A-1. REGIONAL PERFORMANCE

POLICIES

MTP Reference #	Regional Performance
PB3-001	To encourage and incentivize local governments to carry out policies identified in the Metropolitan Transportation Plan, the Regional Transportation Council has established a Policy Bundle Program to advance the plan's goals, such as safety, air quality, mobility options, and quality of life for North Central Texans.

PROGRAMS

Policy Bundle	
Reference	PB2-001
Background	The Regional Transportation Council (RTC) will utilize mechanisms to support the adoption and implementation of a selection of policies identified in the Metropolitan Transportation Plan and aligned with RTC direction. Periodically, the North Central Texas Council of Governments will solicit invitations to participate to local governments, transit authorities, and other transportation partners.
Related Goals	 Support travel efficiency measures and system enhancements targeted at congestion reduction and management. Preserve and enhance the natural environment, improve air quality, and promote active lifestyles. Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system. Provide for timeline project planning and implementation.
Related Policies	PB3-001
Implementation	The North Central Texas Council of Governments will periodically select policies from the plan that reflect current regional priorities, recognizing that areas of focus may evolve over time. The Policy Bundle initiative recognizes agencies demonstrating commitment to regional transportation priorities through policy adoption and implementation. Policies in the bundle can be adopted through various mechanisms, including resolutions, ordinances, governing body actions, or participation in regional initiatives. Adoption of these policies reinforces local commitment to the plan's goals while contributing to a more efficient, robust, multimodal transportation system. Participating entities document their policy implementation and, if determined to meet requirements set forth by the Policy Bundle Program, become eligible for regional funding opportunities or other incentives as designated by the Regional Transportation Council.
Performance Dimensions	 Number of entities submitting for the Policy Bundle Number of policies implemented per entity Percentage of participating entities meeting eligibility requirements Number of new participants compared to the total number of applicants in each round Impact of adopted policies on air quality or other topics
Cost Estimate	N/A - Program costs associated with planning elements only

MEASURING PERFORMANCE IN MOBILITY 2050

Mobility 2050 continues building upon the performance measurement activities presented in Mobility 2045, including the performance framework relative to plan goals and additional federal performance measures, all with consideration of the North Central Texas Council of Governments' long history of performance-based planning. Chapters throughout the plan discuss how performance measurement has been incorporated into planning. This appendix presents supplemental information to the performance information presented in the **Regional Performance** chapter.

PERFORMANCE RELATIVE TO PLAN GOALS SUMMARY

Goal Theme	Goal	Objective	Measure(s)	Data Source(s)
Mobility	Improve the availability of transportation options for people and goods	Expand the region's network of active transportation facilities	 Number of Miles of Existing Regional Veloweb Number of Miles of Existing Community Shared-Use Paths Number of Miles of Existing On-Street Bikeways 	North Central Texas Council of Governments Transportation Active Transportation GIS Dataset
		Expand the region's transit system and improve its efficiency	 Annual Unlinked Passenger Trips in the Region (by mode - Bus, Light Rail, Commuter Rail, Streetcar, Microtransit) Annual Unlinked Passenger Trips by Mode Annual Unlinked Passenger Trips per Vehicle Revenue Hour by Mode Rail Track Mileage and Number of Stations 	National Transit Database, Provider Websites
		Increase the share of non-traditional transportation modes	Percent Non-Single-Occupant Vehicle Travel	US Census Bureau American Community Survey
	Support travel efficiency measures and system enhancements targeted at	Reduce congestion on the region's roadway network	PM Peak Period Travel Time Index on Freeways	National Performance Management Research Dataset
	congestion reduction and management	Improve congestion issues that disproportionately impact freight movement	Percentage Difference Between Truck Congestion and Passenger Vehicle Congestion	National Performance Management Research Dataset
		Provide training for first responders to quickly and effectively manage crash incidents	Number of Personnel Sent to Freeway Incident Management Training	North Central Texas Council of Governments Transportation Safety Team
	Ensure all communities are provided access to the regional transportation system and planning process	Improve transit job access for all commuters across multiple modes	 Percentage of the Region's Population with Access to frequent Fixed-Route Service Percentage of the Region's Employment with Access to Frequent Fixed-Route Service Percentage of the Region's Population with Access to Microtransit Percentage of the Region's Employment with Access to Microtransit 	Regional General Transit Feed Specification Dataset, US Census Bureau American Community Survey

Goal Theme	Goal	Objective	Measure(s)	Data Source(s)
		Hold meaningful, accessible public meetings that provide opportunities for meaningful public involvement	Number of Metropolitan Transportation Plan-Related Public Comments Received through Multiple Channels	Map Your Experience tool, North Central Texas Council of Governments Transportation Public Involvement Team
		Improve access to the internet for all populations across the region	Access to the Internet	US Census Bureau American Community Survey
Quality of Life	Preserve and enhance the natural environment, improve air quality, and	Preserve the region's open and natural areas	Percentage of Regional Land Developed	National Land Cover Dataset
	promote active lifestyles	Implement resilient roadway and transit projects that are protected from floods and minimize impact on the natural environment	National Highway System Lane Miles in Flood Zones	Texas Department of Transportation's Geospatial Roadway Inventory Database, Federal Emergency Management Agency's Flood Insurance Rate Map
		Work to reduce transportation-related emissions of air pollutants, including ozone precursors	8-Hour Ozone National Ambient Air Quality Standards Design Value (ppb)	North Central Texas Council of Governments Air Quality Team, Texas Commission on Environmental Quality
		Encourage a transition to more sustainable fuel sources for the region's vehicles	 Electric Vehicle Registrations Electric Vehicle Charging Infrastructure (number of plugs) Public Agency Fleet Greenhouse Gas Reductions (Dallas-Fort Worth Clean Cities) 	Texas Department of Motor Vehicles, US Department of Energy, Dallas-Fort Worth Clean Cities Coalition
	Encourage livable communities which support sustainability and economic vitality	Encourage shorter, more sustainable trips across the region and across modes	Miles in Length	US Census Bureau Longitudinal Employer- Household Dynamics Origin-Destination Employment Statistics
		Provide for and maintain timely job commutes across modes	 Mean Regional Commute Time (minutes) Mean Regional Commute Time (minutes), by Income 	US Census Bureau American Community Survey
		Maintain affordable transportation costs for households across the region	Housing and Transportation Costs as a Percentage of Household Income	Census Transportation Planning Products
System Sustainability	Ensure adequate maintenance and enhance the safety and reliability of the existing transportation system	Improve the reliability of travel on the region's roadway network	 Percentage of Person Miles of Travel that is Reliable on Interstates Percentage of Person Miles of Travel that is Reliable on the Non-Interstate National Highway System 	National Performance Management Research Dataset
		Improve the safety of travel on the region's roadway network	Regional Crash Rate per 100 Million Vehicle Miles of Travel	North Central Texas Council of Governments Transportation Safety Team, Texas Department of Transportation Crash Records Information System
		Improve the safety of the region's transportation system for nonmotorized users of the transportation system	Bicycle and Pedestrian Crashes Involving a Motor Vehicle by Race/Ethnicity	Texas Department of Transportation Crash Records Information System
		Increase the number of grade-separated rail crossings	Percent of Total Rail Crossings that are Grade-Separated	Federal Railroad Administration's Railroad Safety Map, US Census Bureau American Community Survey 5-Year Estimates
		Adequately maintain and improve the condition of the region's pavements and bridges in an equitable way	 Pavement Condition by Minority Status, Income, and Limited English Proficiency Bridge Condition by Minority Status, Income, and Limited English Proficiency 	Texas Department of Transportation Pavement and Bridge Divisions, US Census Bureau American Community Survey 5-Year Estimates

Goal Theme	Goal	Objective	Measure(s)	Data Source(s)	
	sources to address regional transportation	· · · ·	Plan Revenue per Capita per Year	Mobility 2050 Financial Forecast	
		Ũ	Percentage of Plan Revenue Derived from Revenue Enhancements	Mobility 2050 Financial Forecast	
Implementation			Number of Projects on Current Milestone Policy List	North Central Texas Council of Governments Transportation Project Programming Team	
	programs aimed at reducing the costs	optimize the existing transportation	Proportion of Major Roadway Recommendations that are Asset Optimization	Mobility 2050 Roadway Recommendations	

Annual Unlinked Passenger Trips by Mode, in Millions of Trips

Measure + Mode		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual Passenger	Bus	48.4	48.0	47.2	46.3	42.9	41.0	37.7	44.7	32.7	23.1	26.3	31.5
Trips by Mode	Light Rail	27.7	29.5	29.5	29.8	29.8	30.0	28.9	28.3	20.1	14.5	17.7	20.5
	Demand Response	2.2	1.9	1.9	1.9	1.9	1.8	1.9	2.2	1.6	1.5	2.8	3.8
	Vanpool	1.0	1.0	1.0	0.7	0.7	0.7	0.8	0.8	0.5	0.4	0.5	0.6
	Commuter Rail	2.6	2.6	2.9	2.7	2.6	2.6	2.5	2.8	1.8	1.2	1.8	2.0
	Streetcar		0.4	0.5	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.6	0.5
	Total	81.9	83.3	82.9	82.1	78.5	76.9	72.4	79.7	57.5	41.5	49.6	58.9

Annual Unlinked Passenger Trips per Vehicle Revenue Hour, in Millions of Trips

Measure + Mode		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual Passenger	Bus	19.6	18.5	18.4	17.6	16.2	15.2	13.5	15.8	12.3	9.4	12.1	13.0
Trips per Service	Light Rail	72.4	65.2	65.1	63.7	62.9	61.0	63.0	56.7	41.7	33.5	35.0	37.7
Hour	Demand Response	2.2	1.4	1.4	1.3	1.3	1.2	1.2	1.3	1.0	1.3	1.9	2.4
	Vanpool	10.1	10.2	10.2	8.7	7.3	7.3	5.9	6.1	5.7	7.8	6.8	6.1
	Commuter Rail	38.4	36.3	38.4	35.9	34.3	27.8	28.3	16.1	8.8	5.7	7.6	8.9
	Streetcar	-	42.7	42.9	46.8	38.3	31.1	25.7	30.0	27.6	27.2	20.9	19.2
	Total	142.7	174.3	176.8	174.0	160.3	143.6	137.6	125.9	97.1	84.9	84.3	87.3

Annual unlinked passenger trips per vehicle revenue hour is a key measure of transit system efficiency used by the National Transit Database.

FEDERALLY REQUIRED PERFORMANCE MEASURE SUMMARY

Rulemaking	Measure	Metric (if different)	CFR Section	Geography/ Applicability	Data Sources	Rule Effective	Required to be Included in MTPs After	Last NCTCOG Target-Setting Action	Next NCTCOG Target-Setting Action (Anticipated)	Target-Setting Schedule
PM1 (Highway Safety)			23 CFR 490.207(a)(1)	Whole Metropolitan Planning Area	FARS, VMT estimate	4/14/2016	4/14/2018	2/9/2023	Early 2028	Annually (targets established as
	Rate of fatalities		23 CFR 490.207(a)(2)	Whole Metropolitan Planning Area	FARS, VMT estimate					reductions over 5-year period)
	Number of serious injuries		23 CFR 490.207(a)(3)	Whole Metropolitan Planning Area	FARS, VMT estimate					
	Rate of serious injuries		23 CFR 490.207(a)(4)	Whole Metropolitan Planning Area	FARS, VMT estimate					
	Number of nonmotorized fa serious injuries	atalities and nonmotorized	23 CFR 490.207(a)(5)	Whole Metropolitan Planning Area	FARS, VMT estimate					
(Pavement and	Percentage of pavements o Good condition	f the Interstate System in	23 CFR 490.307(a)(1)	Interstates (Metropolitan Planning Area)	State DOT (via HPMS)	5/20/2017	5/20/2019	3/13/2025	Late 2026	Biennially (4-year performance periods)
Bridge Condition)	Percentage of pavements of Poor condition	f the Interstate System in	23 CFR 490.307(a)(2)	Interstates (Metropolitan Planning Area)	State DOT (via HPMS)					
	Percentage of pavements of Good condition	f the Non-Interstate NHS in	23 CFR 490.307(a)(3)	Non-Interstate NHS (Metropolitan Planning Area)	State DOT (via HPMS)					
	Percentage of pavements or Poor condition	Percentage of pavements of the Non-Interstate NHS in Poor condition Percentage of bridges classified as in Good condition		Non-Interstate NHS (Metropolitan Planning Area)	State DOT (via HPMS)					
	Percentage of bridges class			All NHS (Metropolitan Planning Area)	State DOT (via HPMS)					
	Percentage of bridges class	ified as in Poor condition	23 CFR 490.407(c)(2)	All NHS (Metropolitan Planning Area)	State DOT (via HPMS)					
PM3 (System Performance, Freight and	Percent of person miles traveled on the Interstate System that are reliable	Level of Travel Time Reliability	23 CFR 490.507(a)(1)	Interstates (Metropolitan Planning Area)	NPMRDSv2, Speed Limits, and Auto Occupancy	5/20/2017	5/20/2019	9/12/2024, 3/13/2025	Late 2026	Biennially (4-year performance periods)
Congestion Mitigation and Air Quality Improvement Program)	Percent of person miles traveled on the Non- Interstate NHS that are reliable	Level of Travel Time Reliability)	23 CFR 490.507(a)(2)	Non-Interstate NHS (Metropolitan Planning Area)	NPMRDSv2, Speed Limits, and Auto Occupancy					
FTOgram)	Truck Travel Time Reliabilit	y Index	23 CFR 490.607	Interstates (Metropolitan Planning Area)	NPMRDSv2, Speed Limits					
	Annual hours of peak-hour excessive delay per capita	Total peak hour excessive delay person hours	23 CFR 490.707(a)	All NHS in Nonattainment Urbanized Areas	NPMRDSv2, Speed Limits, and Auto Occupancy					
			23 CFR 490.707(b)	Nonattainment Urbanized Areas	American Community Survey or Local Survey	r I				
	Total emission reductions		23 CFR 490.807	Nonattainment Urbanized Areas	Congestion Mitigation and Air Quality Improvement Program Public Access System					

Rulemaking	Measure	Metric (if different)	CFR Section	Geography/ Applicability	Data Sources	Rule Effective	Required to be Included in MTPs After	Last NCTCOG Target-Setting Action	Next NCTCOG Target-Setting Action (Anticipated)	Target-Setting Schedule	
Transit Asset Management (TAM)	5		49 CFR 625.43(a)	Recipients and sub-recipients of federal financial assistance under 49 USC 53 that own,		10/01/2016	10/1/2018	7/13/2023	Late 2026	Every 4 years	
			49 CFR 625.43(b)	operate, or manage assets used for providing public transportation	Agency's Transit Asset Management Plan						
			49 CFR 625.43(c)		Agency's Transit Asset Management Plan						
	Percentage of facilities within a particular asset class that are rated below condition 3 on the TERM scale		49 CFR 625.43(d)		Agency's Transit Asset Management Plan						
Public	Fatalities – Total Nu		49 CFR	Recipients and sub-recipients		07/19/2018	7/20/2021	5/8/2025	Early 2029	Every 4 years	
ransportation	Fatalities – Rate per	100K Miles	673.11(a)(3)	of federal financial assistance under 49 USC 53 that own,	Transportation Agency Safety Plan						
Plans	Injuries – Total Num	ıber		operate, or manage assets	Agency Sarety Plan						
PTASP)	Injuries – Rate per 1	.00K Miles		used for providing public							
	Safety Events – Tota	al Number		transportation							
	Safety Events – Rate per 100K Miles System Reliability – Average Miles between Major Mechanical Failures										

NHS: National Highway System; FARS: National Highway Traffic Safety Administration Fatality Analysis Reporting System; VMT: vehicle miles of travel; DOT: Department of Transportation; HPMS: Highway Performance Monitoring System; NPMRDS: National Performance Management Research Dataset

REGIONAL PERFORMANCE BY COUNTY

			2026 System Pe	erformance		
County	Population	Employment	Vehicle Miles of Travel (Daily)	Hourly Capacity (Miles)	Vehicle Hours Spent in Delay (Daily)	Increase in Travel Time Due to Congestion*
Collin	1,271,000	795,000	31,511,000	5,387,000	382,000	54%
Dallas	2,728,000	2,563,000	88,435,000	13,216,000	930,000	47%
Denton	1,104,000	551,000	25,314,000	4,157,000	251,000	47%
Ellis	241,000	111,000	8,879,000	2,877,000	22,000	14%
Hood	72,000	36,000	1,643,000	579,000	4,000	13%
Hunt	119,000	57,000	4,240,000	2,107,000	5,000	7%
Johnson	215,000	99,000	5,193,000	1,939,000	10,000	10%
Kaufman	177,000	79,000	8,140,000	1,986,000	36,000	26%
Parker	190,000	90,000	5,463,000	1,803,000	12,000	12%
Rockwall	133,000	73,000	3,287,000	612,000	25,000	37%
Tarrant	2,258,000	1,501,000	58,318,000	9,421,000	480,000	38%
Wise	88,000	44,000	3,828,000	1,516,000	8,000	12%

* Increase in travel time due to congestion refers to the additional time it takes to travel in congested conditions as compared to uncongested or free flowing conditions.

			2050 System P	erformance		
County	Population	Employment	Vehicle Miles of Travel (Daily)	Hourly Capacity (Miles)	Vehicle Hours Spent in Delay (Daily)	Increase in Travel Time Due to Congestion*
Collin	2,155,000	1,243,000	56,748,000	8,413,000	1,189,000	95%
Dallas	3,071,000	3,289,000	114,935,000	14,414,000	1,209,000	48%
Denton	1,878,000	953,000	45,524,000	6,037,000	794,000	83%
Ellis	442,000	206,000	15,372,000	3,339,000	71,000	25%
Hood	114,000	52,000	2,377,000	631,000	12,000	24%
Hunt	206,000	95,000	7,538,000	2,348,000	18,000	14%
Johnson	370,000	167,000	9,182,000	2,294,000	40,000	22%
Kaufman	403,000	189,000	16,269,000	2,446,000	188,000	65%
Parker	375,000	170,000	10,871,000	2,394,000	52,000	26%
Rockwall	246,000	135,000	7,224,000	1,008,000	97,000	68%
Tarrant	2,867,000	2,121,000	86,402,000	11,195,000	837,000	45%
Wise	172,000	77,000	6,312,000	1,691,000	26,000	23%

* Increase in travel time due to congestion refers to the additional time it takes to travel in congested conditions as compared to uncongested or free-flowing conditions.

PROJECT SELECTION/PRIORITIZATION PROCESS

Performance measurement played an integral role in the major roadway project selection and prioritization process for Mobility 2050. As detailed in the **Mobility Options** chapter, the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Fixing America's Surface Transportation (FAST) Act, and the Infrastructure Investment and Jobs Act (IIJA) require Metropolitan Planning Organizations to select and prioritize projects based on the seven national performance goals:

- **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure Condition: To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction:** To achieve a significant reduction in congestion on the National Highway System.
- **System Reliability:** To improve the efficiency of the surface transportation system.
- Freight Movement and Economic Vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental Sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment.

• Reduced Project Delivery Delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The North Central Texas Council of Governments (NCTCOG) identified specific performance measures related to each of these goals and used these performance measures to evaluate roadway segments to determine those most in need of improvements. The scoring process is summarized in the table below and discussed in greater detail in the **Mobility Options** chapter. A similar process is used for project selection for NCTCOG's 10-Year Plan.

The process was supplemented by a nondiscrimination review of project prioritization. This review identified whether:

- The transit and roadway recommendations in Mobility 2050 provide equitable benefits to protected populations.
- The prioritization of these recommendations over time would result in the significant delay in the receipt of benefits to protected populations.

The review found no disparity in the equity or timing of benefits. Results from this review are found in the **Social Considerations** chapter.

Performance Measures Used in Mobility 2050 Project Selection Process

MAP-21/FAST Act/IIJA Goal	Performance Measure	Data Source			
Congestion Reduction	V/C ¹ on various modeled networks	MOBLOS ²			
Congestion Reduction	V/C change between Build and No-Build networks	MOBLOS			
System Reliability	Level of Travel Time Reliability	National Performance Management Research Dataset			
Safati	Fatal and Incapacitating Crash Rate	Against Currented CDIS errorb date			
Safety	Total Crash Rate	Agency-Curated CRIS crash data			
Infrastructure Condition	Good/Fair/Poor Pavement Condition	Texas Department of Transportation pavement datasets associated with PM2 Performance Measures			
Infrastructure Condition	Good/Fair/Poor Bridge Condition	Texas Department of Transportation bridge datasets associated with PM2 Performance Measures and/or National Bridge Inventory			
Fusiekt Management	Truck/Car Travel Time Ratio	National Performance Management Research Dataset			
Freight Movement	Truck Volume Percentage	Transportation Analysis and Forecasting Tool model runs			
	Activity Density Change – Recent (2000-2026)	Demographic forecasts/Census			
Economic Vitality	Activity Density Change – Future (2026-2050)	Demographic forecasts			
Environmental Sustainability Estimate of Environmental Impact by Project Type		Project listings			

CRIS: Texas Department of Transportation Crash Records Information System

 $^{^{1}}$ V/C is the ratio of a roadway's volume to capacity.

² MOBLOS is a measure of the Mobility Level-of-Service. This measure of performance is produced by NCTCOG's TAFT Travel Demand Model.

FUTURE CONSIDERATIONS AFFECTING PERFORMANCE

A number of considerations could impact the transportation system's performance in the future, including, but not limited to:

- **Post-Pandemic Effects**: The COVID-19 pandemic has significantly altered the usage patterns of the region's transportation system. While some metrics indicate ongoing recovery, permanent changes such as increased telecommuting necessitate continuous monitoring and adaptation.
- Emerging Technologies: Innovations like automated vehicles and ridesharing are set to transform transportation dynamics. These technologies could either enhance or challenge the system's capacity and congestion, contingent on their implementation. Detailed discussions on these impacts are available in the Connected/Automated Vehicles and Technologies section of the Operational Efficiency chapter.
- Evolving Travel Behavior and Land Use: Long-term shifts in traveler behavior and land use preferences among the region's residents will redefine transportation needs over time.

Anticipating the potential impacts of evolving trends is key. Scenario planning, as part of a performance-based planning process, is a valuable tool for understanding and preparing for these changes. NCTCOG is considering further exploration of scenario planning, which may be integrated into future Metropolitan Transportation Plans.