects have been completed. This initiative is supported through Regional Transportation Council Local funds. Anticipated products include:

- New funding initiatives and project awards for round three;
- Installation of a biofiltration system at the City of Watauga’s Hightower Drive storm drain inlets;
- Final reports/case studies summarizing impacts, lessons learned, and any future plans; and
- Panels and expert reviews and papers on the success of the program.

Integrated Planning for Regional Transportation, Urban Development, and Stormwater Management

Other Funding Sources

Throughout FY2022 and FY2023, activities contained in this Work Program element concentrate on the integration of regional transportation planning, regional stormwater management, urban development planning, and environmental planning for the purposes of identifying impacts and alleviating risks from severe weather events such as flooding, as well as from other current and future disruptive environmental factors. This comprehensive planning initiative would include assessments of infrastructure and land-use vulnerabilities, analysis of potential lifecycle-based adaptability and durability measures, and determination of possible delivery and maintenance strategies aimed at improving operational capabilities and reducing risk from flooding. Established initially through a working group of partners and stakeholders located in Wise, and portions of Dallas, Denton, Ellis, Johnson, Parker, and Tarrant Counties (specifically, the combined watersheds of the Clear Fork, Elm Fork, and West Fork Trinity River basins), this effort would account for future transportation infrastructure plans, future land-use plans, and the resultant stormwater runoff and/or other environmental effects expected to occur based on these plans. Information and outcomes produced from this preliminary study could ultimately be used to conduct similar, all-inclusive, and contiguous studies facilitating opportunities throughout North Central Texas that may reduce lifecycle costs and other burdens to infrastructure and urban development as regional growth continues. The funding source for this initiative is Surface Transportation Block Grant Program funds, Regional Transportation Council Local funds, and Transportation Development Credits. Funds from other federal and state agencies are anticipated as part of the overall program. Anticipated products may include:

- Development, application, and technical analysis of dynamic numerical models for estimating the extent and severity of flooding and other environmental effects;
- Creation and maintenance of Geographic Information System (GIS) map layers, relational databases, web applications, and other technical tools supporting surveys/inventories, spatial analyses, permitting, and project implementation monitoring;
- Benefit-cost analyses and other economic outputs assessing potential multi-disciplinary alternative applications;
- Community engagement and analysis using the Community Health and Resource Management (CHARM) scenario planning tool in coordination with the Federal Emergency Management Agency (FEMA);
- Maps of current/future vulnerable areas and critical transportation facilities to target for enhanced protection and mitigation from flooding events;
- Identification or incorporation of performance measures and evaluation criteria to inform transportation project development and selection processes;
- Engineering products and tools aimed to calculate infrastructure/land-use design parameters, performance degradation, and lifecycle needs;
- Coordination with resource agencies, technical committees, stakeholders, and other partners highlighting outreach, education, training, and regulatory needs and actions; and
- Documentation of recommended policies, programs, and/or projects.

Everman Integrated Stormwater/Flooding Management Study

Other Funding Sources

In FY2022, NCTCOG will conduct a citywide stormwater baseline assessment to identify areas at risk of flooding, integrate stormwater management practices and identify transportation needs. This baseline is critical to establish the appropriate design elements for the widening of Forest Hill Drive in the cities of Everman, Fort Worth, and Forest Hill. Regional Transportation Council Local funds will be used to support work activities. Anticipated products include:

- Technical memorandum documenting transportation alternatives, flood risks and recommended stormwater management practices.

Forest Hill Drive Planning Study

Other Funding Sources

In FY2023, NCTCOG will initiate a thoroughfare plan review facilitating the future reconstruction and widening of Forest Hill Drive between Lon Stephenson Road and Shelby Road within the cities of Everman, Forest Hill, and Fort Worth. This work will follow the baseline stormwater analysis conducted in the Everman Integrated Stormwater/Flooding Management Study noted above. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized, and consultant assistance may also be acquired to support these efforts. Anticipated deliverables include:

- Technical memoranda documenting analysis of corridor transportation constraints, needs, and comparisons of proposed operational and capacity improvement alternatives;
- Coordination with resource agencies, technical committees, stakeholders, and other partners highlighting outreach, education, training, and regulatory needs/actions based on sustainability and asset management principles; and,
- Final transportation planning direction for the widening of Forest Hill Drive will be documented.

4.03 Ensuring Equity, Nondiscrimination and Environmental Justice in MPO Planning/Program Activities

Transportation Planning Funds

As a recipient of federal funds, NCTCOG is required to ensure nondiscrimination under Title VI of the 1964 Civil Rights Act. Under Title VI and related statutes, each federal agency is required to ensure that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion. The Civil Rights Restoration Act of 1987 clarified the intent of Title VI to include all programs and activities of federal-aid recipients, subrecipients, and contractors whether those programs and activities are federally funded or not. Subsequent presidential executive orders call for environmental justice for minority populations and low-income populations; affirmative advancement of equity, civil rights, racial justice, and equal opportunity for people of color and others who have been historically underserved,

marginalized, and adversely affected by persistent poverty and inequality; and accountability regarding pollution that disproportionately harms communities of color and low-income communities. As an MPO, NCTCOG strives to ensure that nondiscrimination and the principles of equity and environmental justice are incorporated in its transportation plans, programs, policies, and activities.

This element is ongoing throughout FY2022 and FY2023. Staff will ensure compliance with federal- and state-mandated requirements using data-driven and community-driven methods to assess transportation needs, benefits, and burdens. Anticipated products include:

- Annual and triennial reports;
- Data updates to support decision making;
- Analyses of benefits and burdens of plans, programs, policies, and activities, including the metropolitan transportation plan; and
- Technical and outreach support and training for staff and transportation partners.

4.04 Performance-Based Planning and Coordination

Transportation Planning Funds

Federal and state regulations require performance-based planning to ensure the most beneficial transportation projects and programs are implemented. While data-driven decision making has been a cornerstone of the region's planning processes, this subtask provides for the coordination of this commitment and ensures the federal initiative is fully integrated into NCTCOG's planning process. Work efforts will support both short- and long-range transportation planning efforts. The focus of this subtask will be the continued coordination of data-driven planning activities between staff, regional transportation partners, elected officials, and the public. Activities will include review of evolving rules and regulations related to performance-based planning, as well as oversight of data collection, analysis, and processes to support performance-based planning efforts in the metropolitan transportation planning process. Anticipated FY2022 and FY2023 products include:

- Documentation and presentation materials for stakeholder meetings;
- Maps and databases;
- Documentation of analysis methodologies;
- Documentation of decision-making processes;
- Tracking and monitoring of transportation system performance documentation; and
- Web-based performance measure monitoring reports.

4.05 Understanding Public Return on Investment for Transportation Funding

Transportation Planning Funds

Major transportation projects often multiply economic and other effects to a region and the local communities adjacent to the project. This project is a regional study to develop a process for calculating return on investment of public funds for various transportation modes. As a part of this effort, procedures will be developed to apply this process to major transportation projects/corridors within the region. Components include evaluations of direct and indirect effects

of a major transportation project such as safety, economic, social, and mobility benefits. Work for this effort will commence in FY2022 and likely extend into FY2023. Anticipated products include:

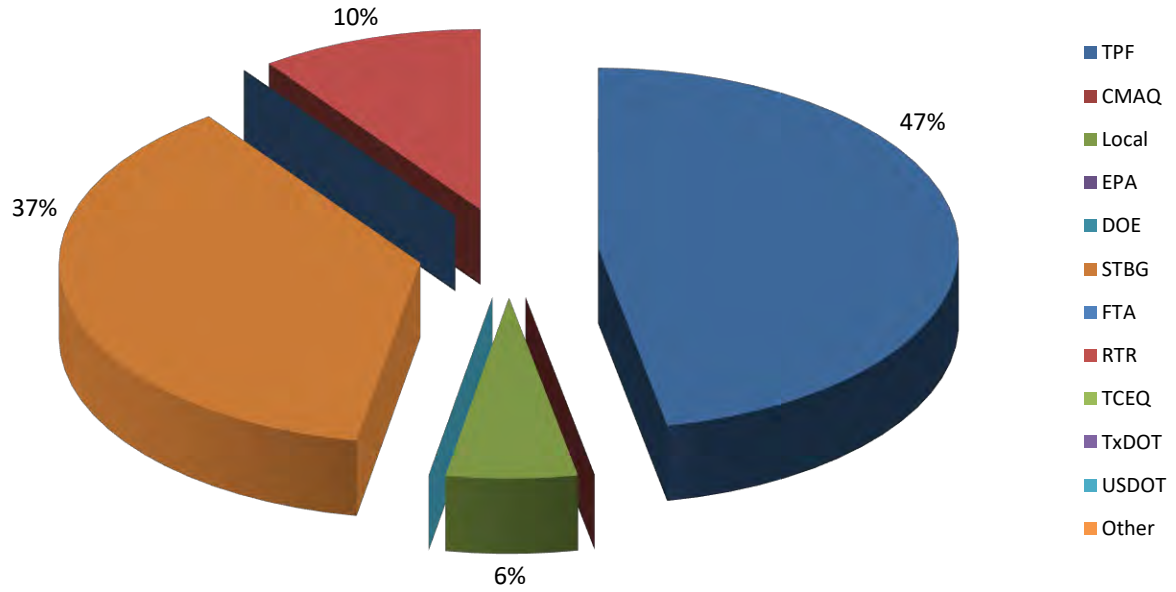
- Technical report outlining process to determine return on investment including assumptions, standards, and procedures for application.

E. Funding Summary

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
4.01	\$2,473,400			
Subtotal				\$2,473,400
4.02	\$526,400			
		\$480,300	Local	
		\$814,600	RTR	
		\$3,042,000	STBG	
Subtotal				\$4,863,300
4.03	\$404,500			
Subtotal				\$404,500
4.04	\$336,800			
Subtotal				\$336,800
4.05	\$95,600			
Subtotal				\$95,600
Total	\$3,836,700	\$4,336,900		\$8,173,600

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man hours, they are not reflected in the funding tables.

Task 4.0 Funding Summary



VI. Task 5 – Special Studies

A. Objective

The North Central Texas Council of Governments' (NCTCOG) Transportation Department frequently serves as an added resource to the various cities, counties, transportation authorities, and the Texas Department of Transportation (TxDOT) by conducting and/or participating in a wide range of various travel forecasting, planning, and technical projects referred to as Special Studies. Projects range from local traffic impact analyses to detailed technical support and evaluations for corridors to meet the requirements of the National Environmental Policy Act. Providing regional support to transportation providers is critical in the planning, operation, and maintenance of a comprehensive regional transportation system.

A continuing emphasis of NCTCOG's Unified Planning Work Program (UPWP) will be to provide continued technical support to the TxDOT Dallas and Fort Worth district offices, Dallas Area Rapid Transit, Trinity Metro, the Denton County Transportation Authority, the North Texas Tollway Authority, the Collin County Toll Road Authority, and other public agencies as needed in carrying out detailed corridor studies. Included in these evaluations will be the completion of ongoing corridor studies and assistance with Environmental Assessments and Environmental Impact Statements consistent with the National Environmental Policy Act process and as outlined in the Metropolitan Planning Rules, as well as procedures developed in Subtask 4.02. Efforts will also be directed at improving levels of transportation decision making by expanding efforts to include a greater emphasis on incorporating the appropriate level of quantitative and qualitative environmental justice analysis procedures as developed in Subtask 4.03 into planning documents, policies, and activities. It is a goal of this enhanced effort to include a greater emphasis on environmental justice analyses such as enhanced analytical capabilities and the identification of benefits and burdens on protected classes of the population into planning

activities. Coordination with the public involvement/outreach process will also play a primary role in ensuring the success of this program. A greater focus on environmental justice serves to not only meet the expectations of legislation but strives to continually improve the transportation planning and decision-making process to ensure that the movement of goods and people is affordable, efficient, safe, and impartial for all patrons.

Emphasis will continue to be placed on providing technical assistance to local governments in transportation subarea studies and comprehensive/thoroughfare planning. NCTCOG serves as an extension of the staff of local governments and is available to provide technical support to maintain and improve transportation planning and to process critical day-to-day information often not available at the local level. Technical support also extends to private sector enterprises under certain circumstances. Staff will assist with corridor-specific requests for travel data used in private sector-initiated project development through potential Comprehensive Development Agreements. As these initiatives move forward, staff will work to include these efforts in the metropolitan planning process. Exhibit I-8 of this document outlines the UPWP policies that will be used to guide the allocation of NCTCOG resources in providing technical assistance.

Planning efforts related to the Land-Use/Transportation interface reflect the connections among bicycle and pedestrian mobility, low vehicle miles of travel, and automobile parking. The objective of this effort is to encourage the deployment of transportation facilities and land uses that reduce the average vehicle miles traveled in the region.

The current transportation legislation, Fixing America's Surface Transportation (FAST) Act, approves funding for surface transportation projects and continues the surface transportation investment made by the US Congress. The FAST Act authorizes funding for many transportation funding categories and specific projects, and continues the concepts identified in previous

legislation regarding the cooperative, continuing, and comprehensive regional planning process. The FAST Act requires all Transportation Management Areas (metropolitan areas with populations greater than 200,000) to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system. Congestion management is an integral element of the region's transportation planning and programming process. It serves as a guide for implementing both near-term and long-term regional transportation improvements.

Also addressed in Task 5 will be the impact of truck traffic, rail freight, and other goods movement in and through the region, and the incorporation of technology for a regional railroad information system. Support for ongoing local, state, and federal initiatives to address transportation system security and the development of policies, programs, and projects to improve transportation safety are also included. In addition, data collection and planning efforts to assess the impact of aviation activity on surface access to aviation facilities and associated improvement needs; regional aviation system planning; and planning for the integration of Urban Air Mobility and Advanced Air Mobility into the traditional planning process to relieve congestion on the existing surface transportation system are key objectives in this Task. Streamlining and coordination of the planning and environmental review processes to expedite project delivery and work efforts to integrate transportation asset management principles within the metropolitan planning process to reduce costs are also included, as well as the planning and implementation of programs to support regional military and community coordination, and activities in support of the arrival of automated vehicles in the region.

Although not a requirement in the UPWP, management and operations projects that are being managed or carried out by Metropolitan Planning Organization staff are included in the document in addition to planning activities. These projects are included in order to provide a more complete

inventory of staff activities and are identified in Tasks 1, 3, and 5. These implementation projects or programs are aimed at reducing congestion and improving air quality in the Dallas-Fort Worth Metropolitan Area.

B. Expected Products

Expected products include a wide variety of technical reports and documentation summarizing the findings of various travel forecasting and transportation planning efforts conducted as part of this task. Detailed descriptions of the likely products from each subtask are included in each subtask description.

C. Previous Work

Routine Work Efforts – In pursuit of a comprehensive, safe, and modern regional transportation system, Task 5 work efforts run a gamut from technical assistance and local traffic impact analyses to environmental impact support, goods movement, monitoring of airport ground access and unmanned aircraft systems, to sustainable development planning and implementation efforts, and to planning for the arrival of high-speed passenger technology and autonomous vehicles in the region. Routine endeavors for Task 5 included using the Dallas-Fort Worth Regional Travel Model for corridor refinement recommendations, and the use of environmental justice data in planning activities. Task 5 work also addressed thoroughfare and subarea studies, alternative travel demand modeling, and model validation checks. Work group meetings ensured coordination both internally and externally.

Land-use and transportation initiatives are also ongoing elements of Task 5. Bicycle and pedestrian planning took place. Staff supported quarterly meetings of the Bicycle and Pedestrian Advisory Committee, provided regional trail coordination, and developed user count traffic reports.

Technical assistance was provided to local communities, not only for bicycle and pedestrian planning, but for sustainable development and transit-oriented development projects as well. School siting and other land-use issues were addressed relative to the impacts on transportation. These aforementioned activities are ongoing and will carry forward into Fiscal Year (FY) 2022 and FY2023.

The Congestion Management Process Update was completed in June 2021. Projects with added capacity were evaluated to justify increased capacity. The Regional Park-and-Ride Inventory Listing was maintained. Necessary updates to the Employers Trip Reduction Manual for regional employers were completed. Staff continued to develop, implement, and monitor regional Travel Demand Management and Transportation System Management and Operations goals and strategies outlined in the Metropolitan Transportation Plan and Congestion Management Process. The 511DFW traveler information system continued. Coordination continued with regional stakeholders regarding updates of the Intelligent Transportation System architecture, as well as special events. Management and oversight continued for several Congestion Management initiatives, including the Traffic Incident Management Training Program, the Mobility Assistance Patrol Program, the Regional Traffic Signal Retiming and Minor Intersection Program, the Regional Trip Reduction Program, and the Vanpool Program. Staff completed an assessment of both the Dallas and Tarrant County programs to determine the viability of possible route expansions, expanding hours of operation, and alternative management options and funding sources. These programs will all continue into FY2022 and FY2023.

Regional freight planning and support of the Regional Freight Advisory Committee continued, including monitoring the implementation of truck-lane restriction corridors, outreach, education, and follow-up studies identified in Freight North Texas. Staff addressed transportation system safety and security through a variety of activities, including support and assistance to agency and

regional partners. Training needs for security-related activities were identified, committee meetings were held, regional crash data for 2014-2020 were processed and analyzed, and federally mandated Safety performance targets were established. Support for the Air Transportation Advisory Committee continued, as did airport system and surface access to aviation planning. Staff administration of the Regional Coordination Committee included conducting quarterly committee and officer communications. Staff completed tasks related to compatible planning through development of presentation materials for local governments encouraging overlay zoning, and monitoring local government planning and zoning actions near military installations.

Throughout FY2020 and FY2021, certain regional projects were identified as critical transportation needs, requiring advanced efforts to bring them to implementation faster, thereby reducing inflation, meeting air quality goals, and alleviating congestion earlier. These projects addressed all surface modes. Streamlined development took place via technical and planning assistance, environmental coordination, and rail and roadway studies. Numerous projects were addressed during the reporting period. This work will continue in FY2022 and FY2023.

Non-Routine Work Efforts – The status of significant or one-time work efforts contained in Task 5 is provided in the table below.

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Collin County Strategic Transportation Initiative	Extensive modeling and outreach efforts continued	Multiyear project	FY2023
Harry Hines Boulevard Corridor Study from Loop 12 to Downtown Dallas	Finalized Phase 1 of the study and have moved into Phase 2. Preparing for stakeholder and public involvement.	Multiyear project	FY2022

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
High-Speed Passenger Technology	Ongoing high speed rail research has been performed, in particular, hyperloop technology. This information was used in the Dallas-Fort Worth Core Express Study.	Multiyear project	Ongoing
High-Speed Passenger Technology Core Express Service	Initiated Phase I of the Dallas-Fort Worth High-Speed Transportation Connections Study which included alternatives analysis efforts, in coordination with the Federal Railroad Administration and the Federal Transit Administration, to determine appropriate high-speed technology(ies) and alignment(s) to proceed to Phase II (FY2022) of the study.	Multiyear project	Ongoing
Regional People Mover Initiative	A scope of services was developed, and a consultant procured to develop vehicle technology and infrastructure specifications for future people mover improvement projects. Coordination efforts occurred regularly with external stakeholders to plan a site-specific system.	Multiyear project	Ongoing
M-Line Extension Feasibility Study	The work scope for the RFP was completed in FY2020. Early in FY2021, staff convened with stakeholders to discuss this study's RFP schedule; it was decided to postpone issuance of this RFP due to other issues related to McKinney Avenue Trolley and that the funds should be returned. Staff and stakeholders will reassess the schedule for new funding and possible RFP issuance.	N/A	N/A

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Regional Passenger Rail Innovative Finance Initiatives	Procured consultant assistance to support NCTCOG in determining transit travel demand along Irving to Frisco/Celina corridor, preferred station locations, and funding/implementation strategies. Activities included monthly Advisory Committee meetings and corridor-specific stakeholder engagement throughout the study.	Multiyear project	Ongoing
Hood County Transportation Plan (including Chisholm Trail Parkway Extension)	Internal meetings and data collection continued in anticipation of the planning study's commencement pending coordination between Hood County and NCTCOG.	Multiyear project	Ongoing
Collin County Outer Loop	Completed study and local environmental document for Segment 3.	There are two more segments remaining to study.	Ongoing
Dallas Area Rapid Transit Red and Blue Lines Transit-Oriented Development Planning Study	All tasks completed and deliverables received. Final report to be submitted to FTA.	N/A	N/A
Sustainable Development Infrastructure Projects	Projects are continuing under construction. Staff continues to pay invoices and oversee reporting.	Multiyear project	Ongoing
Bicycle and Pedestrian Engineering	A Request for Proposals was initiated and a consultant selected for the Fort Worth-to-Dallas Regional Trailing Branding Plan. Completed projects include the Midlothian-to-Waxahachie Trail Preliminary Engineering, Denton to Dallas Trail Preliminary Engineering, Bomber Spur Trail Preliminary Engineering, and South Dallas Trail Preliminary Engineering.	Multiyear project with several trails included.	Ongoing

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Managed Lane Technology Assessment	Staff continued to coordinate with partner agencies on high occupancy vehicle (HOV) discount and integration between systems. Coordinated on public education activities associated with the HOV discount.	Multiyear project	Ongoing
Aviation Education Integration and Outreach	Managed the Unmanned Aircraft Systems Safety and Integration Initiative and the Aviation Career Initiative.	Multiyear project	Ongoing
Regional Freight Planning	The Hazardous Materials Route Study was completed.	Multiyear project	Ongoing
Automated Vehicles: Planning	Convened industry forums to solicit private- and public-sector input for automated vehicle and transportation technology projects. Conducted over forty presentations as part of ongoing public education and outreach efforts. Led the development and approval process for the North Texas Center for Mobility Technologies, a regionwide consortium of universities and NCTCOG.	Multiyear project	Ongoing
Automated Vehicles: Development and Deployment	Introduced automated vehicle developers and freight carriers, and other technology innovations, to stakeholders in the region. Supported regionwide corridor technology improvement projects and automated transportation system deployments. University Partnership Program projects were completed.	Multiyear project	Ongoing

Project Name	Accomplishments to Date	Reason for Carryover to FY2022	Anticipated Completion
Updated Regional Automated Vehicle Program (AV 2.0)	A consultant was procured to lead the regional planning exercise (AV2.1: Planning for Local Partners) to help the region prepare for increased vehicle and roadway automation. Coordinated with local partners to develop and submit proposals for the deployment reimbursement program (AV2.2: Cost Coverage for Local Partners) and the strategic initiatives program (AV2.3: Strategic Investments)	Multiyear project	Ongoing

D. Subtasks

The following subtasks address Special Studies.

5.01 Regional Transportation Studies

This subtask provides support in the development and refinement of major regional corridor studies. For corridors identified for improvement in the financially constrained Metropolitan Transportation Plan (MTP), as well as other potential facilities being considered for inclusion in future MTPs, a comprehensive, detailed, and environmentally focused study must be performed at the corridor level.

Corridor Studies/Environmental Studies Support

Transportation Planning Funds

This subtask is ongoing throughout both FY2022 and FY2023, providing support in the development of corridor studies. For corridors identified for improvement in the Metropolitan Transportation Plan (MTP), both in the financially constrained and the illustrative list of projects, as well as other potential facilities being considered for inclusion in future MTPs, a comprehensive, detailed, and environmentally and socially focused study must be performed at the corridor level. These corridor studies are funded by Transportation Planning Funds, unless otherwise noted, and may require environmental analysis, evaluation of existing and/or future infrastructure conditions, or other feasibility assistance. These studies are required by federal regulation and serve as a bridge between the regional planning process and the more detailed environmental analysis and corridor design, and engineering phases conducted with partner agencies, including Dallas Area Rapid Transit (DART), the Denton County Transportation Authority (DCTA), Trinity Metro, the North Texas Tollway Authority (NTTA), and the Texas Department of Transportation (TxDOT).

Where transportation investments are contemplated, reasonable alternative strategies for addressing the transportation demands and congestion at a corridor or subarea level of the Metropolitan Planning Area are identified and evaluated in these studies. The corridor study process provides information to elected officials, technical staff, the business community, nearby property owners, and the general public on the costs, benefits, and impacts of these alternatives so that an informed decision can be made for a corridor improvement strategy. The study process also presents the opportunity to promote a balanced and multimodal transportation network to improve system interoperability and efficiency, and support the goals of the Metropolitan Transportation Plan, along with sustainability, livability, and community land-use objectives. Funding assistance may be requested from the participating agencies and potential private concessionaires involved in Comprehensive Development Agreement (CDA) efforts.

In addition, this Work Program subtask includes technical assistance enabling NCTCOG to respond to ad hoc requests for information and assistance from local governments, transportation authorities, public agencies, Transportation Management Associations, and private interest groups. TxDOT technical assistance requests, such as on- or off-system arterial corridor analysis projects that help determine design concept and scope, are similarly included in this element. Tasks performed as technical assistance usually involve special computer processing and rerunning portions of the travel forecast model to determine travel conditions and assumptions as specified in each individual request. This work is often done for local governments in conjunction with consultants retained by the local government to complete a study or project. Anticipated products of this subtask include:

- Travel demand modeling forecasts for study corridor alternatives and alignment analysis;
- Specialized model runs such as select-link analyses and alternative demographic modeling;
- Report of daily volumes, peak-hour volumes, level-of-service, vehicle miles traveled, ridership totals, boarding and alighting figures, and other travel model data for studies;
- Travel demand modeling forecasts and forecast results reports with supporting tabulations as required for New Starts applications;
- Travel model networks, Geographic Information System (GIS) shape files, and performance reports as model outputs;
- Coordination meetings that monitor and ensure the continued progress of environmental document completion;
- Collection and transmittal of travel model data for potential CDA proposals;
- Environmental study and project updates on the NCTCOG website;
- Feedback to sponsoring agencies on review of document recommendations and design schematics prior to federal action;
- Update to the regional tolling analysis that evaluates potential environmental justice impacts;
- Analysis that quantifies potential environmental justice impacts at the corridor level;
- Written statements of support at public meetings and hearings for corridors;
- Assistance to local toll project entities on feasibility studies for potential toll roads;
- Review of feasibility and corridor study components;
- Evaluation of institutional structures necessary to implement proposed toll roads.
- Public involvement activities;
- Coordination of planning activities with regional transportation partners including TxDOT and NTTA;
- Corridor recommendations consistent with the Metropolitan Transportation Plan, the Transportation Improvement Program, and Regional Transportation Council policies; and
- Documentation to guide incorporation of asset management principles, performance measures, and pilot project recommendations in the preparatory, analysis, and decision-

making efforts for updates to the Metropolitan Transportation Plan, Congestion Management Process, and the Transportation Improvement Program.

The following is a list of roadway and rail corridor studies in the Dallas-Fort Worth area that may require environmental analysis or other feasibility assistance and would be funded with Transportation Planning Funds. These studies will be conducted based on regional priorities, schedules of partner transportation agencies, and staff and funding availability. This list is not exhaustive of all potential corridor studies but is included as a guide for projects on which assistance is currently ongoing or is anticipated.

- IH 35/IH 35W – Denton County;
- IH 35W – Tarrant County/Johnson County;
- IH 30 – Tarrant County;
- SH 121 – Tarrant County;
- IH 820/IH 20/US 287 – Tarrant County (Southeast Connector);
- SH 170;
- SH 161/SH 360 Toll Connector;
- IH 20 – Tarrant County/Parker County;
- SH 114 – Tarrant County;
- SH 199;
- US 287 – Tarrant County/Johnson County/Wise County;
- SH 360;
- IH 820 West Loop;
- US 377; and
- SH 183 – Tarrant County.

Other Funding Sources

Texas Department of Transportation funds will also be utilized to carry out the work activities noted above, as well as corridor-level mobile source air toxics analyses, on projects that TxDOT requests assistance on. The following projects are anticipated to be performed using Texas Department of Transportation funds:

- US 75 – Dallas County/Collin County;
- US 80/IH 30 – Dallas County/Rockwall County/Kaufman County/Hunt County;
- US 380 – Collin County/Denton County;
- IH 635 East;
- City Map (Downtown Dallas Freeway Coordination Study);
- SH 190 East Branch; and
- IH 20 – Dallas County.

North Texas Tollway Authority Feasibility Studies

Other Funding Sources

During both FY2022 and FY2023, the North Central Texas Council of Governments (NCTCOG) will assist the North Texas Tollway Authority (NTTA) in providing travel demand modeling for current and future corridor feasibility studies, environmental documents, air quality impact analyses, and traffic and revenue forecasts. NTTA funds have been provided through an inter-local agreement between the two agencies to support this element for corridors listed in the

Metropolitan Transportation Plan, as well as other potential NTTA corridors being considered for inclusion in future MTPs. NCTCOG will employ the Dallas-Fort Worth Regional Travel Model, as well as other planning activities, to provide technical data to NTTA in the analysis of new toll or managed facilities, operational enhancements, capacity improvements, or reconstruction of existing toll roads. Anticipated products of this subtask include:

- Technical data from the travel model, including daily volumes, peak-hour volumes, levels-of-service, and vehicle miles traveled for use in the refinement of corridor recommendations; and
- Corridor-level mobile source air toxics analyses.

The following is a list of ongoing and potential feasibility or traffic and revenue studies for NTTA:

- Dallas North Tollway Extension (US 380 to Grayson County);
- SH 190 East Branch (IH 30 to IH 20); and
- President George Bush Turnpike (Multiple Segments).

This list is not exhaustive of all potential toll facilities or toll-related roadway improvements. The list is also not presented in any sort of order of priority or importance. It is included as a guide for possible projects for which assistance may be requested. Project list revisions, as required, may be made by mutual agreement by NTTA and NCTCOG.

Strategic Corridor Initiatives

Other Funding Sources

Under this initiative, North Central Texas Council of Governments (NCTCOG) staff will continue to provide technical, planning, and environmental assistance to transportation agencies and the Regional Transportation Council to help advance critical regional projects through development, approval, and implementation as soon as possible. The goal of this program is to help improve life-cycle functionality and reduce cost escalation due to inflation, alleviate congestion faster, assist in meeting air quality goals, and ensure incorporation of asset management and congestion mitigation strategies/principles. As regional roadway and freight/passenger rail projects continue to increase in complexity, scope, and impacts, the NCTCOG Transportation Department has identified a need to expand its involvement beyond its current planning and programming functions to improve project implementation in the Dallas-Fort Worth region.

Throughout FY2022 and FY2023, the program activities will provide assistance to advance all surface modes of transportation, including passenger rail, freight rail, and roadway improvements, particularly on those projects that deal with multiple transportation modes and asset management initiatives. Surface Transportation Block Grant Program funds, Regional Transportation Council Local funds, and Transportation Development Credits will support this effort. Work products will vary depending on the work performed and could include:

- Meeting summaries;
- Comment review; and
- Technical memorandums.

The following is a list of roadway corridors that may be studied in this element; additional corridors may also be identified:

- IH 820/SH 121;
- SH 183;
- IH 635 East;
- State Loop 9;
- SH 114;
- Outer Loop;
- IH 30 – Rockwall County/Hunt County;
- IH 20 – Dallas County/Tarrant County;
- IH 20/IH 30 – Parker County/Tarrant County;
- IH 35E – Dallas County (including the Dallas North Tollway/IH 3E Interchange);
- IH 35E – Ellis County;
- IH 820 West – Tarrant County;
- SH 360 – Tarrant County;
- US 175 – Dallas County;
- US 380 – Collin County/Denton County; and
- US 75 – Collin County/Dallas County.

Collin County Strategic Transportation Initiative

Other Funding Sources

Carrying over into FY2022 and FY2023, work efforts on this initiative include developing a multimodal Collin County plan with emphasis on north-south capacity and east-west connections to Hunt County. Identification of additional modal needs, as well as integration of those modes into the countywide planning effort, will also be performed. Assistance through the University Partnership Program (UPP) will continue to be utilized to estimate the travel impacts of transportation projects under consideration, with a benefit/cost analysis and an economic impact analysis to evaluate the economic implications of potential transportation improvements in Collin County. Also carrying over from FY2021 are efforts focusing on identifying potential improvements to the IH 30, US 380, and SH 66 corridors, as well as identifying recommended changes to the Hunt County Transportation Plan regarding access to Collin County. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support these efforts. Anticipated deliverables include:

- Travel demand modeling;
- Report of daily volumes, peak-hour volumes, levels-of-service, vehicle miles traveled, and other travel demand model data;
- Presentation of results to local government officials;
- Draft technical memorandum detailing methodology and results of analysis; and
- UPP report on the benefit/cost ratio and other economic analysis results to help decision makers evaluate the value of an investment and prioritize projects.

Harry Hines Boulevard Corridor Study from Loop 12 to Downtown Dallas

Other Funding Sources

In FY2022 and FY2023, NCTCOG will develop a transportation corridor plan for Harry Hines Boulevard from Loop 12 to downtown Dallas. The purpose of this study is to develop a context

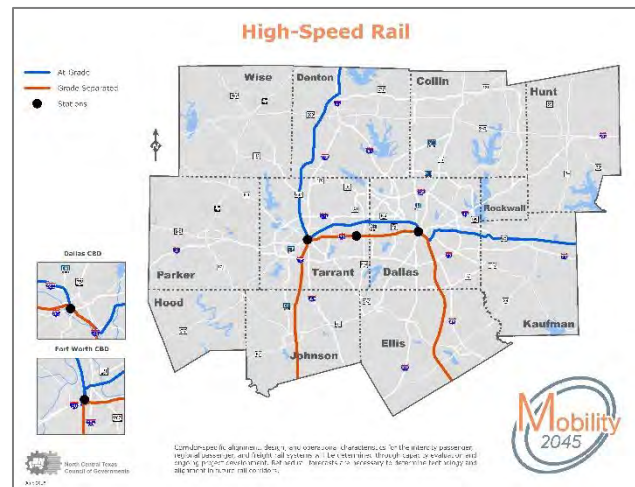
sensitive design with modern engineering concepts to provide multimodal transportation options and to increase the sustainability/livability in the corridor. Work efforts will be supported through Surface Transportation Block Grant Program funds and Transportation Development Credits. Consultant services may be used to support this study. Anticipated products include:

- A master transportation corridor plan for Harry Hines emphasizing multimodal transportation and technology options to support sustainable development.

High-Speed Passenger Technology

Other Funding Sources

North Central Texas Council of Governments (NCTCOG) staff will provide leadership and/or support for work activities related to high- and higher-speed passenger technology within the Dallas-Fort Worth planning area boundary and those areas outside the planning area boundary that impact travel within the boundary. NCTCOG work activities will be supported with Regional Toll Revenue funds and Regional Transportation Council Local funds. Efforts may include all activities associated with planning and implementation of high- or higher-speed passenger technology (i.e., rail, next-generation magnetic levitation) in the Dallas-Fort Worth region, as well as activities related to



connecting the Dallas-Fort Worth region to other metropolitan areas. Consultant assistance may be used for this initiative. Regional Transportation Council Local funds will be used to support travel and associated costs for implementation of high- or higher-speed passenger technology.

The following products will be delivered during FY2022 and FY2023 as the result of work done on this project:

- Various maps identifying alternatives and Regional Transportation Council policies;
- Development of ridership modeling analyses for various high-speed passenger technology alignments and station locations; and
- Recommended station locations, alignments, and technology.

High-Speed Passenger Technology: Dallas-Fort Worth High-Speed Transportation Connections Study

Other Funding Sources

The Regional Transportation Council has secured Surface Transportation Block Grant Program funding, matched with Transportation Development Credits, to support the development of high-speed passenger technology between Dallas and Fort Worth. These dollars and credits will be utilized by the North Central Texas Council of Governments to lead the initiative to complete the

required environmental documents (either an Environmental Assessment or an Environmental Impact Statement) in accordance with the National Environmental Policy Act on the Dallas-Fort Worth High-Speed Transportation Connections Study. Consultant assistance will be utilized. Anticipated products during FY2022 and FY2023 include:

- Fifteen percent conceptual and 30 percent preliminary design plans of Preferred Alternative;
- Final environmental documents (either Environmental Assessment or Environmental Impact Statement); and
- Finding of No Significant Impact or Record of Decision.

Regional Automated Transportation System (ATS) Initiative

Other Funding Sources

Throughout the Dallas-Fort Worth region, many opportunities exist for an appropriate technology to serve as a “last mile” connection or distribution system within a mixed-use activity center area. During FY2022 and FY2023, North Central Texas Council of Governments staff, working in collaboration with the many project opportunity owners, stakeholders, and local government and transportation authority partners, will identify the merits of alternative automated transportation systems (sometimes referred to as people mover) technologies available and assess each regional project opportunity for unique needs, including similarities and synergies. This initiative also includes engineering design efforts for automated transportation systems (ATS) at particular locations and for particular use cases such as passenger and freight distribution. ATS pilot projects are expected to be pursued in both the eastern and western sub-regions, as well as potential retrofit applications. Consultant assistance will be utilized for this initiative. Surface Transportation Block Grant Program funds and Transportation Development Credits will be used. The following products will be delivered as the result of work done on this project:

- Technical memorandums covering evaluation of alternative ATS technologies and guideway system integration;
- Technical memorandums evaluating the needs of the various regional ATS project opportunities; and
- Engineering designs of location-specific infrastructure for alternative ATS systems.

Regional Passenger Rail Innovative Finance Initiative

Other Funding Sources

During FY2022 and FY2023, North Central Texas Council of Governments (NCTCOG) staff will further investigate innovative funding and implementation opportunities for regional passenger rail systems. NCTCOG staff will coordinate efforts with Dallas Area Rapid Transit, the Denton County Transportation Authority, and Trinity Metro, as well as representatives from local government, state, and federal agencies; property owners; and developers to investigate the possible funding options. NCTCOG, working with stakeholders, will explore options under state and local laws for project implementation, and financial and governance structures to advance all regional passenger rail projects. Efforts will also include travel demand forecasting. Consultant assistance may be utilized for this initiative, and Regional Toll Revenue funds will be used. The following products will be delivered as the result of work done on this project:

- Technical memorandums documenting analysis related to travel demand forecasting, project implementation, and financial and governance structure options; and
- Mapping of potential alignment alternatives.

Conversion of Freight Rail to Regional Passenger Rail

Transportation Planning Funds

Throughout the Dallas-Fort Worth region, several opportunities exist to provide passenger rail service in existing freight rail corridors. During FY2022 and FY2023, North Central Texas Council of Governments (NCTCOG) staff will analyze opportunities within the region where potential passenger rail service may be feasible sometime in the future, and what local governments can do to preserve the corridor and develop compatible land use and economic development options. The activities will include collaboration with many project opportunity owners such as private industry, transportation partners, stakeholders, and local government entities; evaluation of corridor feasibility for rail service now and in the future; and how to prepare the corridor by evaluating land-use options that would facilitate future rail service. NCTCOG staff efforts will include analyzing the feasibility of combined or converted operations, including opportunities for unique synergy, cost efficiencies and savings, operations efficiencies, and transportation system effectiveness. The following products will be delivered as a result of work done on this project:

- Technical memorandums covering evaluation of various scenarios and corridor development alternatives;
- Ridership estimates;
- Technical memorandums identifying project feasibility; and
- Presentations and briefings notes.

High-speed Rail/Cedars Planning Study

Other Funding Sources

This study of potential improvements, anticipated to begin in FY2023, will include the review of transportation thoroughfare systems over IH 30. This project will include transportation planning in the Cedars neighborhood of Dallas, transportation connections to the southern sector on both sides of the Trinity River, review of potential structures in proximity of the IH 30 freeway, and preliminary engineering of recommended improvements.

This work will be performed by NCTCOG staff and engineering consultants. It is anticipated that 50 percent of the entire project will be performed by NCTCOG staff and will be conducted in the first 18 months. Consultants will be used for engineering activities in the second 18 months of the study. It is anticipated this effort will be conducted over three years. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support work activities. The anticipated products will include:

- A proposed gridded thoroughfare system over IH 30;
- Transportation recommendations for the Cedars neighborhood;
- Transportation recommendations crossing the Trinity River, connecting Oak Farms to the Cedars neighborhood;

- An inventory of possible transportation and economic development structures in proximity to IH 30; and
- As stated previously, 50 percent of the effort will go primarily to engineering of critical projects.

5.02 Subarea Studies and Local Government Assistance

This subtask provides assistance to local governments, including thoroughfare planning support, comprehensive studies, and technical assistance. This includes coordinating with local, regional, state, and federal agencies and assisting in the preparation of environmental and planning documents, as well as working with local governments in developing the transportation component of a city's comprehensive plan or county-wide transportation plan.

Comprehensive Transportation Planning Studies and Technical Support

Transportation Planning Funds

This subtask is ongoing throughout FY2022 and FY2023, providing an evaluation of multimodal transportation needs within a specific geographic area or along an arterial or transit corridor. Subarea studies are designed to study a specific issue and allow for a comprehensive assessment of general transportation needs within an area prior to examining system alternatives. A portion of this subtask is dedicated to assisting local governments in developing the transportation component of a city's comprehensive plan or in the development of citywide transportation plans through the delivery of travel forecasts and technical support for these efforts. This subtask includes technical assistance enabling the North Central Texas Council of Governments (NCTCOG) to respond to ad hoc requests for information and assistance from local governments, transportation authorities, public agencies, Transportation Management Associations, and private interests. Due to the large number of similar requests, NCTCOG will prepare countywide subarea forecasts that can be used to assist local governments with thoroughfare planning needs and to answer many technical assistance questions. Additionally, this subtask allows for coordinated planning efforts that provide travel demand model ridership data and technical analysis to local transit agencies.

Specific projects in this work subtask are listed below. The list is not all inclusive, as additional requests may be considered pending staff and resource availability. The timing in which local governments are ready to begin studies and the availability of NCTCOG staff and consultant assistance drive the scheduling of these efforts. Consultant assistance may be utilized to support these studies, and local governments may be responsible for consultant assistance funding. The policies set forth to guide the activity in this Work Program element are contained in Exhibit I-5. This Work Program subtask also provides traffic forecasting and technical support for subtasks conducted by other program areas within the department. Anticipated products include:

- Countywide subarea forecasts and identification of recommendations;
- Thoroughfare planning guidelines;
- Travel demand modeling for study corridor alternatives and alignment analyses;
- Report of daily volumes, peak-hour volumes, levels-of-service, vehicle miles traveled, ridership totals, boarding and alighting figures, and other travel model data for studies;
- Collection and transmittal of travel model networks, Geographic Information System shape files, and performance reports as model outputs;

- Project updates on the NCTCOG website; and
- Incorporation of recommendations into the next Metropolitan Transportation Plan.

Provided below is a list of ongoing and candidate projects in the Dallas-Fort Worth area which will be conducted or supported based on regional priorities, schedules of partner transportation agencies, and staff and funding availability. This list is divided into three categories that provide a scaled level of NCTCOG staff involvement: Category 1 – NCTCOG is conducting the study; Category 2 – NCTCOG is providing limited analysis and data to support an external study; and Category 3 – NCTCOG is providing existing data in response to small, ad hoc requests for technical assistance.

Roadway

Category 1

- Hood County Transportation Plan (including Chisholm Trail Parkway Extension)
A countywide plan will be developed that incorporates land-use planning, traffic count and accident data, demographic projections, travel demand modeling, local government committee assistance, and public involvement.
- North Tarrant County Transportation Subarea Study
This study will focus on an assessment of transportation needs in northwest Tarrant County. This effort will include a review of current and future traffic volumes, with attention given primarily to the regional arterial system in regard to connectivity and capacity needs.

Category 2

- Dallas County Major Capital Improvement Program (MCIP)
- City of Dallas Comprehensive Thoroughfare Plan Update
- City of Dallas Area Planning Program
- City of Dallas Bike Plan Update
- City of Dallas Comprehensive Plan Update
- Hunt County Thoroughfare Plan
- East-West Connector for Dallas Fort Worth International Airport
- City of Lake Worth Thoroughfare Planning Assistance
- City of White Settlement Thoroughfare Planning Assistance
- City of Cedar Hill West Side Mobility Assistance

Category 3

- Technical Assistance

Transit

Category 1

- No projects at this time.

Category 2

- No projects at this time.

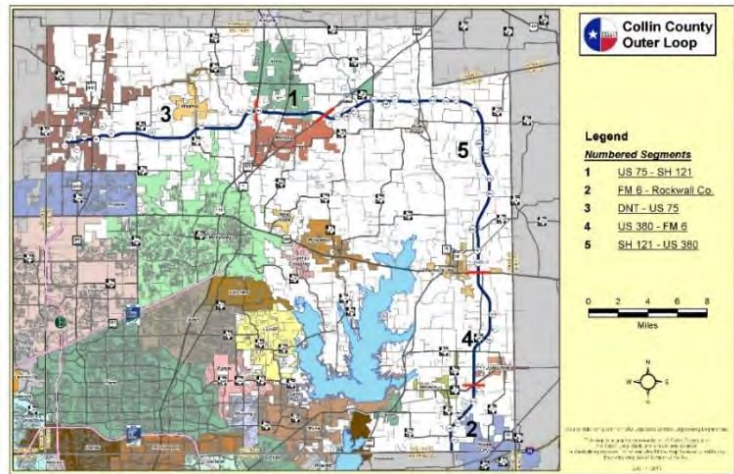
Category 3

- Technical Assistance

Collin County Outer Loop

Other Funding Sources

Ongoing throughout FY2022 and FY2023, the North Central Texas Council of Governments will continue to assist Collin County with the development and implementation of the proposed Collin County Outer Loop. This includes coordinating with local, regional, state, and federal agencies and assisting in the preparation of environmental and planning documents. Regional Toll Revenue funds will be utilized to support this effort, and consultant assistance will be utilized. Anticipated products include:



- Local environmental documents working in collaboration with Collin County staff and consultants.

5.03 Land-use/Transportation Initiatives

This subtask is ongoing throughout both FY2022 and FY2023. Work will include various elements, including Sustainable Development Initiatives, Transit-Oriented Development, and Bicycle/Pedestrian Planning, Safety, and Engineering Initiatives.

Sustainable Development Initiatives

Transportation Planning Funds

This subtask includes regional, subarea, corridor, and district-level planning along with technical assistance focused on the interface between transportation and land use, including assistance with school siting. Staff will continue work on the development and implementation of tools related to land-use planning principles such as sustainable zoning practices and others and will host training sessions and develop educational information. Staff will continue to pursue funding opportunities to expand or enhance activities. Anticipated products during FY2022 and FY2023 include:

SUSTAINABLE DEVELOPMENT IS NOT:

- connected to the Agenda 21 Movement; nor
- an avenue to promote United Nations Policies; nor
- a challenge to, or restriction of, property rights of landowners.

- Technical assistance to local governments on implementing sustainable development programs and projects such as the development of unified corridor plans, land-use analysis, data collection, parking technical assistance, education and training, form-based code review, 3D visualization services, financing strategies and tools for economic development, zoning and special district analysis, and planning to promote infill and mixed-use developments;
- Online information, training, and education on topics related to Green Infrastructure, Sustainable Resource Efficiency, sustainable zoning, sustainable school siting, and other such topics to assist in growth management and land-use planning;
- Planning support for the development of the Blue-Green-Grey program;
- Parking analysis of garage and transportation interfaces at various locations;
- Practical tools for curb lane management throughout the region;
- Meetings and materials for the Coordinated Land Use and Transportation Task Force;
- Analysis of the impacts of mixed-use developments to travel patterns and congestion compared to economic return on investments;
- Kennedale Parkway corridor multimodal access, streetscape, and land-use recommendations for the City of Kennedale;
- Technical assistance to the City of Dallas for the Hensley Field Redevelopment Master Plan, including monitoring of progress as it relates to military planning activities in North Texas; and
- Technical assistance to the City of Plano regarding context-sensitive thoroughfare design best practices.

Other Funding Sources

The Regional Transportation Council selected a series of infrastructure/construction, planning, and land-banking projects during three Sustainable Development Calls for Projects (SDCFP) in 2001, 2005-2006, and 2009-2010. Efforts in overseeing pass-through construction dollars are conducted in conjunction with local governments to better coordinate transportation investments and land use. This program of projects was originally funded by Surface Transportation Program—Metropolitan Mobility funds (now known as Surface Transportation Block Grant Program [STBG] funds), and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds and was established in 2001 when the RTC selected the first Land-use/Transportation Joint Venture projects. Additional RTC Local funds were programmed to fund these projects through the 2005-2006 SDCFP. Regional Toll Revenue, Surface Transportation Block Grant Program funds, and local funds were allocated to the program with the 2009-2010 Sustainable Development Call for Projects, and Congestion Mitigation and Air Quality Improvement Program funds, Surface Transportation Block Grant Program funds and local funds were allocated to the program with the Sustainable Development Phase IV: Turnback, Context-Sensitive, and Transit-Oriented Development funding initiative in FY2018.

Exhibit VI-1 contains the listing of the sustainable development infrastructure projects still underway. The funds are used to provide:

- Road construction, sidewalks, pedestrian amenities, bike trails, etc.

**EXHIBIT VI-1
SUSTAINABLE DEVELOPMENT PROJECTS**

Project Name	Type	Funding Source
Dallas Zang Triangle	Infrastructure	RTR/STBG/TDCs
Dallas Continental Mixed-Use Development	Infrastructure	RTR/STBG/TDCs
Dallas Lake Highlands TOD Multimodal Connectivity Project	Infrastructure	RTR/STBG/TDCs
Farmers Branch Station Area Sidewalks	Infrastructure	RTR/STBG/TDCs
Lewisville Old Town Transit-Oriented Development	Infrastructure	RTR/STBG/TDCs
Mesquite Thomasson Square	Infrastructure	RTR/STBG/TDCs
Crowley Main Street	Infrastructure	CMAQ/STBG/Local
Ennis UPRR Safety Zone	Infrastructure	CMAQ/STBG/Local
Irving SH 356/Irving Boulevard	Infrastructure	CMAQ/STBG/Local
Lewisville College Street	Infrastructure	CMAQ/STBG/Local/TDCs
DCTA Intermodal Transit Center	Infrastructure	CMAQ/STBG/TDCs
Weatherford US 180 (Northern Loop)	Infrastructure	CMAQ/STBG/Local

The 2001 and 2018 projects are coordinated directly between the implementing agencies and the Texas Department of Transportation with staff monitoring project progress. Utilizing RTC Local funds, NCTCOG staff will provide oversight for the implementation of the 2005-2006 infrastructure and land-banking projects. Utilizing STBG funds and Transportation Development Credits (TDCs), staff will oversee the implementation of the 2009-2010 infrastructure projects that may be assigned that are project/corridor specific. RTC Local funds will also be used to identify and support the development of future funding opportunities for sustainable development initiatives. Anticipated products during FY2022 and FY2023 include:

- Implementation and tracking of infrastructure and land-banking projects which include invoice, progress report, and schedule review; and project sponsor meetings;
- Project tracking and technical assistance to local governments developing sustainable development projects;
- Work scopes for plan procurements and consultant selection;
- In-house studies on land use/transportation and sustainability/livability topics of regional benefit;
- Coordination on growth and demographics;
- Training opportunities on regional land use/transportation and sustainability/livability topics of benefit to stakeholders;
- Collection of data as needed, and development and tracking of regional performance measures for reporting to stakeholders and elected officials; and
- Development and assistance in identifying funding programs and grants for regional sustainability/livability initiatives.

Community Schools and Transportation

Other Funding Sources

During FY2022 and FY2023, staff will coordinate with various local cities, counties, independent school districts, and the Texas Department of Transportation to assist in Safe Routes to School project development. The team will provide technical assistance related to needed safety improvements and best practices related to school location siting. Surface Transportation Block Grant Program funds and Transportation Development Credits will support work activities. Anticipated products include:

- Development of Safe Routes to School plans, training, and education information as well as promotion of Safe Routes to School encouragement activities;
- Technical assistance and best practices related to school siting and transportation connections to schools, and assistance in reviewing roadway and active transportation projects impacting schools and analysis of potential school sites;
- Various maps and route analysis for specific safety or access projects;
- Training opportunities for technical staff and elected officials;
- Coordination meetings between Independent School Districts (ISDs) and other stakeholders to engage in regional issues related to school siting, safe routes to school, and policy and transportation issues;
- Practical tools for rapidly growing and greenfield cities and ISDs to plan proactively for school siting and safe bicycle/pedestrian access to schools; and
- Survey and/or data collection of site conditions as needed.

Bachman Lake Area Planning Study

Other Funding Sources

In FY2022, NCTCOG staff will provide planning assistance to the City of Dallas to advance multimodal transportation coordinated with land use at the convergence of major transportation plans and improvements, including modification of major arterial roads such as North West Highway and Harry Hines Boulevard, and the possible second entryway to Love Field Airport. Planning efforts will use stakeholder engagement to identify priorities, goals, and determine areas of further study. Key emphasis of this multi-year study will be placed on addressing safe pedestrian access/facilities along major roadways to create connections to nearby trails, parks, and transit/DART stations; general connectivity of land uses; and coordination with ongoing studies. Consultant assistance may be utilized. Surface Transportation Block Grant Program funds, Regional Transportation Council Local funds, and Transportation Development Credits will be utilized to support work activities. In FY2022, anticipated products include:

- A completed report that will recommend the next phases of implementation.

Hickory Tree Road Planning Study

Other Funding Sources

In FY2022, NCTCOG staff will provide planning assistance to the City of Balch Springs for redesign of the Hickory Tree Road corridor to advance context-sensitive design, mitigate

congestion, and facilitate future economic growth. Planning efforts will use stakeholder engagement to identify goals and a preferred vision for the corridor and identify any areas of further study. Key emphases of this study will include connectivity of and safe pedestrian access to amenities, conceptual street design that emphasizes both pedestrian safety and access management, and transportation planning integration with land use to facilitate economic growth. Surface Transportation Block Grant Program funds, Regional Transportation Council Local funds, and Transportation Development Credits will be utilized to support work activities. In FY2022, anticipated products include:

- Draft and final plans and recommendations.

Regional Mixed-use Development Study

Other Funding Sources

NCTCOG staff will undertake a study investigating the traffic impacts of mixed-use development in the region and its characteristically higher density as compared to standard single use-focused development. The study will 1) explore definitions of mixed use, 2) develop a mixed-use development typology using examples from the region that represent a range of contexts where mixed-use development occurs, 3) use case studies from a range of contexts to investigate the traffic effects that may be associated with mixed-use development and/or other mitigating factors, and 4) explore tradeoffs associated with implementing mixed-use development. Surface Transportation Block Grant Program funds and Transportation Development Credits will be pursued to support work activities. Anticipated products include:

- Development of project work scope; and
- Draft and final report and recommendations.

Dallas Opportunity Zone 1: North Oak Cliff Planning and Conceptual Engineering Study

Other Funding Sources

Beginning in FY2022, this project contains three components within this Opportunity Zone. The first component involves the planning and concept engineering of the Jefferson Viaduct, the Houston Viaduct, the interface thoroughfare street entitled Greenbriar Lane, and the extension onto Jefferson Boulevard. This future system of thoroughfare streets is impacted by the age of the infrastructure, changes to the Dallas levee flood control system, economic development opportunities, and context-sensitive design. The second component involves Eads Avenue, on the eastern side of IH 35E. The third component is a program that involves traffic calming and access management. All three of these emphasis areas involve planning and concept engineering. It is anticipated that a majority of this work will be conducted through a procurement process engaging the engineering community. The funding source is Surface Transportation Block Grant Program funds, matched with Transportation Development Credits. This item will provide planning assistance to the City of Dallas and is part of a larger system of transportation projects in and near the future high-speed rail station. Anticipated products include:

- Identification of project needs and goals;
- Preliminary work scope for the Viaducts/Greenbriar Lane/Jefferson Boulevard;
- Context-sensitive designs for Eads Avenue; and

- Identification of principles necessary for traffic calming and access management.

Transit-Oriented Development

Other Funding Sources

The Transit-Oriented Development (TOD) program was established to provide education, planning, data collection, and technical assistance to TOD projects. Under this element in FY2022 and FY2023, staff will coordinate with public-sector sponsors to evaluate specific needs for the successful implementation of TOD. Additional work will also be conducted to promote TOD in the region and to develop funding strategies and programs. Staff will analyze local data and identify and develop best practices for development around various transit modes. A regional TOD overall strategy will also be developed with local government participation. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support these efforts. Anticipated products include:

- Data collection intended to document existing conditions, develop performance measures for long-term transportation and land-use planning for areas surrounding rail stations and other transit-supportive modes;
- Analysis, education, and planning assistance on criteria-related issues such as the impact of the passenger light-rail system on property values in areas near existing rail stations and other transit modes, parking, job-housing balance, typologies, codes, performance measures, and analysis of options for density and design/form-based code zoning;
- Technical assistance to develop market assessments and station area plans to promote TOD in the region; and
- A regional TOD strategy.

Bicycle and Pedestrian Planning

Other Funding Sources

The focus of this element during FY2022 and FY2023 is to assist in developing, educating on, and promoting bicycle and pedestrian mobility and safety throughout the region. Utilizing Surface Transportation Block Grant Program funds and Transportation Development Credits, staff will plan facilities for active transportation modes; support and provide technical assistance to local governments and the Bicycle and Pedestrian Advisory Committee (BPAC); and advance general data collection, mapping, and a regional bicycle and pedestrian count program. Consultant assistance may be utilized. Staff will also develop and provide public education and information related to safety, accessibility, design, and economic impacts of bicycle and pedestrian facilities. Staff will also manage the updated Regional Safety Campaign: Look Out Texans. Anticipated products include:

- Update of the Active Transportation Planning element for Mobility 2050, including the Regional Veloweb, Performance Measures and Targets;
- Implementation of a bicycle and pedestrian monitoring and data collection program in the region and coordination with local governments on initiatives;
- Bicycle and pedestrian facility plans associated with transit-oriented development areas, bicycle and pedestrian transportation districts, and corridor-area plans;

- Design guidelines and best practices for on-street and off-street bicycle facilities and shared-use paths, including policies related to context-sensitive solutions for multimodal accommodations within street rights-of-way;
- Healthy initiatives and air quality coordination data;
- Regional pedestrian and bicycle plans;
- Active transportation funding programs;
- Bicycle and Pedestrian Advisory Committee meetings;
- Bicycle and pedestrian public education, research, and information programs;
- Purchase of automated bicycle and pedestrian count equipment, parts, and services;
- A-Train Trail Corridor Utilization Study with the Denton County Transportation Authority;
- Federal and State Active Transportation Programs which may include Transportation Alternatives Programs such as Transportation Enhancement, Safe Routes to Schools, and Urban Thoroughfares;
- Technical assistance to large, regionally significant projects like the Cottonbelt Trail;
- Grant proposals to secure additional program funds or to support regional applications; and
- Technical assistance to cities, towns, and counties including policy guidance, planning studies, data, mapping, technical guidance, and Geographic Information System (GIS) support.

Staff will also oversee the implementation of the Regional Bicycle/Pedestrian Sustainable Development Initiatives projects which utilize pass-through CMAQ funds and TDCs available to local governments for the implementation of various bicycle and pedestrian projects. These projects may include, but are not limited to, spot improvements, safety countermeasures, innovative facilities, street reconstruction and rehabilitation as part of bicycle and pedestrian accommodation projects, multi-use trails, signage, pavement markings, traffic signals, and other supportive infrastructure. Staff oversight activities will be supported by Surface Transportation Block Grant Program funds and Transportation Development Credits. Anticipated products include:

- Identification of funding needs and project scopes; and
- General project coordination and project development.

Bicycle and Pedestrian Studies and Engineering

Other Funding Sources

Fort Worth-to-Dallas Regional Trail Branding Plan: During FY2022 and FY2023 staff will oversee the development of a plan for the Fort Worth to Dallas Regional Veloweb Trail including elements such as tourism and major event infrastructure, wayfinding and directional signage, real-time display counters of trail users, economic development, branding and public education, and implementation. The planning effort will include the cities of Arlington, Dallas, Fort Worth, Grand Prairie, and Irving. Regional Transportation Council Local and local funds will be used to support consultant activities, and Surface Transportation Block Grant Program funds and Transportation Development Credits will be used for staff oversight activities. Anticipated products include:

- Plan for infrastructure, signage, development opportunities, branding and public education, and user count equipment; and
- Implementation plan and strategies.

City of Irving Bicycle Plan: During FY2022 and FY2023 staff will oversee the development of a citywide Bicycle Plan for the City of Irving focused on a seamless network of on- and off-street bicycle facilities integrated with the public transportation and the thoroughfare network. The Plan will include stakeholder involvement and analysis of the existing and planned bicycling/public transportation infrastructure network, including gaps in the network, crash data, and technology options. Consultant assistance may be utilized as Phase Two to support planning activities. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support work activities. Anticipated products include:

- City-wide bicycle network plan; and
- Project prioritization, implementation plan, and funding strategies.

Regional Pedestrian and Bicycle Safety Campaign

Other Funding Sources

During FY2022 and FY2023 staff will continue to manage and promote the Look Out Texans safety and education campaign. The campaign is intended to inform, encourage, and educate people of various ages, races, and backgrounds about the benefits of multi-modal transportation and promote a culture of safety around active transportation in the region. Surface Transportation Block Grant Program (STBG) and local funds will be used to support the campaign activities, and Surface Transportation Block Grant Program funds and Transportation Development Credits will be used for staff oversight activities. Deliverables will include:

- Various education and outreach products which may include billboards, radio ads, print material, social media, bus wraps, etc.; and
- Updates to the Look Out Texans Website.

Regional Pedestrian Safety and Bicycle Safety Plans

Other Funding Sources

Carrying over from FY2021, efforts will continue in FY2022 and FY2023 on the implementation and refinement of a regional pedestrian and bicycle safety plan to improve safety for the region's pedestrian and bicycle transportation network. The plan will also serve as a template for the preparation and implementation of local agency pedestrian and bicycle safety plans. This initiative will be funded with Surface Transportation Block Grant Program funds and Transportation Development Credits. Anticipated products include:

- Roadway safety audits of the identified top crash corridors;
- Additional analysis of land-use impacts and various geographies to the crash data; and
- Final plans.

Regional Parking Management Tools and Strategies Program

Other Funding Sources

Parking management at the regional level is meant to improve the efficient use of parking spaces and coordinate the land-use elements of parking with its transportation impact. During FY2022 and FY2023, this program will develop data-driven tools and strategies to support public-sector management and programming of parking at various multimodal locations. Staff will lead planning activities and regional coordination with partner entities who set parking policy. Surface Transportation Block Grant Program funds and Transportation Development Credits will support work activities. Data collection and other consultant services may be required. Anticipated products include:

- Parking Management technology guidance;
- Development of parking management guidance, plans for strategic areas and pilot policy and program implementation;
- Analysis of parking use and data collection within areas of interest;
- Coordination of integrated parking management studies with land-use planning; and
- Identification of strategies for transitioning parking with technology-driven transportation systems.

Smart Transit Corridors and Walkable Places

Other Funding Sources

Expanding transportation choices requires coordinating land use and transportation policy together to most effectively develop or redevelop multi-modal corridors and achieve improved transportation outcomes. Throughout FY2022 and FY2023 this program will focus on multimodal strategies to increase non-single occupancy transportation options in the region through coordinated land-use and transportation planning in priority transit corridors and walkable neighborhoods.

Staff will identify the priority locations based on regional data and coordination with partner agency staff. Planning work for applicable corridors and locations may include existing conditions analysis and mapping, visioning, data collection, stakeholder engagement, investigations on best practices, pilot implementation, and development of regional, corridor, or area plans. Surface Transportation Block Grant Program funds and Transportation Development Credits will support work activities. Anticipated products include:

- Suggested improvements for bicyclists and pedestrians to access transit;
- Strategies to reduce multi-modal transportation barriers in key corridors;
- Review of data and opportunities for job/housing balance;
- Tools and strategies to mitigate gentrification;
- Best practices to support mixed income and workforce housing that increase multi-modal trips;
- Examination of economic potential and benefit of transit served and walkable places;
- Collaboration on public-private partnerships to support walkable development;
- Opportunities to leverage land banking in support of multi-modal transportation infrastructure;
- Education and training events;

- Walkable area and corridor improvement plans;
- Transit corridor and station area plans; and
- Funding and development strategies for select corridors.

Trinity River Multi-Modal Project (Phase 1)

Other Funding Sources

A multi-year effort beginning in FY2022 by the NCTCOG Environment and Development Department staff will create and convene a regional stakeholder committee to coordinate various stakeholders seeking to facilitate tourism and recreation along the Trinity River National Water Trail. Regional Transportation Council Local funds will support work activities. Anticipated products include:

- Support to the communities and Trinity Coalition in the selection of new boat launch sites and strategizing on associated funding sources;
- Compliance with design requirements for new and existing boat launches;
- Publication of the national designation as well as recreation and tourism opportunities with local media outlets; and
- Continuation of collaboration on regional connections between the river trail and the Fort Worth-to-Dallas Regional Veloweb Trail.

Regional Economic Development Initiatives

Transportation Planning Funds

This element continues throughout FY2022 and FY2023 and will provide planning assistance and transportation demographic technical information and data to support economic development initiatives throughout the metropolitan area. Benefactors of this support may include the office of the Governor; area chambers of commerce; economic development coalitions, authorities, and groups; and public-private sector partnerships when working to attract new business and large industries to the region. Transportation Planning Funds will be used to support these initiatives, as well as non-federal sources of funding as they become available. Anticipated products include:

- Maps;
- Travel times;
- Traffic counts and volumes; and
- Socio-economic information.

5.04 Transportation Asset Management

As defined in federal law, transportation asset management is a strategic and systematic process of operating, maintaining, and improving transportation assets to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair (SOGR) over the lifecycle of these assets at minimum practicable cost. This subtask will involve work efforts to integrate transportation asset management principles within the metropolitan transportation planning process.

National Highway System (NHS) Infrastructure Performance Measures and Transportation Asset Management Plan (TAMP) Coordination and Reporting

Other Funding Sources

Existing federal regulations now require that the Texas Department of Transportation (TxDOT) and the North Central Texas Council of Governments (NCTCOG) coordinate on the establishment and reporting of performance targets for pavement and bridge conditions on the National Highway System (NHS). The NHS includes all Interstate Highways and other roadways designated by the US Department of Transportation (USDOT) as important to the nation's economy, defense, and mobility. NCTCOG has the discretion to support TxDOT's NHS pavement and bridge targets (i.e., agree to plan and program projects so that they contribute toward the accomplishment of TxDOT's established targets) or to establish its own quantifiable NHS pavement and bridge targets specific to its metropolitan planning area. As part of NCTCOG's contribution toward achieving established targets, data analysis, project review, and other technical assistance will be applied toward expediting condition improvements, particularly for bridges and NHS "off-system" pavements.

In addition to complying with NHS infrastructure performance measures, TxDOT is required to develop and implement a Transportation Asset Management Plan (TAMP) for the National Highway System (NHS) to preserve or improve asset condition and system performance as part of the National Highway Performance Program (NHPP). TxDOT has prepared a TAMP that not only focuses on pavement and bridge conditions on the NHS but also addresses the entire State Highway System. The scope of this TAMP includes asset management objectives and performance measures, life-cycle planning, risk management, financial planning, and performance gap analyses. To assist TxDOT with TAMP implementation, this element highlights the supporting role of NCTCOG in aiding TxDOT on data collection/analysis, as well as to disseminate TAMP findings to local jurisdictions with NHS roadways.

Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support work activities. Work will be ongoing throughout FY2022 and FY2023, and the following products will be delivered as the result of work done on this element:

- Collection and analysis of NHS pavement and bridge data in coordination with TxDOT and local jurisdictions with NHS roadways;
- Establishment and reporting of NHS pavement and bridge performance targets in coordination with TxDOT and in accordance with federal deadlines;
- Distribution of presentations and reports to guide incorporation of NHS infrastructure performance measures and TAMP findings into updates to the MTP and TIP;
- Development and maintenance of a web page on NHS infrastructure conditions and TAMP compliance, including status updates, meeting materials, and resource information; and
- Development and management of a data and project management system to facilitate reviews of pavement scores and engineering applications directed toward improving NHS "off-system" roadways in poor condition.

Asset Condition-Based Roadway Planning

Transportation Planning Funds

Improved asset management requires acknowledgment and engagement of the various environmental and economic risks that can affect infrastructure vulnerability and longevity. A

durable system not only reduces the probability of component failure, but also reduces the potential extent and severity of overall destruction, service interruption, and recovery time as the result of major disruptive events such as severe weather (e.g., flooding, drought, extreme heat, etc.). To that end, this element will incorporate data evaluating regional pavement/bridge conditions and performance targets, recommendations resulting from the FY2021 University Partnership Program's (UPP) Transportation Infrastructure Vulnerability Assessment Study, outcomes from the Integrated Planning Study for Regional Transportation, Urban Development, and Stormwater Management (as described within subtask 4.02), and other initiatives to inform both project- and system-level asset planning studies. This work will form the basis for conducting systemwide multilevel criticality and vulnerability assessments, identifying customized durability enhancement tactics for various transportation facilities, and utilizing decision-making and/or economic justification tools to aid in the development and prioritization of multimodal durability measures and strategic projects, as appropriate.

Work will be ongoing throughout FY2022 and FY2023, and the following products will be delivered as the result of work done on this element:

- Technical memoranda documenting vulnerable and critical transportation infrastructure itemized by defined asset stress types;
- Travel demand modeling forecasts for study corridor alternatives and alignment analyses;
- Quantification of potential asset management impacts and benefits at the corridor/project level;
- Feedback to sponsoring agencies of environmental document recommendations and design concepts prior to implementing agency approval and delivery;
- Project/corridor recommendations consistent with the Metropolitan Transportation Plan, the Transportation Improvement Program, and Regional Transportation Council policies; and,
- Documentation guiding continued incorporation of asset management principles, lifecycle-based condition needs, and project recommendations for critical and vulnerable-area infrastructure as part of preparation, analysis, and decision-making efforts for updates to the Metropolitan Transportation Plan, Transportation Improvement Program, Congestion Management Process, and other complementary plans/programs.

Streamlining Potential Interventions to Enhance the Life Cycle Condition and Maintenance of Bridge Assets

Transportation Planning Funds

As part of the Regional Transportation Council's commitment to help the Texas Department of Transportation and other National Highway System (NHS) asset owners make progress in the accomplishment of federal condition targets (PM2) for bridges, this initiative through the University Partnership Program will develop a strategic software tool for users to determine feasible interventions to improve condition ratings or extend serviceability of bridges throughout the regional roadway network. Methodology for the tool will be based on the comprehensive review of National Bridge Inventory (NBI) ratings, evaluation of a wide sample set of bridge inspection reports, categorization of possible deficiencies between good/fair/poor ratings on various bridge components, and the identification of corresponding and viable interventions with potential to upgrade safety, functionality, and/or service life. The tool would address a critical knowledge and implementation gap on available or innovative cost-effective maintenance measures for most bridge types, with due respect to environmental factors, service/load demands, and material thresholds, which can be used to either increase or slow the decline of condition ratings

throughout a bridge's typical lifecycle. Work will occur throughout FY2023, and the following products will be delivered as the result of work performed on this element:

- Creation of regional bridge condition maps and location-specific fact sheets highlighting critical bridge attributes such as component performance, structure age, load and vertical clearance limitations, and obsolete design characteristics;
- Technical memorandums highlighting observations/assessments of NBI ratings, inspection reports, deficiency categories, and intervention measures;
- Software tool with user-friendly manual describing inputs, potential outputs, assumptions, and benefit/cost information;
- Final report describing tool methodology, applications, and possible implications for bridge PM2 target-setting and progress reporting; and
- Stakeholder dissemination and training workshops to gain/apply feedback from asset owners.

5.05 Congestion Management Planning and Operations

The Regional Transportation Council (RTC) has selected the following congestion management planning efforts and operational strategies through a series of funding initiatives. The strategies listed below are congestion management directives and special projects that NCTCOG is responsible for implementing and/or administering. Efforts in this subtask will be conducted in conjunction with local governments for better coordination of transportation operations and investments.

Congestion Management Process (CMP) Documentation and Compliance

Transportation Planning Funds

As defined in federal guidelines, the Congestion Management Process is a regionally coordinated approach that provides accurate, up-to-date information on measuring congestion levels and assessing strategies for addressing congestion that meets State and local needs. A CMP is required in urbanized areas with a population exceeding 200,000, known as Transportation Management Areas (TMAs). In TMAs designated as ozone or carbon monoxide non-attainment areas, federal regulations prohibit the programming of federal funds to projects that result in a significant increase in carrying capacity for single-occupant vehicles (SOVs) unless such projects can be justified and incorporate any reasonable travel demand management (TDM) and transportation system management and operation (TSM&O) strategies identified in the CMP.

The updating and maintenance of the CMP documentation for the Dallas-Fort Worth Metropolitan Area is a major element of this Work Program subtask. While the wide range of higher-cost capacity expansion projects and other major infrastructure investments identified in the MTP are needed to meet long-term transportation demands, the CMP focuses on identifying a range of lower-cost, short-term strategies for addressing congestion on the most congested roadway corridors in the region. In addition to TDM and TSM&O strategies, the CMP identifies Asset Optimization strategies where corridor deficiencies and performance gaps can be addressed within the existing right-of way using lower-cost operational and capital improvement strategies that are more cost-effective and quicker to implement than higher-cost capacity expansion projects. Work will be ongoing throughout FY2022 and FY2023, and the following products will be delivered as the result of work done in this element:

- Updated and maintained CMP documentation;
- Presentations and maps utilizing CMP data and information;
- Completion of justification analysis and CMP commitment identification for non-exempt single occupancy vehicle (SOV) capacity-increasing projects submitted for Transportation Improvement Program (TIP) funding;
- Coordination with TxDOT and other implementing agencies of significant SOV capacity-increasing projects to complete CMP forms;
- Integration of corridor-specific CMP strategies into updates to the Metropolitan Transportation Plan and the TIP, and within corridor and environmental studies initiated through Subtask 5.01; and
- Development and maintenance of a web page on the CMP and related strategies, including status updates, CMP forms, meeting materials, and resource information.

Asset Information Planning Tool Development

Transportation Planning Funds

This element will involve the development of an asset information planning tool software with database and visualization features for storing and analyzing transportation asset data. Work efforts will involve the identification of asset data that is readily available from internal and external sources, prioritizing the asset data (asset types, attributes, etc.), and collecting and organizing the asset data. Additional activities will include evaluation of options for collecting additional data, implementing outreach to increase awareness of this tool, and integrating congestion mitigation strategies from the Congestion Management Process (CMP). Work will be ongoing throughout FY2022 and FY2023, and the following products will be delivered as the result of work done on this element:

- Integration of the data fields from the corridor fact sheets from the Congestion Management Process Update documentation into the planning tool;
- Ongoing coordination with program areas to maintain the planning tool to keep data current and reliable; and
- Documentation to guide incorporation of planning tool information and reports into updates to the Metropolitan Transportation Plan, Unified Transportation Program, and Transportation Improvement Program.

Other Funding Sources

This element will also utilize Surface Transportation Block Grant Program funds and Transportation Development Credits to assist with the development of the planning tool. Once the planning tool is in place, it would be maintained and upgraded by NCTCOG staff. Consultant assistance will be utilized. Anticipated products include:

- Development of a work program and request for proposals for the selection of a consultant to assist with the development of the planning tool software;
- Management and oversight of the consultant contract and invoices;
- Development of a planning tool software and website application that produces maps, tables, reports, and fact sheets which will highlight asset management data analyses and congestion mitigation strategy implementation and effectiveness; and

- Training classes, workshops, and instructional materials (user's guide) for internal and external users of the planning tool.

Transportation System Management and Operations

Transportation Planning Funds

This program is ongoing throughout FY2022 and FY2023, supporting development of regional Transportation Systems Management and Operations (TSM&O) strategies. It includes strategies such as intersection and signalization improvements, grade separation, freeway bottleneck removal, and Intelligent Transportation Systems (ITS) which will be developed to reduce travel time and enhance system reliability. Anticipated products include:

- Monitoring, update, identification, and evaluation of regional TSM&O plans, policies and projects outlined in the Metropolitan Transportation Plan and Congestion Management Process;
- Evaluation of TSM&O projects for inclusion in the Transportation Improvement Program, including project-level statements of architecture consistency;
- Support and assistance to regional partners to plan strategies and promote cooperation and participation in committee meetings;
- Evaluation of vehicle and infrastructure technology; and
- Monitoring and assessment of Metropolitan Transportation Plan Policy Bundles survey for TSM&O-related survey components.

Intelligent Transportation Systems (ITS) Architecture

Transportation Planning Funds

This program is ongoing throughout FY2022 and FY2023, supporting development of regional Intelligent Transportation Systems plans and Regional ITS Architecture. ITS improves transportation safety and mobility, reduces environmental impact, and enhances productivity through the integration of advanced communications-based information and electronic technologies into the transportation infrastructure and vehicles. The ITS Architecture guides the use of ITS and builds regional consensus for integrating the systems of multiple agencies in the Metropolitan Planning Area. Anticipated products include:

- Identification and documentation of standards for interagency communication of data and video through Center-to-Center-related software and requirements to facilitate information sharing between agencies;
- Update of the Regional ITS Architecture and development of associated plans and documents;
- Review and approval of project-level statements of ITS architecture consistency; and
- Update of the Regional ITS Architecture Strategic Deployment Plan.

Regional Data Hub and 511DFW

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023, supporting development, testing, implementation, and operations of the regional data hub and 511DFW. There is a significant need for the transportation industry to roll out an enterprise solution that will provide standardized interfaces to reduce integration cost and ensure data interoperability and effective data sharing across the region. Utilizing the open-source data hub platform developed by the California Department of Transportation (CalTrans), NCTCOG plans to implement, test and integrate data sources from the various regional partners and other sources into a cloud-based system to allow for scalability, latency, and security. The data hub will consume standard data inputs from applications, enable sharing of data within the region, make it easy to deploy best-of-breed applications without complex procurement specifications, and allow each agency the freedom to procure systems that best meet their needs. The 511DFW system will feed information into and may consume data from the data hub. 511DFW comprises the public-facing regional Traveler Information System, and the agency-facing user interface for information and performance measures platform. The 511DFW system's public website (511dfw.org) provides personalized travel information and the Transit Trip Planner link. This program uses Surface Transportation Block Grant Program funds, Texas Department of Transportation funds, and Transportation Development Credits to support activities in this area. Consultant services may be utilized. Anticipated products include:

- Testing and implementation of existing regional data hub and interfaces within the Dallas-Fort Worth region developed by CalTrans;
- Evaluation and integration of new and existing data types / sources into and from regional data hub;
- Evaluation, improvement, implementation, and operations of the 511DFW System with outreach and communications planning and educational services to enhance public awareness and use of 511DFW;
- Collection and verification of data ensuring that devices and systems are operated and maintained at a level to detect and report accurate information (i.e., speeds, counts, and other data items);
- Agreements for regional communication, infrastructure, and information sharing including the Memorandum of Understanding between the Dallas-Fort Worth regional ITS partner agencies; and
- Agreements for data and video sharing with individual partners or third-party sources.

Development of Regional and Corridor-Level TDM Strategies

Transportation Planning Funds

This element is ongoing throughout FY2022 and FY2023, providing for the planning and development of regional travel demand management (TDM) strategies including, but not limited to, employer trip reduction initiatives, carpools, vanpools, park-and-ride facilities, and transportation management associations. This element also supports the development of regional TDM strategies in the Metropolitan Transportation Plan. Regional travel demand management strategies identified in the Congestion Management Process (CMP) will be applied on a regional level, and additional travel demand reduction strategies will then be evaluated for their application

on the corridor and subarea levels. At the project implementation level, TDM projects are monitored so they can be added to the regional Transportation Improvement Program at the appropriate time with respect to the single-occupancy vehicle facility implementation. Anticipated products include:

- Monitoring of regional TDM goals and strategies outlined in the Metropolitan Transportation Plan and the Congestion Management Process;
- Assessment and monitoring of Metropolitan Transportation Plan Policy Bundle surveys for TDM-related survey components;
- Assessment and monitoring of public- and private-agency participation in the regional trip reduction target setting for single-occupancy vehicle trips;
- Maintenance of and updates to the Regional Park-and-Ride Inventory database and map;
- Coordination with regional partners for the collection of TDM-related performance measures and/or activity reports for inclusion in TDM reports; and
- Development and implementation assistance efforts to regional employers in developing or strengthening alternative commute programs within their agencies.

Special Events

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023, providing planning and implementation activities for various transportation service needs for special events. NCTCOG continues coordination and technical support for local governments, transportation providers, and other key stakeholders in North Central Texas regarding the regional coordination of special event management plans and critical infrastructure needs to support these events. Surface Transportation Block Grant Program funds and Transportation Development Credits will support this initiative. NCTCOG staff will provide oversight of this program. Anticipated products include:

- An inventory of major special events in the region;
- Coordinated regional partner involvement;
- Implementation of coordinated congestion management strategies associated with special events;
- Identification of funding sources or shared resources, funding agreements executed with regional partners to implement projects; and
- Committee meetings.

Auto Occupancy Detection Technology

Other Funding Sources

This element is ongoing throughout FY2022 and FY2023. To facilitate efficient operation, toll collection, and/or incentive credits on the use of the transportation system, the region has implemented a technology-based system to verify auto occupancy. The region plans to utilize advanced technology for vehicle occupancy detection and verification, as well as other equipment, to improve the safety and operations of the transportation system. As part of this task, NCTCOG staff will provide public outreach and education regarding auto occupancy detection and verification technology. Staff will also work with regional partners to implement occupancy-

based technology, user-based incentives, and dynamic pricing. This element also supports NCTCOG's membership in, and support for, research under FHWA's High Occupancy Vehicle/Managed Use Lane Pooled Fund Study. Congestion Mitigation and Air Quality Improvement Program funds, Surface Transportation Block Grant Program funds, Texas Department of Transportation funds, and Regional Transportation Council Local funds will be used to support these activities. Anticipated products include:

- Coordination and meetings with partner agencies as needed;
- Public outreach and education on auto occupancy detection technologies and user-based incentives;
- Implementation and integration of technology to detect/verify auto occupancy on the transportation system;
- Monitoring of the effectiveness of technology to detect auto occupancy; and
- Support for and participation in FHWA High Occupancy Vehicle/Managed Use Lane Pooled Fund Study.

Traffic Incident Management Training

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023, providing training for agencies responsible for managing and clearing traffic incidents. This training has been demonstrated to improve responder and motorist safety, and to significantly reduce the length and size of roadway closures. The Dallas-Fort Worth area was the first area in the nation to formalize the training process to reach out to all responders and generate improvements in the management of traffic incidents. The goal of NCTCOG Traffic Incident Management (TIM) training is to initiate a common, coordinated response to traffic incidents that will build partnerships, enhance safety for emergency personnel, reduce upstream traffic accidents, improve the efficiency of the transportation system, and improve air quality in the Dallas-Fort Worth region. By implementing best practices techniques throughout the region, clearance times can be reduced by as much as 40 percent. Such an improvement will reduce the impact of congestion, improve regional air quality, and improve the safety and efficiency of travel for all residents and visitors in the area. Surface Transportation Block Grant Program funds, Congestion Mitigation and Air Quality Improvement Program funds, local funds, and Transportation Development Credits support this program. Consultant services may be utilized. Anticipated products include:

- Program management and oversight for the TIM Training Program;
- Implementation of TIM First Responder and Manager Courses and TIM Executive Level Courses;
- Quick Clearance Crash Reconstruction Training workshops;
- Annual TIM Self-Assessment, performance tracking and coordination activities;
- Incident Management Equipment Purchase Call for Projects oversight activities;
- Commercial Vehicle Enforcement (CVE) Working Group, and CVE equipment and training initiative oversight; and
- Support of general training, educational projects and initiatives that promote the implementation of strategies that mitigate traffic and/or CVE incidents; and
- Staging of wreckers and other ancillary services for incident clearance and operational improvements.

Mobility Assistance Patrol Program (MAPP) Administration

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023, and aids stalled or stranded motorists by helping them to move disabled vehicles from the main lanes of regional limited access facilities and ultimately get the vehicles operating or off the facility completely. This support includes minor mechanical and crash assistance, protection to first responders, and the removal of debris. All assistance is provided free of charge to motorists. The MAPP is an essential element to the region's Traffic Incident Management operations and provides ancillary congestion relief, safety, and air quality benefits.

Mobility assistance patrols are operated by the Dallas County and Tarrant County Sheriffs' Offices on congested roadway systems in Dallas and Tarrant Counties, and portions of Collin, Denton, and Johnson Counties. The North Texas Tollway Authority (NTTA) operates patrols on NTTA toll facilities throughout the region, and private-sector partners operate patrols on the LBJ and North Tarrant Express Corridors. Surface Transportation Block Grant Program funds and Transportation Development Credits funds support this program. Consultant services may be utilized. Anticipated products include:

- Regional program oversight including active coordination and support activities for Dallas and Tarrant County operations, and NTTA and private-sector partners on managed-lane facilities;
- Performance tracking, budget monitoring, and patrol route evaluation;
- Evaluation of supplemental funding opportunities and innovative technologies; and
- Comprehensive assessment of the current program to ensure that each program is operating equitably and efficiently.

Regional Vanpool Program

Other Funding Sources

This program, designed to reduce single occupancy commuter trips, is ongoing throughout FY2022 and FY2023 and is an important rideshare program for trip reduction, providing a "shared ride" for commuters traveling long distances or in areas with limited or no fixed-route transit service. The current Regional Vanpool Program is operated by Dallas Area Rapid Transit (DART), the Denton County Transportation Authority (DCTA), and Trinity Metro. Activities will include streamlining the program across providers through regional coordination, providing technical assistance to transit partners, monitoring performance measures, reporting trip reduction data, and exploring future program enhancement. Other initiatives include issuing a cooperative procurement for vanpool services to encourage consistent rider benefits, promoting updated vanpool services to the public, and conducting a vanpool utilization study to assist with future systems and facilities planning and for building interagency partnerships with regional partners for the purpose of increasing participation in commuter vanpools. Surface Transportation Block Grant Program funds and local funds will be utilized for this program. Consultant assistance will be utilized. Anticipated products include:

- Management and oversight of regional vanpool program including operational processes, program budget, invoice activities, agreement development activities, and program assessment activities;

- Coordination meetings with transit partners and stakeholders to maximize regional effectiveness;
- Educational outreach strategies with transit agencies to promote usage among potential riders;
- Procurement and executed agreements for cooperative vanpool services and equipment, on behalf of transit agencies; and
- Procurement and executed agreements for utilization study.

Regional Trip Reduction Program

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023 and is designed to reduce single-occupancy vehicle commute trips. The Regional Trip Reduction Program (RTRP) is an educational commute options program aimed at educating large private- and public- sector employers in the region about available Travel Demand Management (TDM) programs and strategies that reduce single-occupancy vehicle trips for work purposes. The strategies promoted under the RTRP include rideshare (carpool and vanpool) programs, telecommuting and flexible work-hour programs, transit programs, walking, bicycling and similar strategies. The Try Parking It website, www.tryparkingit.com, the regional commute tracking, ride-matching and commuter reward system application is a major component of the RTRP.



Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized for the Regional Trip Reduction Program. NCTCOG staff will provide management, oversight, and implementation of the program. Consultant assistance will be utilized. Anticipated products include:

- Direct outreach to educate commuters and employers on available TDM strategies and assist employers in establishing and/or strengthening alternate commute programs in the workplace;
- Maintenance and update of the Employer Trip Reduction Manual for Regional Employers;
- Maintenance of the RTRP performance database which includes updating, monitoring, and publication of ridership, VMT reduced, emission reductions performance measures, and a listing of new and existing vanpools in operation by regional transit agencies and private vanpool providers;
- Management and oversight of the Try Parking It Program website and commuter recognition activities;
- Promotion of NCTCOG's Try Parking It website to increase program recognition and usage;
- Collaboration with transit agencies in managing vanpool-related information included in the Try Parking It Program;
- Collaboration with private- and public-sector employers regarding their participation in the regional single-occupancy-vehicle trip-reduction target initiative;
- Management of the Regional Vanpool Managed Lane Toll Reimbursement Program; and
- Analysis of impacts of travel behavior changes experienced during COVID-19 related restrictions and an assessment of how continued use of alternative commute strategies can assist in reducing congestion and improving air quality.

Impacts of COVID-19 on Travel Behavior - Telecommuting after COVID-19 or Is it Business as Usual?

Transportation Planning Funds

University Partnership Program assistance will be used to explore whether the positive impacts of commute pattern changes associated with increased teleworking and telelearning during the COVID-19 pandemic will continue in a post-pandemic work environment. The study will investigate whether employers and educational institutions will continue to utilize teleworking and/or telelearning at the same or increased level or if telework policies will return to their pre-COVID status in a post-pandemic work environment. The study will also investigate if public and/or private employers will adopt new policies regarding teleworking and will track best practices by companies that have implemented telework policies. Anticipated products include:

- Meeting and survey summaries;
- Comment review;
- Technical memorandums; and
- Final report on study findings.

Regional Traffic Signal and Minor Intersection Improvement Program

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023 and targets the improvement of the arterial transportation system, including frontage roads, in the Dallas-Fort Worth region. Efforts will be conducted in conjunction with the Texas Department of Transportation (TxDOT), local governments, independent school districts, and/or private-sector companies to identify corridors or intersections to be included. The corridors or intersections will be selected based on several factors including, but not limited to, previously recommended low-cost program improvements; performance measures criteria; high volumes; regional distribution; previously funded and unfunded projects; safety; environmental justice; and local agency needs such as traffic signal software, traffic signal cabinets, traffic signal controllers, battery backup, intersection cameras, detection devices, communications with Traffic Management Center or other intersections, and Global Positioning System clocks. These efforts will generate nitrogen oxide and volatile organic compound emissions reductions to aid in future transportation conformity determinations. Congestion Mitigation and Air Quality Improvement Program funds, Texas Department of Transportation funds, Regional Transportation Council Local, other local funds, and Transportation Development Credits support this project. NCTCOG staff will provide oversight of this project and consultant services may be utilized. Anticipated products include:

- Subrecipient agreements for pre-approval and execution;
- Recommendation and implementation of major and minor improvements;
- Traffic signal equipment and other procurements;
- Inventory and review of regional traffic signal system and operation by corridor and individual signal;
- Development of regional traffic signal minimum equipment standard;
- Evaluation of traffic signal performance platforms that are available to measure the performance of the traffic signals region-wide and subsequent procurement;
- Implementation of signal retiming plans, including analysis of baseline and improved conditions;

- Monthly progress meetings with consultants, TxDOT, and local agencies as appropriate;
- Review of corridor reports, project summary reports, consultant invoices and progress reports; and
- Signal retiming, evaluation and/or reimbursement of tolls for closures during construction and other planned and unplanned events.

Incident Management Signage and Striping Project

Other Funding Sources

NCTCOG staff will continue to inventory regional signage for limited-access facilities within the 12-county Metropolitan Planning Area. Signage locations will be documented in which inaccurate, poorly located, or otherwise incorrect conditions exist that may contribute to congestion or unsafe traffic operations. These locations will be provided to TxDOT and recommended for replacement. Facilities under construction will be omitted from the inventory. This program uses Regional Toll Revenue funds. Activities will be ongoing throughout FY2022 and FY2023. Anticipated products include:

- Video footage of all limited-access facilities;
- Evaluation of video that will result in a documented inventory containing areas of incorrect, or unclear signage;
- GIS-based maps identifying problem locations; and
- Coordination with local TxDOT districts to present project findings.

5.06 Regional Freight Planning

This Work Program subtask includes activities related to the movement of goods in the Dallas-Fort Worth region, both on the regional roadway network and rail system.

Regional Goods Movement

Other Funding Sources

This subtask is ongoing throughout FY2022 and FY2023, assessing the impact of truck traffic, rail freight, and other freight movement issues within and through the Dallas-Fort Worth region. Activities will be conducted based on truck, rail, and air cargo movements throughout the region in support of city, county, State, and federal agencies. Coordination between private-sector stakeholders and public-sector staff will be initiated through multiple initiatives and meetings. This element also includes the collection and analysis of data pertaining to freight mobility and safety. These activities will include continued coordination with private-sector partners in the trucking, rail, and freight-forwarding businesses. A study of Region-to-State Connectivity and Emergency Logistics Planning includes developing and executing an analysis of several statewide freight issues that affect the Dallas-Fort Worth region, including freight flows in and out of the region and state. In FY2020, NCTCOG was chosen for an award by the United States Department of Transportation (USDOT) under the Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant Program for the North Texas Multimodal Operations Velocity Efficiency and Safety (NT MOVES) Program. The NT MOVES program seeks to improve freight and passenger mobility in the Dallas-Fort Worth region through strategic investment in rail

capacity to improve multimodal transportation. It is anticipated that a portion of these funds will be used in FY2023 to support rail project improvements. NCTCOG staff will oversee project management of the NT MOVES/BUILD grant rail project improvements once initiated, and will also oversee other freight rail initiatives. Consultant assistance may be utilized. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized for planning and management work activities. USDOT BUILD Grant funds may be utilized for project oversight and management once project implementation begins. Anticipated products include:

- Monitoring of truck-lane restriction corridor conditions;
- Various reports and studies regarding freight conditions in the Dallas-Fort Worth region, including a Truck Bottleneck Analysis, Region-to-State Connectivity and Emergency Logistics Planning Study, and a Regional Rail Pathing Study;
- Recommended follow-up studies identified in Freight North Texas: The North Central Texas Regional Freight System Inventory, including a Land-Use Compatibility Analysis and a Data Collection Program which could include traffic counts, classification counts, and surveys for the Regional Freight Model;
- Regional Freight Advisory Committee meetings;
- Regional Transportation Council Intermodal/Multimodal/High Speed Rail/Freight Subcommittee meetings, as needed;
- Support to the US Department of Transportation Federal Highway Administration and Texas Department of Transportation for various projects as needed;
- Region-to-state connectivity and emergency logistics planning;
- Freight Mobility Plan;
- Corridor studies;
- Roadway/rail crossing assessments;
- Program management of the NT MOVES/BUILD grant projects;
- Public outreach and educational programs; and
- Technical assistance to the City of Dallas for its Freight Master Plan.

Regional Rail Information System

Other Funding Sources

Ongoing throughout FY2022 and FY2023, this element includes planning and implementation activities related to the development and implementation of Regional Rail Information System (RRIS) technology in the North Central Texas region to monitor and forecast train traffic conditions for both freight and passenger operations. With the development and implementation of RRIS technology, NCTCOG seeks to remediate railroad congestion and delay in the DFW region on the basis of current operation and projected rail traffic growth. In FY2020, NCTCOG was chosen for an award by the United States Department of Transportation (USDOT) under the Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant Program for the North Texas Multimodal Operations Velocity Efficiency and Safety (NT MOVES) Program. The NT MOVES program seeks to improve freight and passenger mobility in the Dallas-Fort Worth region through strategic investment in rail capacity to improve multimodal transportation. A portion of these funds will be used to support initiation of the RRIS technology. USDOT BUILD grant funds; Surface Transportation Block Grant Program funds, matched with Transportation Development Credits; Regional Transportation Council Local funds; and local funds will support work activities. Anticipated products include:

- Development and initiation of a Regional Railroad Information System in the Dallas-Fort Worth region.

Engineering for Passenger Rail/Roadway Interfaces

Other Funding Sources

This element is ongoing throughout FY2022 and FY2023 and includes the establishment of agreements with freight and passenger railroads for engineering of rail projects and rail/roadway projects, allowing for streamlined design and review of design plans for regionally significant transportation projects. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized for work activities. Anticipated products include:

- Agreements with participating railroads; and
- Review of various rail/roadway projects.

5.07 Transportation System Security and Emergency Preparedness

Transportation Planning Funds

This program is ongoing throughout FY2022 and FY2023, supporting ongoing local, State, and federal initiatives to address transportation system security and emergency preparedness planning. NCTCOG continues a dialogue among local governments and transportation providers in North Central Texas regarding the regional coordination of response plans, response capabilities, and emergency medical services in the event of a major incident. Staff also provides technical transportation data needed to support these planning efforts, as well as to facilitate the coordination of various transportation providers and planning agencies.

NCTCOG's Transportation Department will continue to support the Emergency Preparedness Department in developing/enhancing regional emergency preparedness capacity as it relates to utilization of Intelligent Transportation Systems or transportation management tools and infrastructure protection by developing a framework for response and contingency planning due to the unexpected loss or intentional removal of roadway capacity. Scenario modeling may identify the impact to parallel or complementary routes for strategic corridors in the region to help determine potential temporary or interim traffic management solutions. Anticipated products include:

- Support and assistance to agency and regional partners including monitoring of activities, promotion of regional coordination, and committee meetings;
- Interaction and cooperation between emergency responders and transportation staff;
- Technical transportation data, performance analyses, and planning services related to transportation security;
- Infrastructure protection measures (identifying regional transportation assets including recommending vulnerability analyses on regional facilities and services); and
- Transportation resource support for mass evacuation events.

5.08 Roadway Safety

This subtask is ongoing throughout FY2022 and FY2023, supporting planning efforts to develop safety policies, program, and projects.

Transportation Safety Planning

Transportation Planning Funds

Staff coordinates with the Regional Safety Advisory Committee, the Texas Department of Transportation (TxDOT), Texas Department of Public Safety, Federal Highway Administration, local governments, and other partners to develop strategies for regional safety planning efforts, data collection, and analysis. These partners also assist in developing policies, programs and projects to improve safety related to the transportation system. Anticipated products include:

- Collection, processing, maintenance, and analysis of regional safety data including: crash data from TxDOT's Crash Records Information System, fatality data from the National Highway Traffic Safety Administration's Fatality Analysis Reporting System, and hazardous material spill data from the National Response Center;
- Regional Safety Information System implementation and assessment activities;
- Monitoring and promotion of the implementation of regional intersection improvements outlined in NCTCOG's Intersection Safety Implementation Plan (ISIP) and the Texas ISIP;
- Regional and federal safety performance measure tracking and reporting activities;
- Safety-related education and training courses for member agencies;
- Coordination of regional Wrong-Way Driving Mitigation Program and mitigation strategies; and
- Coordination efforts for the Regional Safety Advisory Committee.

Other Funding Sources

Surface Transportation Block Grant Program funds, Transportation Development Credits, and grants will also be utilized to support this program. Anticipated products include:

- Regional Safety Information System application tool;
- Development and implementation of Driver safety public education, outreach, and information programs including a contributing factor public education campaign and development of a Drive Aware North Texas website;
- Regional roadway safety strategic plan development activities;
- Systemic safety improvement funding program activities; and

Railroad Crossing Coordination

Other Funding Sources

This element is ongoing throughout FY2022 and FY2023 and includes the identification, planning, and implementation of rail crossing projects throughout the Dallas-Fort Worth region. Surface Transportation Block Grant Program funds and Transportation Development Credits will be utilized to support this project. Anticipated products include:

- Maintenance of the regional railroad banking program;
- Coordination with local, state, and federal agencies for review of potential rail crossing projects;
- Regional rail crossing assessments;
- Analysis of rail safety data to identify target areas for educational efforts;
- Public outreach and education efforts in the region; and
- Enhanced regional partnerships.

5.09 Regional Aviation Planning and Education

This Work Program subtask includes planning for the regional aviation system and linkages to surface transportation assets within the region. The safe integration of Unmanned Aircraft Systems into the Dallas-Fort Worth region, in addition to public outreach to help expand and enhance aviation and aerospace education and career skills are also included.

Surface Access to Aviation

Transportation Planning Funds

This element is ongoing throughout FY2022 and FY2023. Work includes data collection and planning efforts to access infrastructure to aviation facilities and associated improvement needs. This item includes a review of travel-time contours, air cargo trends and connectivity, and land-use implications surrounding aviation facilities. This project also includes reporting to the Regional Transportation Council and the Air Transportation Advisory Committee, and input into the Metropolitan Transportation Plan (MTP) and other transportation planning activities. Anticipated products include:

- Inventory and data collection of aviation needs;
- Analysis and recommendations for infrastructure improvements affecting aviation;
- Travel-time contours for aviation facilities;
- Inventory of surface transportation access to aviation facilities; and
- Monitoring and assessment of Metropolitan Transportation Plan Policy Bundles survey and other planning activities for aviation-related components.

Urban Air Mobility and Advanced Air Mobility Integration

Transportation Planning Funds

This element includes the continued work in FY2022 and FY2023 around Urban Air Mobility (UAM) and Advanced Air Mobility (AAM) integration into the traditional transportation planning process. Urban Air Mobility envisions a safe and efficient aviation transportation system that will use highly automated aircraft that will operate and transport passengers or cargo at lower altitudes than traditional aircraft within urban and suburban areas to complement and relieve congestion on the existing surface transportation system. The main program for this effort is the North Texas Unmanned Aircraft System (UAS) Safety and Integration Initiative, including the UAS Safety and Integration Task Force and Working Groups. UAM will be comprised of an ecosystem that considers the evolution and safety of the aircraft, the framework for operation, access to airspace, infrastructure development, and community engagement. Advanced Air Mobility builds upon the

UAM concept by incorporating use cases not specific to operations in urban environments, such as commercial inter-city (longer range/thin haul), cargo delivery, public services, private/recreational vehicles, emergency medical response, and infrastructure monitoring and inspection. Anticipated products include:

- Coordination of the North Texas UAS Safety and Integration Task Force and Working Groups;
- Establishment of Routine Beyond Visual Line of Sight (BVLOS) operations in the region;
- Scaling of the Arlington Entertainment District UAS Integration pilot program to other sites in the region;
- Planning for the integration between Advanced Air Mobility and intermodal transportation hubs within the region;
- Determination of synergies between Advanced Air Mobility integration and the Automated Vehicle integration initiatives around the region;
- Planning of air taxi and air cargo/package corridors or procedures between DFW Airport and partner cities;
- Planning for the integration of North Texas airports into the air taxi network for inter- and intra-city travel; and
- Development of a best practice document for public outreach, engagement and education strategy.

Aviation Education Integration and Outreach

Other Funding Sources

This element is ongoing throughout FY2022 and FY2023 and describes implementation and outreach efforts associated with recommendations from the North Texas Aviation Education Initiative study completed in 2010. Facilitation for development of regional aviation programs, as well as a variety of outreach strategies to local students, will be conducted. These efforts are funded through a combination of grants, Regional Transportation Council Local funds, and industry partnerships. Anticipated products include:

- Participation in aviation advisory committees, school career days and other outreach opportunities;
- Continued development of a Speakers Bureau;
- Enhancement of the aviation careers-based mentorship program;
- Enhancements to NCTaviationcareers.com;
- Program curriculum development and facilitation;
- Regional workshops with educators, industry stakeholders, and policy officials; and
- Continued promotion of the aviation education gaming app, FLYBY.

Regional Aviation System Planning

Other Funding Sources

This element is ongoing throughout FY2022 and FY2023 and includes continuous system planning efforts and implementation of the Regional General Aviation and Heliport System Plan. Ongoing technical assistance to local governments and stakeholders for development recommendations and preservation of the North Central Texas regional aviation system is

provided. Coordination with State and federal governments and aviation stakeholders will be completed to provide input to the National Plan of Integrated Airport Systems, the Texas Airport System Plan, and North Central Texas Council of Governments' documents (such as the Metropolitan Transportation Plan). Airport system evaluation may include demand forecasting and capacity assessments. Consultant services may be utilized. This project is funded through Regional Transportation Council Local funds. Anticipated products include:

- Air Transportation Advisory Committee meetings;
- Stakeholder meetings and associated outreach materials;
- Continued implementation of the Regional General Aviation and Heliport System Plan;
- Aviation system performance measures;
- Collection of geospatial data related to airport infrastructure;
- Geographical Information System (GIS) Web Interface;
- Monitoring of compatible development surrounding airports including obstructions;
- Aviation environmental planning tools such as noise modeling and wildlife tracking; and
- Monitoring, coordination, and evaluation of the impacts of unmanned aircraft systems (UAS) on the regional aviation system.

5.10 Regional Military and Community Coordination

This Work Program subtask includes the planning and implementation of programs to support regional military and community coordination.

Naval Air Station Joint Reserve Base, Fort Worth Land Use and Community Outreach Implementation

Other Funding Sources

Following a 2008 study funded through the Department of Defense Office of Local Defense Community Cooperation (DOD OLDCC) that focused on compatible development near military installations, the Naval Air Station Joint Reserve Base (NAS JRB), Fort Worth Regional Coordination Committee (RCC) was formed. Participating local governments include, but are not limited to, Tarrant County and the cities of Benbrook, Fort Worth, Lake Worth, River Oaks, Sansom Park, Westworth Village, and White Settlement. The interjurisdictional partnership is based on the identification of actions that can be taken jointly by the community and the installation to promote compatible development and address current and future encroachment as identified through the Joint Land Use Study. The RCC created a Development Review Web tool for communities to discuss proposed developments near NAS JRB Fort Worth. This element is ongoing throughout FY2022 and FY2023. Regional Transportation Council Local and other local funds will be utilized to support activities in this area. Anticipated products include:

- Community outreach meetings;
- Tracking of bills proposed in the State legislature;
- Regional Coordination Committee (RCC) Development Review Web tool project inventory and comments;
- At least four RCC meetings and RCC Officer coordination; and
- Documentation and presentation material for forums, workshops, and meetings.

Regional Military Compatible Use Implementation

Other Funding Sources

The Department of Defense Office of Local Defense Community Cooperation (DOD OLDCC) funds implementation of recommendations from planning studies to maintain military operations and support compatible development surrounding military installations. The North Central Texas Council of Governments (NCTCOG) recently completed a Regional Joint Land Use Study (JLUS), now known as a Compatible Use study, that contained over 150 recommendations. The Regional Military Compatible Use Implementation will involve work with federal and State military installations, the Texas Military Department, local governments, and the business community to implement the study recommendations. This element is ongoing throughout FY2022 and FY2023. Department of Defense funds and Regional Transportation Council Local funds will be used for this project. Anticipated products include:

- Active parcel compatibility management tool and analysis of parcel data for changes in compatibility;
- Inventory of compatibility actions taken since initial 2008 JLUS;
- Homeowner relations program to inform new residents about quality-of-life issues near military installations and identify resources related to sound attenuation, including a regional noise reporting clearinghouse, homebuilder certifications, documentation of sound attenuation, and a sound attenuation incentive program;
- Updates to local government zoning ordinances, future land-use plans, building codes, and statewide local government codes to increase compatibility near military installations and participation in local government planning studies near military installations;
- Improved and formal communications channels for Texas Military Department installations;
- Economic development and transportation projects near Texas Military Department installations;
- Efforts to protect military installations from encroachment by unmanned aircraft systems (UAS);
- Information exchanges between both military installations and local governments within the region and between communities across Texas that participate in the Department of Defense Compatible Use program; and
- Grant management requirements.

Aviation, Aerospace and Defense Manufacturing Agile Curriculum Program

Other Funding Sources

The Department of Defense Office of Local Defense Community Cooperation (DOD OLDCC) funds work to provide resilience to the aviation, aerospace and defense manufacturing industrial base. In coordination with partner stakeholders at the regional, industrial, and academic levels, NCTCOG will develop an agile curriculum program that will be guided by a governing body to identify training gaps and develop and deploy courses to students recruited to participate in the program. This element is ongoing throughout FY2022 and FY2023. Regional Transportation Council Local funds and anticipated Department of Defense funds will be used for this project. Anticipated products include:

- Framework agreement among the program stakeholders to determine roles and responsibilities;

- Inventory of current training programs related to aviation, aerospace, and defense manufacturing careers;
- Using a compression planning approach, inventory and prioritization of initial training gaps;
- Evaluation criteria, including performance metrics and a framework for data to be collected and reported;
- Program contact road map maintained with current points of contact for each program stakeholder defining institutional touch points and responsibilities;
- Establishment, and ongoing staff support, of a governing body and technical advisory committees;
- Feedback loop process and tool developed to collect data, report on progress towards outcomes, and identify needed program improvements related to academic implementation, student completion/graduation, career placement, and student career performance, among others;
- Based on prioritized training gaps identified, development of agile curriculum at the appropriate level (enhancement to existing courses, new courses, degree programs, certificates, training for specific employer, etc.) that may be targeted to upskilling existing employees or attracting new applicants;
- Student recruitment strategic plan;
- Student recruitment materials developed and distributed to students at all levels (high school, community college, university, existing workforce) to promote each agile curriculum course as well as to raise awareness in the community at large about career opportunities in aviation, aerospace, and defense manufacturing industries, including specific focus on underrepresented communities and individuals transitioning from military to civilian careers; and
- Grant management requirements.

Surface Access to Critical Infrastructure

Transportation Planning Funds

This element supports planning activities to help ensure the accessibility of critical infrastructure in North Texas, including military installations and energy, water, and communications facilities. NCTCOG will provide support for community thoroughfare planning, support for feasibility studies by the Texas Department of Transportation and other implementing agencies, and technical assistance to military installations and other critical infrastructure facilities seeking transportation system performance data. This element is ongoing throughout FY2022 and FY2023. This work includes reporting to the Regional Transportation Council and NAS JRB Fort Worth Regional Coordination Committee as well as input into the Metropolitan Transportation Plan (MTP) and other transportation planning activities. Anticipated products include:

- Inventory and data collection of surface transportation access to military installations and other critical infrastructure;
- Analysis and recommendations for infrastructure improvements affecting military installations and other critical infrastructure; and
- Planning efforts to improve access to military installations and other critical infrastructure.

5.11 Connected and Automated Vehicle Technologies

Activities in Subtask 5.11 will plan for the arrival of automated vehicles, focusing on the implications that automated vehicles may have regarding travel demand, land use, congestion, and transportation data, as well as vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2X) communications. Planning tools, including travel forecasting models, will be forced to adapt in ways that account for the effect upon the roadway system brought about by these technological innovations and transformations. Automated vehicles are no longer discussed solely in the context of automobile passenger travel, but also in the context of freight, transit, and people-mover/shuttle systems. Planning efforts will include coverage of associated technologies, such as connected vehicle technologies and emerging technologies, including digital and virtual reality technologies, that allow people to engage in life activities without having to travel through physical space.

Automated Vehicles: Planning

Transportation Planning Funds

This program is ongoing throughout FY2022 and FY2023 providing planning for the arrival of automated vehicles and determining the impact of such vehicles on the transportation system. Strategies include analyzing the impact of automated vehicles and monitoring legal development relating to automated vehicles. Anticipated products include:

- Support for existing NCTCOG programs, including transportation planning and modeling;
- Monitoring of automated vehicle laws and policies;
- Maintenance of an information clearinghouse for the region on automated vehicle issues;
- Planning and coordination of pilot programs advancing the deployment of automated vehicles;
- Liaison on automated vehicle issues with public and private parties; and

Automated Vehicles: Development and Deployment

Other Funding Sources

This program is ongoing throughout FY2022 and FY2023 providing for the development and deployment of automated vehicles and related technologies. Strategies include building an open data infrastructure to support safe deployment of automated vehicles, encouraging shared mobility transportation models to deliver more mobility to more people in the region more cost-effectively, Consultant assistance may be utilized to support work activities. This program uses Surface Transportation Block Grant Program funds, Texas Department of Transportation funds, and Transportation Development Credits to support activities in this area. Anticipated products include:

- An open data infrastructure for use by automated vehicles;
- Support for shared mobility service delivery models, especially those that increase average vehicle occupancy;
- Development and deployment of automated vehicle technologies in the region; and
- Advancement of emerging cellular-V2X, DSRC and other communications technologies.
- Liaison to the Smart City/Smart State program.

Updated Regional Automated Vehicle Program (AV 2.0)

Other Funding Sources

Automated Vehicles 2.0 (AV2.0) consists of three elements: (a) “Planning for Local Partners” (or, AV2.1): Provide planning assistance for public entities that are planning ahead for the deployment of AVs in their communities; (b) “Cost Coverage for Local Partners” (AV2.2): Funding to help public entities cover infrastructure, equipment, safety, public education, and other costs incurred when an AV deployment comes to a community; and (c) “Regional Strategic Investments” (AV2.3): Comprehensive support for AV deployment projects supporting use cases/communities that have not attracted AV developer interest but offer an important opportunity to solve a transportation “pinch-point.”

In 2020, NCTCOG procured a consultant to lead the effort in developing a regional planning framework for connected and automated vehicles as part of AV2.1: Planning for Local Partners. This framework may include, but is not limited to, traffic modeling, identifying use cases, policy development, public outreach and education, scenario planning, and land-use planning. The grants linked to AV2.2: Cost Coverage for Local Partners will be accessible by public entities with active or in-development deployments of connected and automated vehicle technology. Eligible costs for reimbursement could include, but are not limited to, local government staff and consultant time, infrastructure upgrades, legal services, public education, safety, and software and technical expertise. AV2.3: Regional Strategic Investments will be selected from proposals on a competitive basis according to selection criteria determined by the Regional Transportation Council. Surface Transportation Block Grant Program funds, and Transportation Development Credits will be utilized. Consultant assistance may be utilized. Anticipated products during FY2022 and FY2023 include:

- Automated transportation planning resources for local partners;
- Reimbursement opportunities for local partners that deploy automated transportation solutions;
- Comprehensive projects that address transportation “pinch-points” in the region that require public intervention; and
- Financial and operational support for local partners hosting an automated vehicle implementation.

DFW Freight Optimization Corridors

Other Funding Sources

During FY2022 and FY2023, this project will use connected vehicle and related technologies to optimize the flow of trucks between freight hubs and expressways in the region. The freight industry has identified this initiative as a top priority. The Value of Time for goods movement approaches \$75 per hour. There are safety, operational, and environmental benefits from reducing the number of truck stops/starts at intersections. This project will focus on intersections with high volumes and proportions of freight traffic. It will use the optimal mix of technologies and data sharing to reduce the number of stops that trucks make at signalized intersections. Deployment locations will be selected based on an assessment of potential benefits and costs, and after consultation with the responsible local jurisdictions and freight companies. The project will include continual performance monitoring and adjustment to deliver the maximum net benefits. Consultant assistance will be utilized. Surface Transportation Block Grant Program

funds, Regional Transportation Council Local funds, and Transportation Development Credits will be utilized to support project activities. Anticipated products include:

- Completion of before and after studies of focus intersections;
- Coordination meetings with the Texas Department of Transportation, freight industry, and other public agencies responsible for roadways in the focus areas;
- Evaluation, procurement, and implementation of connected vehicle and other technologies; and,
- Development of data sharing tools that bridge platforms between public- and private-sector stakeholders.

IH 30 – Dallas/Tarrant County Line to IH 635

Other Funding Sources

In FY2023, NCTCOG will initiate a planning study to review roadway corridor design elements to accommodate automated and electric vehicles, including, but not limited to, dynamic inductive charging technology usable by all vehicles, geometric design for autonomous vehicles and retrofit of new facilities using existing technologies to advance next generation autonomous vehicle implementation. The new section of IH 30 from the Dallas/Tarrant County Line to Downtown Dallas will be the candidate location for retrofit technologies. The older section of IH 30 from Downtown Dallas to IH 635 will be the location for new geometric design for autonomous vehicles. It is anticipated that consultant assistance may be utilized to perform a significant portion of the work. Surface Transportation Block Grant Program funds and Texas Department of Transportation funds will be used to support work activities. Anticipated products include:

- Plans, reports, studies, drawings, visualizations, simulations, and other types of planning products.

IH 30 – IH 35W to Dallas/Tarrant County Line

Other Funding Sources

In FY2023, NCTCOG will initiate a planning study to review roadway corridor design elements to accommodate automated and electric vehicles, including, but not limited to, dynamic inductive charging technology usable by all vehicles, geometric design for autonomous vehicles and retrofit of new facilities using existing technologies to advance next generation autonomous vehicle implementation. The new section of IH 30 from Cooper Street to the Dallas/Tarrant County Line will be the candidate location for retrofit technologies. The older section of IH 30 from Downtown Fort Worth to Cooper Street will be the location for new geometric design for autonomous vehicles. It is anticipated that consultant assistance may be utilized to perform a significant portion of the work. Surface Transportation Block Grant Program funds and Texas Department of Transportation funds will be used to support work activities. Anticipated products include:

- Plans, reports, studies, drawings, visualizations, simulations, and other types of planning products.

5.12 Red River Navigation System Feasibility Study

Other Funding Sources

During the 86th Texas Legislative Session, Texas legislators approved the conducting of a feasibility study by the Red River Authority of Texas on increasing navigation on the Red River between approximately Texarkana and Denison, Texas. This is a partnership effort between the states of Arkansas, Louisiana, Oklahoma, and Texas. During FY2022 and FY2023, NCTCOG will continue this partnership and participate in the planning process. The extension of the navigable waters could provide the Dallas-Fort Worth region with access to the sea and result in logistics changes for goods movement in the region. The use of the Red River could potentially provide additional freight transport options, divert freight traffic, provide an inexpensive transportation option for bulk freight, provide potential electric power generation, result in possible air quality benefits, and provide an opportunity to partner with the federally recognized tribal nations. Regional Transportation Council Local funds will be utilized to support this initiative. Anticipated products include:

- Financial feasibility study of increasing navigation on the Red River; and
- Presentation to the Regional Transportation Council.

5.13 North Texas Center for Mobility Technologies

Other Funding Sources

The North Central Texas Council of Governments has partnered with the Texas Research Alliance to develop a mobility research center, the North Texas Center for Mobility Technologies (NTCMT), that will bring together North Texas' top mobility research talent to work on sponsored research projects. Regional Transportation Council Local funds will be utilized to launch this initiative, with contributions from university partners as the initiative progresses. The primary functions and anticipated products of the NTCMT during FY2022 and FY2023 include:

- Readymade research and development network of and for mobility-related companies, municipalities, and other public agencies;
- Attraction of industry and academic talent to North Texas;
- Mobility-related research capabilities within North Texas universities;
- Facilitation of communication and collaboration among the universities with respect to research and development projects and the pursuit/execution of grants;
- Facilitation of university-public sector partnerships on mobility-related projects;
- Facilitation of mobility-related internships for workforce enhancement;
- Acting as a catalyst for building similar North Texas area university networks in other industry sectors;
- Research and industry reports, regional assessments, white papers, scholarly articles focused on mobility innovation topics; and
- Applications for grants and other prospective funding sources.

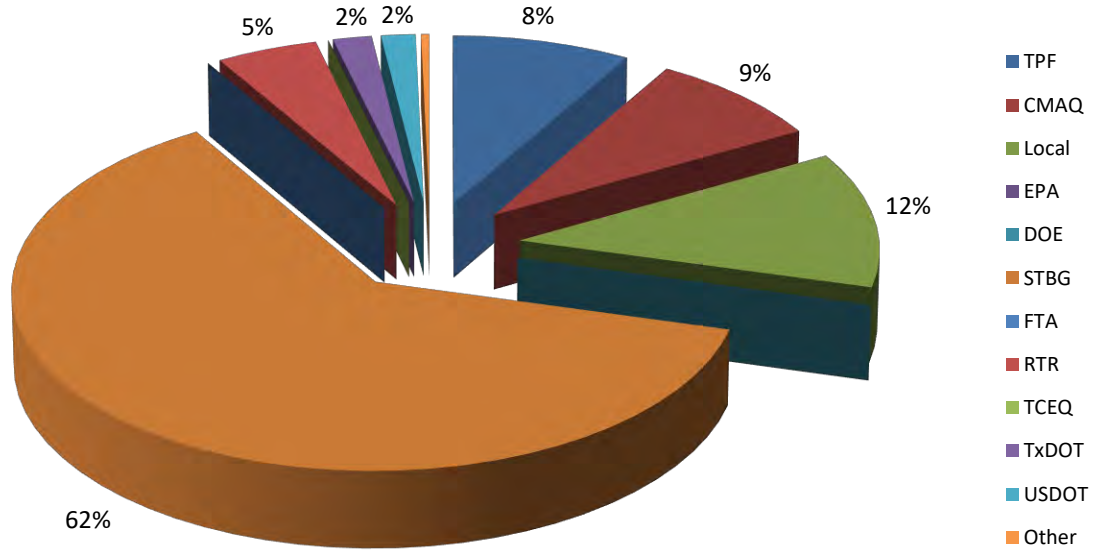
E. Funding Summary

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
5.01	\$1,375,300			
		\$78,400	Local	
		\$50,000	NTTA	
		\$3,453,000	RTR	
		\$14,419,300	STBG	
		\$73,600	TxDOT	
Subtotal				\$19,449,600
5.02	\$1,319,600			
		\$149,000	RTR	
Subtotal				\$1,468,600
5.03	\$873,700			
		\$353,000	Local	
		\$6,876,200	STBG	
Subtotal				\$8,102,900
5.04	\$189,700			
		\$136,000	STBG	
Subtotal				\$325,700
5.05	\$1,296,200			
		\$6,780,800	CMAQ	
		\$3,553,180	Local	
		\$233,000	RTR	
		\$7,762,500	STBG	
		\$1,351,600	TXDOT	
Subtotal				\$20,977,280
5.06				
		\$2,008,000	Local	
		\$8,049,900	STBG	
		\$1,297,000	USDOT	
Subtotal				\$11,354,900
5.07	\$63,500			
Subtotal				\$63,500
5.08	\$633,900			
		\$769,900	STBG	
Subtotal				\$1,403,800
5.09	\$125,900			
		\$498,400	Local	
Subtotal				\$624,300

Subtask	TPF ¹	Additional Funding		Total
		Amount	Source	
5.10	\$198,000	\$257,700	DOD	
		\$400,000	Local	
Subtotal				\$855,700
5.11	\$685,000	\$186,600	Local	
		\$11,799,800	STBG	
		\$36,600	TXDOT	
Subtotal				\$12,708,000
5.12		\$281,800	Local	
Subtotal				\$281,800
5.13		\$2,496,000	Local	
Subtotal				\$2,496,000
Total	\$6,760,800	\$73,351,280		\$80,112,080

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credits sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man hours, they are not reflected in the funding tables.

Task 5.0 Funding Summary



VII. Strategic Regional Initiatives

Staff has identified strategic regional initiatives directed toward innovative methods of funding and implementing transportation improvements in the North Central Texas region to offset the decline in federal and state gas tax revenues and help expedite project implementation. One of these nontraditional methods focuses on techniques to capture the increase in value of real property brought about by the public sector funding of highway and transit improvements. Staff will pursue funding for these efforts through various sources such as partnerships with transportation providers, as well as State and federal grant opportunities that may arise, which will be considered our sixth type of revenue. A second example is to pay for transportation projects with a portion of the funding commitment to be in the form of a loan. This loan could be repaid through several financial mechanisms, including the Tax Increment Financing district. Other innovative funding approaches like working with the State Comptroller's office in using State retirement funds as a loan to advance project construction resulting in the interest payment being significantly less than the cost of construction index. Below is a summary of the strategic initiatives that will be pursued once available funding is identified.

Transportation Innovative Finance Initiative Opportunities – Building on the work conducted for the Cotton Belt Innovative Finance Initiative, this effort will continue to investigate revenue opportunities for various transportation corridors. This includes high-speed rail between Dallas and Fort Worth. The Regional Transportation Council is ready to explore regional rail implementation in other corridors in North Central Texas. This also involves projects that have significant impacts in increasing tax revenue for a city resulting in a portion of the transportation funding to be repaid to the Regional Transportation Council, resulting in leveraging more money for more projects.

The project will identify viable revenue sources appropriate for both capital and operation and maintenance costs for various proposed transportation infrastructure projects. Proposed transportation infrastructure projects include roadway, public transportation, and multimodal projects. The effort will: 1) analyze various revenue strategies; 2) coordinate with local governments and transportation partners through regularly scheduled meetings; 3) assess the existing conditions and potential opportunities for innovative funding opportunities; 4) evaluate capital and operation and maintenance costs for various projects; and 5) prepare a formal report identifying a recommended funding plan for various projects. The public-at-large will be involved in this process.

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VIII. Overview of Work Program Funding

The work described in this document will be accomplished during the period October 1, 2021, to September 30, 2023. This work will be a cooperative effort between government agencies at four levels – local, regional, state, and federal – and will be funded in some manner by each of the participants. These activities will also involve private-sector groups, including citizens, companies, interest groups, and various associations of these three. This Work Program is prepared with requests, guidance, and cooperation from the principal local agencies in the region.

The transportation planning process is a collection of resources that can be called upon by local governments to assist and supplement their capabilities whenever necessary to meet needs for solving increasingly more complex transportation problems. The Fiscal Year (FY) 2022 and FY2023 Unified Planning Work Program (UPWP) reflects the Metropolitan Planning Organization's (MPO's) goals to meet MPO planning requirements and guidelines reaffirmed by the Fixing America's Surface Transportation Act; to aid in the implementation of projects contained in the Metropolitan Transportation Plan through an efficient, cost-effective, and equitable system of project programming and prioritization in the Transportation Improvement Program; to develop and implement a regional Congestion Management Process; to continue to support regional efforts to improve air quality; to coordinate regional aviation planning activities; and to assist local governments and transportation providers with various transportation planning activities. Efforts will continue on the monitoring and investigation of new travel forecasting and transportation planning techniques to provide the most efficient and effective solutions available for meeting the region's transportation needs.

Disadvantaged Business Enterprises

Participation by Disadvantaged Business Enterprises (DBEs) to plan and provide technical and transportation services is encouraged by the North Central Texas Council of Governments (NCTCOG). In this regard, NCTCOG has established a Transportation Department-wide overall DBE goal of 19.4 percent, which is composed of 28.4 percent NCTCOG procurements and 5 percent for subrecipient procurements for participation on the part of socially and economically disadvantaged individuals in US Department of Transportation assisted projects. This DBE goal is effective for FY2020 through FY2022. Contracting opportunities for this goal period include anticipated procurements the NCTCOG Transportation Department will complete, as well as anticipated procurements subrecipients will complete. Examples of subrecipients would include small transit providers, cities, counties, Independent School Districts, etc. Specific DBE goals are established for each procurement, dependent upon the type of services being procured. As part of ongoing outreach efforts to the consultant community, consultant firms are encouraged to provide their contact, areas of expertise, and DBE certification information to NCTCOG for Request for Proposal notifications. In addition, a DBE list is maintained, based on information provided by firms, and provided as part of the Request for Proposal. Assurance is also given that, in accordance with Title VI of the Civil Rights Act of 1964, NCTCOG will not discriminate against any person on the grounds of race, color, age, sex, disability, or national origin.

Proposed Budget

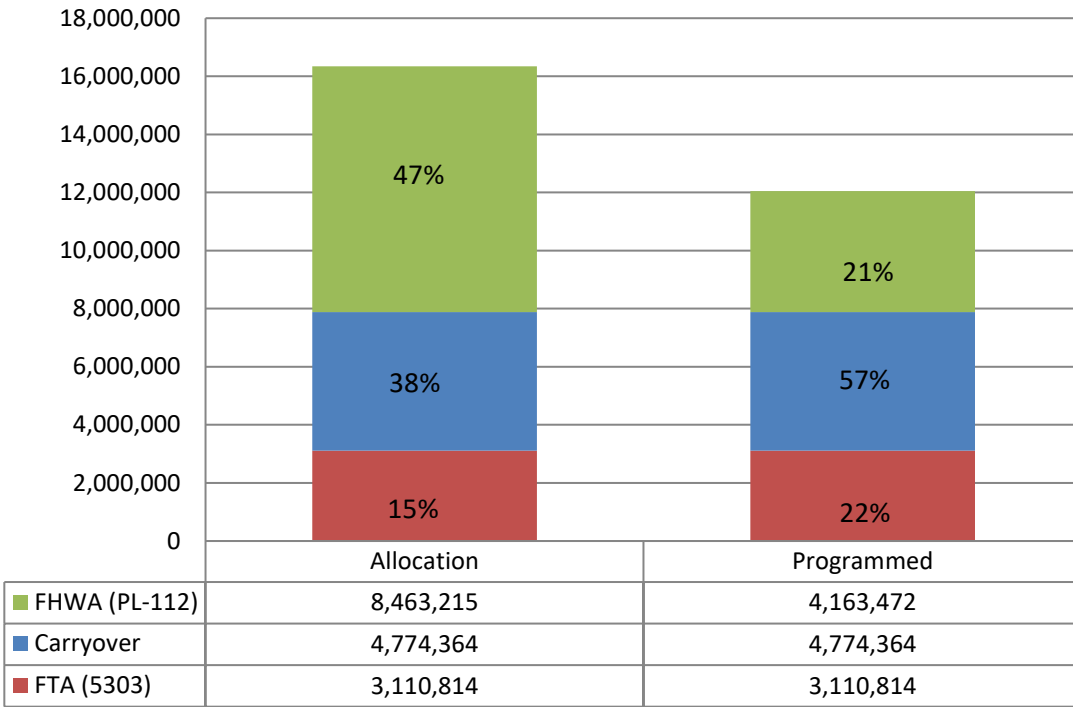
This section summarizes the budget for the FY2022 and FY2023 UPWP. Financial support for FY2022 and FY2023 will be provided from a number of sources, including the Federal Highway Administration, the Federal Transit Administration, the Environmental Protection Agency, the Department of Energy, the Department of Defense, the Texas Department of Transportation, the North Texas Tollway Authority, and the Texas Commission on Environmental Quality. In addition, various local sources will be acquired to assist in the funding of this program.

The US Department of Transportation provides funds through programs of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Both FHWA PL 112 and FTA 5303 funds are provided annually to MPOs to support metropolitan regional transportation planning activities based on an 80 percent federal/20 percent local match requirement. The Texas Department of Transportation will provide the 20 percent match for the FHWA 112 and FTA 5303 funds for FY2022 and FY2023 to the MPO to carry out the UPWP in the form of Transportation Development Credits. These Transportation Development Credits are provided by metropolitan areas building toll roads and are used on a statewide basis to provide the match funds needed for all Metropolitan Planning Organizations. The FY2022 and FY2023 FHWA and FTA funding levels reflected in this program are summarized in Exhibit VIII-1. The formula-based FHWA PL 112 allocation to the UPWP for the Dallas-Fort Worth Metropolitan Area is \$8,463,215 in FY2022 and \$8,463,215 in FY2023 for a two-year total of \$16,926,430. The FTA 5303 funding is \$3,110,814 in FY2022 and \$3,110,814 in FY2023 for a two-year total of \$6,221,628. An estimated balance of \$4,774,364 in unexpended/unobligated FHWA PL 112 funding will be available from the FY2021 authorization. Each of these funding amounts is incorporated by source agency into the Work Program by task and subtask. Total FHWA PL 112 and FTA 5303 funding for the FY2022 and FY2023 UPWP is estimated at \$27,922,422. Transportation Planning funds in the amount of \$25,171,800 have been programmed and allocated to each of the UPWP subtasks as shown in Exhibit VIII-2. These programmed funds include the FTA 5303 allocation of \$6,221,628, the estimated FY2021 FHWA PL 112 fund balance of \$4,774,364, and \$14,175,808 of Fiscal Years 2022 and 2023 FHWA PL 112 funding. The remaining balance of Fiscal Years 2022 and 2023 FHWA PL 112 funds of \$2,750,622 is anticipated to be carried over to Fiscal Year 2024.

**EXHIBIT VIII-1
FY2020 and FY2021 TPF Programming Summary**

	FY2022		FY2023	
	Allocation	Programmed	Allocation	Programmed
FTA Section 5303	3,110,814	3,110,814	3,110,814	3,110,814
FHWA (PL-112)				
Carryover	4,774,364	4,774,364	4,299,743	4,299,743
New Allocation	8,463,215	4,163,472	8,463,215	5,712,593
Total TPF	16,348,393	12,048,650	15,873,772	13,123,150
Carryover		4,299,743		2,750,622
Two-Year Totals				
FTA Section 5303	6,221,628			
FHWA PL-112	21,700,794			
Total	27,922,422			
Programmed	25,171,800			
Carryover	2,750,622			

Summary of TPF 2022 Funding Levels



Summary of TPF 2023 Funding Levels

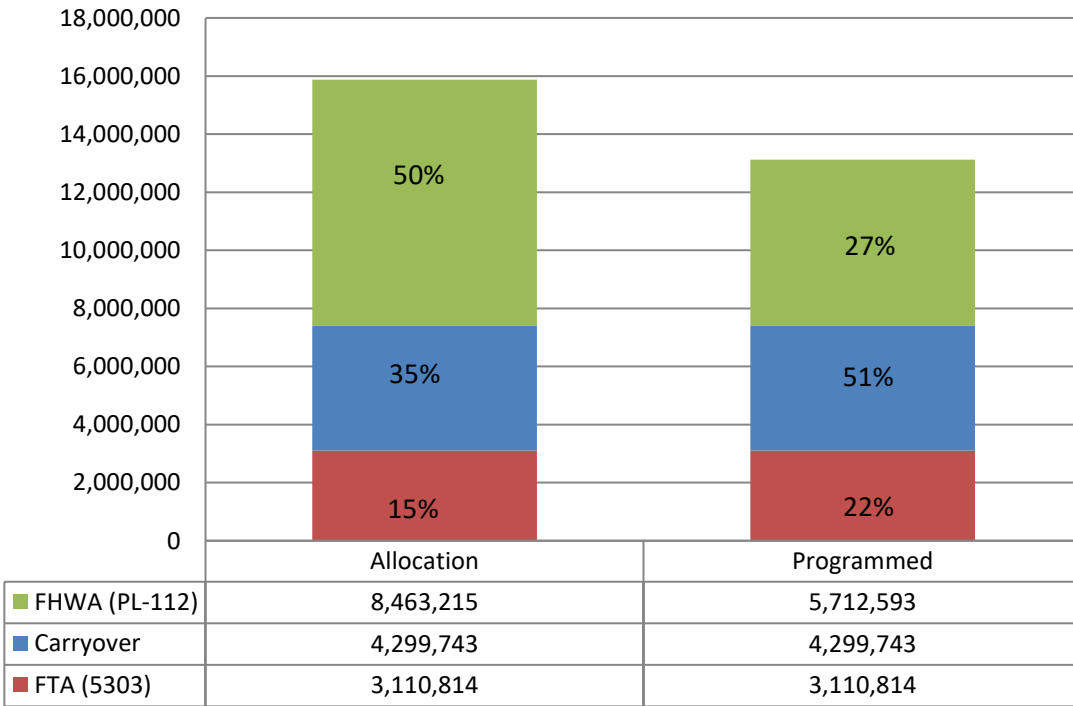
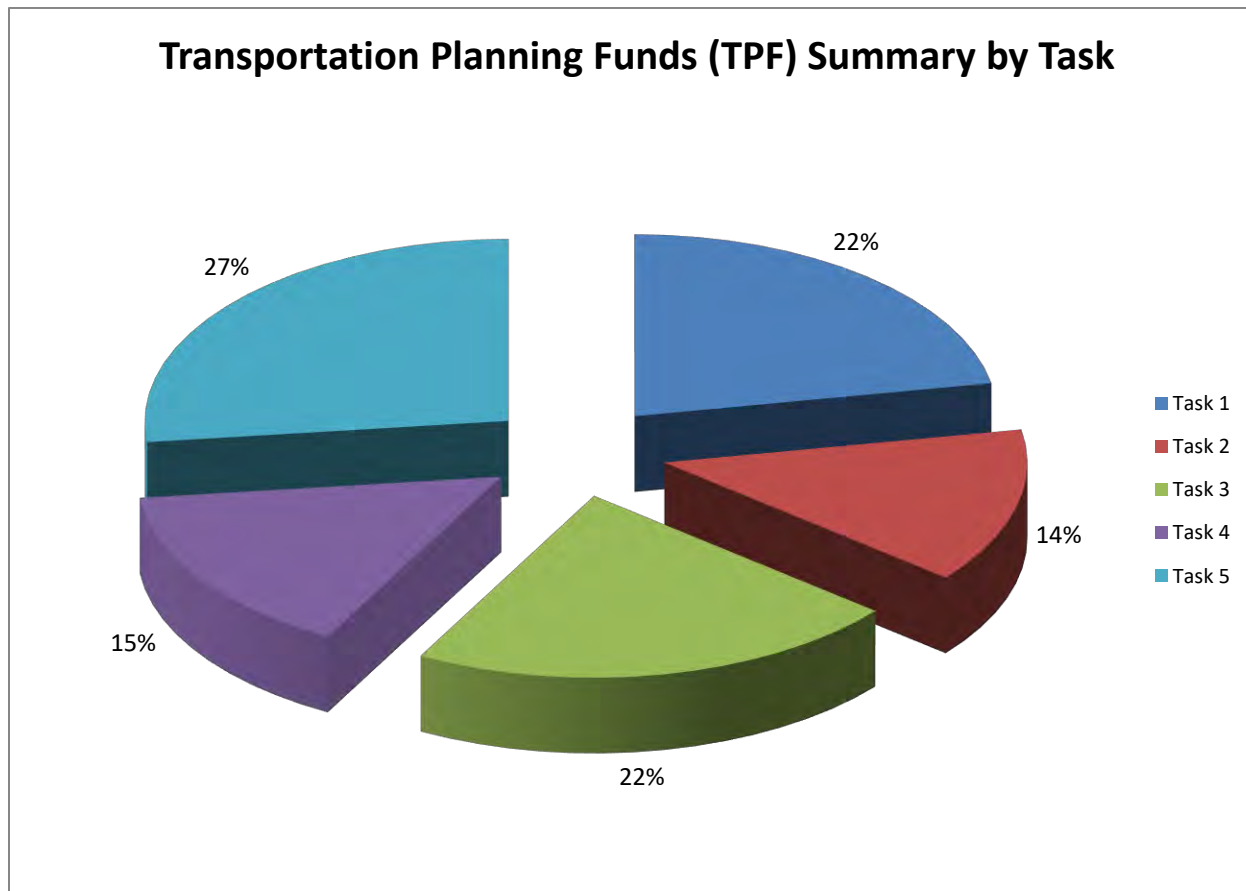


EXHIBIT VIII-2
FY2022 and FY2023 Allocation of Transportation Planning Funds

Subtask	Subtask Title	TPF		
		FY2022	FY2023	Total
1.01	Community Outreach	\$2,098,000	\$2,286,900	\$4,384,900
1.02	Program and Policy Administration	\$249,750	\$311,850	\$561,600
1.03	Fiscal Management and Information Systems	\$0	\$0	\$0
1.04	Computer System Applications and Data Management	\$305,800	\$310,100	\$615,900
	Task 1.0	\$2,653,550	\$2,908,850	\$5,562,400
2.01	Travel Forecasting Support	\$929,900	\$992,900	\$1,922,800
2.02	Transportation Data Development	\$246,200	\$212,200	\$458,400
2.03	Demographic Data and Forecasts	\$540,600	\$554,300	\$1,094,900
	Task 2.0	\$1,716,700	\$1,759,400	\$3,476,100
3.01	Transportation Project Programming	\$1,404,900	\$1,499,300	\$2,904,200
3.02	Regional Air Quality Planning	\$494,700	\$486,000	\$980,700
3.03	Air Quality Management and Operations	\$0	\$0	\$0
3.04	189700	\$808,600	\$842,300	\$1,650,900
3.05	Transit Management and Operations	\$0	\$0	\$0
	Task 3.0	\$2,708,200	\$2,827,600	\$5,535,800
4.01	Metropolitan Transportation Plan	\$1,102,100	\$1,371,300	\$2,473,400
4.02	Coordination of Transportation and Environmental Planning Processes	\$255,500	\$270,900	\$526,400
4.03	Ensuring Equity, Nondiscrimination and Environmental Justice in MPO Planning/Program Activities	\$204,500	\$200,000	\$404,500
4.04	Performance Based Planning & Coordination	\$167,900	\$168,900	\$336,800
4.05	Understanding the Public Return on Investment for Transportation Funding	\$50,000	\$45,600	\$95,600
	Task 4.0	\$1,780,000	\$2,056,700	\$3,836,700
5.01	Regional Transportation Corridor Studies	\$615,600	\$759,700	\$1,375,300
5.02	Subarea Studies and Local Government Assistance	\$583,400	\$736,200	\$1,319,600
5.03	Land-Use/Transportation Initiatives	\$404,400	\$469,300	\$873,700
5.04	Transportation Asset Management	\$93,000	\$96,700	\$189,700
5.05	Congestion Management Planning and Operations	\$666,200	\$630,000	\$1,296,200
5.06	Regional Freight Planning	\$0	\$0	\$0
5.07	Transportation System Security and Emergency Preparedness	\$31,600	\$31,900	\$63,500
5.08	Roadway and Railroad Safety	\$316,400	\$317,500	\$633,900
5.09	Regional Aviation Planning and Education	\$62,600	\$63,300	\$125,900
5.10	Regional Military and Community Coordination	\$93,000	\$105,000	\$198,000

Subtask	Subtask Title	TPF		
		FY2022	FY2023	Total
5.11	Connected and Automated Vehicle Technologies	\$324,000	\$361,000	\$685,000
5.12	Red River Navigation System Feasibility Study	\$0	\$0	\$0
5.13	North Texas Center for Mobility Technology	\$0	\$0	\$0
	Task 5.0	\$3,190,200	\$3,570,600	\$6,760,800
	FUNDING TOTALS	\$12,048,650	\$13,123,150	\$25,171,800



UPWP funding is composed of five types of funding. The first type consists of planning activities being conducted with formula planning funds and utilizes FHWA PL-112 and FTA Section 5303 funding for project support. The second type consists of planning activities being conducted with nonformula funds provided by various agencies such as the North Texas Tollway Authority, the Texas Department of Transportation, and the Texas Commission on Environmental Quality. Congestion Mitigation and Air Quality Improvement Program (CMAQ) and Surface Transportation Block Grant Program (STBG) funding are also utilized under this category. Our third revenue type

consists of Management and Operations, or implementation projects, which are supported through nonformula implementation funds. These projects are funded primarily through CMAQ and STBG funds, as well as various local government funding. Local air quality and sustainable development implementation and planning projects funded with Regional Transportation Council Local funds are a fourth type of revenue. Projects to be implemented with Regional Toll Revenue funding (e.g., proceeds from SH 121 up-front payment) represent the fifth type. Nonformula implementation activities outlined in Chapter VII, Strategic Regional Initiatives, for which funding will be pursued from various sources such as partnerships with transportation providers, as well as State and federal grant opportunities would be a sixth type of funding.

Provided in Exhibit VIII-3 is an inventory of computer hardware, software/licenses, and maintenance items, as well as other equipment anticipated to be purchased or leased during the period of the FY2022 and FY2023 Unified Planning Work Program to support work activities outlined in Tasks 1 through 5 of the Work Program. Also included is the video/web hosting services required to live stream and record/post meetings of the Regional Transportation Council per State legislation, as well as public meetings and other meetings as appropriate. The source of funding utilized to obtain these items or services is provided in the table, along with the specific Work Program Subtask in which the funding is programmed to accommodate the work activities.

EXHIBIT VIII-3
Anticipated Equipment/Software Purchases/Leases

Quantity	Description	Estimated Price	Funding Source	Subtask
70	Microcomputer systems (desktops, portable, tablet)	\$175,000	RTC Local	1.04
4	Laser printers and image scanners for network group usage	\$25,000	RTC Local	1.04
40	Voice-over-Internet-Protocol (VoIP) phone devices, including accessories such as microphones for conference phones or hands-free devices.	\$15,800	RTC Local	1.04
---	Other computer hardware items, replacements, accessories, and upgrades (for example, docking stations, headsets, hard drives, additional RAM, projectors, video cards, network cabling, warranty extensions)	\$10,000	TPF	1.04
---	Other computer hardware items, replacements, accessories, and upgrades (for example, docking stations, headsets, hard drives, additional RAM, projectors, monitors/televisions, video cards, network cabling, warranty extensions)	\$30,000	RTC Local	1.04
---	Licenses to traffic simulation and assignment software packages (two "TransModeler" and one "DTA" dynamic)	\$6,000	TPF	1.04
---	Two years of software support by Caliper and specific renewal for 50 TransCAD licenses	\$150,000	TPF	1.04
---	Software purchases/upgrades (for example, the current or higher versions of: SmartSheet and Adobe licenses), software/services, cable service, application subscriptions, advanced mapping/presentation software, and software support renewals	\$88,000	TPF	1.04
---	Web-based traffic count reporting software, including annual maintenance and support	\$16,000	TPF	1.04
---	Video equipment and supplies, and air cards	\$9,000	TPF	1.04
---	Audio/video equipment, and technology updates and maintenance for the Transportation meeting rooms	\$50,000	RTC Local	1.04

Quantity	Description	Estimated Price	Funding Source	Subtask
---	Audio/video equipment, and technology updates and maintenance for the Transportation Council Room	\$124,000	RTC Local	1.02
---	Video/web hosting services	\$22,000	TPF	1.02
---	Bicycle-Pedestrian count equipment (replacement batteries)	\$10,000	STBG	5.03
---	Public involvement subscriptions	\$160,000	TPF	1.01
---	Outreach and educational subscriptions	\$25,000	CMAQ	1.01
---	Communications Outreach Tools (i.e., photo storage, Getty images, Survey Monkey, campaign analysis software, Constant Contact)	\$130,000	Allocation	1.01
---	Legislation monitoring software (i.e., Telicon)	\$5,000	TPF	1.01
---	Visualization Software	\$20,000	CMAQ	1.01
---	Data Loggers	\$10,000	STBG	3.03
---	MAPP Vehicle Tracking Technology	\$88,000	STBG	5.05
---	Predictive Crash Analysis Software	\$100,000	STBG	5.08
---	Traffic and Travel Data Purchase	\$100,000	STBG/TxDOT	2.02

The Texas Department of Transportation (TxDOT) has approved an MPO Revolver Fund through a partnership with NCTCOG, the Regional Transportation Council, Dallas County, and the city of Dallas. Federal programs administered by NCTCOG require that costs be incurred and paid prior to seeking reimbursements from TxDOT and/or the appropriate federal agency. The MPO Revolver Fund will enable NCTCOG to cash flow the federal programs administered by NCTCOG.

The UPWP will be modified over the course of the fiscal year(s) as additional funds become available. Funding from each source is summarized by task in Exhibit VIII-4. FHWA and FTA funding is summarized under Transportation Planning funds (TPF).

EXHIBIT VIII-4
FY2022 and FY2023 UPWP Funding Summary

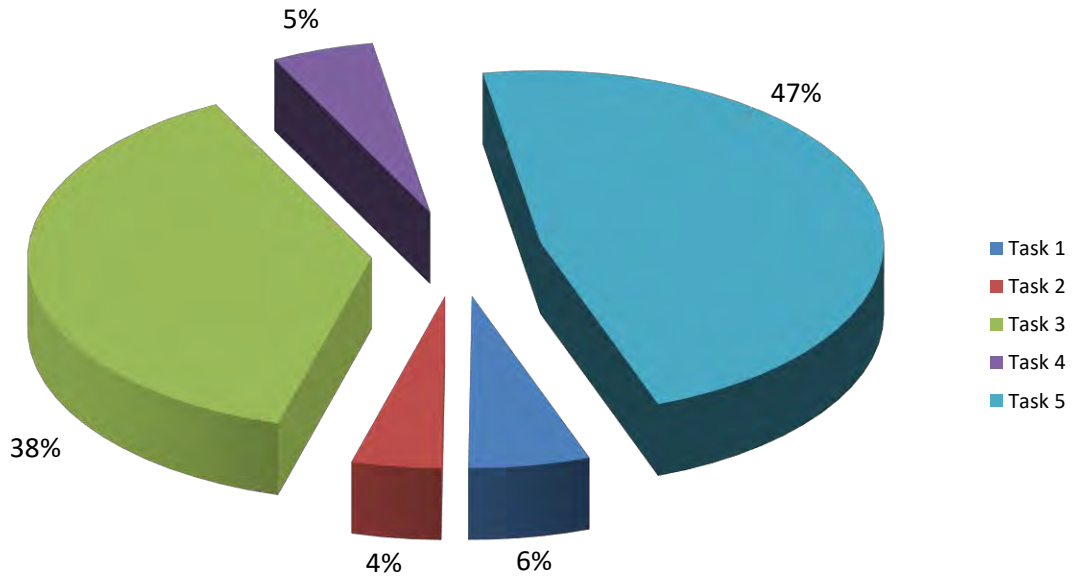
Funding Source	Task 1.0 Administration	Task 2.0 Data Development	Task 3.0 Short-Range Planning	Task 4.0 Metropolitan Transportation Planning	Task 5.0 Special Studies	Total
FTA Activities	44.21.00	44.22.00	44.24.00 44.25.00	44.23.01	44.23.02 44.24.00 44.22.00 44.27.00	
TPF ¹	\$5,562,400	\$3,476,100	\$5,535,800	\$3,836,700	\$6,760,800	\$25,171,800
CMAQ	\$2,503,200	\$0	\$2,189,400	\$0	\$6,780,800	\$11,473,400
DOD	\$0	\$0	\$0	\$0	\$257,700	\$257,700
DOE	\$0	\$0	\$113,900	\$0	\$0	\$113,900
EPA	\$0	\$0	\$7,402,250	\$0	\$0	\$7,402,250
FHWA	\$0	\$0	\$12,300	\$0	\$0	\$12,300
FTA	\$0	\$0	\$21,848,050	\$0	\$0	\$21,848,050
Local	\$485,700	\$373,000	\$16,914,879	\$480,300	\$9,855,380	\$28,109,259
NCTCOG						
Local	\$189,700	\$0	\$0	\$0	\$0	\$189,700
NTTA	\$0	\$0	\$0	\$0	\$50,000	\$50,000
RTR	\$295,600	\$0	\$2,506,400	\$814,600	\$3,835,000	\$7,451,600
STBG	\$677,300	\$3,232,000	\$8,297,000	\$3,042,000	\$49,813,600	\$65,061,900
TBD	\$0	\$0	\$0	\$0	\$0	\$0
TCEQ	\$0	\$0	\$0	\$0	\$0	\$0
TxDOT	\$60,750	\$79,800	\$0	\$0	\$1,461,800	\$1,602,350
USDOT	\$0	\$0	\$0	\$0	\$1,297,000	\$1,297,000
Subtotal	\$9,774,650	\$7,160,900	\$64,819,979	\$8,173,600	\$80,112,080	\$170,041,209

¹Transportation Planning Funds (TPF) includes both FHWA PL-112 and FTA Section 5303 funds. TxDOT will apply Transportation Development Credit sufficient to provide the match for FHWA PL-112 and FTA Section 5303 programs. As the credits reflect neither cash nor man hours, they are not reflected in the funding tables.

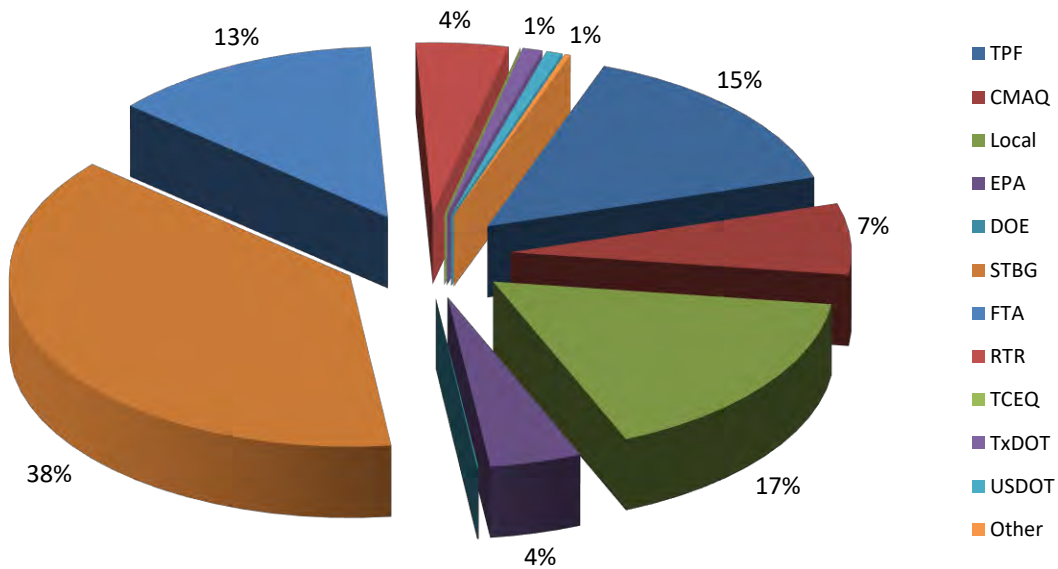
Combined Transportation Planning Funds ²	\$23,148,058.00
Estimated Unexpended Carryover	<u>\$4,774,364.00</u>
TOTAL TPF:	\$27,922,422.00

² Estimate based on prior years' authorizations

Summary of Funding by Task



Summary of Total Funding



Activity Schedule

Work in the FY2022 and FY2023 UPWP will be ongoing and continuous throughout the two-year timeframe. Work Program tasks conducted for, or in cooperation with, local agencies are dependent upon their participation in the process and are scheduled accordingly. Some projects, such as preparing the Transportation Improvement Program, can be described as year-round activities when accounting for individual project revisions and their technical and local impact reviews. In addition, the performance of consultant studies for local transit operators and other cities must be timed in accordance with locally determined priorities, which thus precludes setting a rigid advanced schedule. Task initiation will also depend on special needs or interests and resources available. Consequently, no specific schedule for work tasks has been provided in this Work Program.

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IX. Other Metropolitan Transportation and Air Quality Planning-Related Activities in the Dallas-Fort Worth Area

In addition to the work outlined in this Unified Planning Work Program (UPWP), other transportation and air quality planning activities will be conducted by various transportation planning and implementation agencies. The Fixing America's Surface Transportation Act metropolitan planning guidelines for preparation of the UPWP call upon Metropolitan Planning Organizations to include in the UPWP a detailed description of transportation and transportation-related planning activities anticipated within the metropolitan area during the period covered by the UPWP, regardless of funding sources. Local governments and transportation agencies throughout the metropolitan area were asked to submit a summary of these anticipated activities. The following information summarizes the efforts that were submitted to the North Central Texas Council of Governments for inclusion in this document.

City of Dallas

Vision Zero Action Plan: The City of Dallas is developing a Vision Zero Action Plan on how to achieve its goal of zero fatalities and a 50 percent reduction in severe injuries by 2030. This plan is set to be completed by the end of 2021, in accordance with the Vision Zero resolution passed by City Council in 2019.

Dallas On-Street Parking/Curb Management Policy: As an extension of the Strategic Mobility Plan, the City is developing an On-Street Parking/Curb Management Policy report that will guide decisions around setting parking pricing, managing uses of the curb, and allocating its use to different functions (e.g., mobility, vehicle storage, deliveries, etc.).

Convention Center Master Plan: The City of Dallas has a study underway to look at improvements around the Kay Bailey Hutchison Convention Center. There are several projects and/or initiatives happening at or around the section of IH 30 from IH 3E to IH 45:

- The redevelopment of the IH 30 Canyon from IH 35E east to IH 45 led by the Texas Department of Transportation;
- High Speed Rail station led by Texas Central;
- Multimodal facility and Oak Farms studies led by the City of Dallas;
- Oak Farms study led by NCTCOG;
- Dallas Convention Center Master Plan study led by the City of Dallas;
- Rail district led by NCTCOG/City of Dallas; and
- High-speed Rail/Cedars Planning Study led by NCTCOG.

Based on the above, and since the frontage roads are eliminated, the City grid system is expected to provide the redundancy that is needed for rapid response to incidents in addition to supporting multimodal movements in the area. Combined, these efforts will identify needed improvements to the street grid and transportation system to encourage development and improve the quality of life in the Cedars and southern Downtown areas to make them more walkable and bikeable.

Oak Farms: The Oak Farms study will include an infrastructure asset inventory to identify needed improvements, produce preliminary engineering for the overall improvements and, if funds are sufficient, produce detailed engineering for the priority needs.

Hensley Field Master Plan: Hensley Field, a former Dallas Naval Air Base with 738 acres on Mountain Creek Lake in far west Dallas, is undergoing a master planning process to reimagine this City of Dallas owned site as a walkable mixed-use community. This planning effort is being led by the City of Dallas in collaboration with the North Central Texas Council of Governments,

Grand Prairie, Dallas Area Rapid Transit, and other stakeholders/partners. The master planning process will involve exploration and evaluation of alternative development scenarios to inform selection of a preferred scenario that will form the basis for the master plan. The planning process has begun and is expected to yield a draft master plan by the spring of 2022. Preliminary estimates show that upon build out, Hensley Field could feature 7,000 dwelling units with diversity of price and type. It could also accommodate 7.5 million square feet of commercial, institutional, and civic space that could potentially create 15,000 jobs across sectors and industries. Additionally, it could include a 160-acre network of parks and open spaces linked with an enhanced Mountain Creek Lake serving as a regional amenity and recreation destination.

City of Plano

Interlocal Agreement Between University of Texas at Dallas and the City of Plano for Collaboration Research on Air Quality Monitors: Since June 2016, the Environmental Health and Sustainability Department (EHS) staff has participated in a broad consortium of North Texas stakeholders led by the University of Texas at Dallas (UTD). All are interested in developing a real-time air quality monitoring network for a region that is not in compliance with the Clean Air Act. Currently, there are no federal or state air quality monitors located in the City of Plano.

This research partnership with UTD allows the City to test newer and less expensive technology. UTD leads a team building and calibrating a 44-monitor system for deployment in Plano. It will provide real-time estimates of PM1, PM2.5, PM10, and CO₂. The information can be used to lower risks of personal exposures and improve environmental health by informing policies and practices such as traffic management, signal light timing, vehicle idling, alternative transportation, and personal outdoor activities.

Expressway Corridor and Environmental Health Study: In 2018, Plano initiated a study to consider the health effects of adjacency to major transportation corridors in regard to air and noise pollution. This study identifies sensitive land uses where occupants would be more likely to be affected by these pollutants. An environmental health map was adopted denoting contours where noise levels are expected to be higher than what is considered to be appropriate by the Department of Housing and Urban Development. Zoning cases in these areas with sensitive land uses must complete an environmental health analysis and incorporate appropriate mitigation measures. Implementation of the results of this study is still underway.

Silver Line Corridor Market Assessment and Economic Development Strategy: This study will assess the market potential of Plano's transit corridors and offer economic development strategies to guide future investment, as well as land-use planning and zoning activities in these areas. This study supports Plano's transit-oriented development policy of the city's Comprehensive Plan, which proactively encourages an integrated mix of uses and civic spaces within walking distance of planned transit stations. The study area is one-half mile around each station. In particular, the focus of the study recommendations will be on the properties immediately surrounding the station areas. The Silver Line Corridor Market Assessment and Economic Development Strategy will consist of an assessment of the current economic market and climate and a projection of future development potential around Plano's two new Silver Line commuter rail stations and light rail transit station. Focus groups and one-on-one interviews with key stakeholders will further inform study recommendations.

Trinity Metro

East Lancaster Avenue Transit Oriented Development Plan: Trinity Metro is developing a transit-oriented development plan for station areas along East Lancaster Avenue from Downtown Fort Worth to Handley Drive in support of future high-capacity transit improvements.

Denton County Transportation Authority (DCTA)

Transit-Oriented Development Planning Analysis of the Kansas City Southern (KCS) Rail

Corridor: As a separate right-of-way for freight rail, the KCS corridor between the University of North Texas in Denton and Hebron Parkway in Plano will be the focus of a study to determine opportunities to enhance regional transit connectivity and spur economic development throughout Denton County. The rail line has the potential to connect to DCTA's A-train and other rail lines planned or in operation in the Dallas-Fort Worth area. The analysis and recommendations will reflect the transit-oriented development and multimodal needs and aspirations of each local community related to potential station locations. The table below presents an initial proposed schedule for this task order, assuming a 24-month project timeline.

Anticipated 24-Month Schedule	Duration	Start	Finish
Task 1: Project Management	24 months	4/01/2021	3/28/2023
Task 2: Stakeholder Outreach	24 months	4/01/2021	3/28/2023
Task 3: Data Collection/Station Area Validation	3 months	4/01/2021	7/01/2021
Task 4: Station Area Analysis	3 months	7/01/2021	10/01/2021
Task 5: Station Area Concepts	3 months	10/01/2021	11/01/2021
Task 6: Station Area Plans	6 months	12/01/2021	6/01/2022
Task 7: Develop Station Area Types and Priority	6 months	6/01/2022	12/01/2022
Task 8: Final Documentation	3 months	3/01/2022	3/01/2023

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APPENDIX A

POLICY AND TECHNICAL COMMITTEE MEMBERSHIP

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County Judge
Johnson County

Theresa Daniel, Ph.D., Vice Chair
Commissioner
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Ann Zadeh, Secretary
Councilmember
City of Fort Worth

Tennell Atkins
Councilmember
City of Dallas

Richard E. Aubin
Councilmember
City of Garland

Dennis Bailey
Commissioner
Rockwall County

Mohamed “Mo” Bur, P.E.
District Engineer
Texas Department of Transportation,
Dallas District

Dianne Costa
Board Member
Denton County Transportation
Authority

Jeff Davis
Chair
Trinity Metro

Pat Deen
County Judge
Parker County

Andy Eads
County Judge
Denton County

Kevin Falconer
Mayor
City of Carrollton

Gary Fickes
Commissioner
Tarrant County

George Fuller
Mayor
City of McKinney

Barry L. Gordon
Mayor
City of Duncanville

Rick Grady
Councilmember
City of Plano

Lane Grayson
Commissioner
Ellis County

Mojoy Haddad
Board Member
North Texas Tollway Authority

Clay Lewis Jenkins
County Judge
Dallas County

Ron Jensen
Mayor
City of Grand Prairie

Carl L. Johnson, P.E.
District Engineer
Texas Department of Transportation,
Fort Worth District

Brandon Jones
Councilmember
City of Lewisville

Jungus Jordan
Mayor Pro Tem
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John Keating
Councilmember
City of Frisco

Mike Leyman
Mayor Pro Tem
City of Mansfield

B. Adam McGough
Deputy Mayor Pro Tem
City of Dallas

William Meadows
Board Member
Dallas Fort Worth International Airport

Allan E. Meagher
Councilmember
City of Irving

Cara Mendelsohn
Councilmember
City of Dallas

Robert Miklos
Mayor Pro Tem
City of Mesquite

Cary Moon
Councilmember
City of Fort Worth

Philip J. Ritter
Citizen Representative
City of Dallas

Chris Schulmeister
Councilmember
City of Allen

Casey Thomas II
Councilmember
City of Dallas

Jeremy Tompkins
Councilmember
City of Euless

T. Oscar Trevino Jr., P.E.
Mayor
City of North Richland Hills

William Tsao, P.E.
Citizen Representative
City of Dallas

Paul N. Wageman
Chair
Dallas Area Rapid Transit

Duncan Webb
Commissioner
Collin County

B. Glen Whitley
County Judge
Tarrant County

W. Jeff Williams, P.E.
Mayor
City of Arlington

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TxDOT, Dallas

Joe Atwood
Hood County

Melissa Baker
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City of Fort Worth

Claud Elsom
Rockwall County

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Jeremy Hutt
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Thuan Huynh
City of McKinney

Tony Irvin
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Kelly Johnson
North Texas Tollway
Authority

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Alonzo Liñán
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Eron Linn
Dallas Area Rapid Transit

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Jim O'Connor
City of Irving

Kenneth Overstreet
City of Bedford

Kevin Overton
City of Dallas

Tim Palermo
Denton County Transportation
Authority

Dipak Patel
City of Lancaster

Todd Plesko
Dallas Area Rapid Transit

Shawn Poe
City of Richardson

John Polster
Denton County

Tim Porter
City of Wylie

Bryan G. Ramey II
City of Duncanville

Greg Royster
Dallas Fort Worth
International Airport

Kathryn Rush
City of Dallas

Moosa Saghian
Kaufman County

David Salmon
City of Lewisville

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City of Plano

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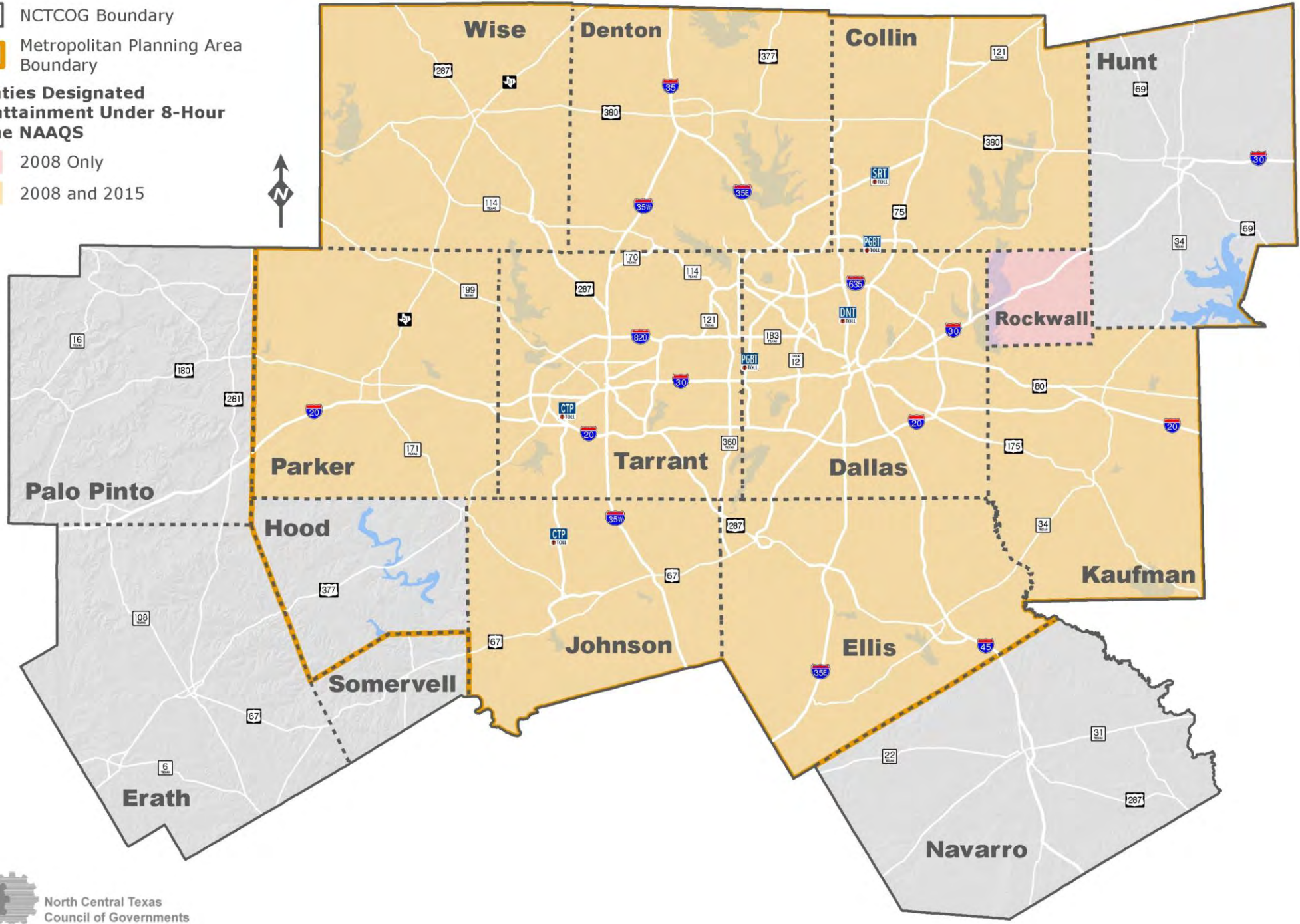
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Communications Specialist II

APPENDIX B

METROPOLITAN AREA BOUNDARY MAP
(GOVERNOR OR GOVERNOR'S DESIGNEE APPROVED)

Transportation and Air Quality Planning Areas

- NCTCOG Boundary
- Metropolitan Planning Area Boundary
- Counties Designated Nonattainment Under 8-Hour Ozone NAAQS**
 - 2008 Only
 - 2008 and 2015



APPENDIX C
DEBARMENT CERTIFICATION

APPENDIX C

DEBARMENT CERTIFICATION (Negotiated Contracts)

- (1) The **North Central Texas Council of Governments**, as **CONTRACTOR**, certifies to the best of its knowledge and belief that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public* transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity* with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions* terminated for cause or default.
- (2) Where the **CONTRACTOR** is unable to certify to any of the statements in this certification, such **CONTRACTOR** shall attach an explanation to this certification.

**federal, state or local*

Mike Eastland, Executive Director
North Central Texas Council of Governments

Date

APPENDIX D
LOBBYING CERTIFICATION

APPENDIX D

LOBBYING CERTIFICATION

**CERTIFICATION FOR CONTRACTS, GRANTS,
LOANS AND COOPERATIVE AGREEMENTS**

The undersigned certifies to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Mike Eastland, Executive Director

Executive Director
Title

North Central Texas Council of Governments
Agency

Date

APPENDIX E
CERTIFICATION OF COMPLIANCE

APPENDIX E

CERTIFICATION OF COMPLIANCE

I, Mike Eastland, Executive Director,
(Name and Position, Typed or Printed)

a duly authorized officer/representative of North Central Texas Council of Governments

(MPO)

do hereby certify that the contract and procurement procedures that are in effect and used by the forenamed MPO are in compliance with 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," as it may be revised or superseded.

Date

Mike Eastland, Executive Director

Attest:

Michael Morris

Director of Transportation

APPENDIX F

**CERTIFICATION OF INTERNAL ETHICS
AND COMPLIANCE PROGRAM**

APPENDIX F

CERTIFICATION OF INTERNAL ETHICS AND COMPLIANCE PROGRAM

I, Mike Eastland, Executive Director,
(Name and Position, Typed or Printed)

a duly authorized officer/representative of North Central Texas Council of Governments

(MPO)

do hereby certify that the forenamed MPO has adopted and does enforce an internal ethics and compliance program that is designed to detect and prevent violations of law, including regulations and ethical standards applicable to this entity or its officers or employees and that the internal ethics and compliance program satisfies the requirements of by 43 TAC § 31.39 "Required Internal Ethics and Compliance Program" and 43 TAC § 10.51 "Internal Ethics and Compliance Program" as may be revised or superseded.

Date

Mike Eastland, Executive Director

Attest:

Michael Morris

Director of Transportation

APPENDIX G
PUBLIC PARTICIPATION PLAN

Public Participation Plan for the Dallas- Fort Worth Metropolitan Area

March 2020 Update



North Central Texas
Council of Governments



Regional Transportation Council

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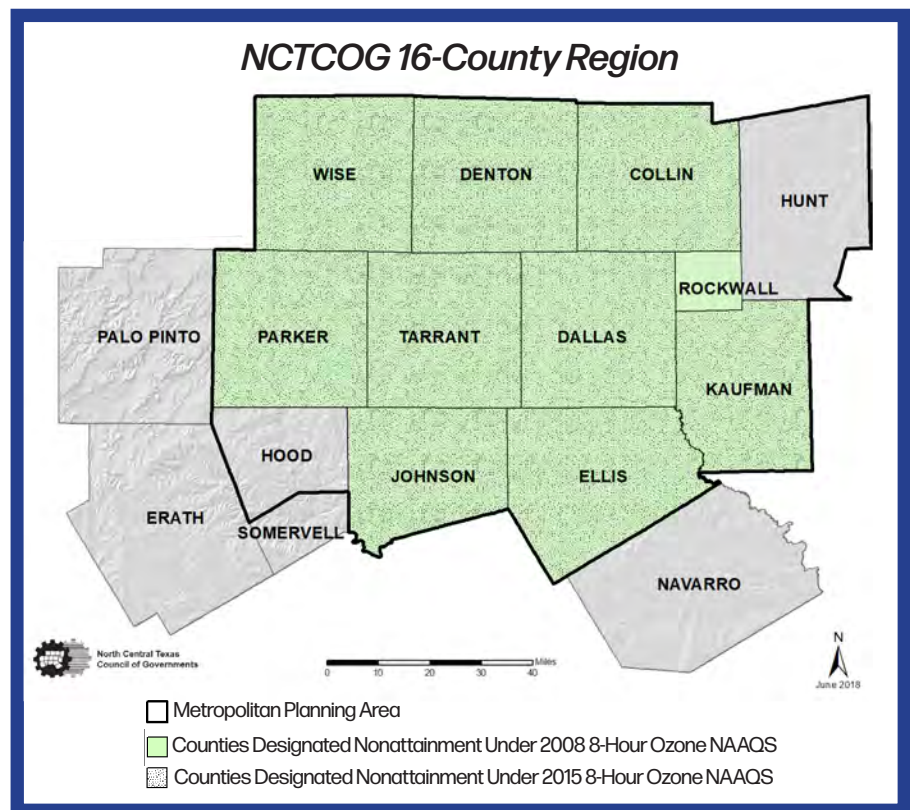
1. About the Metropolitan Planning Organization

North Central Texas Council of Governments Transportation Department and Regional Transportation Council

As the federally designated Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth area since 1974, the North Central Texas Council of Governments (NCTCOG) Transportation Department works in cooperation with the region's transportation providers to address the complex transportation needs of the rapidly growing region. The 12-county region includes Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise counties. This area is urbanized or expected to be urbanized in the next 20 years. North Texas is one of the fastest-growing regions in the country, adding about 1 million people every 10 years. More than 7 million people live in the region today, and that is expected to increase to over 11 million by 2045. NCTCOG works with its transportation partners and all levels of government, as well as the public, to address traffic safety and congestion by developing a multimodal transportation system that includes highway, passenger rail, bus, and bicycle and pedestrian facilities.

In addition to serving as the MPO for the Dallas-Fort Worth area, NCTCOG also coordinates public transportation planning for the 12-county region and four additional counties: Erath, Navarro, Palo Pinto and Somervell.

The Regional Transportation Council (RTC), the independent policy body of the MPO, oversees the work of the MPO, establishes priorities and guides the development of multimodal transportation plans, programs and partnerships. The RTC consists primarily of local elected officials and representatives from the area's transportation providers, and the RTC determines how to allocate federal, state and regional funds to transportation improvements. Committees and advisory groups lend expertise and develop recommendations for the RTC to consider.



2. Guiding Principles for Public Participation

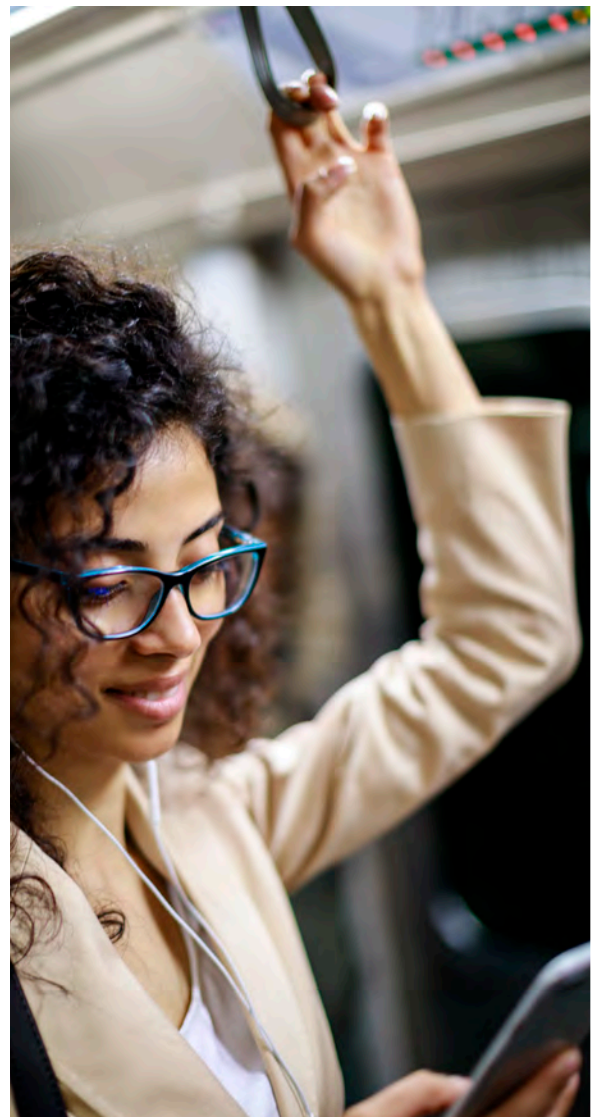
This Public Participation Plan outlines the MPO's responsibility to inform and involve individuals and communities and discusses the principles, goals and strategies it employs to broadly engage the diverse audiences living and working in North Texas.

NCTCOG adheres to federal requirements for public involvement and strives to go beyond these requirements by finding new ways to engage the public in the transportation planning and programming process. Appendix A outlines the laws and legislation relevant to public participation and how NCTCOG meets these standards.

Consistent and Comprehensive Communication

Transportation policies and programs affect every individual, group and community in North Texas; therefore, the MPO employs a collaborative public involvement process to identify transportation needs and solutions for the region. Clear and continuous communication with the public through multiple channels is the cornerstone for building a transportation system that helps preserve the region's quality of life while moving people and goods safely, efficiently and reliably.

Additionally, the MPO must ensure regional transportation planning is consistent with federal goals to improve air quality because some counties in the Dallas-Fort Worth area do not meet the ozone standards set by the Environmental Protection Agency (EPA). Appendix B outlines the current county classifications under each ozone standard as of the date of this publication. Therefore, the MPO develops and implements programs to reduce ozone-causing emissions from transportation-related sources. To accomplish the mobility and air quality goals of the entire region, the MPO actively seeks to hear from people who live, work and travel in North Texas and have varying transportation needs and priorities.





Commitment to Diversity and Inclusiveness

NCTCOG values the full range of voices in North Texas and is committed to listening to and seeking input from the diverse individuals and many communities that reside in the Dallas-Fort Worth area. As such, NCTCOG seeks to both meet federal requirements for participation and actively increase the number and diversity of participants in the planning process.

Consistent with federal requirements outlined in Appendix A, NCTCOG is committed to incorporating Environmental Justice elements and Title VI considerations into its Public Participation Plan. During the public participation process, populations that have been traditionally underserved by existing transportation systems, including but not limited to low-income and minority households, are sought out and their needs considered.

NCTCOG addresses Environmental Justice concerns throughout the transportation planning process, and it is the responsibility of all staff to consider the needs of traditionally underserved communities during planning, project selection and project implementation. As the Public Participation Plan is implemented, special consideration is given to ensure all residents have reasonable access to information and opportunities to give input. Furthermore, demographic data is analyzed to identify areas having considerable numbers of protected populations. This information can be used to select locations for public meetings and outreach events as well as to identify opportunities to better target or diversify outreach efforts.

The Language Assistance Plan (LAP) in Appendix B outlines NCTCOG’s efforts to make information available to limited English proficient (LEP) persons. The LAP outlines demographic information, analysis of Department activities, language assistance provided and communication to LEP persons about the availability of language assistance.

Title VI states that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion. Title VI prohibits discrimination, whether intentional or where the unintended effect is unduly burdensome.

The Title VI Complaint Procedures in Appendix D outline the NCTCOG Title VI policy and explain the process by which complaints may be submitted by individuals, investigated and potentially resolved.

The Public Participation Plan outlines principles and strategies through which NCTCOG seeks to include all of the region’s communities in the planning process. In particular, the diversity of communities in North Texas means NCTCOG will work to establish and maintain relationships and channels of communication with individuals and organizations that serve traditionally underrepresented groups. By working with communities, NCTCOG will better reach individuals and understand their transportation needs, resulting in relationships that lead to consensus building.

Communication and outreach strategies that specifically aim to increase the number and diversity of people reached through the planning process include, but are not limited to:

Media Outreach	Regularly research newspapers, online publications and blogs serving areas with considerable numbers of protected populations and update the media contact database as needed
Paid Advertising	Continue to advertise public input opportunities in minority publications and through social media and identify opportunities to place paid advertisements in strategically selected media and organizational publications to encourage individuals to sign up for NCTCOG Transportation Department email updates
Language Translation	Advertise public input opportunities in Spanish-language newspapers with instructions for requesting additional translation; translate key NCTCOG Transportation Department documents and work with program areas to identify opportunities for bilingual outreach in Spanish and other languages; provide translation into Spanish or other languages upon request
Community Networks	Establish and facilitate a network of individuals and organizations who will share information and notices of input opportunities in their communities and through their own networks
Business Outreach	Evaluate how to expand outreach to the business community, including minority chambers of commerce
Nonprofit Coordination	Identify and develop opportunities to better coordinate with nonprofit organizations already effectively reaching segments of the North Texas population



Consultation with Committees

Standing and ad hoc committees, subcommittees, task forces and working groups provide valuable input, insight and coordination on planning for transportation and air quality issues in the region. The Regional Transportation Council is the forum for cooperative decision-making by the elected officials of local governments and representatives of local transportation providers in the Metropolitan Planning Area. The RTC meets on the second Thursday of each month.

The Surface Transportation Technical Committee provides technical review and advice to the RTC with regard to the surface transportation system. Other technical committees, determined as needed by the NCTCOG Transportation Director, provide technical review and advice for the regional transportation planning process.

Meetings of the RTC and the standing technical, policy and strategic committees are open meetings. Visit www.nctcog.org/trans/about/committees to learn more about the committees, their members, past and upcoming meetings, and other information.

Collaboration with Audiences and Stakeholders

Collaboration with the region's diverse audiences and stakeholders helps build the consensus needed to develop transportation plans, policies and projects that accomplish the mobility, quality of life and air quality goals of the region. NCTCOG strongly encourages involvement and input from individuals, groups and organizations who live, work or travel in North Texas and may be affected by transportation and air quality decisions. Individuals exist in communities, and often in networks of communities, both formal and informal, so listening to and informing individuals is an important way the NCTCOG Transportation Department implements its communications and outreach plans. Further developing connections in communities will expand the reach of NCTCOG information and involve more people in transportation decision-making.

In accordance with the federal laws and legislation in Appendix A, and using the communications and outreach strategies detailed in this plan, NCTCOG seeks to reasonably inform and involve the parties outlined on the following page.

Required for General Public Participation

Individuals	Transit benefit program
Affected public agencies	Parking cash-out program
Representatives of public transportation employees	Shuttle program
Public ports	Telework program
Freight shippers	Representatives of users of public transportation
Providers of freight transportation services	Representatives of users of pedestrian walkways and bicycle transportation facilities
Private providers of transportation	Representatives of the disabled
Intercity bus operators	Other interested parties
Employer-based commuting programs	Those traditionally underserved by existing transportation systems:
Carpool program	<ul style="list-style-type: none"> ● Low-income households ● Minority Households
Vanpool program	

Required for Metropolitan Transportation Plan and TIP

Indian Tribal governments
Federal land management agencies, when the MPA includes Federal public lands
Agencies and officials responsible for other planning activities within the MPA that are affected by transportation:
<ul style="list-style-type: none"> <li style="width: 50%;">● State and local planned growth <li style="width: 50%;">● Environmental protection <li style="width: 50%;">● Economic development <li style="width: 50%;">● Airport operations <li style="width: 50%;">● Tourism <li style="width: 50%;">● Freight movements <li style="width: 50%;">● Natural disaster risk reduction

Required for Metropolitan Transportation Plan

State and local agencies responsible for:
<ul style="list-style-type: none"> <li style="width: 50%;">● Land use management <li style="width: 50%;">● Conservation <li style="width: 50%;">● Natural resources <li style="width: 50%;">● Historic preservation <li style="width: 50%;">● Environmental protection

Required for Congestion Management Plan (if developed in the future)

Employers	Organizations that provide job access reverse commute projects or job-related services to low-income individuals
Private and nonprofit providers of public transportation	
Transportation management organization	

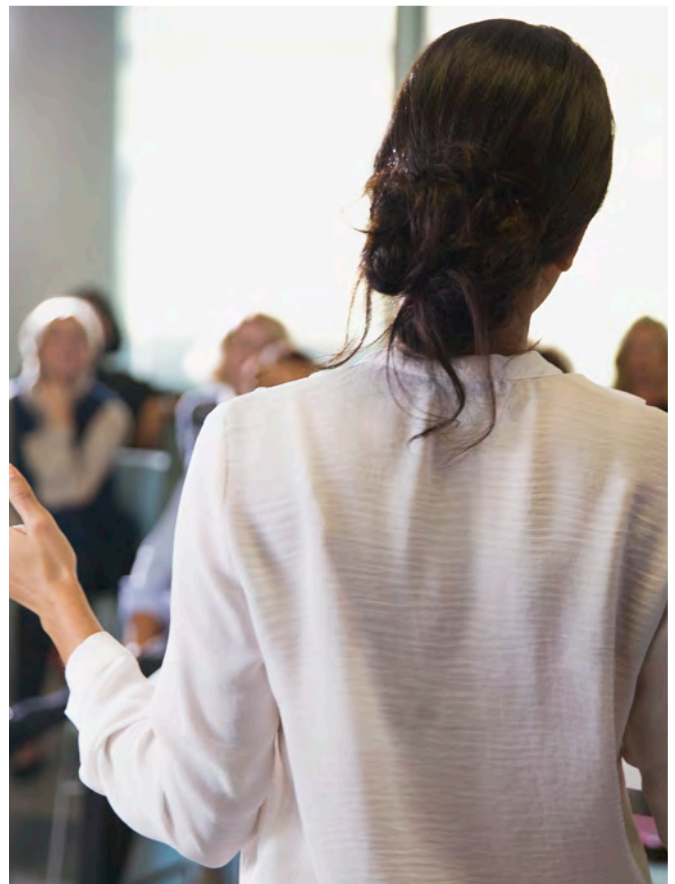
3. Public Participation Goals

NCTCOG implements an integrated communications and outreach program to engage diverse audiences in planning for transportation and improving air quality. Making content relevant, removing barriers to participation, stating information simply and using visualization techniques facilitates understanding and meaningful input. NCTCOG not only seeks to inform and educate, but also to empower and improve opportunities for the public to share their ideas, perspectives and priorities for transportation. When the public has been informed and has had an opportunity to provide input, sufficient consensus building can take place, providing the support for whatever transportation decisions are made. Finally, monitoring, evaluating and refining communications and outreach strategies will ensure NCTCOG's efforts to inform and gather input are inclusive, effective and transparent, and meet its desired outcomes for its public participation process.

Public involvement goals and the strategic priorities for accomplishing each are outlined below.

Goal 1: Inform and Educate

- Increase awareness and understanding of the MPO among North Texans
- Connect with organizations and community leaders who can help reach more people and engage those individuals in the planning process
- Make information accessible and understandable
- Develop visuals to illustrate and enhance communications
- Provide timely public notice of information resources and opportunities to comment on plans, policies and programs
- Ensure transparency and accessibility for open meetings, including for the RTC and the standing technical, policy and strategic committee meetings
- Provide language translation and alternate formats upon request





Goal 2: Engage Diverse Audiences and Encourage Continued Participation

- Identify the affected public and other stakeholder groups with respect to the plans, programs, projects, policies and partnerships under development
- Clearly define the purpose and objectives for public dialogue on transportation plans, programs, projects, policies and partnerships
- Encourage input to be submitted in various ways, including flexible, creative and innovative approaches
- Eliminate barriers to participation by hosting public meetings at accessible locations and convenient times and posting video recordings, information and public comment opportunities online for ease of access
- Document and respond, as needed, to comments from public meetings, outreach events, mail, email, web forms and social media
- Share public input with policy and technical committees
- Use input to develop policies, plans and programs, making the final versions easily accessible

Goal 3: Evaluate Public Participation Strategies and Efforts

- Review quantitative and qualitative data for outreach and communications efforts
- Review how public input influenced transportation decision-making
- Inform the public about outreach and communications efforts and outcomes through reporting



4. Procedures for Public Comments and Specific Plans and Programs

NCTCOG strives to continuously inform and involve the public and encourages North Texans to submit comments and questions at any time. A summary of NCTCOG's procedures for gathering and documenting public input and presenting it to the RTC and other committees is outlined below.

In addition, when developing and updating major plans and programs there are several specific outcomes and milestones that especially benefit from public input. Staff seeks to align the outcomes and milestones to outreach efforts and opportunities for public involvement. It is important that local governments, transportation partners, business and community groups, nonprofits, stakeholders and interested residents who have a stake in these outcomes have opportunities to be involved in determining the future of transportation in the region. As such, the opportunities for public input described below meet legislative regulations for participation while aiming to provide early notification and a process that is efficient, accessible and transparent.

Public Comment Compilation, Consideration and Response

NCTCOG compiles, summarizes and responds to substantive comments submitted on plans, programs and policies. Public input provides NCTCOG and the RTC with community insight that can be balanced with professional expertise and technical analysis to reach informed decisions. In the event that more than one public meeting is scheduled for a given topic, the public comment period for that topic begins the day of the first meeting. When a specific comment period is stated, comments must be received by 11:59 pm CT on the date specified as the deadline.



Comments relevant to and received during specific public comment periods are provided to the RTC in advance of any meetings where they are scheduled to take action on the relevant policy, plan or program. All comments received outside these formal public comment periods, regardless of the topic, are compiled into a monthly report and presented to the RTC in advance of its next regularly scheduled meeting. These comments are accessible to the public in the RTC meeting agendas, public meeting minutes and monthly comment reports on the NCTCOG website.

As a matter of course, the RTC gives greater weight to the voices of impacted residents, businesses, governments, transportation partners, and other agencies and organizations in the region. Therefore, when providing comments to the RTC, NCTCOG may distinguish between local comments and comments submitted from outside the region or a project corridor.

With an increased focus on expediting project implementation and funding allocation, there may be rare occasions in which issues arise that require urgent action, such as modification of the Transportation Improvement Program, due to funding requirements or timelines. In these cases, there will be adequate public notice and clear communication of the abbreviated comment period. An abbreviated comment period will be at least 72 hours. Longer comment periods are preferred and will be offered whenever possible. As with comments received during longer comment periods, staff will compile, summarize and respond to substantive comments received during the abbreviated comment period. Staff will provide these comments and their responses at the next RTC meeting.

Following the request of emergency funds to provide assistance in the aftermath of Hurricane Harvey in 2017, NCTCOG may also choose to utilize an abbreviated comment period to seek public input on assistance requested from the state or local governments experiencing an emergency. Use of a comment period in such instances is at NCTCOG's discretion and depends on the amount of assistance requested. NCTCOG may not provide funds to either state or local governments in any instance without securing approval from the RTC. Notification will be provided to the public of such actions at the next public input opportunity.

Additional Comment Opportunities for Changes to Final Plans

If any of the final plans or programs differ significantly from the draft that was made available for public comment and raise new material issues that interested parties could not reasonably have foreseen from the public involvement efforts, an additional opportunity for public comment will be made available. At the minimum, the format of the additional comment opportunity will be the same as the initial opportunity and have a minimum 14-day comment period, unless provisions for an expedited comment period apply as outlined above. In the case of public meetings, the number and location of the subsequent public meeting(s) may vary, but at a minimum one public meeting will be held at NCTCOG, and a video recording of that meeting will be posted online.

Minor changes to a final plan or program, or changes that could have been reasonably foreseen, can be made without further opportunities for public involvement. As such, recommendations presented during public comment periods are understood to be contingent on the outcomes of the public involvement process. Changes made to a final draft plan or program as a result of public comments received during the comment opportunity will not require a further opportunity for public comment; notification of such changes will be provided at the next public input opportunity. This is consistent with CFR § 450.316 (a)(1)(viii) included in Appendix A.



Inclement Weather and Public Comment Periods

Specific public comment periods are given for the transportation planning actions and outcomes outlined, and these are initiated either by a public meeting or posting information online for public review. Should inclement weather lead to the cancellation of one or more public meetings, NCTCOG will first notify the public of the cancellation through email, webpage updates and social media. In most cases, if another public meeting in the series can be hosted as planned and/or a video recording made available at www.nctcog.org/input, the deadline for public comments will remain as if weather were not a factor. However, based on the topic, staff may determine it is necessary to reschedule the meeting or meetings and adjust the public comment period.

If action initiating a public comment period, such as posting information to www.nctcog.org/input for review, is delayed by inclement weather, staff will communicate the delay by email and social media and again when the information becomes available for comment. If the delay is less than seven calendar days, the deadline for public comments will remain as if weather were not a factor.



Public Participation Plan Development and Updates

The Public Participation Plan describes the public involvement responsibilities of the MPO and outlines goals and strategies for broadly engaging diverse audiences in the transportation planning process. Staff monitors and evaluates communication and outreach strategies and reviews federal legislation and guidance for public participation. As communications trends and transportation planning requirements change, staff will determine the level and timing of changes needed to the Public Participation Plan. Staff will align input opportunities with the extensiveness of proposed changes.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Development or update of the Public Participation Plan	One public meeting shall be held at least 30 days prior to requesting RTC approval. At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.	45 days	Information sent to public involvement contact list NCTCOG publication article Social media
Update to one or more Public Participation Plan appendices or legislative references in the document	Recommendations posted online for public review and comment at www.nctcog.org/input .		Newspaper ad, including minority publications News release
Typographic or grammatical correction	None	Not applicable	Not applicable



Unified Planning Work Program (UPWP)

The Unified Planning Work Program for Regional Transportation Planning provides a summary of the transportation and related air quality planning tasks conducted by the MPO. It is developed every two years and serves as a guide for transportation and air quality planning activities to be conducted over the course of specified fiscal years. Included in the UPWP are detailed descriptions of the transportation and air quality planning tasks with a summary of the amount and source of funds to be used. The UPWP is developed in cooperation with the Texas Department of Transportation, Dallas Fort Worth International Airport, transportation authorities, toll authorities and local governments in the Dallas-Fort Worth Metropolitan Area. Specific planning needs for the region are identified through requests solicited from representatives of these agencies. This information is combined with regional needs identified by NCTCOG, and after allocating funds from available resources, presented as a proposed Work Program for the upcoming fiscal years. The UPWP is modified periodically to reflect new initiatives, project modifications and funding adjustments.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Development of the UPWP	<p>One public meeting shall be held at least 30 days prior to requesting RTC approval.</p> <p>At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video. Whenever possible, a livestream will be provided as well.</p>	30 days	<p>Information sent to public involvement contact list</p> <p>NCTCOG publication article</p> <p>Social media</p> <p>Newspaper ad, including minority publications</p>
Modifications	<p>Recommendations posted online for public review and comment at www.nctcog.org/input.</p>		



Metropolitan Transportation Plan (MTP)

Updated at least every four years, the Metropolitan Transportation Plan is the long-term, financially constrained, multimodal transportation plan for the region. It includes policies, programs and projects for development that respond to adopted goals, and it guides expenditures of state and federal funds during the next 20 or more years. It is the product of a comprehensive, cooperative and continuous planning effort. Transit, highway, local roadway and bicycle and pedestrian projects are among projects included in the MTP. During its development, transportation investment priorities and major planning-level project design concepts are established. Broad regional impacts of transportation and the environment are addressed. This is an early and important opportunity for the public and stakeholders to help define and influence transportation choices in the region. As such, numerous outreach and communications strategies are implemented to engage a diverse audience in public input opportunities. Strategies may include but are not limited to print and online surveys, stakeholder workshops, website content, media outreach, email and mail notices, presentations to community groups and public meetings for both the development of the MTP and review of its final recommendations prior to Regional Transportation Council consideration. Public comments regarding the MTP will be included in the plan's documentation or by reference to the Transportation Conformity documentation.

Changes to the MTP are incorporated through an update, amendment or administrative modification, and public input opportunities correspond to the level of proposed changes.

The most comprehensive set of changes, an update, is a complete review of the MTP that addresses new demographics or changes to the overall timeframe for the plan. Project changes, additions or deletions may also be part of an update, requiring a new transportation conformity determination.

An amendment incorporates a significant change to one or more projects included in the MTP, but it does not modify the demographic assumptions or overall timeframe for a plan. The addition or deletion of a project is completed through the amendment process. Other examples of changes to projects requiring an amendment include a major change in project cost, project or project phase initiation dates, or a major change in design concept or design scope, e.g., changing project termini or the number of through traffic lanes. An amendment requires public review and comment and redemonstration of fiscal constraint. Changes to projects that are included only for illustrative purposes outside of the financially constrained section of the plan do not require an amendment.

The purpose of the public comment and review period in all cases is to solicit feedback regarding the recommendations and information documented in the MTP. As a result, it is sometimes necessary to make minor modifications to the MTP documentation and coded transportation model networks. These modifications may include updating existing project data, correcting erroneous information, or clarifying text. In the event these changes are necessary during the public comment and review period, revised documentation will be posted online at www.nctcog.org/input and the associated MTP website. Notification of these revisions will be provided to the public involvement contact list and through social media.

Administrative modifications are minor changes to project/project phase costs, funding sources of previously-included projects, and minor changes to project or project phase initiation dates. An administrative revision is a revision that does not require public review and comment, redemonstration of fiscal constraint, or a conformity determination. This could also include project clarifications or technical network coding/reporting corrections consistent with NCTCOG review, public comments and conformity partner comments.

Finally, changes to the section of non-regionally significant projects in the Metropolitan Transportation Plan may be incorporated through the Transportation Improvement Program modification process to ensure consistency between the two documents. The action to make modifications to the Transportation Improvement Program will also modify the Metropolitan Transportation Plan.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Development of the Metropolitan Transportation Plan	A public meeting shall be held at least 60 days prior to requesting RTC approval. A second public meeting will be held at least 30 days prior to RTC approval.	30 days following each meeting	Information sent to public involvement contact list NCTCOG publication article Social media
Metropolitan Transportation Plan Update	At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.		
Metropolitan Transportation Plan Amendment	One public meeting shall be held at least 30 days prior to requesting RTC approval. At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.	30 days	Newspaper ad, including minority publications News release
Metropolitan Transportation Plan administrative revisions	Summary of modifications accessible from www.nctcog.org/input for informational purposes.	Not applicable	Availability of information included on next notice for a public input opportunity

Transportation Improvement Program (TIP)

As projects listed in the Metropolitan Transportation Plan move closer to implementation, they are added to the Transportation Improvement Program, a comprehensive, multi-year list of funded transportation projects. The TIP lists projects with committed funds from federal, state and local sources. To maintain an accurate project listing, this document is updated on a regular basis, according to the Transportation Improvement Program Modification Policy in Appendix C. The modification policy defines types of TIP modifications and the related procedures. Every two to three years, NCTCOG, in cooperation with the Texas Department of Transportation, local governments and transportation agencies, develops a new TIP. Public comments on the TIP will be included in the documentation of the TIP or by reference to the public meeting minutes on the NCTCOG website. With an increased focus on expediting project implementation and funding allocation, there may be very rare occasions in which issues arise that require urgent modification of the Transportation Improvement Program due to funding requirements or timelines. In these cases, there will be adequate public notice and clear communication of the abbreviated comment period. An abbreviated comment period will be at least 72 hours. Longer comment periods are preferred and will be offered whenever possible.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Development of the Transportation Improvement Program	<p>One public meeting shall be held at least 30 days prior to requesting RTC approval.</p> <p>At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video. Whenever possible, a livestream will be provided as well.</p>	30 days	<p>Information sent to public involvement contact list</p> <p>NCTCOG publication article</p> <p>Social media</p> <p>Newspaper ad, including minority publications</p> <p>News release</p>
TIP Revisions requiring Regional Transportation Council approval	Recommendations posted online for public review and comment at www.nctcog.org/input .		
TIP Administrative Amendments	Summary of modifications accessible from www.nctcog.org/input for informational purposes.	Not applicable	Availability of information included on next notice for a public input opportunity
Project changes not requiring TIP modification (i.e. staff action) and modifications supporting previous RTC action	None	Not applicable	Not applicable

Transportation Conformity

The region's long- and short-range transportation plans, the Metropolitan Transportation Plan and Transportation Improvement Program, must comply with federal air quality regulations because the Dallas-Fort Worth area is designated by the EPA as nonattainment for the pollutant ozone. The Transportation Conformity analysis documents that the total ozone-causing pollution expected from all of the region's planned transportation projects is within limits established in the State Implementation Plan. The analysis incorporates, among many factors, the expected completion date of transportation projects. The draft conformity determination of the Metropolitan Transportation Plan and Transportation Improvement Program and supporting documentation shall be made available at the related public meetings.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Transportation Conformity determination draft related to development of the Transportation Improvement Program or Metropolitan Transportation Plan	One public meeting shall be held at least 30 days prior to requesting RTC approval.	30 days	Information sent to public involvement contact list NCTCOG publication article Social media Newspaper ad, including minority publications News release
Transportation Conformity determination draft related to update or amendment of the Metropolitan Transportation Plan	At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.		
Transportation Conformity draft related to changes to the transportation system			
Transportation Conformity draft related to changes in the emissions budget of the State Implementation Plan and/or nonattainment area boundary changes	Draft conformity determination and supporting data posted online for public review and comment at www.nctcog.org/input .		
Transportation Conformity approval by federal partners	None, final approval available at www.nctcog.org/conformity .	Not applicable	News release announcing federal approval



Federal Transit Administration Funding

Local public transportation providers receive Federal Transit Administration (FTA) funds through the Urbanized Area Formula Program. The providers request Urbanized Area Formula Program funds, including Job Access/Reverse Commute (JA/RC) projects, through their annual Programs of Projects (POPs). The POPs are included in the Transportation Improvement Program following public comment and approval by the Regional Transportation Council. The public involvement procedures outlined below satisfy the federal public participation requirements associated with development of POPs, and this is stated on public meeting notices. Additionally, up to 2 percent of the Urbanized Area Formula Program funds are awarded through a competitive Call for Projects for Job Access / Reverse Commute projects. NCTCOG follows the same public involvement procedures when recommending the award of funds through a Call for Projects. Local public transportation providers may also receive funds from other FTA formula programs, and the public will have an opportunity to review and comment on the recommendations. Whenever possible, draft POPs and other funding recommendations will be combined with a discussion about regional public transportation needs and priorities to garner interest and provide for a more comprehensive discussion. Changes to POPs will be addressed through the Transportation Improvement Program modification process.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Draft Programs of Projects for Urbanized Area Formula Program funds (includes Job Access / Reverse Commute projects)	One public meeting shall be held at least 30 days prior to requesting RTC approval.	30 days	Information sent to public involvement contact list
Funding recommendations for other Federal Transit Administration formula programs, e.g., Bus and Bus Facilities, Enhanced Mobility of Seniors and Individuals with Disabilities and State of Good Repair	At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.		NCTCOG publication article Social media Newspaper ad, including minority publications News release



Annual Listing of Obligated Projects

Federal regulations require NCTCOG to develop an annual listing of obligated projects, including investments in roadways, transit, maintenance, pedestrian walkways and bicycle transportation facilities, for which federal funds were obligated in the preceding fiscal year. NCTCOG, in consultation and coordination with the Texas Department of Transportation and public transportation agencies, compiles the information and publishes the annual listing of projects at www.nctcog.org/annual.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Publishing of Annual Listing of Obligated Projects	Review only at www.nctcog.org/annual .	Not applicable	Information sent to public involvement contact list NCTCOG publication article Social media

Congestion Management Process

The Congestion Management Process outlines lower-cost projects and programs for the effective management of transportation facilities and systems, maximizing the benefit of available resources and improving reliability of the system. A transportation system as large as Dallas-Fort Worth's needs more than just capital improvements to run smoothly. The CMP includes quick-to-implement, low-cost strategies to better operate the system and manage travel-demand. These strategies complement costly infrastructure improvements. This plan is required of metropolitan areas with populations exceeding 200,000 people, and it is updated periodically.

Transportation Planning Action	Minimum Public Involvement Opportunity	Length of Comment Period	Minimum Notification of Opportunity
Development of the Congestion Management Process	One public meeting shall be held at least 30 days prior to requesting RTC approval. At a minimum, the meeting will be recorded and posted online at www.nctcog.org/video . Whenever possible, a livestream will be provided as well.	30 days	Information sent to public involvement contact list NCTCOG publication article Social media Newspaper ad, including minority publications News release

Environmental Studies

Whenever NCTCOG is involved in the development of environmental documents pursuant to the National Environmental Policy Act (NEPA), the public involvement requirements of implementing agencies; and when applicable, the Texas Department of Transportation Environmental Manual, will be met. During this process, NCTCOG will continuously coordinate with the implementing agency.

Additionally, as the Metropolitan Planning Organization for the Dallas-Fort Worth area, NCTCOG receives copies of draft environmental documents to make available to the public for review and comment during business hours. The comment period is determined by the agency publishing the document.



5. Public Participation Strategies

NCTCOG offers information in a variety of formats to include as many people as possible in the planning process. In today's media and communications environment, a comprehensive approach to outreach will rely on multiple streams of information to engage people repeatedly at different times and through different media. Upon request, any NCTCOG Transportation Department information will be converted into alternative formats or languages.

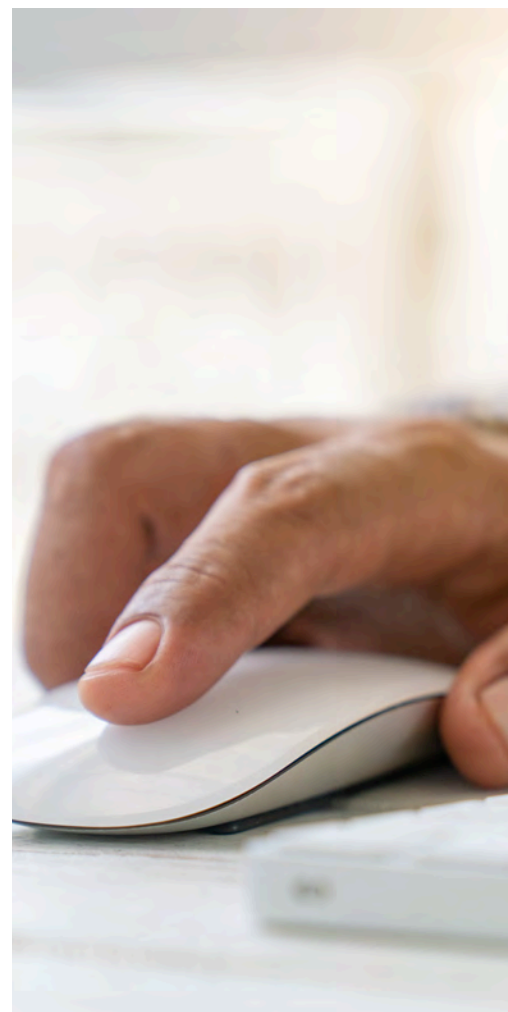
Efforts to inform and gather input from the public include, but are not limited to, the following strategies.

NCTCOG Transportation Department Website

The internet allows NCTCOG to reach a large cross section of people at times convenient to their personal schedules. People can access NCTCOG's web-based information 24 hours a day, seven days a week on their personal or public computer or mobile devices. Websites, email lists, online video, webinars and social media can all be used to inform, educate and dialog with people about transportation planning.

NCTCOG maintains www.nctcog.org/trans, a website that provides easy access to information about the plans, programs and policies of the MPO. Following a major redesign in 2018, the website employs responsive design features and includes a calendar of events; committee activities and actions; requests for proposals, qualifications or partners; and electronic versions of plans, reports, policies and program information. The site includes a search feature that allows users to find specific documents or other information using key words, and the Google Translate widget embedded on every webpage provides an option to instantly translate information into more than 100 languages.

When information is released for public review and comment, it will be available at www.nctcog.org/input, which will be included on all communications announcing the public review and comment opportunity.



This site includes a Public Involvement webpage, www.nctcog.org/trans/involve, to provide the latest information on public meetings, media releases, public surveys and the NCTCOG Transportation Department Public Participation Plan. Public meeting presentations, handouts, schedules, flyers and minutes are made available on this site as well. Interested parties may also directly access all NCTCOG Transportation Department staff members via email, phone, fax or postal mail; contact information for all staff members is easily accessible on the website.

Finally, website visitors can easily subscribe to NCTCOG email and mailing lists and submit comments and questions. If a person does not have internet access, he or she can request staff to make items on the website available by calling 817-695-9240.

Social Media

The NCTCOG Transportation Department maintains a social media presence to inform North Texans about programs, projects, policies and opportunities for them to give input and be involved in the decision-making process. This currently includes the use of Facebook, Twitter, Instagram, YouTube, and Vimeo, but other social media platforms may be added in the future.

NCTCOG staff will post information on NCTCOG Transportation Department accounts and monitor and respond to questions and concerns as warranted. To reach the widest audience possible, NCTCOG also posts engaging and entertaining content that focuses on transportation and air quality issues. Additionally, staff actively seeks to build relationships with transportation partners, local governments, agencies and other groups by sharing their posts and occasionally submitting suggested social media content to cities, chambers of commerce and other organizations.





Video

One of several visualization techniques, video is used to increase understanding of complex transportation plans, policies and programs. Video recordings of public meetings and Regional Transportation Council meetings, including livestreams, are posted online at www.nctcog.org/video. Video recordings of selected other meetings and workshops are also available.

Additionally, short, informational videos are posted at www.youtube.com/NCTCOGtrans and may be shared on NCTCOG's other social media accounts. As needed, video will complement materials available for public review and comment at www.nctcog.org/input. Depending on the length of the video, not only will it be online at www.nctcog.org/input, but it will also be available at www.nctcog.org/video or www.youtube.com/NCTCOGtrans.

Print and Digital Publications

The NCTCOG Transportation Department develops publications designed to educate the public on transportation issues and encourage their active involvement. Many of the publications are sent to the public involvement contact list and made available at public meetings, community events and Regional Transportation Council and subcommittee meetings. All are available on the NCTCOG website or by contacting NCTCOG at transinfo@nctcog.org or 817-695-9240. Upon request, any NCTCOG Transportation Department publication will be converted into alternative formats or languages. Publications include, but are not limited to:

- *Citizen's Guide to Transportation Planning and Programming in the Dallas Fort Worth Metropolitan Area*
- Educational pieces, such as topic-specific Fact Sheets and the annual state-of-the-region report
- Local Motion (a newsletter for local elected officials and transportation decision-makers)
- Metropolitan Transportation Plan Executive Summary
- Mobility Matters (a newsletter mailed and emailed to the public involvement list)
- Notices of public meetings, opportunities for public review and comment, workshops and open house events

Various planning documents and other publications are available upon request. Most can also be viewed via the NCTCOG website. These documents include, but are not limited to:

- Metropolitan Transportation Plan
- Transportation Improvement Program
- Congestion Management Process
- Transportation Conformity Analysis
- Technical Report Series
- Unified Planning Work Program

Environmental documents received by the Metropolitan Planning Organization are also available to the public. As the Metropolitan Planning Organization for the Dallas-Fort Worth area, NCTCOG receives copies of draft environmental documents to make available to the public for review and comment during business hours.

Finally, staff occasionally submits suggested article content to cities, chambers of commerce and other organizations for inclusion in their communications.



Public Meetings, Workshops, Roundtables, Forums and Other Events

For large, complex or extensive transportation planning efforts, public meetings, workshops, roundtables, conferences, forums and other events enable and foster in-depth discussion. Typically, these events are reserved for development of plans, programs and policies and significant changes to those as well as more project- or study area-specific discussions. As needed, the NCTCOG Transportation Department will host these events to gather input and build consensus among various transportation stakeholders.

To facilitate greater participation in public meetings specifically, the following criteria are considered when selecting meeting locations. These criteria also reflect Environmental Justice considerations.

- Meetings will be held in accessible locations, preferably near transit lines or routes.
- Meetings will be held in buildings that are in full compliance with the Americans with Disabilities Act of 1990.
- Presentations and supporting documentation, as needed, will be available at meetings.
- An informal meeting environment will be cultivated, allowing attendees to ask questions and submit comments.
- For meetings on a specific project, an effort will be made to hold the meeting(s) in the corridor(s) directly affected by the project.
- The NCTCOG Transportation Department will make every effort to accommodate attendees with special needs if they provide sufficient notice. Upon request, language translation, including sign and foreign language interpreters and handouts in large print or Braille, will be available. Additionally, staff will make every effort to accommodate requests from persons with disabilities. A minimum of three days advance notice is required for these arrangements to be provided as outlined in the Language Assistance Plan in Appendix B. Public meeting notices will provide the telephone number and email address to request special arrangements.
- At a minimum, meetings will be audio taped. Video recording and livestreaming, however, are increasingly offered, and these recordings are subsequently posted to the website.

The NCTCOG Transportation Department will, on occasion, provide other informational items at public meetings. Any additional information or materials may be requested at public meetings, and NCTCOG can assure that information is mailed upon request.

All public meeting notices are sent to selected newspapers, including minority publications, as necessary, to ensure regional coverage. Staff coordinates with non-English newspapers to provide translated notices to their readers. All public meetings are posted on the Texas Register website as part of the Open Meetings requirement. Public meeting notices are mailed to public libraries and city and county offices for posting. Additionally, notices are mailed and emailed to individuals, elected officials, transportation partners and organizations on the public involvement contact list, which is constantly growing. To be included, individuals may subscribe at meetings and events, on the website or by contacting NCTCOG. Staff coordinates with public information officers of the cities in which meetings are scheduled to request assistance in posting information, often on the city cable television channel, websites and social media accounts.



Community Events

In an effort to educate the public and increase public awareness of transportation plans and programs, NCTCOG distributes information and engages in discussion at a variety of community events throughout the year such as events organized by local governments and school districts, Earth Day celebrations, bike rallies, etc. To request NCTCOG's participation in an event or for more information, email transinfo@nctcog.org or call 817-695-9240.

Mail and Email

The public involvement mail and email lists are the most direct forms of communication used by NCTCOG to inform and engage the public and partners. Together, they represent a comprehensive way to reach member governments, state agencies, neighborhood associations, civic organizations, transportation advocacy groups, social service organizations, freight companies, transit providers, chambers of commerce (including minority chambers), houses of worship, representatives of tribal governments and individuals.

Individuals receive public meeting notices, information about public review and comment opportunities, announcements of workshops or open houses, educational brochures, newsletters, and other material suitable for mass mailings.

The lists are continually maintained and expanded based on sign-up sheets at public meetings and community events, requests sent through the NCTCOG Transportation Department website (an online form is available for submission), returned mail, and requests for additions and deletions from various other sources.

Advertising

Paid advertising is used to announce public meetings, opportunities for public review and comment and other initiatives. Fixing America's Surface Transportation (FAST Act) and the U.S. Code of Federal Regulations emphasize the importance of public involvement, including public meetings and the opportunity for public comment, in the transportation planning process and require adequate notice be given to the public of these activities. As such, paid advertising complements other outreach and communications efforts. Ads are placed in select newspapers, including minority publications, to ensure regional coverage. Online advertising, including on Facebook, may be used to complement traditional print advertising.

Shareable Content

Staff will seek to develop connections and partnerships with a wide range of outreach professionals, business and community groups, jurisdictions and agencies to extend the reach of messaging about transportation and air quality issues and opportunities for public input. NCTCOG committee members and community leaders are encouraged to share information to reach wider and more diverse audiences and help involve new audiences in the planning process.

Speaking Opportunities

Staff often presents to organizations and groups such as neighborhood associations, Kiwanis and Rotary groups, chambers of commerce, professional associations, universities, schools, businesses and nonprofits, among others. Presentations provide staff with the opportunity to build relationships with organizations and involve them more actively in the planning process. To schedule a speaker or for more information, visit www.nctcog.org/speakers or call 817-695-9240.

Media Relations

Proactive media outreach efforts include distributing news releases on major projects and programs and opportunities for public input to more than 240 reporters at local media outlets and community news sources, including minority news media. The extensive media list includes all major local television stations and newspapers as well as several radio stations. The media contact list is continuously updated, and staff are committed to coordinating with local editors and news directors to provide timely and accurate information. Staff participates in interviews with local and national print, radio and television media. The goal of furthering these relationships with local media is to foster greater public awareness and understanding among Dallas-Fort Worth area residents regarding transportation issues. NCTCOG posts all of its news releases on its website in an online newsroom that is accessible to the public.

Visualization

Maps, charts, diagrams, illustrations, photographs, infographics, video and the use of color are used to visualize ideas, concepts, plans, projects and programs. Visualization elements are integrated in presentations, publications, website and social media content.

Surveys and Keypad Polling

The NCTCOG Transportation Department may conduct print and/or electronic surveys to determine public awareness and/or sentiment with regard to certain planning issues. Surveys may be relatively small endeavors designed to shed light on a single issue, or may be related to large-scale planning endeavors.

Similar to a survey, keypad polling is another opportunity to gather input on community preferences and priorities. Polling questions can be integrated into a presentation and attendees respond with keypads provided by NCTCOG. Results can be immediately shown in the presentation or captured and reviewed later.



Stakeholder Interviews

Meetings with regional transportation stakeholders, such as community and business leaders, nonprofit organization representatives and other individuals helps staff understand local communities. For example, information about the most effective communications and outreach strategies for a particular area or group of people helps staff to engage more and increasingly diverse groups of people in the transportation planning process.

Telephone Town Halls

The NCTCOG Transportation Department will host telephone town hall discussions as needed. Telephone town halls are announced through NCTCOG Transportation Department communications, and interested individuals can sign up in advance to participate. The format is similar to a radio show, except participants listen in from their landline or mobile phones. Staff provides information on a topic and callers can respond with their questions or comments. Polling can be integrated into the discussion, as relevant. An audio recording is then posted online and shared with members of the public who were not able to participate.

Community Networks

The population of the Dallas-Fort Worth area is 7.3 million people and growing, and regional demographics are ethnically, linguistically and economically diverse. Therefore, in an effort to reach as many people as possible, staff is increasingly seeking to engage people of influence who are willing to use their connections in their communities to help raise awareness of NCTCOG; share information and notices about plans, programs and projects; facilitate meetings and organize events that allow NCTCOG to interact directly with community members and groups; highlight NCTCOG on social media; and publicize NCTCOG meetings and events. By cultivating a network of key individuals and organizations, NCTCOG will leverage existing community networks to provide information to the widest possible audience, including groups traditionally underrepresented in the transportation and air quality planning process.

In the coming years, NCTCOG is planning to initiate a grant-funded community-based organization (CBO) pilot program through a Request for Partners or similar initiative. In the program, NCTCOG will engage local CBOs to carry out public involvement activities related to transportation issues; possible activities could include surveys, community events or focus groups. The CBOs will then facilitate interactions between NCTCOG and community members and provide NCTCOG with data and information related to their contracted public involvement activities. The program's goal is to help NCTCOG access community networks by opening doors to engage individuals in communities that have been traditionally underrepresented in its public involvement process.



6. Evaluation of Public Participation

The NCTCOG Transportation Department will regularly evaluate its measurable public participation strategies to help determine whether the Public Participation Plan is achieving desired outcomes for public involvement in the transportation and air quality planning process. Performance metrics and reporting for public participation utilize both quantitative and qualitative measures to tell the story of how public involvement is informing the planning process and helping meet goals for public involvement. Other public participation strategies are also reviewed, evaluated and discussed in the context of the measurable strategies, the desired outcomes of the Public Participation Plan and the goals for NCTCOG's public involvement process, more generally.

Evaluation helps staff understand how to better engage the public and more effectively allocate time and resources. In addition, staff will produce reports for the public that clearly explain and illustrate how public participation strategies are working toward the desired outcomes NCTCOG has identified for its public involvement processes. Evaluation of these strategies and the overall Public Participation Plan is ongoing, and efforts improve communication with the public.

The table on the following pages outlines the measurable public participation strategies, the performance metrics and reporting data for each, and desired outcomes for public participation.

Evaluation of Project-Specific Outreach

Some or all of the strategies outlined in the Public Participation Plan may be used for project-specific outreach, and the corresponding evaluation criteria and outcomes apply. Additional outcomes, however, may also be established to complement measurable public involvement goals for public involvement specific to each project. At the beginning of a project requiring public involvement, staff will outline strategies and expected outcomes so the public knows what to expect from the process. The results of the public involvement process for each project are communicated throughout the project and documented in final reports as applicable.





Evaluation Matrix for Public Participation Strategies

Outreach Strategy	Performance Metrics and Reporting	Desired Outcomes
NCTCOG Transportation Department Website	Total number of visits Number of unique visitors Webpages with most visits Average time spent on significant webpages Top referring websites/sources of web traffic Most common search terms	Identification of trends and changes for website usage Prioritization of and increased accessibility of information and public input opportunities Refined use of metadata to drive traffic
Social Media and Video	Facebook <ul style="list-style-type: none"> • Number of total page likes • Total reach • Average engagement rate per post Twitter <ul style="list-style-type: none"> • Number of followers • Total number of impressions • Total number of engagements • Average engagement rate per post YouTube <ul style="list-style-type: none"> • Number of subscribers • Number of views • Estimated minutes watched 	Broad distribution of information and public input opportunities through engaging, shareable content and personalized interactions Increased feedback and public input Development of an engaged online base of followers that helps disseminate information and public input opportunities
Print and Digital Publications	Available publication formats Number of print copies of each publication distributed Number of unique views for each publication	Information in multiple formats accessible to all communities in the region Informed understanding of planning process Sustained awareness of public input opportunities

Outreach Strategy	Performance Metrics and Reporting	Desired Outcomes
Public Meetings and Community Events	<p>Public meetings</p> <ul style="list-style-type: none"> • Number of public meetings • Number of online public input opportunities • Median attendance per meeting • Median online viewers per meeting and online public input opportunity • Accessible locations for individuals with disabilities • Regional accessibility of information • Notification of how to request language translation or special accommodations <p>Public contacts</p> <ul style="list-style-type: none"> • Number of contacts receiving public meeting notifications • Net change in number of contacts for the year <p>Public meeting advertising</p> <ul style="list-style-type: none"> • Ad placements • Median reach for each Facebook ad • Median engagement for each Facebook ad <p>Community events</p> <ul style="list-style-type: none"> • Number of events attended by staff • Number of events distributing NCTCOG Transportation Department information • Total estimated attendance for all events • Geographic representation in event locations 	<p>Information about policies, programs and projects accessible in multiple formats to all communities throughout the region</p> <p>Greater awareness of policies, programs and projects</p> <p>Timely notification through multiple strategies about opportunities to provide input and engage with staff</p> <p>Increased feedback and public input</p> <p>Planned opportunities for the public to interact directly with staff</p> <p>Increased accessibility of staff to communities and partners</p> <p>Transparency in public involvement efforts and the planning process</p>
Public Comments	<p>Total number of comments received</p> <p>Number of comments from meetings and events</p> <p>Number of comments from email</p> <p>Number of comments from social media</p> <p>Number of comments received via other modes</p> <p>Most common comment topics</p>	<p>Transparency in public involvement efforts and the planning process</p> <p>Identification of trends and changes in public attention and concerns</p>

Outreach Strategy	Performance Metrics and Reporting	Desired Outcomes
Speaking Opportunities	Number of presentation requests Number of presentations Number of people reached Types of audiences/groups reached Types of presentation topics	Increased awareness of the planning process and specific plans, programs and projects Increased accessibility of staff to communities and partners Greater participation by communities and organizations in the planning process
Shareable Content	Number of partners that shared content Type of partners that shared content Type of content shared by partners New audiences reached through partners	Strong relationships with partner organizations willing to help disseminate information to the public through multiple channels Extended reach of messaging about transportation, air quality and public input opportunities Increased connections with communities not actively involved in the planning process
Media Relations	Number of news releases Number of media requests Number of media mentions Media Contacts List <ul style="list-style-type: none"> ● Types of news sources ● Number of news outlets ● Number of minority news outlets ● Number of news outlets in each county ● Number of reporters 	Transparency in public involvement efforts and the planning process Proactive media relations to communicate public input opportunities, policies and programs Diverse list of media contacts to keep the public broadly informed Understanding of local, regional, statewide and national media coverage of transportation and air quality issues Understanding of the NCTCOG Transportation Department's public image



Appendix A: Laws and Legislation Relevant to Public Participation

FEDERAL LEGISLATION AND EXECUTIVE ORDERS

Fixing America's Surface Transportation (FAST) Act

The FAST Act, the most recent federal transportation legislation, and the associated implementing regulations emphasize the importance of public involvement and contain specific language outlining requirements for public participation processes and procedures. In general, FAST Act legislation and regulations maintained requirements of previous transportation legislation (ISTEA, TEA-21, SAFETEA-LU and MAP-21) and did not establish any new requirements. Notably, the FAST Act did add a requirement to provide a reasonable opportunity to for public ports and specific types of private providers of transportation to be involved in the metropolitan transportation planning process.

Elements of the Public Participation Plan that specifically respond to requirements:

- Notices of public input opportunities, including public meetings, will be sent to newspapers to ensure regional coverage. Translated notices will also be sent to non-English newspapers. Notification is also sent to local libraries, city halls, county court houses, chambers of commerce (including minority chambers) and representatives of tribal governments. NCTCOG will maintain a comprehensive contact list of individuals and organizations that wish to be notified of all public input opportunities as well as stakeholders outlined in federal requirements.
- Information is disseminated through NCTCOG's publications, reports, public meetings and other outreach events, the NCTCOG website, social media pages, local media sources and open meetings.
- To the maximum extent possible, NCTCOG will employ visualization techniques such as maps, charts, graphs, photos and computer simulation in its public involvement activities.

- Reports, plans, publications, recent presentations and other information are available on the NCTCOG website. Public comments may also be submitted on the NCTCOG Transportation Department website and via email and social media. Interested parties may subscribe to receive topic specific email correspondence. Additional web-related communication tools are evaluated continuously for implementation.
- Public meetings are held in diverse locations throughout the region, accessible to individuals with disabilities, preferably near transit lines or routes, at both day and evening times. Public meetings are recorded and archived on the NCTCOG website; when multiple public meetings are held on the same topic(s), at least one meeting in the series is recorded and archived on the NCTCOG website. In addition, public meeting materials and summaries are archived online and hard copies can be mailed upon request.
- Public meetings will be held during development of the Transportation Improvement Program (TIP), Metropolitan Transportation Plan (MTP) and Unified Planning Work Program. There are also online public input opportunities. All public comments will be reviewed and considered by the Regional Transportation Council and standing technical, policy and strategic committees. Public comments received on the TIP and the MTP shall be included in documentation of the TIP and the MTP or by reference to the public meeting minutes (for the TIP) or Transportation Conformity documentation (for the MTP).
- If the final TIP or MTP significantly differs from the draft made available for public review and public comment and raises new material issues that interested parties could not reasonably have foreseen from the public involvement efforts, an additional opportunity for public comment will be provided. Recommendations presented during public comment periods are understood to be contingent upon the outcomes of the public involvement processes for these plans; therefore, it is understood that the final TIP or MTP may reflect changes resulting from the outcome of these processes. In addition, when NCTCOG can reasonably foresee alternative outcomes based on circumstances or events coincident with its public involvement processes for these plans, NCTCOG may present alternative recommendations for public comment alongside its final recommendations; in this case, it will be understood that decisions about these recommendations are contingent upon both the public involvement process and the resolution of these circumstances or events.
- When possible, public meetings will be coordinated with the Texas Department of Transportation.
- NCTCOG regularly reviews its Transportation Public Participation Plan. If modified in a more restrictive fashion, a 45-day comment period will be held following the public meetings at which proposed revisions are discussed.

23 CFR §450.316 Interested parties, participation, and consultation.

- a. The MPO shall develop and use a documented participation plan that defines a process for providing individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.
 1. The MPO shall develop the participation plan in consultation with all interested parties and shall, at a minimum, describe explicit procedures, strategies, and desired outcomes for:
 - i. Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP;
 - ii. Providing timely notice and reasonable access to information about transportation issues and processes;
 - iii. Employing visualization techniques to describe metropolitan transportation plans and TIPs;
 - iv. Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;
 - v. Holding any public meetings at convenient and accessible locations and times;
 - vi. Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;
 - vii. Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;
 - viii. Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues that interested parties could not reasonably have foreseen from the public involvement efforts;
 - ix. Coordinating with the statewide transportation planning public involvement and consultation processes under subpart B of this part; and
 - x. Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.

2. When significant written and oral comments are received on the draft metropolitan transportation plan and TIP (including the financial plans) as a result of the participation process in this section or the interagency consultation process required under the EPA transportation conformity regulations (40 CFR part 93, subpart A), a summary, analysis, and report on the disposition of comments shall be made as part of the final metropolitan transportation plan and TIP.
 3. A minimum public comment period of 45 calendar days shall be provided before the initial or revised participation plan is adopted by the MPO. Copies of the approved participation plan shall be provided to the FHWA and the FTA for informational purposes and shall be posted on the World Wide Web, to the maximum extent practicable.
- b. In developing metropolitan transportation plans and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, tourism, natural disaster risk reduction, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, the MPO shall develop the metropolitan transportation plans and TIPs with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the area that are provided by:
1. Recipients of assistance under title 49 U.S.C. Chapter 53;
 2. Governmental agencies and non-profit organizations (including representatives of the agencies and organizations) that receive Federal assistance from a source other than the U.S. Department of Transportation to provide non-emergency transportation services; and
 3. Recipients of assistance under 23 U.S.C. 201-204.
- c. When the MPA includes Indian Tribal lands, the MPO shall appropriately involve the Indian Tribal government(s) in the development of the metropolitan transportation plan and the TIP.
- d. When the MPA includes Federal public lands, the MPO shall appropriately involve the Federal land management agencies in the development of the metropolitan transportation plan and the TIP.
- e. MPOs shall, to the extent practicable, develop a documented process(es) that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies, as defined in paragraphs (b), (c), and (d) of this section, which may be included in the agreement(s) developed under §450.314.

***Title VI of the Civil Rights Act of 1964:
Nondiscrimination in Federally Assisted Programs***

Title VI states that no person is excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion. Title VI prohibits discrimination: whether intentional or where the unintended effect is unduly burdensome.

Title VI Complaint Procedures (Appendix D) outline the NCTCOG Title VI policy, how an individual may submit a complaint, how the complaint will be investigated and potential resolution scenarios.

***Executive Order 12898:
Federal Actions to Address Environmental Justice
in Minority and Low-Income Populations***

In response to Executive Order 12898: Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, NCTCOG's policy reflects that no segment of the region should, because of race, economic makeup, age, sex, or disability, bear a disproportionate share of the adverse human health or environmental effects, including social and economic effects, of its programs, policies and activities or be denied equal access to environmental benefits. Other fundamental concepts of Environmental Justice included in NCTCOG's policy are to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and to prevent the denial of, reduction in, or significant delay in receipt of benefits by minority and low-income populations.

NCTCOG addresses Environmental Justice concerns throughout the transportation planning process, and it is the responsibility of all staff to consider the needs of traditionally underserved communities during planning, project selection and project implementation. As the Public Participation Plan is implemented, special consideration is given to ensure all residents have reasonable access to information and opportunities to give input. Demographic data is analyzed to identify areas having considerable numbers of protected populations, and this can be used for public meeting location and outreach event selection as well as identification of need for more targeted or diverse outreach efforts.

***Executive Order 13166:
Improving Access to Service for Persons with Limited English Proficiency***

In 2000, President William J. Clinton signed Executive Order 13166: Improving Access to Services for Persons with Limited English Proficiency. The order provided clarification of Title VI in the Civil Rights Act of 1964, stating that recipients of federal funds must "ensure that the programs and activities they normally provide in English are accessible to LEP persons and thus do not discriminate on the basis of national origin."

The order also required federal agencies and recipients of federal financial assistance to examine the services they provide and develop an implementation plan to provide meaningful access to LEP persons.

Guidance from the Federal Highway Administration, Federal Transit Administration and the Texas Department of Transportation stresses the importance of reducing language barriers that can prevent meaningful access by LEP persons to important services. NCTCOG values public involvement and feedback and encourages participation by all communities.

To ensure all communities have meaningful access to information and opportunities to participate in the planning process, the NCTCOG Transportation Department analyzes department activities and demographic information for the region in order to:

- Identify LEP persons who need language assistance and determine how these individuals are served or likely to be served by NCTCOG Transportation Department programs.
- Outline how language assistance will be available.
- Train staff for considering the needs of and interacting with LEP persons.

- Provide notice to LEP persons.
- Monitor and update plans and strategies that address how LEP individuals have access to information and opportunities for program participation.

Because transportation planning and services provided by NCTCOG can be both a benefit and a burden to economic development, employment, housing, education, healthcare and social opportunities, NCTCOG staff is dedicated to assessing the location and needs of LEP communities and consequently, the services NCTCOG provides to these communities.

A Language Assistance Plan (LAP) in Appendix B outlines NCTCOG's efforts to make information available to limited English proficient (LEP) persons. According to U.S. Department of Transportation Guidelines, a four-factor analysis is used to evaluate the extent to which language assistance measures are required to ensure meaningful access to LEP persons.

The four-factor analysis considers:

1. The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity or service.
2. The frequency with which LEP individuals come in contact with the program.
3. The nature and importance of the program, activity or service provided by the federal-funding recipient to people's lives.
4. Resources available to federal-funding recipients and costs of language assistance.

The LAP outlines demographic information, analysis of Department activities, language assistance provided and communication to LEP persons about the availability of language assistance.

Appendix B: Language Assistance Plan

UPDATED JUNE 2018

The North Central Texas Council of Governments (NCTCOG) is committed to incorporating environmental justice elements and Title VI considerations into the public participation process for transportation planning. Input and involvement from populations that have been traditionally underserved by existing transportation systems including, but not limited to, low-income and minority households, are sought out and their needs considered. Various communication strategies and information formats seek to make information easily accessible and understandable.

Title VI states that no person shall be excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, disability, or religion. Title VI prohibits discrimination whether intentional or where the unintended effect is unduly burdensome. The North Central Texas Council of Governments Transportation Department Title VI Complaint Procedures (Appendix D) establishes a procedure under which complaints alleging discrimination in NCTCOG's provisions, services, or NCTCOG activities can be made by persons who are not employees of NCTCOG.

The U.S. Department of Transportation defines Limited English Proficiency (LEP) as persons who do not speak English as their primary language and who have limited ability to read, write, speak, or understand English.

Executive Order 13166

In 2000, President William J. Clinton signed Executive Order 13166 “Improving Access to Services for Persons with Limited English Proficiency.” The order provided clarification of Title VI in the Civil Rights Act of 1964, stating that recipients of federal funds must “ensure that the programs and activities they normally provide in English are accessible to LEP persons and thus do not discriminate on the basis of national origin.”

The order also required federal agencies and recipients of federal financial assistance to examine the services they provide and develop an implementation plan to provide meaningful access to LEP persons.

Guidance from the Federal Highway Administration, Federal Transit Administration and Texas Department of Transportation stresses the importance of reducing language barriers that can prevent meaningful access by LEP persons to important services. NCTCOG values public involvement and feedback and encourages participation by all communities.

To ensure all communities have meaningful access to information and opportunities to participate in the planning process, the NCTCOG Transportation Department analyzes department activities and demographic information for the region in order to:

- Identify LEP persons who need language assistance and determine how these individuals are served or likely to be served by NCTCOG Transportation Department programs.
- Outline how language assistance will be available.
- Train staff to interact with and consider the needs of LEP persons.
- Provide notice to LEP persons.
- Monitor and update plans and strategies that address how LEP individuals have access to information and opportunities for program participation.

Because transportation planning and services provided by NCTCOG can be both a benefit and a burden to economic development, employment, housing, education, healthcare and social opportunities, NCTCOG staff is dedicated to assessing the location and needs of LEP communities and, consequently, the services NCTCOG provides to these communities.

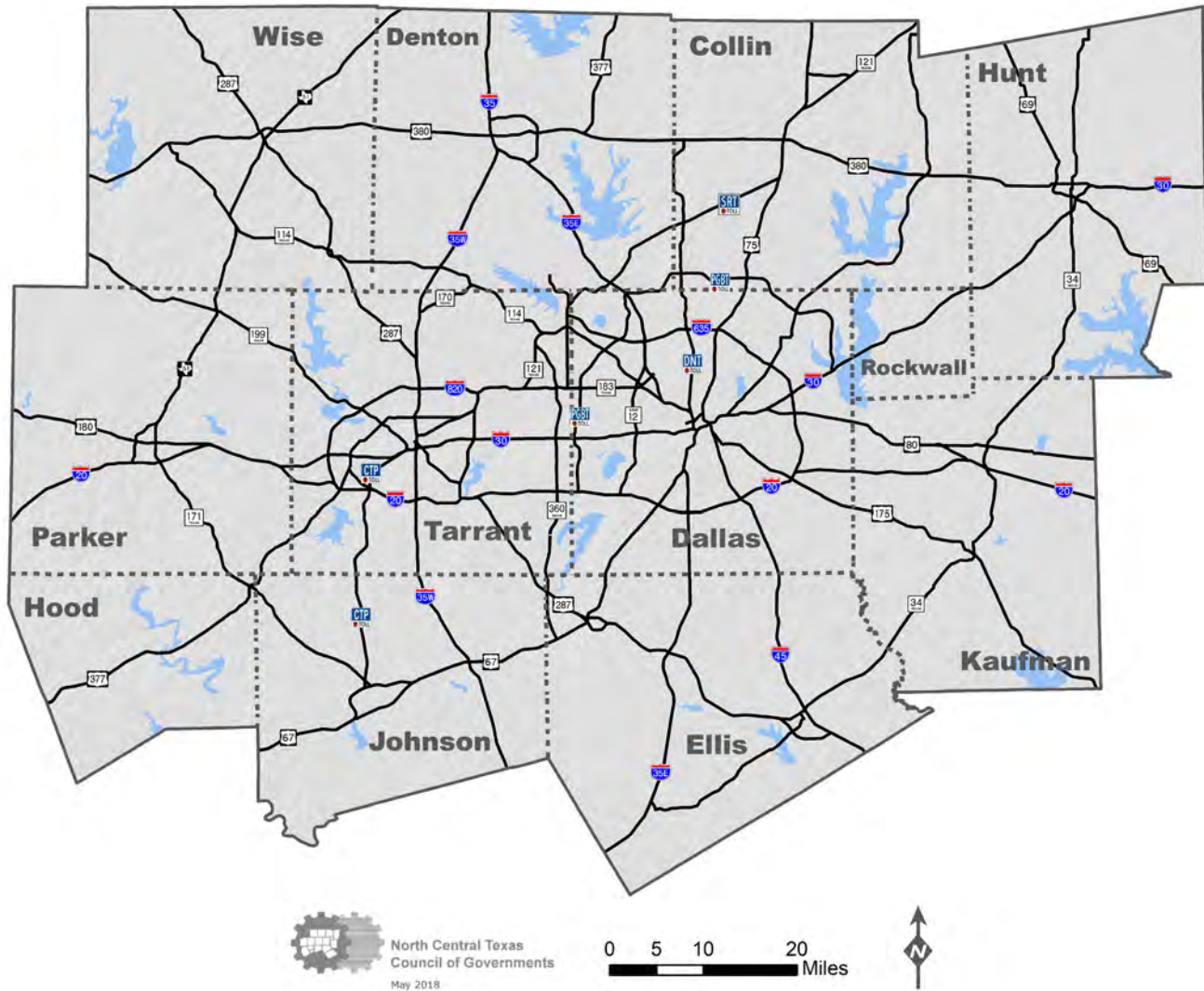
Identification of LEP Populations and Determination of How These Individuals Are Served or Likely to be Served by NCTCOG Transportation Department Programs

The U.S. Department of Transportation issued Policy Guidance to federal financial assistance recipients regarding Title VI prohibition against national origin discrimination affecting LEP persons. In this guidance, the U.S. Department of Transportation provided the four-factor analysis as an approach to evaluate the extent to which language assistance measures are required to ensure meaningful access to LEP persons.

Factor 1: *The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient grantee.*

The Metropolitan Planning Area boundary encompasses 12 counties (Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise).

Limited English Proficiency Service Area



Data for the 12-county Metropolitan Planning Area was gathered using the 2006-2010 and 2012-2016 American Community Survey datasets. LEP persons were classified as anyone over the age of five who described their ability to speak English as less than 'very well' (i.e. 'well,' 'not well,' or 'not at all'). Due to recent changes in the Census Bureau's coding of language data, it is not possible to compare language groups between the two datasets. The aggregate LEP population increased by 14.9% between 2010 and 2016.

In 2010, the American Community Survey estimated population over age five was 5,698,467 for the 12-county region. The total LEP population was 765,371, approximately 13.4 percent of the total population over age five. In 2016, the LEP population was 879,120, 13.6% of the region's 6,446,768 residents over the age of five. In 2016, Spanish was the largest language represented among the LEP population, with 10.8% percent of the total population over age five. Asian and Pacific Island languages were the second largest group among the LEP population, comprising 1.7 percent of the total population over age five. LEP individuals speaking other Indo-European languages or other languages respectively comprised 0.8 percent and 0.4 percent of the total population over age five.

LEP Population for the 12-County Dallas-Fort Worth Metropolitan Planning Area

Total Metropolitan Planning Area (MPA) Population Over 5	Total MPA LEP Pop.	% LEP of Total Pop.	Total MPA Spanish LEP Pop.	% Spanish LEP of Total Pop.	Total MPA Asian and Pacific Island Languages LEP Pop.*	% Asian and Pacific Island Languages LEP of Total Pop.	Total MPA Other Indo-European Languages LEP Pop.	% Other Indo-European Languages LEP of Total Pop.	Total MPA Other Languages LEP Pop.	% Other Languages LEP of Total Pop.
2006-2010 American Community Survey	5,698,467	13.4%	624,880	11.0%	89,868	1.6%	35,731	0.6%	14,892	0.2%
2012-2016 American Community Survey	6,446,768	13.6%	694,804	10.8%	109,511	1.7%	50,426	0.8%	24,379	0.4%

Source: 2006-2010 and 2012-2016 American Community Survey; www.census.gov

Limited English Proficiency (LEP) is classified as any person whose primary language is other than English and answered that their ability to speak English was “well,” “not well,” and “not at all.”

The Dallas-Fort Worth Metropolitan Planning Area consists of Collin, Dallas, Denton, Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise counties.

In 2016, the US Census Bureau changed the way that it codes language data. Consequently, language groupings cannot be compared between the 2006-2010 and 2012-2016 American Community Surveys.

*LEP Asian Languages for 2010 include: Vietnamese (0.58%), Chinese (0.33%), Korean (0.24%), Other Asian Languages (0.14%), Laotian (0.07%), Tagalog (0.06%), Thai (0.04%), Mon-Khmer, Cambodian (0.04%), Japanese (0.04%), Other Pacific Island Languages (0.02%) and Himong (0.002%).

LEP Asian Languages for 2016 include: Vietnamese (0.64%), Other Asian and Pacific Island Languages (0.41%), Chinese (including Mandarin, Cantonese) (0.36%), Korean (0.21%), and Tagalog (including Filipino) (0.08%).

Recognizing that low literacy could also result in Limited English Proficiency, data from the U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy was analyzed. The study used population estimates for persons 16 years and older as of 2003. Individuals determined to lack basic literacy skills either scored below basic in prose or could not be tested due to language barriers.

The study found that 19 percent of the statewide population lacked basic literacy skills. Within the 12-county area, 21 percent of the Dallas County population lacked basic literacy skills. Dallas County was the only county in the region above the state percentage.

This Language Assistance Plan outlines how the needs of the LEP population in the service area will be addressed, how language services will be made available, and how LEP persons will be notified of these services.

Location	Population Size¹	Percent Lacking <i>Basic Literacy Skills</i>²
Texas	15,936,279	19%
Collin County	437,018	8%
Dallas County	1,650,735	21%
Denton County	371,897	8%
Ellis County	90,668	13%
Hood County	35,299	9%
Hunt County	60,001	13%
Johnson County	102,672	12%
Kaufman County	60,172	14%
Parker County	72,454	9%
Rockwall County	40,168	8%
Tarrant County	1,130,374	14%
Wise County	40,253	12%

¹ Estimated population size of persons 16 years and older in households in 2003.

² Those lacking basic prose literacy skills include those who scored Below Basic in prose and those who could not be tested due to language barriers.

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003 National Assessment of Adult Literacy

Factor 2: *The frequency with which LEP individuals come in contact with the program.*

The nature of the programs associated with the Metropolitan Planning Organization dictate that the majority of contact with the public and LEP persons is through inquiries submitted to the MPO, public meetings, public outreach events, the MPO website, and program implementation activities.

In order to better inform the frequency with which LEP individuals come in contact with MPO programs, a staff survey of LEP encounters was conducted in 2011. Department staff members were asked if they had encountered an LEP individual in the past six months, and if so, what languages they had encountered, the frequency, and what type of work activity they were conducting. Of the 134 department staff members surveyed, 18 indicated that they encountered LEP individuals speaking six total languages in a period of six months. Spanish was the most common, followed by rare encounters of Vietnamese, Hindi, Arabic, Chinese and unspecified languages. The most frequent work activities in which staff encountered LEP individuals were phone calls and public meetings. The majority of interactions were related to the AirCheckTexas Drive a Clean Machine vehicle repair and replacement assistance program, a state-funded initiative to reduce ozone-causing emissions from high-polluting vehicles.

As a result of this survey, NCTCOG maintains a voluntary directory of employees who are able to communicate in languages other than English and are willing to provide assistance to LEP individuals. If an employee encounters a LEP individual with whom it is difficult to communicate, they may be able to refer the individual to an employee who can better assist them in another language. At present, 14 languages are represented in this language assistance directory.

Factor 3: *The nature and importance of the program, activity or service provided by the recipient to people's lives.*

NCTCOG is the agency responsible for the regional transportation planning process; in this capacity, NCTCOG must ensure that all segments of the population are involved or have the opportunity to be involved in the decision making process. As required by federal guidelines, NCTCOG produces a Metropolitan Transportation Plan that outlines long-range transportation investments, a Transportation Improvement Program (TIP) that provides short-range planning for transportation investments, a Unified Planning Work Program (UPWP) that outlines tasks to be performed in the upcoming year and a Congestion Management Process for developing and implementing operational and travel-demand strategies that improve transportation system performance.

Consistent with the Public Participation Plan, planners seek public input on these products, which influence quality of life and mobility options in the region. Public meetings represent one way for North Texans to be informed and involved. Public meeting notices include the telephone number and email address to request special accommodations for language translation or disability. On each notice, this information is provided in English and Spanish. Public meetings are advertised in newspapers, and staff interact regularly with local reporters, some of whom contribute to minority publications. Translated ads are placed in the major Spanish newspapers.

Additionally, 10 North Texas counties, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant and Wise, are classified by the U.S. Environmental Protection Agency as moderate nonattainment for the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS). On April 30, 2018, EPA designated nine of these counties (excluding Rockwall) as marginal nonattainment for the 2015 8-hour ozone NAAQS. MPO transportation plans must show transportation conformity and comply with rules established by the Clean Air Act Amendments of 1990. Therefore, NCTCOG is also responsible for developing and implementing plans, policies, and programs

to reduce transportation-related emissions that lead to ozone formation.

Based on the LEP Interaction Survey described in Factor 2, staff encounters most LEP individuals through the AirCheckTexas program. This state program offers financial assistance to individuals who meet income requirements and wish to make emissions-related repairs or replace older, high-polluting vehicles. It allows local residents to contribute to the regional air quality solution. The AirCheckTexas program team currently employs bilingual staff to assist Spanish speakers that are LEP, and program applications are available in both Spanish and Vietnamese. Additionally, web content and other materials for public awareness campaigns are available in English and Spanish.

Factor 4: *The resources available to the recipient and costs.*

NCTCOG currently has available, if needed, bilingual staff who can assist with translation needs and/or translation review. NCTCOG also has agreements with translation services that cover many languages, as well as American Sign Language. Since 2013, NCTCOG has received one request for translation at a public meeting and one request for a meeting transcript for a hearing impaired person.

To translate documents, NCTCOG currently utilizes both a translation service and department staff. The average cost for the outside translation service is \$0.12 per word. At no cost, the Google Translate tool was added to the NCTCOG Transportation Department website, making information more readily accessible in more than 100 languages. Each year a portion of the community outreach budget is proactively allocated to translation services. Visualization tools such as animations, maps, renderings, photos and others are also used, when possible, to increase understanding among all audiences. These tools can also be especially beneficial for LEP persons. All language assistance is provided at no charge to LEP individuals.

Guidelines for Making Language Assistance Available

The four-factor analysis will be used as a tool for analyzing to what extent and how the needs of LEP communities are addressed during transportation planning and program implementation. For example, the four-factor analysis will be used to determine initial translation or alternative format needs for documents and the website. Department reports, newsletters, brochures, other publications and website information include instructions about how to request information in other formats. Translators and interpreters used by the NCTCOG Transportation Department will be evaluated to ensure accurate, high-quality language services are available to LEP persons.

Increased use of visualization tools will be used to make information more understandable and, in some cases, reduce the need for English proficiency.

Plans, projects and programs for areas with a high number of LEP persons will have materials that address the needs of the population in those area. Environmental Justice communities, including non-English speakers, are mapped whenever possible to provide, as much as possible, plan- or project-specific data.

The NCTCOG Transportation Department will make every effort to accommodate language translation needs, if provided sufficient notice. A minimum of three business days advance notice is required for these arrangements to be provided at public meetings.

NCTCOG Transportation Department staff will consistently seek input and involvement from organizations and agencies which serve LEP populations to complement other language assistance and outreach efforts.

Staff Training for Interacting with and Considering the Needs of LEP Persons

All NCTCOG Transportation Department staff members employed as of February 2013 completed training on the requirements and techniques for providing meaningful access to services for LEP persons. Training materials and resources continue to be available for review by all staff — including new employees. In March 2018, a select group of staff (Environmental Justice Liaisons designated by each team in the department) received supplemental training in best practices for engaging LEP populations.

Notice of Assistance Available for LEP Persons

Public meeting notices include the telephone number and email address to request special accommodations for language translation or disability. On each notice, this information is included in English and Spanish.

Notice of the North Central Texas Council of Governments Transportation Department Title VI Complaint Procedures is accessible online and in a brochure made available at public meetings and outreach events. Title VI complaint forms are available in both English and Spanish.

Language assistance can be obtained by contacting the NCTCOG Transportation Department:

North Central Texas Council of Governments, Transportation Department
P.O. Box 5888
616 Six Flags Drive (76011)
Arlington, TX 76005-5888
Phone: (817) 695-9240
Fax: (817) 640-3028
Email: transinfo@nctcog.org
Website: www.nctcog.org/trans/

Monitoring and Updating Plans and Strategies That Address How LEP Individuals Have Access to Information and Opportunities for Program Participation

This Language Assistance Plan is intended to be reviewed and updated in conjunction with the NCTCOG Transportation Public Participation Plan.

Environmental justice and Title VI activities will be periodically summarized to provide information about how the NCTCOG Transportation Department:

- Addresses the needs of LEP persons and those traditionally underserved by existing transportation services.
- Facilitates opportunities for full and fair participation from all individuals.
- Makes information accessible and understandable.
- Ensures no person shall, on the basis of race, color, national origin, age, sex, disability, or religion, be excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance.

Appendix C: Transportation Improvement Program Modification Policy - Policies and Procedures to Streamline Project Delivery

UPDATED MARCH 2013

The Transportation Improvement Program (TIP) is a staged, multi-year program of projects approved for funding with federal, State, and local funds within the Dallas-Fort Worth area. A new TIP is approved every two to three years by the Regional Transportation Council (RTC), which serves as the policy board for the Dallas-Fort Worth Metropolitan Planning Organization (MPO). Due to the changing nature of projects as they move through the implementation process, the TIP must be modified on a regular basis.

Please note certain project changes require collaboration with our State and federal review partners. This collaboration occurs through the Statewide Transportation Improvement Program (STIP) revision process. Therefore, modification of the Dallas-Fort Worth TIP will follow the quarterly schedule established for revisions to the Statewide Transportation Improvement Program (STIP).

This policy consists of four sections:

General Policy Provisions: Overall policies guiding changes to project implementation

Project Changes Not Requiring TIP Modification: Changes related to administration or interpretation of Regional Transportation Council Policy

Administrative Amendment Policy: Authority granted to the MPO Director to expedite project delivery and maximize the time the RTC has to consider policy level (vs. administrative) issues

Revision Policy: Changes only the Regional Transportation Council can approve or recommend for State and federal concurrence

General Policy Provisions

1. All projects inventoried in the Transportation Improvement Program fall under this modification policy, regardless of funding source or funding category.
2. Air quality conformity, Mobility Plan consistency, congestion management process compliance, and financial constraint requirements must be met for all TIP modifications.
3. Project modifications will only be made with the consent of the implementing/impacted agency.
4. The Dallas-Fort Worth MPO will maintain a cost overrun funding pool. Program funds must be available through the cost overrun pool or from other sources in order to process modifications involving project cost increases.
5. All funding from deleted projects will be returned to the regional program for future cost overruns or new funding initiatives, unless the deleted funds are needed to cover cost overruns in other currently selected projects. However, it is important to note that funds are awarded to projects, not to implementing agencies. Therefore, funds from potentially infeasible projects cannot be saved for use in future projects by implementing agencies. MPO staff will manage timely resolution of these projects/funds. In addition, if a project was selected through a particular "program," such as the Sustainable Development or Regional ITS Funding Program, funds from deleted projects may be returned to those programs for future "calls for projects" in those areas.
6. For projects selected using project scoring methodologies, projects will no longer be rescored before a cost increase is considered.
7. Cost increases for strategically selected projects fall under the same modification policy provisions.
8. As a general policy, new projects are proposed through periodic regional funding initiatives. However, the RTC may elect to add new projects to the TIP, outside of a scheduled funding initiative under emergency or critical situations. Projects approved under this provision must be an immediate need.
9. Local match commitments (i.e., percentages) will be maintained as originally approved. Cost overruns on construction, right-of-way, and engineering costs will be funded according to original participation shares.

10. Additional restrictions may apply to projects selected under certain funding initiatives. For example, projects selected through the Land Use/Transportation Joint Venture (i.e., Sustainable Development) program are not eligible for cost increases from RTC-selected funding categories.
11. Cost overruns are based on the total estimated cost of the project, including all phases combined, and are evaluated once total project cost is determined to exceed original funding authorization.
12. Cost indicators may be evaluated on cost overruns to alert project reviewers of potential unreasonable cost estimates (examples include cost per lane-mile, cost per turn lane). The cost indicators are developed by the MPO, in consultation with TxDOT, using experience from the last several years. If a project falls out of this range, the MPO may either: (a) require a more detailed estimate and explanation, (b) require value engineering, (c) suggest a reduced project scope, or (d) determine that a cost increase will come from local funds, not RTC funds.
13. For a project change to be considered, implementing agencies must submit modification requests for their TIP projects through the online TIP modification system. Project change requests must include complete information by the deadline. Incomplete requests will be sent back to agency for re-submittal in a future cycle.
14. Implementing agencies must identify one or two official points of contact for TIP project modifications. The point of contact is responsible for entering complete project modification requests into the online TIP modification system on time. The point of contact must be capable of collecting and entering accurate project information. Points of contact will be sent reminders leading up to submittal deadlines.

Project Changes Not Requiring TIP Modification

In certain circumstances, changes may be made to TIP projects without triggering a TIP modification. These circumstances are outlined below:

1. **Changes that do not impact the overall purpose of a project:** Changes to MTP reference, CSJ's, or other clerical edits do not require a TIP modification.
2. **Changes to TxDOT's Design and Construction Information System (DCIS):** The DCIS is a project tracking system, therefore, simply updating the DCIS to match previously approved TIP projects or project elements does not require TIP modification. MPO staff maintains the official list of projects and funding levels approved by the RTC.
3. **Carryover Funds:** At the end of each fiscal year, unobligated funds are moved to the new fiscal year as carryover funds. For example, if a project receives funding in a specific fiscal year, but the project is not implemented by the end of the fiscal year, staff will automatically move the funds for that project into the next fiscal year. These changes do not require a TIP modification.
4. **Cost/Funding Increases:** Staff will update cost increases in the information system for changes of less than \$400,000.
5. **Increases in Local Funds:** Staff will adjust with concurrence of local agency.

6. **Changes in RTC Funding Categories:** Staff adjustments permitted.
7. **Emergency:** This provision includes emergency changes that need approval quickly, but timing is not aligned with the RTC Meeting schedule. These changes would come to the RTC for ratification at the next scheduled meeting.
8. **Cost/Funding Decreases:** Staff will update the information system with cost decreases.
9. **Funding Year Changes:** Staff will update the information system for changes that advance project implementation. Once projects are ready for construction (i.e., all federal and State requirements and procedures have been met), staff will advance the project to construction if funds are available.
10. **Statewide Transportation Improvement Program (STIP) Revisions Consistent with Previous RTC Action** (e.g., Staff will place a project or changes previously approved by the RTC in the appropriate information system and documents.)
11. **Addition of Noncapacity, Conformity-Exempt Projects:** Staff will place projects in the appropriate information system/document.

Examples include, but are not limited to:

Sign refurbishing	Safety/Maintenance
Landscaping	Intersection Improvements
Preventive maintenance	Intelligent Transportation System
Bridge rehabilitation/replacement	Traffic Signal Improvements

12. **Changes to Implementing Agency:** Staff will process after receiving a written request/approval from the current implementing agency and the newly proposed implementing agency.
13. **Increased Flexibility for Traffic Signal, Intersection Improvement, ITS, and “Grouped” Projects:** Staff will use best practices to advance this category of projects.
14. **Addition and Adjustment of Phases:** Includes engineering, right-of-way, construction, etc.
15. **Administrative Scope Changes:** Minor clarifications to the type of work being performed, physical length of project, and project termini/limits. For example, changing the limits of a project from “.25 miles west of” to “west of,” or changing the limits from “point A” to “.5 miles east of point A,” or clarifying limits due to a change to the name of a roadway when there is no physical change to the limits (the name of the roadway just changed from one name to another, etc.
16. **Funding Year Changes:** Can be moved by staff if project is being moved less than one year.

Please note that a STIP revision may be required to make these changes in the statewide funding document. In all cases, MPO information systems will be updated and changes will be noted in project tracking systems.

Administrative Amendment Policy

Administrative Amendments are TIP modifications that do not require action of the RTC for approval. Under the Administrative Amendment Policy, the RTC has authorized the Director of Transportation, or his designee, for the Dallas-Fort Worth MPO to approve TIP modifications that meet the following conditions. After they are approved, administrative amendments are provided to STTC and the RTC for informational purposes, unless they are merely processed to support previous RTC project approval.

- 1. Changes in Federal/State Funding Categories that Do Not Impact RTC-Selected Funding Programs:** RTC-Selected funding programs include: CMAQ, STP MM, RTR, Category 2M - Metro Corridor (in coordination with TxDOT), Texas Mobility Funds, Urbanized Area Formula Program - Transit Section 5307.
- 2. Potentially Controversial Projects:** The administrative amendment policy does not restrict the Transportation Director from requesting Regional Transportation Council (RTC) action on potentially controversial project changes.
- 3. Change in funding share due to adding funding from one program to another:** For instance, if adding Thoroughfare Assessment Program funds (80% federal and 20% state/local) to a project that is 56% federal and 44% local, an administrative amendment is permitted. The revision policy applies to all other instances.

Revision Policy

Revisions are modifications that require approval of the Regional Transportation Council. A revision is required for any project modification that meets the following criteria or that does not fall under the Administrative Amendment Policy.

- 1. Adding or Deleting Projects from the TIP:** This provision includes all projects not covered previously in this Policy. All new projects regardless of funding source need to be approved under this Revision Policy.
- 2. Cost/Funding Increases:** A revision is required on any cost/funding increase over \$400,000.
- 3. Substantive Scope Changes:** This provision includes major or substantive changes that may have citizen interest or policy implications. For example, limits change to a brand new location, limits are extended or shortened substantially, the number of lanes changes, etc.
- 4. Funding Year Changes:** A revision is required to move a project more than one year into a fiscal year that would delay project implementation.
- 5. Changes in the Funding/Cost Shares:** A change to the percentage of the total project cost paid by each funding partner requires a revision (with the one exception noted in the administrative amendment policy).

Approved by the RTC on March 14, 2013

Appendix D: Title VI Complaint Procedures

El Procedimiento de Quejas Titulo VI

Introduction

The North Central Texas Council of Governments (NCTCOG) serves as the federally designated Metropolitan Planning Organization for the Dallas-Fort Worth region. As a recipient of federal financial assistance and under Title VI of the Civil Rights Act of 1964 and related Title VI statutes, NCTCOG ensures that no person shall, on the grounds of race, religion, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any agency programs or activities. These prohibitions extend from the North Central Texas Council of Governments, as a direct recipient of federal financial assistance, to its sub-recipients (e.g., contractors, consultants, local governments, colleges, universities, etc). All programs funded in whole or in part from federal financial assistance are subject to Title VI requirements. The Civil Rights Restoration Act of 1987 extended this to all programs within an agency that receives federal assistance regardless of the funding source for individual programs.

This policy is intended to establish a procedure under which complaints alleging discrimination in NCTCOG's provisions, services, or NCTCOG activities can be made by persons who are not employees of NCTCOG.

Any person who believes NCTCOG, or any entity who receives federal financial assistance from or through NCTCOG (i.e., sub-recipients, sub-contractors, or sub-grantees), has subjected them or any specific class of individuals to unlawful discrimination may file a complaint of discrimination.

NCTCOG will follow timelines set forth in guidance from the Department of Transportation, the Federal Highway Administration, Federal Transit Administration and the Department of Justice for processing Title VI discrimination complaints.

When to File

A complaint of discrimination must be filed within 180 calendar days of the alleged act of discrimination, or discovery thereof; or where there has been a continuing course of conduct, the date on which that conduct was discontinued. Filing means a written complaint must be postmarked before the expiration of the 180-day period. The filing date is the day you complete, sign, and mail the complaint form. The complaint form and consent/release form must be dated and signed for acceptance. Complaints received more than 180 days after the alleged discrimination will not be processed and will be returned to the complainant with a letter explaining why the complaint could not be processed and alternative agencies to which a report may be made.

Where to File

In order to be processed, signed original complaint forms must be mailed to:

North Central Texas Council of Governments
Transportation Department Title VI Specialist
P.O. Box 5888
Arlington, TX 76005-5888

Or hand delivered to:
616 Six Flags Drive Arlington, TX 76011

Upon request, reasonable accommodations will be made for persons who are unable to complete the complaint form due to disability or limited-English proficiency. A complaint may also be filed by a representative on behalf of a complainant.

Persons who are not satisfied with the findings of NCTCOG may seek remedy from other applicable state or federal agencies.

Required Elements of a Complaint

In order to be processed, a complaint must be in writing and contain the following information:

- Name, address, and phone number of the complainant.
- Name(s) and address(es) and business(es)/organization(s) of person(s) who allegedly discriminated.
- Date of alleged discriminatory act(s).
- Basis of complaint (i.e., race, color, national origin, sex, age, religion, or disability).
- A statement of complaint.
- Signed consent release form.

Incomplete Complaints

Upon initial review of the complaint, the Title VI Specialist will ensure that the form is complete and that any initial supporting documentation is provided. Should any deficiencies be found, the Title VI Specialist will notify the complainant within 10 days. If reasonable efforts to reach the complainant are unsuccessful or if the complainant does not respond within the time specified in the request (30 days), the recipient may close the complainant's file. The complainant may resubmit the complaint provided it is filed within the original 180-day period.

Should the complaint be closed due to lack of required information, NCTCOG will notify the complainant at their last known address. In the event the complainant submits the missing information after the file has been closed, the complaint may be reopened provided it has not been more than 180 days since the date of the alleged discriminatory action.

Records of Complaints

The Title VI Specialist will keep a record of all complaints received. The log will include such information as:

- Basic information about the complaint such as when it was filed, who filed it, and who it was against.
- A description of the alleged discriminatory action.
- Findings of the investigation.

Complaint Process Overview

The following is a description of how a discrimination complaint will be handled once received by NCTCOG.

RECEIPT OF COMPLAINT

Complaint is received by NCTCOG: Complaints must be in writing and signed by the complainant or their designated representative. If the complainant is unable to complete the form in writing due to disability or limited-English proficiency, upon request reasonable accommodations will be made to ensure the complaint is received and processed in a timely manner. Complainants wishing to file a complaint who do not have access to the Internet or the ability to pick up a form will be mailed a complaint form to complete. Complaints will be forwarded to the Texas Department of Transportation, Office of Civil Rights, Federal Programs Section.

Complaint is logged into tracking database: Complaint forms will be logged into the complaint tracking database; basic data will be maintained on each complaint received, including name of complainant, contact information, name and organization of person(s) who allegedly discriminated, date of alleged discriminatory act(s), basis of complaint (i.e., race, color, national origin, sex, age, religion, or disability), and description of the alleged discriminatory action.

INITIAL REVIEW AND WRITTEN RESPONSE

Initial review: Within 10 days of the receipt of the complaint, NCTCOG's Transportation Department Title VI Specialist will complete an initial review of the complaint. The purpose of this review is to determine if the complaint meets three basic criteria.

1. The complaint will be reviewed for completeness.
2. The program in which the alleged discrimination occurred will be examined to ensure that the complaint was filed with the appropriate agency.
3. Determination of timeliness will be made to ensure the complaint was filed within the 180 calendar day time requirement.

Initial written response: Within 10 days of the receipt of the complaint, the Title VI Specialist will provide an initial written response to the complaint appropriate to the criteria of the initial review.

1. If the complaint form is incomplete, the complainant will be notified and asked to furnish the missing information within 30 days. Upon receipt of the requested information, the initial review will resume and a follow-up written response will be provided within 10 days of the receipt of the complete complaint.
2. If a complaint is complete but the program or activity about which the complaint was made is not conducted by NCTCOG or an entity who receives federal financial assistance from or through NCTCOG (i.e., sub-recipients, sub-contractors, or sub-grantees), every attempt will be made to establish the correct agency. Whenever possible, and if consent was granted on the Consent/Release form, the complaint will be forwarded to the appropriate agency. The complaint will then be closed at NCTCOG.
3. If the complaint is complete but the alleged discrimination occurred 180 calendar days or more before the complaint was filed, the complaint will be closed at NCTCOG.

NCTCOG's Title VI Specialist will confer with the Transportation Department Director on the determination of a complete complaint and on any deferrals to other agencies. Once the Title VI Specialist completes an initial review of the complaint and determines that the criteria for a complete complaint is met, NCTCOG will forward the complaint and a copy of the written response to the Texas Department of Transportation, Office of Civil Rights, Federal Programs Section.

INVESTIGATION OF COMPLAINT

Fact-finding process: The Title VI Specialist will confer with the Transportation Department Director to determine the most appropriate fact-finding process to ensure all available information is collected in an effort to reach the most informed conclusion and resolution of the complaint. The type of investigation techniques used may vary depending on the nature and circumstances of the alleged discrimination. An investigation may include, but is not limited to:

- Internal meetings with NCTCOG staff and legal counsel.
- Consultation with state and federal agencies.
- Interviews of complainant(s).
- Review of documentation (i.e., planning, public involvement, and technical program activities).
- Interviews and review of documentation with other agencies involved.
- Review of technical analysis methods.
- Review of demographic data.

Determination of investigation: An investigation must be completed within 80 days of receiving the complete complaint, unless the facts and circumstances warrant otherwise. A determination will be made based on information obtained. The Title VI Specialist, Transportation Department Director, and/or designee will render a recommendation for action, including formal and/or informal resolution strategies, in a report of findings. The findings of the investigation will be logged into the complaint tracking database.

NOTIFICATION OF DETERMINATION

Within 14 days of completion and determination of an investigation, the complainant must be notified by the NCTCOG Executive Director of the final decision. The notification will advise the complainant of his/her appeal rights with state and federal agencies if he/she is dissatisfied with the final decision. A copy of this letter, along with the report of findings, will be forwarded to the Texas Department of Transportation, Office of Civil Rights, Federal Programs Section for information purposes.

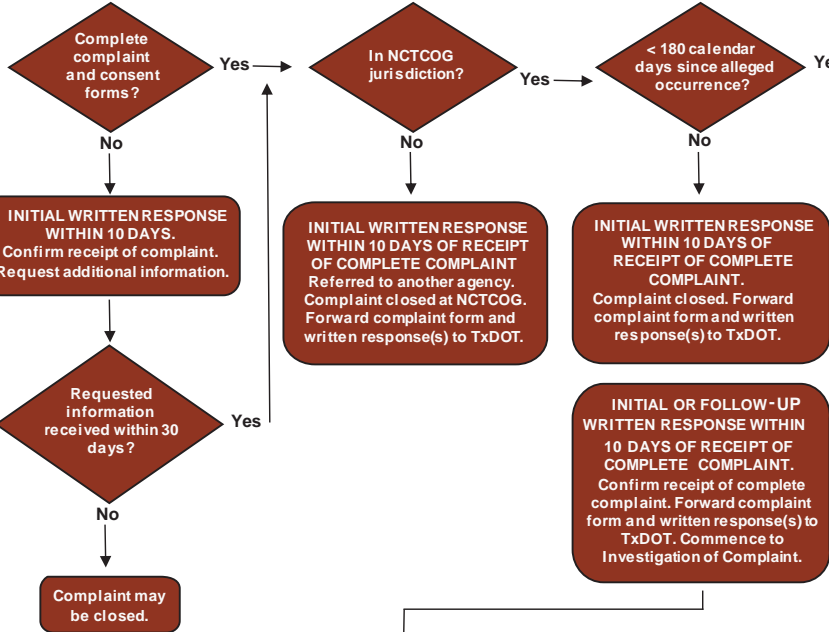
Title VI Complaint Procedures

RECEIPT OF COMPLAINT

A written discrimination complaint is received, entered into tracking database, and forwarded to the Texas Department of Transportation (TxDOT).

INITIAL REVIEW AND WRITTEN RESPONSE

Initial review initiated. Applicable initial written response will be sent to complainant and TxDOT within 10 days of when complaint is received.

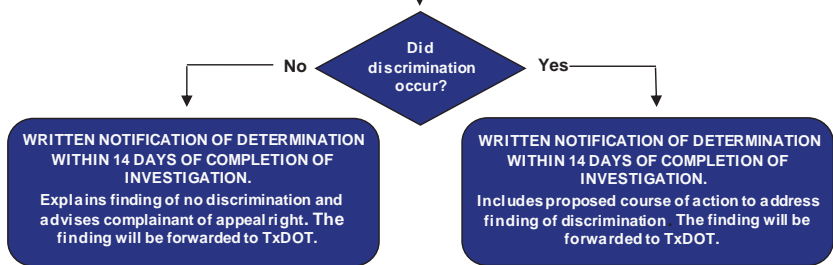


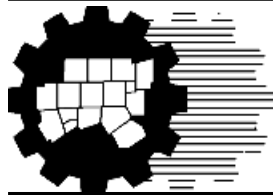
INVESTIGATION OF COMPLAINT

Completed within 80 days of receiving complete complaint unless facts and circumstances warrant otherwise. Determination of whether discrimination occurred summarized and report submitted to head of the Transportation Department.

NOTIFICATION OF DETERMINATION

Written notification of investigation determination will be sent to complainant and TxDOT within 14 days of completion of an investigation.





North Central Texas Council of Governments Discrimination Complaint Form

Please read the information on this page of this form carefully before you begin.

The North Central Texas Council of Governments (NCTCOG) serves as the federally designated Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth region. As a recipient of federal financial assistance and under Title VI of the Civil Rights Act of 1964 and related statutes, NCTCOG ensures that no person shall, on the grounds of race, religion, color, national origin, sex, age or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any agency programs or activities. These prohibitions extend from the North Central Texas Council of Governments, as a direct recipient of federal financial assistance, to its sub-recipients (e.g., contractors, consultants, local governments, colleges, universities, etc.). All programs funded in whole or in part from federal financial assistance are subject to Title VI requirements.

NCTCOG is required to implement measures to ensure that persons with limited-English proficiency or disability have meaningful access to the services, benefits and information of all its programs and activities under Executive Order 13166. Upon request, assistance will be provided if you are limited-English proficient or disabled. Complaints may be filed using an alternative format if you are unable to complete the written form.

The filing date is the day you complete, sign, and mail this complaint form. Your complaint must be filed no later than 180 calendar days from the most recent date of the alleged act of discrimination. The complaint form and consent/release form must be dated and signed for acceptance. You have 30 calendar days to respond to any written request for information. Failure to do so will result in the closure of the complaint.

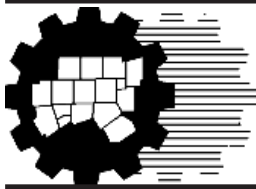
Submit the forms by mail to:

North Central Texas Council of Governments
Transportation Department
Title VI Specialist,
P.O. Box 5888
Arlington, TX 76005-5888

Or in person at:

616 Six Flags Drive
Arlington, TX 76011

If you have any questions or need additional information, please call (817) 695-9240 or e-mail titlevi@nctcog.org.



North Central Texas Council of Governments Discrimination Complaint Form

Please read the information on the first page of this form carefully before you begin.

1

 First Name MI Last Name

 Street Address City State Zip Code

 Telephone Number e-mail Address

2 Who do you believe discriminated against you?

 First Name MI Last Name

 Name of Business/Organization Position/Title

 Street Address City State Zip Code

 Person's Relationship to You

3 When did the alleged act(s) of discrimination occur?

Please list all applicable dates in mm/dd/yyyy format.

 Date(s)

Is the alleged discrimination ongoing? Yes No

4 Where did the alleged act(s) of discrimination occur? (Attach additional pages as necessary.)

 Name of Location

5 Indicate the basis of your grievance of discrimination:

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Race | <input type="checkbox"/> Color |
| <input type="checkbox"/> National Origin | <input type="checkbox"/> Sex |
| <input type="checkbox"/> Age | <input type="checkbox"/> Disability |
| <input type="checkbox"/> Religion | |

6 Describe in detail the specific incident(s) that is the basis(es) of the alleged discrimination. Describe each incident of discrimination separately. Attach additional pages as necessary.

Please explain how other persons or groups were treated differently by the person(s)/ agency who discriminated against you.

Please list and describe all documents, e-mails, or other records and materials pertaining to your complaint.

Please list and identify any witness(es) to the incidents or persons who have personal knowledge of information pertaining to your complaint.

Have you previously reported or otherwise complained about this incident or related acts of discrimination? If so, please identify the individual to whom you made the report, the date on which you made the report, and the resolution. Please provide any supporting documentation.

Please provide any additional information about the alleged discrimination.

7 If an advisor will be assisting you in the complaint process, please provide his/her name and contact information.

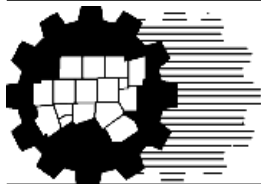
First Name	MI	Last Name	
Name of Business		Position/Title	Telephone Number
Street Address	City	State	Zip Code

8 This complaint form must be signed and dated in order to address your allegations. Additionally, this office will need your consent to disclose your name, if needed, in the course of our investigation. The Discrimination Complaint Consent/Release form is attached. If you are filing a complaint of discrimination on behalf of another person, our office will also need this person’s consent.

I certify that to the best of my knowledge the information I have provided is accurate and the events and circumstances are as I have described them. I also understand that if I will be assisted by an advisor, my signature below authorizes the named individual to receive copies of relevant correspondence regarding the complaint and to accompany me during the investigation.

Signature

Date



North Central Texas Council of Governments Discrimination Complaint Consent/Release Form

Please read the information on this form carefully before you begin.

First Name

MI

Last Name

Street Address

City

State Zip Code

As a complainant, I understand that in the course of an investigation it may become necessary for the North Central Texas Council of Governments to reveal my identity to persons at the organization or institution under investigation. I am also aware of the obligations of the North Central Texas Council of Governments to honor requests under the Freedom of Information Act. I understand that as a complainant I am protected from retaliation for having taken action or participated in action to secure rights protected by nondiscrimination statutes and regulations which are enforced by the Federal Highway Administration (FHWA) of the U.S. Department of Transportation.

Please Check one:

- I CONSENT and authorize the North Central Texas Council of Governments (NCTCOG), as part of its investigation, to reveal my identity to persons at the organization, business, or institution, which has been identified by me in my formal complaint of discrimination. I also authorize NCTCOG to discuss, receive, and review materials and information about me from the same and with appropriate administrators or witnesses for the purpose of investigating this complaint. In doing so, I have read and understand the information at the beginning of this form. I also understand that the material and information received will be used for authorized civil rights compliance activities only. I further understand that I am not required to authorize this release and do so voluntarily.
- I DENY CONSENT to have the North Central Texas Council of Governments (NCTCOG), reveal my identity to persons at the organization, business, or institution under investigation. I also deny consent to have NCTCOG disclose any information contained in the complaint with any witnesses I have mentioned in the complaint. In doing so, I understand that I am not authorizing NCTCOG to discuss, receive, nor review any materials and information about me from the same. In doing so, I have read and understand the information at the beginning of this form. I further understand that my decision to deny consent may impede this investigation and may result in the unsuccessful resolution of my case.

Signature

Date

El Procedimiento de Quejas Título VI

Introducción

El North Central Texas Council of Governments (NCTCOG) sirve como el designado federal Metropolitan Planning Organization para la región de Dallas-Fort Worth. Como receptora de ayuda económica federal y en virtud del Título VI de la Ley de Derechos Civiles de 1964 y estatutos vinculados al Título VI, el NCTCOG garantiza que ningún individuo quede excluido de la participación, el acceso a los beneficios proporcionados o sea víctima de discriminación en el marco de ningún programa o actividad de ningún organismo con motivo de su raza, religión, color, nacionalidad, género, edad o discapacidad. Estas prohibiciones abarcan al North Central Texas Council of Governments, como receptor directo de ayuda económica federal, y sus “subreceptores” (es decir, contratistas, consultores, gobiernos locales, facultades, universidades, etc.). Todos los programas financiados por ayuda económica federal en forma parcial o total se encuentran sujetos a los requisitos establecidos en el Título VI. La Ley de Restauración de Derechos Civiles de 1987 hizo que esto se ampliara a todos los programas de cualquier organismo que recibiese ayuda federal independientemente de la fuente de financiación para programas individuales.

El propósito de esta política consiste en establecer un proceso según el cual individuos que no son empleados del NCTCOG puedan presentar quejas por discriminación por parte de disposiciones, servicios o actividades del NCTCOG.

Toda persona que crea haber sido víctima de discriminación ilegal, ya sea hacia su persona o hacia un colectivo de individuos específico, por parte del NCTCOG o cualquier entidad que reciba ayuda económica federal del NCTCOG o a través de este NCTCOG (como subreceptores, subcontratistas o subcesionarios), puede presentar una queja por discriminación.

Al procesar las quejas por discriminación en virtud del Título VI, el NCTCOG seguirá los plazos establecidos según la guía del Department of Transportation, el Federal Highway Administration, Federal Transit Administration y el Department of Justice.

Cuando Presentarla

La queja por discriminación debe presentarse dentro de los 180 días calendario de la presunta acción de discriminación o del descubrimiento de este último. En caso de que la conducta se haya manifestado en forma continua, a partir de la fecha en la que se haya interrumpido dicha conducta. Al presentar la queja por escrito debe estar sellada por el correo antes de la expiración del período de 180 días. Se considerará fecha de presentación al día en el que usted complete, firme y envíe el formulario de queja. Para que puedan aceptarse, el formulario de queja y el formulario de consentimiento/divulgación deben estar fechados y firmados. Las quejas que se reciban una vez que hayan pasado más de 180 días después de la presunta discriminación no serán procesadas y se le reenviarán al reclamante junto con una carta que explique por qué la queja no ha podido procesarse y a qué agencias alternativas se puede dirigir un informe.

Dónde Presentar

Para poder procesarlos, los formularios de quejas originales firmados se deben de ser enviadas a:

North Central Texas Council of Governments
Transportation Department Title VI Specialist
P.O. Box 5888
Arlington, TX 76005-5888

O en persona a:
616 Six Flags Drive Arlington, TX 76011

Se podrán realizar adaptaciones razonables bajo pedido para los individuos que no se encuentren en condiciones de completar el formulario de queja debido a una discapacidad o a conocimientos limitados del idioma inglés. Asimismo, un representante del reclamante podrá presentar una queja en nombre de este último.

Individuos que no se encuentren satisfechos con la resolución del NCTCOG podrán recurrir a otras agencias aplicables estatales de agencias federales.

Elementos Requeridos de Una Queja

Para que una queja pueda procesarse, debe ponerse por escrito e incluir la siguiente información:

- Nombre, domicilio y número de teléfono del reclamante.
- Nombre(s), domicilio(es) y empresa(s)/organización(es) de la(s) presunta(s) víctima(s) de discriminación.
- Fecha del presunto acto(s) de discriminación.
- Motivo de la queja (por ejemplo: raza, color, nacionalidad, género, edad, religión o discapacidad).
- Una declaración de queja.
- Un formulario de consentimiento de divulgación firmado.

Quejas Incompletas

Después de la revisión inicial de la queja, el especialista en el Título VI verificará que el formulario esté completo y se asegurará de que toda la documentación de respaldo necesaria en esa etapa se encuentre incluida. En caso de que falten documentos, el especialista en el Título VI se lo informará al reclamante dentro de los 10 días. Si no resulta posible contactar al reclamante a pesar de haber realizado esfuerzos razonables para hacerlo, o si el reclamante no responde dentro del período especificado en la solicitud (30 días), el receptor podrá dar por finalizado el caso del reclamante. El reclamante puede volver a presentar la queja, siempre y cuando lo haga dentro del período inicial de 180 días.

En caso de que el caso se cierre por falta de información necesaria, el NCTCOG se lo informará al reclamante, para lo cual intentará establecer contacto valiéndose de su última dirección conocida. Si el reclamante brinda la información faltante después del cierre de su caso, el caso podrá volver a abrirse, siempre y cuando no hayan transcurrido más de 180 días desde la fecha del presunto discriminatorio.

Registro de Quejas

El Especialista en el Título VI llevará un registro de todas las quejas recibidas. El registro incluirá información como la siguiente:

- Información básica sobre la queja, tal como cuándo se presentó, quién la presentó y contra quién.
- Una descripción de la presunta acción discriminatorio.
- Conclusiones de la investigación.

Resumen del Proceso de Quejas

Lo siguiente es una descripción de como una queja discriminatoria deberá ser manejada ya que sea recibida por NCTCOG.

RECEPCIÓN DE LA QUEJA

El NCTCOG recibe una queja: Las quejas deben presentarse por escrito y estar firmadas por el reclamante o un representante designado por este último. Si el reclamante no se encuentra en condiciones de completar el formulario debido a una discapacidad o a conocimientos limitados del idioma inglés y solicita asistencia, se realizarán adaptaciones razonables para garantizar que la queja se reciba y se procese de manera oportuna. Los reclamantes que deseen presentar una queja y no dispongan de acceso a internet o no tengan la posibilidad de ir a recoger un formulario, recibirán un formulario de quejas por correo para que puedan completarlo. Las quejas se enviarán al Texas Department of Transportation, Office of Civil Rights, Federal Programs Section.

La queja se registra en una base de datos para realizar su seguimiento: Los formularios de quejas se registrarán en la base de datos de quejas para realizar su seguimiento. En todas las quejas recibidas se conservarán los datos básicos, que incluyen el nombre del reclamante, su información de contacto, el nombre y la organización de la persona(s) de la presunta discriminación, fecha en que ocurrió del presunto acto (s) discriminatorio, el motivo en el que se basa la queja por discriminación (por ejemplo: raza, color, nacionalidad, género, edad, religión o discapacidad), y una descripción de la presunta acción discriminatoria.

REVISIÓN INICIAL Y RESPUESTA POR ESCRITO

Revisión inicial: Dentro de los 10 días siguientes a la recepción de la queja, el Especialista en el Título VI de NCTCOG Transportation Department realizará una revisión inicial de la queja. El objetivo de esta revisión es determinar si la queja cumple con tres criterios básicos.

1. Se controlará que la queja esté completa.
2. Se examinará el programa en el que se haya producido la presunta discriminación para verificar que la queja se haya presentado ante la agencia apropiada.
3. Se definirán los marcos temporales para asegurarse de que la queja se haya presentado dentro del plazo de 180 días calendario, según lo indicado.

Respuesta inicial por escrito: Dentro de los 10 días siguientes a la recepción de la queja, el Especialista en el Título VI dará una respuesta inicial por escrito al reclamante, la cual será adecuada en función de los criterios de la revisión inicial.

1. En caso de que el formulario de quejas se encuentre incompleto, se informará al reclamante. A su vez, se le solicitará que proporcione la información faltante dentro de los 30 días posteriores. Una vez recibida la información solicitada, la revisión inicial volverá a comenzar y se brindará una respuesta de seguimiento por escrito dentro de los 10 días siguientes a la fecha de recepción de la queja completa.
2. En caso de que una queja esté completa pero el programa o la actividad la cual se base la queja no esté dirigido/a por el NCTCOG o una entidad que reciba ayuda económica federal del NCTCOG o a través de este último (subreceptores, subcontratistas o subcesionarios), se realizarán todos los esfuerzos posibles para determinar cuál es la agencia correcta al que se debería remitir el caso. Cuando sea posible, y si se concedió el consentimiento en el formulario de divulgación, la queja se le remitirá a la agencia apropiada. La queja quedará cerrada en el NCTCOG.
3. Si la queja está completa pero la presunta discriminación ocurrió 180 días calendarios o más antes de que se presentará la queja, dicha queja quedará cerrada en el NCTCOG.

El Especialista en el Título VI del NCTCOG consultará con el Director del Departamento de Transporte para tomar una determinación sobre quejas completas o retrasos por derivación a otras agencias. Una vez que el Especialista en el Título VI finalice la revisión inicial de la queja y determine que cumple con los criterios necesarios para constituir una queja completa, el NCTCOG le enviará la queja y una copia de la respuesta por escrito al Texas Department of Transportation, Office of Civil Rights, Federal Programs Section.

INVESTIGACIÓN DE QUEJA

Proceso de investigación: El Especialista en el Título VI consultará con el Director del Departamento de Transporte para determinar cuál es el proceso de investigación más adecuado para garantizar que se reúna toda la información disponible y poder llegar a una conclusión y posterior resolución de la queja basada en la mayor cantidad de información posible. El tipo de técnicas de investigación utilizadas variará en función del carácter y las circunstancias de la presunta discriminación. Una investigación puede incluir, entre otros:

- Reuniones internas con el personal y los asesores jurídicos del NCTCOG.
- Consultas con agencias estatales y federales.
- Entrevistas con reclamante (s).
- Revisión de documentación (por ejemplo: planificación, participación del público y actividades del programa técnico).
- Entrevistas y revisión de documentación con otras agencias involucrados.
- Revisión de métodos de análisis técnico.
- Revisión de información demográfica.

Resolución de la investigación: La investigación debe finalizar dentro de los 80 días siguientes a la recepción de la queja completa, a menos que los hechos y las circunstancias hagan disponer algo diferente. Se tomará una determinación en base a la información obtenida. El Especialista en el Título VI, el Director del Departamento de Transporte y/o la persona designada presentará una recomendación sobre el curso de acción a seguir. La misma incluirá estrategias de resolución formales y/o informales en un informe de conclusiones. Los resultados de la investigación se registrarán en la base de datos para realizar el seguimiento de las quejas.

AVISO DE RESOLUCIÓN

Dentro de los 14 días siguientes a la finalización y resolución de una investigación, el Director Ejecutivo del NCTCOG deberá informar la decisión final al reclamante. El aviso brindará información al reclamante sobre su derecho a apelar ante agencias estatales y federales en caso de no encontrarse satisfecho/a con la decisión final. Con fines informativos, se le enviará una copia de esta carta junto con un informe de los resultados de la investigación a Texas Department of Transportation, Office of Civil Rights, Federal Programs Section.

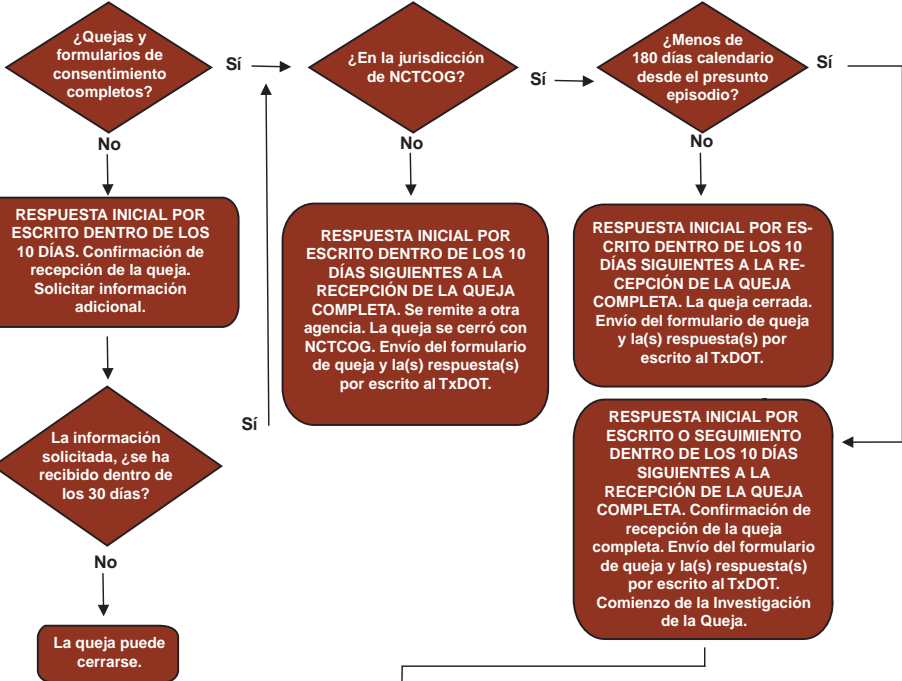
El Procedimiento de Quejas Título VI

RECEPCIÓN DE LA QUEJA

Se recibe una queja de discriminación por escrito, la cual se ingresa a la base de datos para realizar un seguimiento y se envía a Texas Department of Transportation (TxDOT).

Comienza la revisión inicial. Se le envía una respuesta inicial por escrito al reclamante, según corresponda, y al TxDOT dentro de los 10 días siguientes a la recepción de la queja.

REVISIÓN INICIAL Y RESPUESTA POR ESCRITO



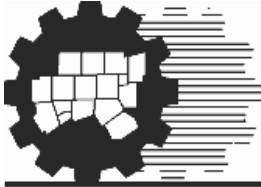
INVESTIGACIÓN DE QUEJAS

Finalizada dentro de los 80 días siguientes a la recepción de la queja completa, a menos que los hechos y las circunstancias hagan disponer algo diferente. Decisión resumida en cuanto a si existió una discriminación y presentación de informe al titular del Departamento de Transporte.

Al reclamante y al TxDOT se les enviará un aviso por escrito sobre el resultado de la investigación dentro de los 14 días siguientes a la conclusión de la investigación.

AVISO DE RESOLUCIÓN





Consejo de Gobiernos del Centro-Norte de Texas Formulario de denuncia por discriminación

Lea detenidamente la información de esta página del siguiente formulario antes de empezar.

El Consejo de Gobiernos del Centro-Norte de Texas (NCTCOG) funciona como la Organización Metropolitana de Planeamiento (MPO) designada federalmente para la región Dallas-Fort Worth. Como destinatario de la asistencia financiera federal y según el Título VI de la Ley de Derechos Civiles de 1964 y normas relacionadas, NCTCOG garantiza que ninguna persona, por motivos de raza, religión, color, origen nacional, sexo, edad o discapacidad será excluida de participar en o de obtener los beneficios de los programas o actividades de los organismos o, de lo contrario, estará sujeta a discriminación. Estas prohibiciones se extienden desde el Consejo de Gobiernos del Centro-Norte de Texas, como un destinatario directo de asistencia financiera federal, hasta sus subdestinatarios (por ejemplo: contratistas, consultores, gobiernos locales, institutos, universidades, etc.).

Todos los programas financiados en parte o en su totalidad por asistencia financiera federal están sujetos a los requisitos del Título VI.

Se le exige a NCTCOG que implemente medidas para garantizar que las personas con capacidad limitada o incapacidad en inglés tengan acceso significativo a los servicios, beneficios y a la información de todos sus programas y actividades según el Decreto Presidencial 13166. Se proporcionará asistencia a pedido si usted tiene capacidad limitada o incapacidad en inglés. Las denuncias se presentarán usando un formato alternativo si no puede completar el formulario escrito.

La fecha de presentación corresponde al día que usted completa, firma y envía por correo este formulario de denuncia. Su denuncia debe presentarse antes de los 180 días calendario a partir de la fecha más reciente del presunto acto de discriminación. El formulario de denuncia y el formulario de consentimiento para la divulgación deben fecharse y firmarse para su aceptación. Usted tiene 30 días calendario para responder cualquier solicitud escrita de información. El incumplimiento de lo anterior tendrá como resultado el cierre de la denuncia.

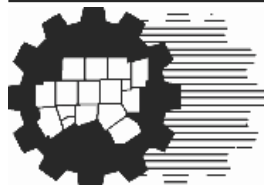
Envíe los formularios por correo a:

Consejo de Gobiernos del Centro-Norte de Texas
Departamento de Transporte
Título VI Especialista
Apartado postal 5888
Arlington, TX 76005-5888

o entréguelos personalmente en:

616 Six Flags Drive
Arlington, TX 76011

Si tiene alguna duda o necesita información adicional, llame al (817)695-9240 o envíe un correo electrónico a titlevi@nctcog.org.



Consejo de Gobiernos del Centro-Norte de Texas Formulario de denuncia por discriminación

Lea detenidamente la información de esta página del siguiente formulario antes de empezar.

1

Nombre	Inicial del segundo nombre Apellido		
Dirección	Ciudad	Estado	Código postal
Número telefónico	Dirección de correo electrónico		

2 ¿Quién cree que lo ha discriminado?

Nombre	Inicial del segundo nombre Apellido		
Nombre de la empresa/organización	Cargo/Profesión		
Dirección	Ciudad	Estado	Código postal
Relación de la persona con usted			

3 ¿Cuándo sucedió el presunto acto de discriminación?
Enumere todas las fechas correspondientes en el formato mm/dd/aaaa.

Fecha(s):
¿Está en curso la presunta discriminación?
 Sí No

4 ¿Dónde sucedió el presunto acto de discriminación? (Agregue páginas adicionales cuando sea necesario)

Lugar

5 Indique el fundamento de su queja por discriminación.

- | | |
|---|--|
| <input type="checkbox"/> Raza: | <input type="checkbox"/> Color: |
| <input type="checkbox"/> Origen nacional: | <input type="checkbox"/> Sexo: |
| <input type="checkbox"/> Edad: | <input type="checkbox"/> Discapacidad: |
| <input type="checkbox"/> Religión: | |

6 Describa detalladamente los incidentes específicos que fundamentan la presunta discriminación. Describa por separado cada incidente de discriminación. Agregue páginas adicionales cuando sea necesario.

Explique cómo otras personas o grupos fueron tratados de manera diferente por las personas/organismos que lo discriminaron a usted.

Enumere y describa todos los documentos, correos electrónicos u otros registros y materiales pertenecientes a su denuncia.

Enumere e identifique a todos los testigos de los incidentes o a las personas que tengan conocimiento personal de la información perteneciente a su denuncia.

¿Ha informado anteriormente o, de lo contrario, ha denunciado este incidente o actos relacionados de discriminación? Si así fuera, identifique a la persona a la que usted informó, la fecha del informe y la decisión. Proporcione toda la documentación complementaria.

Proporcione toda la información adicional sobre la presunta discriminación.

7 Si cuenta con la ayuda de un asesor en el proceso de denuncia, proporcione el nombre y la información de contacto del asesor.

Nombre	Inicial del segundo nombre	Apellido
Nombre de la empresa	Cargo/Profesión	Número telefónico
Dirección	Ciudad	Estado Código postal

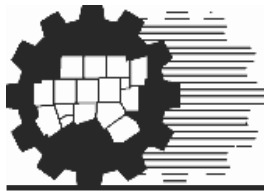
8 Este formulario de denuncia debe tener la fecha y la firma para tratar sus acusaciones. Además, esta oficina necesitará su consentimiento para divulgar su nombre, si fuera necesario, en el curso de nuestra investigación. Se adjunta el formulario de Consentimiento para divulgación de la denuncia por discriminación. Si presenta una denuncia por discriminación en nombre de otra persona, nuestra oficina también necesitará el consentimiento de dicha persona.

Certifico que, a mi leal saber y entender, la información que he proporcionado es exacta y que los eventos y circunstancias son tal como los he descrito. Además, entiendo que si cuento con la asistencia de un asesor, mi siguiente firma autoriza a la persona nombrada a recibir copias de la correspondencia relevante concerniente a la denuncia y a que me acompañe durante la investigación.

Firma

Fecha

Consejo de Gobiernos del Centro-Norte de Texas – Departamento de Transporte
Título VI – Procedimientos de denuncia



Consejo de Gobiernos del Centro-Norte de Texas Formulario de Consentimiento de divulgación de denuncia por discriminación

Lea detenidamente la información del siguiente formulario antes de empezar.

Nombre	Inicial del segundo nombre	Apellido
Dirección	Ciudad	Estado Código postal

Como denunciante, entiendo que en el curso de una investigación para el Consejo de Gobiernos del Centro-Norte de Texas puede volverse necesario revelar mi identidad a personas de la organización o institución bajo investigación. Además tengo conocimiento de las obligaciones del Consejo de Gobiernos del Centro-Norte de Texas de satisfacer las solicitudes conforme a la Ley de Libertad de información. Entiendo que como denunciante, estoy protegido de represalias por haber tomado medidas o participado en medidas para garantizar derechos protegidos por normas y reglas de no discriminación impuestas por la Administración Federal de Autopistas (FHWA) del Departamento de Transporte de los Estados Unidos.

Tilde lo que corresponda:

- CONSIENTO y autorizo al Consejo de Gobiernos del Centro-Norte de Texas (NCTCOG), como parte de su investigación, a revelar mi identidad a las personas de la organización, empresa o institución que haya sido identificada por mí en mi denuncia formal por discriminación. También autorizo a NCTCOG a tratar, recibir y revisar los materiales y la información sobre mí contenida en la denuncia y con los administradores o testigos adecuados con el fin de investigar esta denuncia. Para esto, he leído y entiendo la información que está en el comienzo de este formulario. También entiendo que el material y la información recibida se utilizarán solamente para las actividades autorizadas de cumplimiento de los derechos civiles. Además entiendo que no se me exige autorizar la divulgación y que lo hago voluntariamente.
- NIEGO LA AUTORIZACIÓN al Consejo de Gobiernos del Centro-Norte de Texas (NCTCOG) para que revele mi identidad a las personas de la organización, empresa o institución bajo investigación. También niego mi autorización para que NCTCOG divulgue cualquier información contenida en la denuncia a cualquiera de los testigos que haya mencionado en la denuncia. Al hacer esto, entiendo que no autorizo a NCTCOG a tratar, recibir o revisar cualquier material e información sobre mí contenida en la denuncia. Para esto, he leído y entiendo la información que está en el comienzo de este formulario. Además entiendo que mi decisión de denegar el consentimiento puede entorpecer esta investigación y puede tener como resultado la solución no exitosa de mi caso.

Firma	Fecha
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**Appendix E:
Regional Transportation
Council Rules for Public
Comment**

**Regional Transportation
Council Normas para el
Comentario Público**

Regional Transportation Council

Rules for Public Comment

The Regional Transportation Council (RTC) hereby establishes reasonable rules regarding the public's right to address the Council at open meetings consistent with the Texas Open Meetings Act. The intent of these rules is to hear the views of the public prior to the RTC considering items. These rules also promote an orderly and fair process through which public comments may be received by the RTC.

Public Comment

At every open meeting of the RTC, opportunity will be provided at the beginning of the meeting for members of the public to address the RTC regarding any item(s) on the agenda for consideration. Persons are permitted up to three (3) minutes to speak. A person addressing the RTC through a translator will be provided up to six (6) minutes. A timer will be visible to the speaker and indicate the amount of time remaining. Speakers shall conclude their comments prior to or upon expiration of the time. In the event a large number of speakers are present, the RTC may encourage large delegations to have one person speak for the group or impose reasonable time limits per individual that are more restrictive; if a delegation chooses to select a spokesperson to represent the entire delegation, the spokesperson will be provided up to five (5) minutes to speak or ten (10) minutes if the spokesperson is addressing the RTC through a translator. Persons requesting translation services, to be provided by the RTC, must do so at least seventy-two (72) hours in advance of the posted meeting time.

Speaker Registration

Persons who wish to speak must complete and return to staff a registration card prior to the start of the RTC meeting. Registration cards are printed on yellow paper, available in the RTC meeting room and must, at a minimum, include the following information:

1. Speaker's name;
2. City of residence;
3. Zip code;
4. Agenda item(s) on which the speaker plans to speak;
5. Indication of whether speaking on/for/against agenda item(s); and
6. Any other information requested by RTC staff.

Speaker Warning and Removal

The RTC Chair will provide a notice to a speaker whose time has expired. The RTC reserves the right to have speakers removed from the meeting room in the event they become disruptive or make threatening, profane or otherwise inappropriate remarks.

Regional Transportation Council

Normas para el Comentario Público

The Regional Transportation Council (RTC, por sus siglas en inglés) establece normas razonables con respecto al derecho del público a dirigirse al Consejo en reuniones abiertas consistentes con el Texas Open Meeting Act. La intención de estas normas es de escuchar las opiniones del público antes de que el RTC considere los artículos. Estas normas también promueven un proceso ordenado y justo a través del cual el RTC puede recibir comentarios del público.

Comentario Público

En cada reunión abierta del RTC, se proporcionará la oportunidad al inicio de la reunión para que los miembros del público se dirijan al RTC sobre cualquier artículo(s) de agenda para su consideración. Las personas tienen permitido hasta tres (3) minutos para hablar. La persona que se dirija al RTC a través de un traductor se le proporcionará hasta seis (6) minutos. Un temporizador será visible para el participante comunitario e indicará la cantidad de tiempo restante. El participante comunitario concluirá sus comentarios antes de o al vencimiento del tiempo. En caso de que se presenten una alta cantidad de participantes comunitarios, el RTC puede animar a las grandes delegaciones de que una persona hable por el grupo o imponer límites de tiempo razonables por persona que sean más restrictivas; si una delegación decide elegir a un portavoz que represente a toda la delegación, se le proporcionará al portavoz hasta cinco (5) minutos para hablar o diez (10) minutos si el portavoz se dirige al RTC a través de un traductor. Personas que soliciten servicios de traducción, que serán proporcionados por el RTC, deben hacerlo al menos setenta y dos (72) horas antes de la hora de la reunión publicada.

Registro para el Participante Comunitario

Las personas que desean hablar deben de completar y regresar al personal una tarjeta de registro antes del comienzo de la reunión de RTC. Las tarjetas de registro son imprimidas en papel amarillo, están disponibles en la sala de reunión del RTC, y como mínimo, deben incluir la siguiente información:

1. Nombre del participante comunitario;
2. Ciudad de residencia;
3. Código postal;
4. Artículo(s) de agenda sobre los cuales planea hablar;
5. Indicar si está hablando sobre/en favor/en contra del artículo(s) de agenda; y
6. Cualquier otra información solicitada por el personal de RTC.

Advertencia y Remoción del Participante Comunitario

El presidente del RTC le proporcionará un aviso al participante comunitario cuyo tiempo ha expirado. El RTC se reserva el derecho de retirar los participantes comunitarios de la sala de reuniones en caso de que se vuelvan disruptivos o hagan comentarios amenazantes, obscenos o inapropiados.

APPENDIX H

MEMORANDUM OF UNDERSTANDING

**MEMORANDUM OF UNDERSTANDING
AMONG
THE DALLAS-FORT WORTH METROPOLITAN PLANNING ORGANIZATION (“MPO”),
THE TEXAS DEPARTMENT OF TRANSPORTATION (“TXDOT”),
PUBLIC TRANSPORTATION OPERATORS, AND OTHER TRANSPORTATION AGENCIES**

WHEREAS, the Fixing America's Surface Transportation Act (FAST Act) promulgated regulations 23 Code of Federal Regulations (CFR) 450.314, and

WHEREAS, the MPO, the State and the Public Transportation Operators are required by 23 CFR 450.314 to cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process, and

WHEREAS, these responsibilities shall be clearly identified in written agreements among the MPO, the State and the Public Transportation Operators serving the Metropolitan Planning Area (MPA), and

WHEREAS, to the extent possible, a single agreement between all responsible parties should be developed, and

WHEREAS, the federal regulations require the written agreement include specific provisions for cooperatively developing and sharing information related to the development of financial plans that support the metropolitan transportation plan (MTP), the metropolitan Transportation Improvement Program (TIP), and development of the annual listing of obligated projects, and

WHEREAS, the MPO and the designated air quality planning agency entered into a written agreement on May 12, 1978, followed by a letter from the Governor of Texas to the United States Environmental Protection Agency dated July 24, 1978, describing their respective roles and responsibilities for air quality-related transportation planning. The agreement and letter were submitted as part of a revision to the State Implementation Plan that was approved by the United States Environmental Protection Agency on March 29, 1982, effective May 28, 1982. The roles and responsibilities for air quality-related transportation planning were subsequently codified in Title 30 Texas Administrative Code Chapter 114, Subchapter G Transportation Planning, which was approved into the State Implementation Plan on November 8, 1995, effective January 8, 1996, and

WHEREAS, the federal regulations require that the MPO, State DOT, and the Public Transportation Operators shall jointly agree upon and develop specific written procedures

for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO, and the collection of data for the State asset management plan for the National Highway System (NHS), and

WHEREAS, other transportation agencies in the MPA desire to cooperate in transportation planning related to the MPA, as set forth in below.

NOW THEREFORE, the parties agree as follows:

1. **Purpose.** It is the purpose of this Memorandum of Understanding (MOU) to make provision for cooperative mutual responsibilities in carrying out the Metropolitan Planning Process and Performance Based Planning and Programming in the Dallas-Fort Worth MPA and to provide a single agreement between the State of Texas acting through the Texas Department of Transportation (TxDOT), the Regional Transportation Council, as the transportation policy body of the North Central Texas Council of Governments, serving together as the Dallas-Fort Worth MPO, and Dallas Area Rapid Transit, Denton County Transportation Authority, Fort Worth Transportation Authority, City of Arlington, City of Grand Prairie, City of McKinney, and City of Mesquite (“Public Transportation Operators”), and, Collin County Toll Road Authority, North Texas Tollway Authority, Dallas Fort Worth International Airport (“Other Transportation Agencies”) in accordance with current Federal Legislation and as required by 23 CFR 450.314.

2. **Responsibilities of all parties.**

All parties will:

- a. Cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process in a performance based planning format and final form, and decide upon and adopt performance targets for this planning process in accordance with Federal and State requirements and guidance.
- b. Make provisions for cooperatively developing and sharing information related to the development of financial plans that support the Metropolitan Transportation Plan (MTP) and TIP.

- c. Cooperatively develop a listing of projects that comprehensively address the transportation system within the MPO boundaries. Identified projects shall include both roadway and transit initiatives, including but not limited to investments in pedestrian walkways and bicycle transportation facilities for which federal funds were obligated in the preceding fiscal year.
- d. Endeavor to ensure that the Unified Planning Work Program (UPWP) required to be developed by the MPO will detail and document these responsibilities, deliverables and associated costs. Each party will bear its own costs for activities required by this MOU, unless the MPO allocates funding for such activity and it is reflected in the UPWP.

3. Performance Based Planning and Programming

- a. Developing transportation performance data
 - i. TxDOT will provide the MPO with a subset for their MPA of the state performance data used in developing statewide targets.
 - ii. If an MPO chooses to develop their own target for any measure, they will provide TxDOT with any supplemental data it they utilize in association with the target-setting process.
- b. Selection of transportation performance targets
 - i. TxDOT will develop draft statewide federal performance targets in coordination with the applicable MPO. Coordination may include in-person meetings, web meetings, conference calls, and/or email communication. MPOs shall be given an opportunity to provide comments on statewide targets one month prior to final statewide targets adoption.
 - ii. If the MPO chooses to adopt their own target for any measure, it will develop draft MPO performance targets in coordination with TxDOT. Coordination methods will be at the discretion of the MPO, but TxDOT shall be provided an opportunity to provide comments on draft MPO performance targets prior to final approval.

c. Reporting of performance targets

- i. TxDOT performance targets will be reported to the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), as applicable. The MPO will be notified when TxDOT has reported final statewide targets.
- ii. MPO performance targets will be reported to TxDOT.
 1. For each target, the MPO will provide the following information no later than 180 days after the date TxDOT or the Public Transportation Operator establishes performance targets, or the date specified by federal code:
 - a. Written agreement to plan and program projects so that they contribute toward the accomplishment of TxDOT or Public Transportation Operator performance target, or;
 - b. Written notification that the MPO will set a quantifiable target for that performance measure for the MPO's planning area.
 - i. If a quantifiable target is set for the MPO planning area, the MPO will provide any supplemental data used in determining any such target.
 - c. Documentation of the MPO's target or support of the statewide or relevant public transportation provider target will be provided in the form of the MPO's resolution or meeting minutes.
- iii. TxDOT will include information outlined in 23 CFR 450.216 (f) in any statewide transportation plan amended or adopted after May 27, 2018, and information outlined in 23 CFR 450.218 (q) in any statewide transportation improvement program amended or adopted after May 27, 2018.

- iv. The MPO will include information outlined in 23 CFR 450.324 (f) (3-4) in any MTP amended or adopted after May 27, 2018, and information outlined in 23 CFR 450.326 (d) in any TIP amended or adopted after May 27, 2018.
 - v. Reporting of targets and performance by TxDOT and the MPO shall conform to 23 CFR 490, 49 CFR 625, and 49 CFR 673.
- d. Reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO
- i. TxDOT will provide the MPO with an update of the subset for their MPA of the state performance data used in developing statewide targets including prior performance data.
- e. The collection of data for the State asset management plans for the NHS
- i. TxDOT will be responsible for collecting bridge and pavement condition data for the State asset management plan for the NHS.

4. Responsibilities of the MPO

The MPO will:

- a. Work in consultation with Public Transportation Operators, Other Transportation Agencies, and TxDOT in developing the financial plan for the MTP.
- b. Work in consultation with Public Transportation Operators, Other Transportation Agencies, and TxDOT in developing the financial plan for the TIP.
- c. Conduct Technical Committee and Policy Board meetings as required and necessary.
- d. In consultation with Public Transportation Operators, Other Transportation Agencies, and TxDOT, update the MTP and TIP in accordance with State and Federal laws.

- e. Invite Public Transportation Operators and Other Transportation Agencies to participate in all public participation processes.
- f. Conduct comprehensive, cooperative and continuous transportation planning for the Dallas-Fort Worth MPA.
- g. Establish necessary transportation performance targets, share information related to the performance data, and document the reporting of performance to be used in tracking progress toward attainment of critical outcomes within the MPO MPA, if the MPO elects to develop quantifiable targets for performance measures for the MPO's planning area.

5. Responsibilities of the Public Transportation Operators and Other Transportation Agencies

The Public Transportation Operators and Other Transportation Agencies will:

- a. Work in consultation with the MPO in developing short-range and long-range plans for transit or other projects for inclusion in the MTP.
- b. Assist in validation of data used as input into the transportation plan.
- c. Work in consultation with the MPO and TxDOT in developing the financial plan for the MTP.
- d. Work in consultation with the MPO and TXDOT in developing the financial plan for the TIP.
- e. Provide the MPO with the annual list of transit or other obligated projects with federal funds.
- f. Serve on the MPO Technical Committee and Policy Board as applicable.
- g. Notify the MPO of changes to projects that would affect the MTP or TIP.
- h. Invite the MPO to participate in all public participation processes.

- i. Each Public Transportation Operator shall establish transit asset management performance targets and share them with the MPO and other interested parties.

6. Responsibilities of TxDOT.

- a. Work in consultation with Public Transportation Operators, Other Transportation Agencies, and the MPO in developing the financial plan for the TIP and MTP.
 - b. Assist in the validation of data used as input into the transportation plan.
 - c. Provide the MPO with the annual list of obligated projects.
 - d. Serve on the MPO Technical Committee and Policy Board.
 - e. Notify the MPO of changes to projects that would affect the MTP or TIP.
 - f. In consultation with the MPO, Public Transportation Operators, and Other Transportation Agencies, update the MTP and TIP in accordance with State and Federal laws.
 - g. Work in consultation with the MPO, Public Transportation Operators, and Other Transportation Agencies in developing short-range and long-range plans for transit for inclusion in the MTP and TIP.
7. **Term.** This Memorandum shall remain in full force and effect until such time it is terminated in writing by a party, at which time the terminating party's rights and obligations shall cease. Termination by a single party will not terminate the Memorandum as to the remaining parties.
8. **Validity and Enforceability.** If any current or future legal limitations affect the validity or enforceability of a provision of this MOU, then the legal limitations are made a part of this MOU and shall operate to amend this MOU to the minimum extent necessary to bring this MOU into conformity with the requirements of the limitations, and so modified, this MOU shall continue in full force and effect.

9. **Governing Law and Venue.** This MOU shall be governed by the laws of the State of Texas. Venue for an action arising under this MOU shall lie exclusively in Travis County, Texas.

10. **Severability.** If a provision contained in this MOU is held invalid for any reason, the invalidity does not affect other provisions of the MOU and can be given effect without the invalid provision, and to this end the provisions of this MOU are severable.

(SIGNATURE PAGES TO FOLLOW)

EXECUTED by the parties hereto, each respective entity acting by and through its duly authorized official as required by law.

METROPOLITAN PLANNING ORGANIZATION

Regional Transportation Council

DocuSigned by:

Michael Morris _____

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Michael Morris, P.E., Director of Transportation

Date: 6/15/2018

North Central Texas Council of Governments

DocuSigned by:

Mike Eastland _____

A4E72C1BEF0F42B...
MIKE EASTLAND, Executive Director

Date: 6/15/2018

PUBLIC TRANSPORTATION OPERATORS

Dallas Area Rapid Transit

DocuSigned by:

Gary C. Thomas _____

8F4FBFA358D648A...
Gary C. Thomas, President/Executive Director

Date: 6/11/2018

Denton County Transportation Authority

DocuSigned by:

James C. Cline, Jr. _____

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James C. Cline, Jr., P.E. President

Date: 6/15/2018

Fort Worth Transportation Authority

DocuSigned by:

Paul J. Ballard _____

864E0DFA8AEA413...
Paul J. Ballard, President and Chief Executive Officer

Date: 6/8/2018

City of Arlington

DocuSigned by:

Jim Parajon

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Jim Parajon, Deputy City Manager

Date: 6/15/2018

City of Grand Prairie

DocuSigned by:

Tom Hart

8938F8B9451642C...

Tom Hart, City Manager

Date: 6/15/2018

City of McKinney

DocuSigned by:

Paul Grimes

487F8E42C872437...

Paul Grimes, City manager

Date: 6/12/2018

City of Mesquite

DocuSigned by:

Cliff Keheley

5587DAC84BA8451...

Cliff Keheley, City Manager

Date: 6/8/2018

OTHER TRANSPORTATION AGENCIES

Collin County Toll Road Authority

DocuSigned by:

Keith Self

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The Honorable Keith Self, President

Date: 6/8/2018

North Texas Tollway Authority

DocuSigned by:

Gerry Carrigan

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Gerry Carrigan, CEO/Executive Director

Date: 6/11/2018

Dallas/Fort Worth International Airport Board

DocuSigned by:

Sean Donohue

516B5D9BF6C943D...
Sean Donohue, Chief Executive Officer

Date: 6/11/2018

STATE OF TEXAS, THROUGH THE DEPARTMENT OF TRANSPORTATION

Texas Department of Transportation

DocuSigned by:

Mohamed K. Bur

E2527853E8DE475...
Mohamed "Mo" K. Bur, P.E., District Engineer
TxDOT Dallas District

Date: 6/11/2018

DocuSigned by:

Loyi Bussett

ED934AC20CA641C...
Loyi Bussett, P.E., District Engineer
TxDOT Fort Worth District

Date: 6/8/2018

DocuSigned by:

Noel Paramanathan

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Noel Paramanathan, P.E., District Engineer
TxDOT Paris District

Date: 6/11/2018

APPENDIX I

**REGIONAL TRANSPORTATION COUNCIL
ADOPTED PERFORMANCE TARGETS**

APPENDIX I

REGIONAL TRANSPORTATION COUNCIL ADOPTED
PERFORMANCE TARGETS

**REGIONAL TRANSPORTATION COUNCIL ADOPTED
TRANSPORTATION PERFORMANCE TARGETS**

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are required to implement a common system of transportation performance measures for state Departments of Transportation and Metropolitan Planning Organizations (MPOs). FHWA and FTA have developed a series of measures through five rulemaking processes. The North Central Texas Council of Governments (NCTCOG) is implementing and integrating the required measures. This common set of measures makes it easier to evaluate the existing national system and the effectiveness of funding programs. It also allows for region-to-region comparison of transportation system performance.

NCTCOG continues to monitor and report on these federal performance measures and has responded to all five major performance measure rulemakings as required. The rulemakings include measures related to safety; pavement and bridge condition; system performance, freight, and Congestion Mitigation and Air Quality (CMAQ); transit asset management; and transit safety. Rulemaking for pavement and bridge condition, system performance, freight and CMAQ measures establishes a four-year performance reporting period cycle that began in 2018. MPOs, like NCTCOG, and the Texas Department of Transportation (TxDOT) must set two-year and four-year targets for each of these measures corresponding to the performance period cycle. The Regional Transportation Council (RTC) adopted 2020 and 2022 targets for pavement and bridge condition, system performance, freight and CMAQ measures in November 2018 and is currently in the process of revisiting 2022 targets and adjusting as needed. Other performance measure rulemakings (safety, transit asset management, and transit safety) are adopted annually.

Roadway Safety (PM1) Measures

MPOs must establish targets specific to the planning area for five safety performance measures for all public roads in the planning area. NCTCOG worked closely with TxDOT to establish annual targets for each of these measures. Coordination between stakeholders is key when setting targets. As part of the TxDOT Strategic Highway Safety Plan development process, stakeholders from TxDOT, NCTCOG, local governments, law enforcement, emergency medical services, educators, and others worked collaboratively utilizing a data-drive, multi-year process to develop both statewide and regional safety performance measure targets. The RTC last approved targets for the safety measures in February 2019.

Safety Performance Measures	2020 Targets (TxDOT)	2020 Targets (NCTCOG)
Fatalities	3,791	599.20
Fatality Rate	1.414	0.838
Serious Injuries	17,751	3,999.60
Serious Injury Rate	6.55	5.568
Non-Motorized Fatalities and Serious Injuries	2,237.60	582.40

Transit Safety

As part of new federal rulemaking related to Public Transit Agency Safety Plans (PTASP), NCTCOG will be required to adopt regional targets for four performance measures related to the safety of the region's transit system: Fatalities, Injuries, Safety Events, and System Reliability. The region's transit providers are in the process of creating PTASP plans and adopting their own targets for these measures now, and RTC will subsequently adopt regional targets for these measures in mid-2021.

Regional Transit Asset Management Targets

NCTCOG is required by the federal government to set regional transit asset management (TAM) targets in coordination with transit providers. The regional targets of transit assets focus on ensuring that public transportation vehicles, rail lines and other capital assets are in a state of good repair. TAM will help prioritize funding to achieve or maintain the state of good repair by evaluating the condition of transit assets compared to the regional targets. The RTC last approved targets for the transit asset management measures in February 2019.

Asset Category	Target	Metric
Rolling Stock (transit vehicles)	0%	Vehicles that meet or exceed the industry standard, defined as the Federal Transit Administration's Default Useful Life Benchmark
Infrastructure (rail track)	0%	Rail track segments with performance restrictions
Equipment (transit support vehicles)	0%	Vehicles that meet or exceed the industry standard, defined as the Federal Transit Administration's Default Useful Life Benchmark
Facilities (buildings, stations, park and rides)	0%	Transit facilities rated below "Adequate" (3.0) on the industry standard Transit Economic Requirements Model (TERM) scale.

Pavement and Bridge Condition (PM2) Measures

Federal performance measures and targets relating to pavement and bridge condition pertain to roadways designated as part of the National Highway System (NHS). Developed by the Federal Highway Administration (FHWA) in cooperation with the states, local officials, and metropolitan planning organizations (MPO), the NHS is comprised of all Interstate Highways as well as other roadways critical to the nation's economy, defense, and mobility. Texas has the largest network of NHS facilities in the nation, composed of just over 70,200 lane-miles of pavement and 17,700 bridges in 2020. In the 12-county North Central Texas Council of Governments (NCTCOG) region, the NHS includes approximately 12,400 lane-miles of pavement (17.7% of state total) and 3,800 bridges (21.5% of state total) in 2020.

As with all states, the Texas Department of Transportation (TxDOT) is required within each four-year performance period (initial four-year performance period established in 2018) to set two-year and four-year pavement and bridge condition targets for the entire statewide NHS network, regardless of facility ownership. Just over 7,900 lane-miles of pavement (11.3% of state total) and 1,000 bridges (5.8% of state total) throughout Texas in 2020 are defined as "off-system" NHS, meaning those assets are not owned or maintained by TxDOT, but instead by local governments or toll road authorities. Comparatively, NCTCOG region "off-system" NHS in 2020 consists of about

3,800 lane-miles of pavement (30.5% of regional total) and 450 bridges (11.8% of regional total), both substantial amounts of the state’s “off-system” NHS subtotal (48.0% and 44.1% for pavement and bridges, respectively).

When TxDOT sets new or adjusts statewide targets for pavement and bridge condition during the performance period, for each target NCTCOG and other state MPOs are provided a 180-day window to report to TxDOT whether it will either: (1) affirm to plan a program of projects contributing to the new and/or adjusted statewide target; or (2) commit to a separate quantifiable target within the metropolitan planning area. In establishing targets, state departments of transportation (DOTs) and MPOs must coordinate to the maximum extent practicable to ensure consistency with state DOT risk-based transportation asset management plans (TAMPs), long-term state of good repair (SOGR) objectives, and all relevant state and metropolitan planning requirements and investment strategies.

For pavement condition, targets are set according to the percentage of pavement (in lane-miles) for Interstate NHS facilities and non-Interstate NHS facilities in “good” and in “poor” condition. With Interstate NHS pavements, the condition measure is based on the metric of International Roughness Index (IRI) rating plus three distress metrics of cracking, rutting, and faulting. The condition measure for non-Interstate NHS pavements is based solely on the IRI rating. While each of these four-year pavement condition targets was adjusted by TxDOT in 2020, the Regional Transportation Council (RTC) reaffirmed its support for the adjusted statewide targets. In contributing toward the accomplishment of statewide pavement condition goals, the RTC additionally reaffirmed its policy statement to work with local governments on expediting improvements to “off-system” NHS facilities in “poor” condition.

Performance Measure	2018 Baseline	2020 Condition (New)	2022 Target (Original)	2022 Target (Updated)
Interstate NHS – Good Condition	66.8%	66.6%	66.4%	66.5%
Non-Interstate NHS – Good Condition	54.4%	55.2%	52.3%	54.1%
<i>These measures represent the percentage of Interstate and non-Interstate NHS pavements in “good” condition across the entire State. Increasing value represents an improvement.</i>				
Interstate NHS – Poor Condition	0.3%	0.2%	0.3%	0.2%
Non-Interstate NHS – Poor Condition	13.8%	14.2%	14.3%	14.2%
<i>These measures represent the percentage of Interstate and non-Interstate NHS pavements in “poor” condition across the entire State. Decreasing value represents an improvement.</i>				

For bridge condition, targets are set according to the percentage of NHS bridges (by deck area) in “good” and in “poor” condition. With all NHS bridges, the condition measures are based on the minimum National Bridge Inventory (NBI) rating identified for each structure’s deck, superstructure, and substructure components. In 2020, TxDOT adjusted the statewide four-year target for “poor” condition NHS bridges, while the original statewide four-year target for “good” condition NHS bridges remained unchanged. The RTC reaffirmed its support for both statewide bridge targets, and in contributing toward the accomplishment of statewide bridge condition goals, the RTC additionally reaffirmed its policy statement to assist TxDOT and local governments on expediting improvements to NHS bridges in “poor” condition.

Performance Measure	2018 Baseline	2020 Condition (New)	2022 Target (Original)	2022 Target (Updated)
All NHS Bridges – Good Condition	50.7%	50.7%	50.4%	50.4%
<i>This measure represents the percentage of NHS bridges by deck area in “good” condition across the entire State. Increasing value represents an improvement.</i>				
All NHS Bridges – Poor Condition	0.9%	1.3%	0.8%	1.5%
<i>This measure represents the percentage of NHS bridges by deck area in “poor” condition across the entire State. Decreasing value represents an improvement.</i>				

System Performance, Freight, and CMAQ (PM3) Measures

This broad set of required measures addresses travel time reliability, freight movement, excessive delay, commuter mode share and air quality. For most of these measures, NCTCOG opted to establish its own targets for 2020 and 2022, though in some cases these targets have to be agreed upon with TxDOT. 2022 targets for several of these targets were revised through RTC action in September 2020.

Performance Measures	Baseline (2018)	2020 Condition	2022 Target
Interstate Reliability (Person Miles Traveled)	77.30%	78.40%	79.50%
<i>This measure represents the percentage of travel on the region’s Interstates that occurs on facility segments that meet the threshold for reliability/predictability of travel specified in the rulemaking. Increasing values represent an improvement.</i>			
Non-Interstate NHS Reliability (Person Miles Traveled)	71.10%	74.40%	71.10%
<i>This measure represents the percentage of travel on the region’s Non-Interstate National Highway System (NHS) that occurs on facility segments that meet the threshold for reliability/predictability of travel specified in the rulemaking. Increasing values represent an improvement.</i>			
Truck Travel Time Reliability Index	1.74	1.83	1.90
<i>This measure is a reliability index¹ that represents the amount of extra time that truck drivers have to add to median trip times because of predictability issues to arrive on time at their destinations. If a hypothetical trip in the region is typically 10 minutes, truck drivers needed to plan for 17.4 total minutes in 2017 to arrive on time 95% of the time. Lower values represent an improvement.</i>			
Peak Hour Excessive Delay (Person-Hours per Capita)	15.50	13.25	15.00
<i>The rulemaking defines “excessive delay” as delay during peak travel times that occurs either below 20mph or 60% of the speed limit, whichever is lower. The measure reported is the amount of this delay per capita, which represents the impact that delay has on individual users of the roadway system. Lower values represent an improvement.</i>			

Performance Measures	Baseline (2018)	2020 Condition	2022 Target	
Percent Non-SOV Mode Share (% Commuter Trips)	19.50%	19.80%	20.20%	
This measure is the percentage of commuters in the urbanized area who traveled to work using a means other than driving alone as reported by the latest available American Community Survey data. Higher values represent an improvement.				
On-Road Mobile Source Emissions Reductions (Cumulative)	NO_x (kg/day)	2,410.80	5,884.42	7,403.95
	VOC (kg/day)	499.72	1,418.56	1,814.02
This measure is the cumulative reduction of certain pollutants that will be eliminated by the construction of projects funded with CMAQ funding. The 2020 and 2022 targets are cumulative totals for the performance period. Higher values represent an improvement.				

All targets represent an improvement over the observed historical trend. NCTCOG will continue to monitor and report on these measures, and the RTC will have the opportunity to establish new targets in 2022.

**RESOLUTION SUPPORTING HIGHWAY SAFETY IMPROVEMENT PROGRAM
PERFORMANCE TARGETS AND REGIONAL SAFETY POLICY POSITION
(R19-01)**

WHEREAS, the North Central Texas Council of Governments (NCTCOG) is designated as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area by the Governor of Texas in accordance with federal law; and,

WHEREAS, the Regional Transportation Council (RTC), comprised primarily of local elected officials, is the regional transportation policy body associated with the North Central Texas Council of Governments, and has been and continues to be the regional forum for cooperative decisions on transportation; and,

WHEREAS, under Title 23 Code of Federal Regulations (CFR) Part 490, States and MPOs must coordinate to develop targets for federally required performance measures; and,

WHEREAS, on August 31, 2017, the Texas Department of Transportation (TxDOT) established Highway Safety Improvement Program performance targets (i.e., PM1) that were identical to targets included in the Strategic Highway Safety Plan and the Highway Safety Plan.

WHEREAS, the performance targets were developed using a data-driven, multi-year, collaborative process that utilize a methodology that would result in a two percent reduction from the original trend line projection in 2022. The proposed reduction would be achieved by reducing each intermediated year by 0.4% in 2018, 0.8% in 2019, 1.2% in 2020, 1.6% in 2021, and 2.0% in 2022;

WHEREAS, TxDOT provided notice of the established performance targets to MPOs across the State, which triggered a 180-day deadline for MPOs to establish their own targets or support TxDOT targets; and,

WHEREAS, the RTC has considered the establishment of targets for the Highway Safety Improvement Program performance measures for the North Central Texas region.

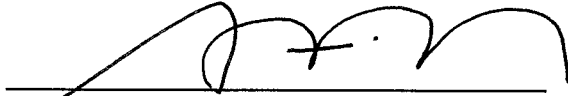
NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The Regional Transportation Council supports the federally required PM1 (Highway Safety Improvement Program) performance targets as adopted by the Texas Department of Transportation for 2018 – 2022 as reflected in Attachment 1.

Section 2. The Regional Transportation Councils adopts the regional safety position that “Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.”

Section 3. The Regional Transportation Council directs staff to transmit the recorded support of the adopted targets to the Texas Department of Transportation.

Section 4. This resolution shall be in effect immediately upon its adoption.



Gary Fickes, Chair
Regional Transportation Council
Commissioner, Tarrant County

I hereby certify that this resolution was adopted by the Regional Transportation Council of the North Central Texas Council of Governments for the Dallas-Fort Worth Metropolitan Area on February 14, 2019.



Roger Harmon, Secretary
Regional Transportation Council
County Judge, Johnson County

ATTACHMENT 1

HIGHWAY SAFETY IMPROVEMENT PROGRAM (PM 1) SAFETY PERFORMANCE MEASURES

- Number of Fatalities: The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
- Rate of Fatalities: The ratio of total number of fatalities to the number of vehicle miles traveled (VMT), (in 100 Million VMT) in a calendar year.
- Number of Serious Injuries: The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.
- Rate of Serious Injuries: The ratio of total number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries: The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

TEXAS DEPARTMENT OF TRANSPORTATION HIGHWAY SAFETY IMPROVEMENT PROGRAM PERFORMANCE TARGETS REDUCTION SCHEDULE: 2018 – 2022¹

2018 – 2022 Target Crash Reduction Schedule	
Year	Reduction
2018	0.4%
2019	0.8%
2020	1.2%
2021	1.6%
2022	2.0%

¹ The Regional Transportation Council previously affirmed support for the 2018 TxDOT Highway Safety Improvement Program Performance Targets on December 14, 2017.

A two percent reduction from the original trend line projection will be achieved by calendar year 2022. The proposed reduction only applies to positive slope projection trends and will be achieved by reducing each intermediate year by the reduction percentages specified in the above schedule. When the slope analysis projects a negative slope, the target set will mirror the projection determined by the slope.

**RESOLUTION APPROVING REGIONAL TARGETS FOR PAVEMENT AND BRIDGE
CONDITION AND SYSTEM PERFORMANCE MEASURES
(R18-04)**

WHEREAS, the North Central Texas Council of Governments (NCTCOG) is designated as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area by the Governor of Texas in accordance with federal law; and,

WHEREAS, the Regional Transportation Council (RTC), comprised primarily of local elected officials, is the regional transportation policy body associated with the North Central Texas Council of Governments, and has been and continues to be the regional forum for cooperative decisions on transportation; and,

WHEREAS, under Title 23 Code of Federal Regulations (CFR) Part 490, States and MPOs must coordinate to develop targets for federally required performance measures; and,

WHEREAS, on June 21, 2018, the Texas Department of Transportation (TxDOT) established targets for pavement and bridge condition (i.e., PM2) and system performance measures (i.e., PM3) and provided notice to MPOs across the State, which triggered a 180-day deadline for MPOs to establish their own targets or support TxDOT targets; and,

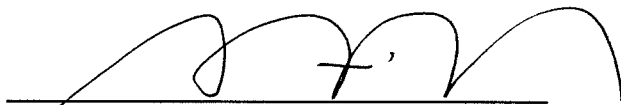
WHEREAS, the RTC has considered the establishment of targets for pavement and bridge condition and system performance measures for the North Central Texas region.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The Regional Transportation Council adopts performance targets for the federally required PM2 (pavement and bridge) and PM3 (system reliability, excessive delay, and air quality) performance measures as reflected in Attachment 1, including the policy statements regarding the pavement and bridges in poor condition.

Section 2. The Regional Transportation Council directs staff to transmit the approved targets in a format requested by the Texas Department of Transportation as reflected in Attachment 2.

Section 3. This resolution shall be in effect immediately upon its adoption.



Gary Fickes, Chair
Regional Transportation Council
Commissioner, Tarrant County

I hereby certify that this resolution was adopted by the Regional Transportation Council of the North Central Texas Council of Governments for the Dallas-Fort Worth Metropolitan Area on November 8, 2018.



Roger Harmon, Secretary
Regional Transportation Council
County Judge, Johnson County

RTC Position on Pavement Condition Targets

Good

NCTCOG Supports TxDOT Statewide 2022 “Good Pavement Condition” Targets for National Highway System Facilities

Poor

NCTCOG Supports TxDOT Statewide 2022 “Poor Pavement Condition” Targets for National Highway System Facilities

Collaboration with TxDOT to Plan and Program Projects Contributing Toward Accomplishment of Pavement Goals will also Include the Following Action: NCTCOG will Work with Local Governments to Focus on Improvement of National Highway System Off-System Arterials in Poor Condition



Roadway Pavement Condition Targets

Roadway Categories	Total Network	2018 Baseline	2022 Target
STATE of TEXAS			
Good Pavement Condition			
Interstate National Highway System (NHS)	19.19%	66.80%	66.40%
Non-Interstate National Highway System (NHS)	80.81%	54.40%	52.30%
Poor Pavement Condition			
Interstate National Highway System (NHS)	19.19%	0.30%	0.30%
Non-Interstate National Highway System (NHS)	80.81%	13.80%	14.30%
North Central Texas Region			
Interstates (on-system) ¹	25.90% ²	5.81% ³	7.99% ³
Non-Interstate Freeway (on-system) ¹	13.40% ²	6.76% ³	8.93% ³
Toll Roads (off-system)	6.70% ²	8.43% ³	9.32% ³
Arterials (on-system) ¹	30.30% ²	18.52% ³	18.39% ³
Arterials (off-system)	23.80% ²	73.66% ³	69.82% ³

¹ On-system refers to the TxDOT System

² Mobility 2045 Plan – 2018 Baseline Network Lane-Miles

³ Based on 5-year moving average



RTC Bridge Condition Targets

NCTCOG Supports TxDOT Statewide 2022 “Good/Poor Condition” Targets for National Highway System Bridges

Collaboration with TxDOT to Plan and Program Projects Contributing Toward Accomplishment of Bridge Goals will also Include the Following Action: NCTCOG will Focus on Expedited Programming to Improve National Highway System Bridges in Poor Condition

State of Texas		
Bridges*	2018 Baseline	2022 Target
Good Bridge Condition		
All National Highway System Facilities	50.63%	50.42%
Poor Bridge Condition		
All National Highway System Facilities	0.88%	0.80%

*Based on total deck area



RTC System Performance Targets

Performance Measure		Historical Trend	Baseline (2016/2017)	2020 Target	2022 Target	Target Strategy
Interstate Reliability (% Person Miles Travelled)		Improving	77.3%	78.6%	79.5%	Targets Set to Improve Over Trend
Non-Interstate NHS Reliability (% Person Miles Travelled)		Worsening	71.1%	N/A	71.1%	
Truck Travel Time Reliability Index		Improving	1.74	1.71	1.66	
Peak Hour Excessive Delay (Hours per Capita)*		Worsening	15.5	N/A	15.0	
Percent Non-SOV Mode Share (% Commuter Trips)*		Improving	19.5%	19.9%	20.2%	
On-Road Mobile Source Emissions Reductions (Cumulative)	NOx (kg/day)	Improving	2,410.80	2,892.96	5,062.68	
	VOC (kg/day)	Improving	499.72	599.67	1,079.40	

*Regional Transportation Council and TxDOT must agree on a single regional target concurrence from TxDOT agreeing to NCTCOG proposed targets has been received



TxDOT Established (PM2) Pavement and Bridge Performance Measure Targets

Federal Performance Measure	Baseline	2020 Target	2022 Target
Pavement on IH			
% in “good” condition	66.80%	N/A	66.4%
% in “poor” condition	0.30%	N/A	0.30%
Pavement on non-IH NHS			
% in “good” condition	54.40%	N/A	52.30%
% in “poor” condition	13.8%	N/A	14.3%
NHS Bridge Deck Condition			
% in “good” condition	50.63%	N/A	50.42%
% in “poor” condition	0.88%	N/A	0.80%

DFW MPO Established (PM3) System Performance Measure Targets

Federal Performance Measure	Baseline	2020 Target	2022 Target
NHS Travel Time Reliability			
IH Level of Travel Time Reliability	77.3%	78.6%	79.5%
Non-IH Level of Travel Time Reliability	71.1%	N/A	71.1%
Truck Travel Time Reliability	1.74	1.71	1.66
Annual Hours of Peak Hour Excessive Delay per capita			
Dallas-Fort Worth*	15.5	N/A	15.0
% Non-SOV Travel			
Dallas-Fort Worth*	19.5%	19.9%	20.2%
Total Emission Reduction			
NOX	2,410.80	2,892.96	6,509.16
VOC	499.72	599.67	1,399.23

*Regional Transportation Council (MPO) and TxDOT agreed upon regional target

**RESOLUTION SUPPORTING TRANSIT ASSET MANAGEMENT PERFORMANCE TARGETS
(R19-02)**

WHEREAS, the North Central Texas Council of Governments (NCTCOG) is designated as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area by the Governor of Texas in accordance with federal law; and,

WHEREAS, the Regional Transportation Council (RTC), comprised primarily of local elected officials, is the regional transportation policy body associated with the North Central Texas Council of Governments, and has been and continues to be the regional forum for cooperative decisions on transportation; and,

WHEREAS, under Title 23 Code of Federal Regulations (CFR) Part 490, States and MPOs must coordinate to develop targets for federally required performance measures; and,

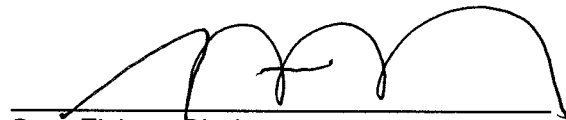
WHEREAS, the Fixing America's Surface Transportation (FAST) Act requires the adoption of regional Transit Asset Management (TAM) performance targets for four asset categories: 1) Rolling Stock – Revenue Vehicles; 2) Infrastructure – Rail Track; 3) Equipment – Non-Revenue Vehicles; and 4) Facilities – Buildings, Stations, Park and Rides in the fiscal years 2018 – 2022; and,

WHEREAS, the MPO has coordinated public transportation providers to establish regional Transit Asset Management performance measures for the North Central Texas region; and,

WHEREAS, the RTC has considered the establishment of targets for the Transit Asset Management performance measures for the North Central Texas region.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

- Section 1.** The Regional Transportation Council supports the federally required Transit Asset Management performance targets for Fiscal Years 2018 – 2022 as reflected in Attachment 1.
- Section 2.** The Regional Transportation Council directs staff to continue to coordinate with transit providers to develop consistent Transit Asset Management definitions and targets.
- Section 3.** The Regional Transportation Council directs staff to transmit the adopted targets to the Texas Department of Transportation.
- Section 4.** This resolution shall be in effect immediately upon its adoption.



Gary Fickes, Chair
Regional Transportation Council
Commissioner, Tarrant County

I hereby certify that this resolution was adopted by the Regional Transportation Council of the North Central Texas Council of Governments for the Dallas-Fort Worth Metropolitan Area on February 14, 2019.



Roger Harmon, Secretary
Regional Transportation Council
County Judge, Johnson County

ATTACHMENT 1

**TRANSIT ASSET MANAGEMENT REGIONAL PERFORMANCE TARGETS
Fiscal Years 2018 – 2022¹**

Asset Category	Regional Target	Metric
Rolling Stock (transit vehicles)	0%	Vehicles that meet or exceed the industry standard ² , defined as the Federal Transit Administration's Default Useful Life Benchmark
Infrastructure (rail track)	0%	Rail track segments with performance restrictions
Equipment (transit support vehicles)	0%	Vehicles that meet or exceed the industry standard ² , defined as the Federal Transit Administration's Default Useful Life Benchmark
Facilities (buildings, stations, park-and-rides)	0%	Transit facilities rated below "Adequate" (3.0) on the industry standard Transit Economic Requirements Model (TERM) scale

¹The Regional Transportation Council previously adopted Fiscal Year 2018 Regional Targets on December 14, 2017.

²These vehicles are old as or older than the industry standard.

**RESOLUTION APPROVING SYSTEM, FREIGHT AND CMAQ PERFORMANCE MEASURES
(R20-04)**

WHEREAS, the North Central Texas Council of Governments (NCTCOG) is designated as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area by the Governor of Texas in accordance with federal law; and,

WHEREAS, the Regional Transportation Council (RTC), comprised primarily of local elected officials, is the regional transportation policy body associated with the North Central Texas Council of Governments, and has been and continues to be the regional forum for cooperative decisions on transportation; and,

WHEREAS, under Title 23 Code of Federal Regulations (CFR) Part 490, States and MPOs must coordinate to develop targets for federally required performance measures; and,

WHEREAS, on June 21, 2018, the Texas Department of Transportation (TxDOT) established 2020 and 2022 targets for System Performance, Freight, and CMAQ measures (i.e. PM3); and,

WHEREAS, the RTC adopted 2020 and 2022 quantitative regional targets for PM3 measures November 8, 2018; and,

WHEREAS, per Title 23 CFR Part 490, the RTC has an opportunity to either adjust or reaffirm 2022 targets for PM2 and PM3 measures; and,

WHEREAS, updated PM3 targets are due to the Federal Highway Administration via TxDOT October 1, 2020; and,

WHEREAS, the RTC has considered the reaffirmation of existing 2022 targets and adoption of new 2022 regional targets for the North Central Texas region.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1. The Regional Transportation Council reaffirms 2022 Regional Targets for PM3 measures:

- Interstate Reliability
- Non-interstate Reliability
- Peak Hour Excessive Delay
- Non-SOV Travel

Section 2. The Regional Transportation Council adopts new 2022 Regional Targets for PM3 measures as contained in Attachment 1:

- Truck Travel Time Reliability
- Emissions Reductions

Section 3. The Regional Transportation Council directs staff to transmit the approved targets to the Texas Department of Transportation.

Section 4. This resolution shall be in effect immediately upon its adoption.

DocuSigned by:

Roger Harmon

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Roger Harmon, Chair
Regional Transportation Council
County Judge, Johnson County

I hereby certify that this resolution was adopted by the Regional Transportation Council of the North Central Texas Council of Governments for the Dallas-Fort Worth Metropolitan Area on September 10, 2020.

DocuSigned by:

Ann Zadeh

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Ann Zadeh, Secretary
Regional Transportation Council
Councilmember, City of Fort Worth

New Performance Measure Targets

Truck Travel Time Reliability: 1.90 (Aspirational 1.83)

Emissions Reductions – NO_x: 7,403.95 kg/day

Emissions Reductions – VOC: 1,814.02 kg/day