



TECHNICAL ADVISORY COMMITTEE MEETING

Monday, April 28, 2025

2:00 p.m.

Livestream at: www.campotexas.org

AGENDA

1. Certification of Quorum – Quorum requirement is 13 members
..... Ms. Emily Barron, Chair

ACTION:

2. [Approval of March 24, 2025 Meeting Summary](#).....Mr. Chad McKeown, CAMPO
Mr. McKeown will seek TAC approval of the March 24, 2025 meeting summary.
3. [Discussion and Recommendation for Adoption of 2050 Regional Transportation Plan \(RTP\)](#)
..... Mr. William Lisska, CAMPO
Mr. Lisska will seek TAC recommendation for adoption of the 2050 RTP.
4. [Discussion and Recommendation on Federal Transit Administration \(FTA\) Section 5310 Project Call](#)..... Mr. Ryan Collins, CAMPO
Mr. Collins will discuss the current FTA Section 5310 Project Call evaluation results and seek TAC recommendation.

INFORMATION:

5. [Presentation of Draft FY 2026 & 2027 Unified Planning Work Program \(UPWP\)](#)
..... Ms. Theresa Hernandez, CAMPO
Ms. Hernandez will provide an overview of the draft UPWP for fiscal years 2026 and 2027.
6. [Discussion and Presentation on 2025 Regional Intelligent Transportation System \(ITS\) Architecture Update](#)..... Mr. Nirav Ved, CAMPO
Mr. Ved will provide a presentation on the update to the Regional ITS Architecture, a federally required document necessary to fund ITS projects.
7. [Discussion on 2026-2029 Call for Projects for Transportation Alternatives Set-Aside \(TASA\) and Carbon Reduction Program \(CRP\) Funding](#) Mr. Ryan Collins, CAMPO
Mr. Collins will discuss the 2026-2029 Call for Projects for TASA and CRP funding.

Persons with Disabilities:

Upon request, reasonable accommodations are provided. Please call 737-229-0896 at least three (3) business days prior to the meeting to arrange for assistance.

8. Report on Transportation Planning Activities
9. TAC Chair Announcements
 - Next TPB Meeting – May 12, 2025, 2:00 p.m.
 - Next TAC Meeting – May 19, 2025, 2:00 p.m.
10. Adjournment

Persons with Disabilities:

Upon request, reasonable accommodations are provided. Please call 737-226-4840 at least three (3) business days prior to the meeting to arrange for assistance.



**Capital Area Metropolitan Planning Organization
Technical Advisory Committee Meeting**

Livestream at: www.campotexas.org

**Meeting Minutes
March 24, 2025
2:00 p.m.**

1. Certification of Quorum Ms. Emily Barron, Chair

The Chair called the CAMPO Technical Advisory Committee (TAC) meeting to order at 2:02 p.m.

A quorum was announced present.

Present:

	Member	Representing	Member Attending	Alternate Attending
1.	Erik Leak	City of Austin	Y	
2.	Cole Kitten	City of Austin	N	Diane Vargas
3.	Richard Mendoza, P.E.	City of Austin	Y	
4.	Randall Skinner	City of Cedar Park	Y	
5.	Lua Saluone	City of Georgetown	Y	
6.	Lu Zhang	City of Kyle	N	
7.	Ann Weis	City of Leander	Y	
8.	Emily Barron, Chair	City of Pflugerville	Y	
9.	Brian Kuhn	City of Round Rock	Y	
10.	Shaun Condor, P.E.	City of San Marcos	Y	

11.	Aimee Robertson	Bastrop County	Y	
12.	Kennedy Higgins	Bastrop County (Smaller Cities)	N	
13.	Greg Haley, P.E.	Burnet County	Y	
14.	Russell Sander	Burnet County (Smaller Cities)	N	Caleb Kraenzel
15.	Commissioner Ed Theriot	Caldwell County	N	
16.	Vacant	Caldwell County (Smaller Cities)	-	
17.	Jennifer Moczygemba	Hays County	Y	
18.	Angela Kennedy	Hays County (Smaller Cities)	Y	
19.	Charlie Watts	Travis County	Y	
20.	Cathy Stephens	Travis County (Smaller Cities)	Y	
21.	Bob Daigh, P.E.	Williamson County	Y	
22.	Matt Rector	Williamson County (Smaller Cities)	Y	
23.	David Marsh	CARTS	N	Ed Collins
24.	Mike Sexton, P.E.	CTRMA	N	
25.	Sharmila Mukherjee	Capital Metro	Y	Jacob Calhoun
26.	Heather Ashley-Nguyen, P.E.	TxDOT	N	

2. Election of Officers for Technical Advisory Committee (TAC Chair and TAC Vice Chair)

The Chair recognized Mr. Chad McKeown, CAMPO Deputy Executive Director who informed the Committee that the Nominating Subcommittee convened on February 13, 2025 to consider candidates for TAC officer positions of Chair and Vice Chair.

Mr. McKeown reported that the Nominating Subcommittee unanimously voted to recommend Ms. Emily Barron (City of Pflugerville) for TAC Chair and Mr. Richard Mendoza (City of Austin) for TAC Vice Chair.

The Chair entertained a motion to approve candidates, Ms. Emily Barron (City of Pflugerville) for TAC Chair and Mr. Richard Mendoza (City of Austin) for TAC Vice Chair, as presented.

Mr. Ed Collins moved to approve candidates, Ms. Emily Barron (City of Pflugerville) for TAC Chair and Mr. Richard Mendoza (City of Austin) for TAC Vice Chair, as presented.

The motion was seconded.

The motion prevailed unanimously.

Ms. Barron thanked the Committee for their confidence in her ability to preside as Chair again and continued with the next order of business.

3. Approval of January 27, 2025 and February 24, 2025 Meeting Summaries

..... Mr. Chad McKeown, CAMPO

The Chair entertained a motion for approval of the January 27, 2025 and February 24, 2025 meeting summaries, as presented.

Mr. Bob Daigh, P.E. moved for approval of the January 27, 2025 and February 24, 2025 meeting summaries, as presented.

Mr. Jacob Calhoun seconded the motion.

Mr. Chad McKeown informed the TAC that the January 27, 2025 and February 24, 2025 meeting summaries will be amended to include Mr. Lua Saluone in attendance for both meetings.

The motion prevailed unanimously to approve the amended TAC January 27, 2025 and February 24, 2025 meeting summaries, as noted.

4. Discussion and Recommendation on 2025 Federal Performance Measure Targets

The Chair recognized Mr. Nirav Ved, CAMPO Data & Operations Manager who informed the Committee that Congress passed a rule in 2016 that mandates State Departments of Transportation (DOTs), Metropolitan Planning Organizations (MPOs), and transit agencies adopt a Transportation Performance Management System which determines whether our investment and policy decisions are being used to achieve national performance goals. Mr. Ved added that the adoption of federal performance measure targets is an annual requirement and noted that CAMPO utilizes the transportation performance management process for adopting regional targets, planning products such as the Transportation Improvement Program (TIP), and Regional Transportation Plan (RTP).

Mr. Ved highlighted the performance measure goal areas as set by Congress and presented the 2025 performance measure targets and the previous year's performance measure targets. Mr. Ved noted that it is common practice for MPOs to adopt TxDOT's targets.

Mr. Ved briefly discussed the interactive Performance Measure Dashboard which is available for review on the CAMPO website. The presentation was concluded with a request for a recommendation to adopt the 2025 Performance Measure Report and federal performance measure targets, as presented. There were no questions or comments.

The Chair entertained a motion to approve a recommendation to adopt the 2025 Performance Measure Report and federal performance measure targets, as presented.

Mr. Brian Kuhn moved to approve a recommendation to adopt the 2025 Performance Measure Report and federal performance measure targets, as presented.

Mr. Ed Collins seconded the motion.

The motion prevailed unanimously.

5. Presentation on Final Draft 2050 Regional Transportation Plan (RTP)

The Chair recognized Mr. William Lisska, CAMPO Regional Planning Manager who provided a brief introduction to the presentation on the progress toward the final draft 2050 RTP. Mr. Lisska highlighted the purpose and timeline for the draft 2050 RTP and provided a summary of the project call and projects received.

Mr. Lisska introduced Ms. Allison Fluitt of Kimley-Horn and Associates, consultant services provider for the 2050 RTP who thanked the jurisdictions and agency partners for their partnership in developing the revenue projections and project submittals for inclusion in the draft 2050 RTP. Ms. Fluitt provided a brief overview of the fiscal constraint process for the draft 2050 RTP and arrival at the fiscally constrained and illustrative project lists.

Mr. Lisska later summarized the revisions to the draft 2050 RTP which included updates to the Title VI analysis, agency and jurisdictional comments received on the project listing, and updates on the Travel Demand Model. The presentation was concluded with the timeline for adoption of the 2050 RTP and a brief summary of the next steps. A brief question and answer followed.

6. Report on Transportation Planning Activities

Mr. McKeown recognized Mr. Ashby Johnson, CAMPO Executive Director who informed the Committee that CAMPO received notice from the national Association of Metropolitan Planning Organizations (AMPO) that the Trump Administration took action to move unused Transportation Infrastructure Finance and Innovation Act (TIFIA) funding to the Surface Transportation Block Grant (STBG) or Category 7 funding account. Mr. Johnson reported that the funding will go through the existing formulas for distribution and will be awarded to TxDOT, CAMPO and other MPOs in the State and country based on population.

Mr. Johnson reported that FY 2025 and 2026 funding will be utilized after the Infrastructure Investment and Jobs Act (IIJA) funding is depleted and highlighted funding amounts to be awarded to CAMPO. Mr. Johnson noted that the STBG or Category 7 funding amounts will not come with obligation authority.

Mr. Johnson added that upon redistribution of funding in the fall, additional obligation authority will be given to TxDOT and noted that there will be enough to cover STBG or Category 7 funding.

The report on transportation planning activities concluded without questions or comments.

7. TAC Chair Announcements

The Chair announced that the next Transportation Policy Board Meeting will be held on April 14, 2025 and the next Technical Advisory Committee Meeting and action on the 2050 RTP will be held on April 28, 2025 at 2:00 p.m.

8. Adjournment

The March 24, 2025 meeting of the Technical Advisory Committee was adjourned at 2:28 p.m.



Date: April 28, 2025
Continued From: March 24, 2025
Action Requested: Recommendation

To: Technical Advisory Committee
From: Mr. William Lisska, Regional Planning Manager
Agenda Item: 3
Subject: Recommendation for Adoption of 2050 Regional Transportation Plan (RTP)

RECOMMENDATION

Staff requests the Technical Advisory Committee recommend adoption of the 2050 Regional Transportation Plan by the Transportation Policy Board.

PURPOSE AND EXECUTIVE SUMMARY

CAMPO must adopt the 2050 RTP no later than May 2025 to remain in compliance with federal rules. In addition to providing goals, policies, and performance measures to guide the development of transportation in the region, the RTP includes a fiscally constrained project list of regionally significant activities that could reasonably be implemented over the plan horizon. The purpose of this item is to review the Draft Final 2050 RTP document, including the incorporation of comments from the Transportation Policy Board (TPB), Technical Advisory Committee (TAC), member-agency staff, and the public and to seek a recommendation for adoption from the TAC. CAMPO staff will present the Draft Final 2050 RTP to the TPB for action at the May 12 meeting.

FINANCIAL IMPACT

The Transportation Policy Board does not allocate project funding in the Regional Transportation Plan. However, the RTP and project listing play an important role in federal and state funding decisions and administrative processes. The 2050 RTP fiscal limit establishes the available revenues from which to allocate financially constrained projects within the life of the plan.

BACKGROUND AND DISCUSSION

CAMPO is responsible for the development and maintenance of a long-range regional transportation plan (RTP) for the six-county region. The purpose of the long-range plan is to coordinate regional transportation planning activities, prioritize a comprehensive list of projects, activities, and programs, and develop a fiscal constraint analysis that estimates the region's capacity to fund, operate, and maintain projects in the long-range plan. CAMPO is currently operating under the 2045 RTP, which was adopted by the Transportation Policy Board in May 2020. CAMPO is now seeking a recommendation for adoption from the TAC on the Draft Final 2050 RTP. The 2050 RTP must be adopted no later than May 2025 to remain in compliance with federal rules and avoid a lapse, and CAMPO staff will present the Draft Final 2050 RTP to the TPB for action at the May 12 meeting.

The 2050 RTP includes seven chapters, covering the following topics: (1) an overview of RTP requirements and the guiding goals and objectives; (2) a summary of regional trends and unconstrained needs identified in previous planning work; (3) estimation of the fiscal limit for regional transportation funding over the plan horizon; (4) development and prioritization of the fiscally constrained project list for the plan horizon; (5) performance of the constrained project list in the regional travel demand

model, including an equity analysis; (6) a summary of the public involvement process; and (7) a discussion of federal performance measurement in the context of the RTP and regional policies. The 2050 RTP also includes a series of appendices containing the constrained and illustrative project lists; the evaluation process and criteria for projects submitted to CAMPO through the RTP project call; and other regional plans, studies, processes, reviews, and analyses that inform the 2050 RTP.

Project sponsors were provided their draft lists of financially constrained and illustrative projects in late November / early December 2024 and given the opportunity to adjust their remaining local funding capacity (if applicable). In February, TxDOT reviewed on-system local agency project listings to provide a final determination of concurrence. CAMPO received member-agency staff comments on the RTP and constrained projects list from Austin, CARTS, Cedar Park, Georgetown, Hutto, Pflugerville, Travis County, TxDOT, and Williamson County and have responded to comments and incorporated feedback, as appropriate. The second round of public comment for the Draft 2050 RTP opened in February and closed on April 15, 2025. Updates to the constrained project list compared to the public comment draft are listed in Attachment A. The constrained and illustrative projects are listed individually in Draft RTP Appendix A and an interactive web map is available at the following link:

<https://campotexas.maps.arcgis.com/apps/instant/portfolio/index.html?appid=7cd2c7c7da0b4f239b0c85f34f5bff5c>

SUPPORTING DOCUMENTS

Attachment A – Updates to Draft Constrained Project List

Attachment B – Draft Constrained Project List Prioritization Scores

MPO ID	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Update
51-00001-00	TxDOT		Travis	FM 685 (Dessau Rd)	Wells branch	CR 138		Conduct Corridor Study	Study	2025	Pflugerville requests removal - Local study already complete. TxDOT agrees to remove.
61-00031-00	City of Georgetown		Williamson	Southwest Bypass	SH 29	Leander Road		Widen from 2-lane undivided 4-lane divided	\$ 56,000,000	2045	Duplicate with Williamson County project listing 61-00139-00 - Georgetown requests to remove 61-00031-00
61-00083-00	TxDOT		Williamson	RM 1431	Anderson Mill Rd	Bagdad Rd		Widen 4-lane to 6-lane divided with raised median	\$ 59,560,000	2045	Duplicate with Cedar Park project 61-00184-00 - TxDOT requests to remove 61-00083-00
61-00084-00	TxDOT		Williamson	RM 2243	E of SW Bypass	Norwood Dr		Widen 2-lane with center turn lane to 4-lane divided with pedestrian improvements	\$ 18,183,160	2026	Duplicate with Georgetown project 61-00191-00 in TIP - TxDOT requests to remove 61-00084-00.
41-00052-00	TxDOT		Hays	Robert S. Light	FM 1626	IH 35		Widen a 2 ln roadway to a four-lane roadway	\$ 22,380,000	2035	Duplicate with Hays County project 41-00101-00 - TxDOT requests to remove 41-00052-00
61-00244-00	Williamson County		Williamson	SH 195			Sun City Boulevard	Add Overpass	\$ 23,000,000	2030	TxDOT request removal - does not have TxDOT concurrence
51-00097-00	Travis County		Travis	Blake-Manor Rd	FM 973	Taylor Ln		Widen 2-lane undivided to 4-lane divided with bike lanes and sidewalks	\$ 17,400,000	2030	Travis County requests removal - Project is constructed
51-00117-00	Travis County		Travis	Blake-Manor Rd	Taylor Lane	Burleson-Manor Rd		Widen 2-lane undivided to a 4-lane divided with bike lanes and sidewalks	\$ 16,951,250	2030	Travis County requests removal - Project is constructed
51-00491-00	Travis County		Travis	Arterial A	US 290 E	FM 734		Construct new 4-lane divided roadway with bike and pedestrian accommodations	\$ 33,247,500	2030	Locally funded project to be added to constrained list
51-00113-00	Travis County		Travis	Connector between FM 973 and Blake Manor Rd	FM 973	Blake Manor Rd		Construct new 4-lane divided with bike lanes and sidewalks	\$ 8,500,000	2030	Locally funded project to be added to constrained list
51-00103-00	Travis County		Travis	Harold Green Rd / Tesla Rd	SH 130	Austin Colony Blvd		Construct new 2-lane divided with bike lanes and sidewalks	\$ 12,776,207	2030	Locally funded project to be added to constrained list
51-00150-00	Travis County		Travis	Main St	Sunfield Pkwy	Turnersville Rd		Build new 2-lane divided with bike and pedestrian accommodations.	\$ 13,820,000	2030	Locally funded project to be added to constrained list
51-00130-00	Travis County		Travis	Pflugerville East Rd (Cameron Rd) (Phase 1)	Weiss Ln	Fuchs Grove Rd		Upgrade existing 2-lane and construct new to a 4-lane divided with bike lanes and sidewalks	\$ 38,788,750	2030	Locally funded project to be added to constrained list
51-00490-00	Travis County		Travis	Ross Rd	Pearce Ln	Heine Farm Rd		Widen 2-lane undivided to 2-lane divided roadway with bike and pedestrian accommodations	\$ 6,191,625	2030	Locally funded project to be added to constrained list
51-00171-00	Travis County	City of Austin	Travis	Ross Rd	SH 71	Pearce Ln		Widen 2-lane undivided to a 4-lane divided with bike lanes and sidewalks	\$ 18,820,000	2030	Locally funded project to be added to constrained list
71-00020-00	Travis County		Travis, Williamson	Rowe Ln	SH 130 NB frontage	Hodde Ln		Widen existing 2-lane undivided roadway to a 2-lane divided roadway (SAFE 2 cross section) with bike and pedestrian accommodations	\$ 31,031,002	2030	Locally funded project to be added to constrained list
51-00106-00	Travis County		Travis	South Pleasant Valley Rd	1,000' North of River Plantation	SH 45		Widen 2-lane undivided to 4-lane divided with bike lanes and sidewalks	\$ 42,633,939	2030	Locally funded project to be added to constrained list

MPO ID	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Update
51-00110-00	Travis County		Travis	Thaxton Rd	McKinney Falls Pkwy	Sassman Rd		Widen 2-lane undivided to 4-lane divided with bike lanes and sidewalks	\$ 7,931,088	2030	Locally funded project to be added to constrained list
51-00111-00	Travis County		Travis	Wells Branch Pkwy	Killingsworth Ln	Cameron Rd		Construct new 4-lane divided with bike lanes and sidewalks	\$ 20,163,961	2030	Locally funded project to be added to constrained list
71-00024-00	TxDOT		Travis, Williamson	FM 973	US 79	US 290		Widen existing 2-lane roadway to a 4-lane freeway with 2-lane frontage roads	\$ 533,289,345	2033	TxDOT requests splitting into four project segments - will maintain same total cost, scope, and limits
51-00209-00	TxDOT		Travis	SH 71	Blanco County Line	Silvermine Dr		Widen from 4-lane undivided to 6-lane divided	\$ 942,530,000	2035	TxDOT requests moving project from constrained to illustrative list - project not currently under active development
41-00122-00	TxDOT		Hays, Travis	RM 1826	SH 45	RM 150		RECONSTRUCT EXISTING 2-LN ROADWAY TO A 4-LN DIVIDED	\$ 349,240,000	2045	Project to be added to constrained list from the illustrative list - removal of duplicates and transfer of 51-00209-00 to illustrative list provides additional fiscal capacity to prioritize
61-00226-00	TxDOT	Williamson County	Williamson	SH 29	Southwest Bypass	Butler Farms Blvd		Widen 5-Lane undivided to 4-Lane divided freeway with 3-Lane frontage roads each direction.	\$ 705,000,000	2040	Project to be added to constrained list from the illustrative list - removal of duplicates and transfer of 51-00209-00 to illustrative list provides additional fiscal capacity to prioritize
61-00123-00	Williamson County		Williamson	Hutto Arterial	Chandler Road	US 79		Construct new 2-lane with a continuous left turn lane	\$ 49,000,000	2034	Locally funded project to be added to constrained list
61-00189-00	Williamson County		Williamson	Hutto Arterial	Chandler Road	US 79		Widen 2-lane undivided to 6-lane divided	\$ 106,000,000	2042	Locally funded project to be added to constrained list
61-00124-00	Williamson County		Williamson	Hutto Arterial	US 79	FM 1660		Construct new 2-lane with a continuous left turn lane	\$ 83,000,000	2038	Locally funded project to be added to constrained list
61-00195-00	Williamson County		Williamson	Hutto Arterial	US 79	FM 1660		Widen 2-lane undivided to 6-lane divided	\$ 89,000,000	2046	Locally funded project to be added to constrained list

MPO ID	Project Type	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Prioritization Score (0 to 100)
52-00040-00	Active	CapMetro		Travis	Various				Bikeshare Infrastructure for Stations	\$ 10,000,000	2025	95
12-00001-00	Active	City of Bastrop		Bastrop	Old Iron Bridge Rehabilitation			Old Iron Bridge parallel to SH150 across the Colorado River	Rehabilitation of the Old Iron Bridge to provide bike/ped connectivity and a recreation location	\$ 12,350,000	2030	89
42-00007-00	Active	City of Buda		Hays	FM 1626 Shared Use Path	State Highway 45	RM 967		Install new greenway to establish 12' wide concrete trail connectivity along FM 1626 connecting the existing shared use path along SH 45 to the intersection of FM 1626 and RM 967.	\$ 4,000,000	2030	83
62-00006-00	Active	City of Cedar Park		Williamson	Red Line Trail	South city limit	North city limit		Design and construct 10-foot shared-use path within CapMetro right-of-way	\$ 25,000,000	2030	80
62-00007-00	Active	City of Georgetown		Williamson	Austin Avenue Pedestrian and Bicycle Bridges	2nd St	Morrow St		Rehabilitate / Reconstruct existing Bridges	\$ 18,000,000	2030	71
52-00041-00	Active	City of Lakeway		Travis	Lakeway Blvd Shared-Use Path	Flamingo Blvd	RM 620		Lakeway Blvd Shared-Use Path Connectivity & Upgrades	\$ 3,800,000	2031	81
72-00001-00	Active	City of Leander		Williamson, Travis	Sidewalks			1/2 mile radius from Leander public schools	Establish a Safe Routes to School Program, which should include strategic placement of crossing guards and crosswalks, community education and outreach, and infrastructure projects. Address critical gaps in sidewalks and shared-use paths on both sides of every roadway within a half-mile of a school (6' minimum for local roads and 10' minimum for arterial roads).	\$ 29,586,800	2032	78
62-00009-00	Active	City of Leander		Williamson	US 183			Metro Dr	Pedestrian bridge creating an east-west crossing over US 183 at Metro Dr that creates a grade separation between pedestrians, US 183, and railroad	\$ 4,450,000	2035	86
42-00008-00	Active	City of San Marcos		Hays	Purgatory Creek Trail	Wonder World Drive	San Marcos River (within the city of San Marcos) at Children's Park and Bicentennial Park	Purgatory Creek	The project consists of Purgatory Channel improvements including the construction of Trail, Trailheads, and Pedestrian Bridges located along Purgatory Creek from Wonder World Drive to the San Marcos River, within the City of San Marcos.	\$ 65,191,392	2030	100
42-00001-00	Active	City of San Marcos		Hays	SL 82/University Dr	CM Allen Pkwy	Guadalupe St.		Retrofit of 4-lane undivided arterial to 2-lane undivided with continuous left turn lane and off-street shared path	\$ 2,500,000	2030	74
51-00497-00	Active	Travis County		Travis	Onion Creek Greenway	McKinney Falls State Park	Colorado River Confluence	Onion Creek	Install new greenway to establish 12' wide concrete trail connectivity through Onion Creek corridor.	\$ 37,500,000	2030	85
41-00123-00	Active	TxDOT		Hays	SH 123	IH 35	De Zavalla Dr		Construct Sidewalks	\$ 1,807,694	2027	77
54-00002-00	ITS	City of Austin		Travis	City of Austin Signals/ATMS Improvements	Various	Various		This project will design and construct citywide traffic signals and Advance Traffic Management System improvements.	\$ 26,600,000	2030	100
55-00100-00	ITS	University of Texas at Austin	TxDOT	Travis	Texas SMARTTrack			UT Austin Pickle Research Campus	Closed and open course testing track for technology assessment, technology advancement, and testing	\$ 18,000,000	2030	83
11-00041-00	Roadway	Bastrop County		Bastrop	Lentz Main St, New Facility, Sand Hills Rd	FM 20	Red Rock Ranch Rd		Upgrade existing 2-lane undivided facilities to 2-lane divided facilities with continuous left turn lanes and buffered bike lanes and construct a new facility connecting Lentz Main St to Sand Hills Rd.	\$ 48,500,000	2035	56
51-00009-00	Roadway	City of Austin		Travis	BURNET RD	MOPAC SVRD	MCNEIL RD		Widen roadway to 6-lanes with a raised median and bicycle and pedestrian improvements.	\$ 75,900,000	2030	78

Note: Projects in the TIP and projects expected to be funded with 100% local funds do not receive a prioritization score for the Regional Transportation Plan.

MPO ID	Project Type	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Prioritization Score (0 to 100)
51-00016-00	Roadway	City of Austin		Travis	E MARTIN LUTHER KING JR BLVD (FM 969)	AIRPORT BLVD	US 183		Retrofit roadway to 4-lanes with a raised median and bicycle and pedestrian improvements.	\$ 27,400,000	2030	72
51-00223-00	Roadway	City of Austin		Travis	MENCHACA RD (FM 2304)	STASSNEY LN	RAVENS CROFT DR		Retrofit roadway to 4-lanes with a raised median and bicycle and pedestrian improvements.	\$ 108,100,000	2030	62
51-00236-00	Roadway	City of Austin		Travis	N LAMAR BLVD	W GUADALUPE ST	W RIVERSIDE DR		Retrofit roadway to 4-lanes with a raised median and bicycle and pedestrian improvements.	\$ 41,700,000	2030	80
51-00085-00	Roadway	City of Bee Cave		Travis	Hamilton Pool Road Connector	FM 3238 (Hamilton Pool Road) approx. 2,300 ft. S of SH 71	RM 2244	SH 71	New roadway connection between 3238 (HPR) and RM 2244	\$ 7,000,000	2030	61
61-00012-00	Roadway	City of Cedar Park		Williamson	New Hope Drive	RM1431	Lakeline Blvd		Widen from 2 to 4-lane divided	\$ 12,000,000	2030	66
61-00184-00	Roadway	City of Cedar Park	Williamson County	Williamson	RM 1431 (Whitestone Boulevard)	Bagdad Road	Williamson/Travis County line		Widen 4-lane undivided with continuous left turn lane to 6-lane divided	\$ 19,340,000	2030	60
61-00011-00	Roadway	City of Cedar Park		Williamson	Ronald Reagan Boulevard	South of RM1431	North Cedar Park City limit		Widen from 4 to 6-lane arterial roadway divided with SUP	\$ 30,000,000	2030	71
61-00035-00	Roadway	City of Georgetown		Williamson	SE Inner Loop	FM 1460	SH 29		Widen from 2-lanes to 4-lanes divided. Limited Access	\$ 65,000,000	2030	63
61-00025-00	Roadway	City of Georgetown	TxDOT	Williamson	SH 29	Haven Lane	Patriot Way		Widen from 4 undivided to 5-lanes divided arterial with pedestrian improvements, signal and intersection improvements.	\$ 45,500,000	2030	70
61-00023-00	Roadway	City of Georgetown		Williamson	Williams Drive	IH 35	Jim Hogg Drive		Widen from 4 undivided to 5-lanes divided arterial with pedestrian improvements, signal and intersection improvements and safety lighting	\$ 25,576,600	2030	75
41-00015-00	Roadway	City of Kyle		Hays	Kyle Parkway	IH 35 at FM 1626	SH 21		Construct 4 lane facility & Reconstruction and widen to 4 lane facility	\$ 102,800,000	2035	73
61-00217-00	Roadway	City of Leander		Williamson	Bagdad Road	Kettering Drive	CR 281		Section to widen existing four-lane divided with TWLTL to a six-lane divided facility with raised median and shared use paths and section to widen existing two-lane undivided facility to a six-lane divided facility with raised median and shared use paths.	\$ 134,800,000	2030	75
61-00216-00	Roadway	City of Leander		Williamson	Crystal Falls Parkway	Ronald Reagan Blvd	CR 175		New location six-lane divided facility with raised median and shared use paths. This includes approximately 1030 LF of a new bridge structure.	\$ 49,832,836	2030	64
61-00215-00	Roadway	City of Leander		Williamson	San Gabriel Parkway East	183A	Ronald Reagan Blvd		Section of new location four-lane divided facility with raised median and shared use paths and section to widen existing two-lane undivided facility to a four-lane divided facility with raised median and shared use paths.	\$ 41,790,000	2030	58
61-00222-00	Roadway	City of Leander		Williamson	US 183	183A	Osage Dr		This corridor project includes improvements at intersections, in terms of turn lane capacity, crossing improvements, and ADA updates	\$ 30,030,000	2030	62
41-00047-00	Roadway	City of San Marcos		Hays	River Ridge Pkwy	Lime Kiln Rd	I-35		Construct new 4-lane divided boulevard with pedestrian/bicycle facilities	\$ 73,700,000	2035	81
41-00022-00	Roadway	City of San Marcos		Hays	SH 123	Broadway Street	Wonder World Drive/RM 12		Reconstruct 4-lane undivided with continuous left turn lane to 4-lane divided boulevard with on-street parking and pedestrian/bicycle improvements	\$ 56,100,000	2030	88
41-00021-00	Roadway	City of San Marcos		Hays	SH 123	IH 35	Broadway Street		Reconstruct from 4-lane undivided to 4-lane boulevard with pedestrian/bicycle improvements	\$ 35,900,000	2030	89

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41-00039-00	Roadway	City of San Marcos		Hays	SH 80	Old Bastrop Highway	East of FM 110		Reconstruct 4-lane with continuous left turn lane to 4-lane divided boulevard with on-street parking and pedestrian/bicycle improvements	\$ 79,000,000	2030	64
41-00038-00	Roadway	City of San Marcos		Hays	SH 80 (Hopkins Street)	Guadalupe Street	CM Allen		Retrofit 4-lane to 4-lane with on-street parking and pedestrian/bicycle improvements	\$ 17,000,000	2030	70
41-00036-00	Roadway	City of San Marcos		Hays	SL 82 (Guadalupe Street)	University Drive	IH 35		For University to Grove Street segment, retrofit to 2-lane one-way street with on-street parking including pedestrian/bicycle improvements. For section from Grove Street to IH 35 segment, reconstruct 4-lane to 4-lane divided boulevard with on-street parking and pedestrian/bicycle improvements	\$ 11,600,000	2030	70
41-00093-00	Roadway	Hays County		Hays	FM 2001 East Interim	Graef Road	Southeast of SH 21		Construct one lane in each direction with shoulders and turn lanes on new alignment	\$ 41,671,000	2030	50
51-00155-00	Roadway	Travis County		Travis	Decker Lake Rd	FM 3177	FM 973		Widen 2-lane undivided to 4-lane divided Upgrade existing 2-lane divided and construct new to a 4-lane divided with bike and pedestrian accommodations	\$ 41,670,000	2033	77
51-00121-00	Roadway	Travis County		Travis	Dessau Rd	Wells Branch Pkwy	Howard Ln		Widen 4-lane divided to a 6-lane divided with bike and pedestrian accommodation	\$ 17,260,000	2034	79
51-00124-00	Roadway	Travis County		Travis	Harold Green Rd / Tesla Rd	Austin Colony Blvd	Burleson Manor Rd		Construct new 2-lane divided with bike lanes and sidewalks	\$ 70,560,000	2033	75
51-00159-00	Roadway	Travis County		Travis	McNeil Dr/Howard Ln	Parmer Ln (FM 734)	MoPac North		Widen 4-lane undivided to 6-lane divided with bike and pedestrian accommodations	\$ 30,290,000	2032	82
71-00023-00	Roadway	TxDOT		Bastrop, Travis	FM 1100	US 290	SH 95 North		RECONSTRUCT EXISTING 2-LN ROADWAY TO A 4-LN DIVIDED ROADWAY WITH CLTL	\$ 152,827,788	2035	74
31-02001-00	Roadway	TxDOT		Caldwell	FM 2001	SH 21	US 183		Widen from 2-lane undivided to 4-lane divided	\$ 284,218,002	2040	59
41-00147-00	Roadway	TxDOT		Hays	FM 2001	Sun Bright Blvd	SH 21		REALIGN AND WIDEN TO 4-LANE DIVIDED ROADWAY BY ADDING TWO LANES AND SHOULDERS	\$ 131,271,181	2040	70
31-00200-00	Roadway	TxDOT		Caldwell	FM 2720	Old Spanish trail	SH 142		widen from 2-lane undivided to 4-lane undivided with shoulders, add cable barrier	\$ 44,931,658	2029	66
31-00200-01	Roadway	TxDOT		Caldwell	FM 2720	SH 21	Old Spanish trail		widen from 2-lane undivided to 4-lane undivided with shoulders, add cable barrier	\$ 1,868,342	2029	54
31-02004-00	Roadway	TxDOT		Caldwell	FM 2720			SH 130	CONSTRUCT INTERCHANGE	\$ 148,985,740	2029	60
51-00178-00	Roadway	TxDOT		Travis	FM 734 (Parmer Lane)	IH 35	US 290		Widen 4-lane divided to 6-lane divided	\$ 523,066,305	2030	78
51-00179-00	Roadway	TxDOT		Bastrop	FM 812	Travis County Line	SH 21		Realign and widen 2-lane unvided to 4-lane divided	\$ 59,360,000	2031	78
51-00509-01	Roadway	TxDOT		Travis	FM 812	US 183	Bastrop County Line		Realign and widen 2-lane unvided to 4-lane divided	\$ 72,688,000	2031	78
11-00008-00	Roadway	TxDOT		Bastrop	FM 969	SH 71	FM 1209		Widen 2-lane undivided to 6-lane	\$ 211,548,087	2035	66
51-00181-00	Roadway	TxDOT		Travis	FM 973	FM 969	US 290		Realign and widen 2-lane undivided to 6-lane divided	\$ 539,480,000	2035	77
71-00024-00	Roadway	TxDOT		Williamson	FM 973	US 79	Samsung Highway		Widen existing 2-lane roadway to a 6-lane divided highway	\$ 151,964,285	2033	79
71-00024-01	Roadway	TxDOT		Williamson	FM 973	Samsung Highway	FM 1660		Widen existing 2-lane roadway to a 4-lane freeway with 2-lane frontage roads	\$ 20,000,000	2033	79
71-00024-02	Roadway	TxDOT		Williamson	FM 973	FM 1660	Williamson County Line/Travis County Line		Widen existing 2-lane roadway to a 4-lane freeway with 2-lane frontage roads	\$ 8,378,632	2033	79
71-00024-03	Roadway	TxDOT		Travis	FM 973	Williamson County Line/Travis County Line	US 290		Widen existing 2-lane roadway to a 4-lane freeway with 2-lane frontage roads	\$ 352,946,428	2033	79

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41-00120-00	Roadway	TxDOT		Hays	IH 35	N SH 123	S of Posey Rd		Operational, intersection, main lane and frontage road improvements	\$ 604,474,481	2035	86
61-00136-00	Roadway	TxDOT		Williamson	IH 35			Inner Loop	Bridge Replacement and Intersection Improvement	\$ 106,430,000	2028	69
61-00220-00	Roadway	TxDOT		Williamson	IH 35	SH 45N	RM 1431		ADD NB & SB NON-TOLLED MANAGED LANES, RECONSTRUCT RAMPS, IMPROVE FRONTAGE RD & FREIGHT MOVEMENTS, AND ADD AUX LANES	\$ 1,881,600,000	2035	87
61-00221-00	Roadway	TxDOT		Williamson	IH 35	RM 1431	SH 29		ADD NB & SB NON-TOLLED MANAGED LANES, RECONSTRUCT RAMPS, IMPROVE FRONTAGE RD & FREIGHT MOVEMENTS, AND ADD AUX LANES	\$ 1,221,920,000	2035	84
41-00051-00	Roadway	TxDOT		Hays	RM 12	Fitzhugh Rd	RM 150 W		WIDEN FROM 2-LANE DIVIDED TO 4-LANE Divided	\$ 182,705,885	2030	72
51-00193-00	Roadway	TxDOT		Travis	RM 1431	Lohman Ford Rd/Lago Vista	Trails End		Reconstruct 4-lane undivided to 4-lane divided	\$ 104,085,505	2045	68
41-00122-00	Roadway	TxDOT		Hays, Travis	RM 1826	SH 45	RM 150		RECONSTRUCT EXISTING 2-LN ROADWAY TO A 4-LN DIVIDED	\$ 349,240,000	2045	70
51-00194-00	Roadway	TxDOT		Travis	RM 1826	US 290	SH 45		RECONSTRUCT EXISTING 2-LN ROADWAY TO A 4-LN DIVIDED ROADWAY WITH BIKE AND PEDESTRIAN PATH	\$ 70,000,000	2033	73
51-00196-00	Roadway	TxDOT		Travis	RM 2244	Walsh Tarlton	Montebello		Widen 4-lane undivided to 4-lane with continuous left turn lane and shoulders	\$ 16,764,087	2040	68
51-00199-00	Roadway	TxDOT		Travis	RM 620	SH 71	Aria Dr/Cavalier Dr		Widen from 4 to 6-lane divided	\$ 73,024,000	2029	73
51-00200-00	Roadway	TxDOT		Travis	RM 620	Aria Dr/Cavalier Dr	Hudson Bend Rd		Widen from 4 to 6-lane divided	\$ 126,560,000	2029	70
51-00204-00	Roadway	TxDOT		Travis	RM 620	RM 2222	Hudson Bend Rd		Widen 4-lane undivided to 6-lane divided	\$ 204,093,322	2035	72
51-00530-00	Roadway	TxDOT		Travis	RM 620	N of Foundation Rd	N of Hatch Rd		Reconstruct intersection to add overpass at Anderson Mill Road	\$ 87,360,000	2029	66
51-00205-00	Roadway	TxDOT		Travis	SH 130	SH 71	SH 45 SE		Widen from 4 to 6-lanes (3 lanes in each direction)	\$ 252,533,767	2030	76
51-00205-01	Roadway	TxDOT		Travis	SH 130	Gattis School Rd	RM 685		Widen from 4 to 6 lanes (3 lanes in each direction)	\$ 48,076,923	2026	83
61-00086-01	Roadway	TxDOT		Williamson	SH 130	IH 35	Gattis School Rd		Widen from 4 to 6 lanes (3 lanes in each direction)	\$ 231,481,481	2026	83
61-00224-00	Roadway	TxDOT		Williamson	SH 130			CR 138/GATTIS SCHOOL RD	INTERSECTION IMPROVEMENTS	\$ 49,661,913	2028	70
21-00012-00	Roadway	TxDOT		Burnet	SH 29	Summit Ridge Rd	CR 252		Widen from 4-lane undivided to 4-lane with continuous left turn lane	\$ 163,348,024	2030	75
61-00226-00	Roadway	TxDOT	Williamson County	Williamson	SH 29	Southwest Bypass	Butler Farms Blvd		Widen 5-Lane undivided to 4-Lane divided freeway with 3-Lane frontage roads each direction.	\$ 705,000,000	2040	77
11-00011-00	Roadway	TxDOT		Bastrop	SH 71	CR 206 (Colorado Circle)	SH 21		Construct 4-lane overpass and add 2-lane eastbound and westbound frontage roads	\$ 69,965,910	2030	72
51-00006-00	Roadway	TxDOT		Travis	SH 71	SH 130	Ross Rd		Complete Frontage Rds, Bridges over Onion Creek	\$ 54,374,312	2035	79
51-00211-00	Roadway	TxDOT		Travis	SH 71	Patton Ave	Spirit of Texas Dr.		Construct westbound frontage road	\$ 125,127,337	2035	79
71-00012-00	Roadway	TxDOT		Burnet	SH 71	FM 2147	US 281		Widen 2-lane undivided to 4-lane with continuous left turn lane	\$ 283,498,999	2030	65
51-00540-00	Roadway	TxDOT		Travis	SL 1	Williamson Creek	Davis Rd		EXTEND SB AUX LANE	\$ 9,183,046	2030	73
51-00213-00	Roadway	TxDOT		Travis	SL 360			Spicewood Springs Road	Grade separate intersection	\$ 69,440,000	2029	74
51-00216-00	Roadway	TxDOT		Travis	SL 360	RM 2244	MoPac Expressway		Add continuous frontage roads and grade separations	\$ 311,611,230	2035	73

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51-00217-00	Roadway	TxDOT		Travis	SL 360			Lakewood Drive	Grade Separate Intersection	\$ 67,872,000	2029	74
51-00192-00	Roadway	TxDOT		Travis	US 183	0.46 Miles South of Thompson Ln		0.07 Miles SW of Airport Commerce Dr	Construct 1-Lane southbound frontage road along US 183 that merges with US 183S-71W Direct Connector	\$ 15,592,657	2033	71
51-00220-00	Roadway	TxDOT		Travis	US 183	SH 71		SH 130	Reconstruct existing 4-lane roadway to a 6-lane divided roadway with 3-lane urban frontage roads	\$ 171,000,000	2031	87
71-00028-00	Roadway	TxDOT		Burnet, Williamson	US 183	Lampasas County Line		SH 29	Reconstruct existing 4-lane to 4-lane divided-rural depressed median	\$ 654,397,860	2035	78
21-00014-00	Roadway	TxDOT		Burnet	US 281	1.5 MI N of SH 71		2.00 MI S of SH 71	Reconstruct interchange, Modified Cloverleaf w/DC	\$ 226,240,000	2030	54
21-00016-00	Roadway	TxDOT		Burnet	US 281	Park Rd 4		RM 1855	Widen 4-lane undivided to 4-lane with continuous left turn lane	\$ 31,398,825	2034	68
71-00015-00	Roadway	TxDOT		Hays, Travis	US 290	RM 1826		RM 12	Widen from 4-lane to 6-lane divided, add frontage road 4 to 6	\$ 600,000,000	2040	74
61-00092-00	Roadway	TxDOT		Williamson	US 79	IH 35		East of FM 1460	ADD ONE LANE IN EACH DIRECTION	\$ 61,308,799	2030	79
61-00248-00	Roadway	Williamson County		Williamson	Connector between SH 45 and Merriltown Drive	SH 45		WILLIAMSON COUNTY LINE	CONSTRUCT A NEW 4-LANE DIVIDED WITH PEDESTRIAN/BICYCLE AND TRANSIT IMPROVEMENTS	\$ 30,029,563	2030	71
61-00154-00	Roadway	Williamson County		Williamson	RONALD REAGAN BOULEVARD	SUN CITY BLVD.		IH 35	WIDEN 2-LANE UNDIVIDED TO 4-LANE DIVIDED	\$ 89,000,000	2030	64
61-00175-00	Roadway	Williamson County		Williamson	SH 130	US 79		LIMMER LOOP	CONSTRUCT NEW 2-LANE FRONTAGE ROAD IN EACH DIRECTION	\$ 22,700,000	2030	74
55-00001-00	TDM	City of Austin		Travis	TDM Climate Pollution Reduction Grant	Various		Various	The TDM program will implement solutions that move trips to off-peak hours or shift drive-alone trips to other forms such as public transit, walking, biking, teleworking, carpooling, and vanpooling.	\$ 47,850,000	2030	100
53-00040-00	Transit	Austin Transit Partnership		Travis	Austin Light Rail Phase I (Guadalupe / 3rd St. / Trinity / S. Congress / Riverside Dr.)	Guadalupe @ 38th St.		Riverside Dr. @ Yellow Jacket and S. Congress @ Oltorf	9.8 mile Light Rail system with 15 stations	\$ 7,100,000,000	2027	100
53-00024-00	Transit	CapMetro		Travis	Additional Park & Ride facilities				Additional Park & Ride facilities to either expand existing facilities or new facilities to serve new routes or new areas that do not currently have a Park & Ride	\$ 45,000,000	2025	79
53-00035-00	Transit	CapMetro		Travis, Bastrop	Capital Metro Track	Colony Park		Manor	Extension of new commuter rail line (Green Line) from Colony Park to Manor. Approximately 5 miles of existing freight track would be upgraded to passenger service with 2-3 additional stations (total of 8-10 including existing Downtown, Plaza Saltillo and initial Colony Park segment). There is potential for park & rides along the line. 2 new vehicles are purchased for service.	\$ 330,000,000	2034	75
53-00011-00	Transit	CapMetro		Travis	Capital Metro Track	Downtown Station		Leander Station	The first phase of Red Line improvements provides additional track to help improve operational flexibility. Includes 1 additional station added along the line.	\$ 61,000,000	2025	82

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53-00013-00	Transit	CapMetro		Travis	Capital Metro Track	Downtown Station	Leander Station		The second phase of the Red Line improvements adds double-tracking as necessary to support expanded operations and increased frequency. Station platforms are extended to increase passenger carrying capacity. 4 new trains are added to the fleet and a maintenance facility.	\$ 369,000,000	2031	92
53-00034-00	Transit	CapMetro		Travis	Capital Metro Track	Downtown Station	Colony Park		New commuter rail line (Green Line) from Downtown Austin to Colony Park. Approximately 8 miles of existing freight track would be upgraded to passenger service with 4-5 additional stations (total of 6-7 including existing Downtown and Plaza Saltillo). There is potential for park & rides along the line. 5 new vehicles are purchased for service and a facility to support rail operations.	\$ 555,000,000	2034	80
53-00033-00	Transit	CapMetro		Travis	Capital Metro Track			Airport Blvd/S Lamar Blvd	Airport Blvd. and North Lamar Blvd. Red Line/Freight Rail Grade Separation. Project includes double-tracking between Guadalupe Street and Morrow Street, station platforms under North Lamar Blvd. and utility improvements.	\$ 300,000,000	2030	85
73-00005-00	Transit	CapMetro		Travis	Exposition center bus rapid Transit	Republic Square	Expo Center		Capital support for Express route from Lockhart and Easton Park to downtown Austin	\$ 1,000,000	2045	79
53-00025-00	Transit	CapMetro		Travis	Fare Collection Upgrades				Upgrades and installation of improved fare collection infrastructure and database to manage fare collection for Capital Metro services.	\$ 30,000,000	2030	60
73-00006-00	Transit	CapMetro		Travis, Hays	IH 35	San Marcos CARTS facility	Downtown Austin		Capital for Express route from San Marcos and Buda to Southpark Meadows and downtown Austin	\$ 1,000,000	2035	77
73-00001-00	Transit	CapMetro		Travis, Williamson	IH 35, SH 45, MoPac	CARTS Georgetown	Downtown Austin		Capital for Express route from Georgetown and Round Rock to Howard Station and downtown Austin	\$ 1,000,000	2038	87
53-00007-00	Transit	CapMetro		Travis	Menchaca Rd, Ben White Blvd, S Lamar Blvd, 5th/6th St	Slaughter Ln	Guadalupe St		Manchaca BRT Light (Rapid) line from south Austin to Republic Square. This line would mainly follow Manchaca Road and S. Lamar Blvd and have 11 stops along the line including the activity centers of Westgate, S Lamar, Seaholm, & Downtown Austin. There would be 2 park & rides along the line at Slaughter and Westgate Transit Center.	\$ 15,400,000	2030	82
53-00014-00	Transit	CapMetro		Travis	MoPac	Circle C	Downtown Austin		Capital support for Express route from South Mopac to downtown Austin	\$ 1,000,000	2040	76
53-00023-00	Transit	CapMetro		Travis	Neighborhood Circulators				A fleet of neighborhood circulators to expand access to Capital Metro services in order enhance the coverage of our system into areas that are more difficult to reach with existing fleet.	\$ 2,300,000	2025	88
53-00019-00	Transit	CapMetro		Travis	New Bus Yard				New bus yard for storage and maintenance of fleet to handle expanded fleet and provide additional electrification opportunities.	\$ 230,000,000	2030	63
53-00030-00	Transit	CapMetro		Travis	North Base Demand Response			10805 Cameron Road, Austin, TX 78754	North Base Demand Response: Development of 25 acres for new Demand Reponse operations and maintenance facility; includes administration, storage and maintenance for ~220 transit vehicles, service island, and a new central parts warehouse for the agency. Project includes a community room for public use.	\$ 120,000,000	2025	50
53-00016-00	Transit	CapMetro		Travis	RM 2222	RM 620	Downtown Austin		Capital support for Express route from Four Points and downtown Austin	\$ 1,000,000	2045	65

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73-00002-00	Transit	CapMetro		Travis, Williamson	SH 130, SH 45, MoPac	Hutto	Downtown Austin		Capital support for Express route from Hutto and Pflugerville to downtown Austin	\$ 1,000,000	2040	76
73-00004-00	Transit	CapMetro		Travis, Bastrop	SH 71	Bastrop	Downtown Austin		Capital support for Express route from Bastrop and Del Valle to Downtown Austin	\$ 1,000,000	2045	79
53-00031-00	Transit	CapMetro		Travis	South Base Demand Response			5315 Ben White Blvd., Austin, TX 78741	South Base Demand Response: Redevelopment of ~11.5 acres for new Demand Reponse operations and maintenance facility; includes administration, storage and maintenance for ~165 transit vehicles, and service island. May also include facilities for CapMetro's expanding MetroBike transit service.	\$ 111,000,000	2027	50
53-00022-00	Transit	CapMetro		Travis	Upgrade of Stations and bus Stops				Upgrade of stations and bus stops into mobility hubs with improved amenities such as (but not limited to): bike share program, ADA improvements, real time display, etc.	\$ 35,000,000	2025	90
53-00008-00	Transit	CapMetro		Travis	US 290 Service Rd, S Lamar Blvd, 5th/6th St	Convict Hill Rd	Guadalupe St		Oak Hill BRT Light (Rapid) line from Oak Hill to Republic Square. This line would mainly follow US 290 service road and S. Lamar Blvd and have 12 stops along the line including the activity centers of Oak Hill, Sunset Valley, S Lamar, Seaholm & Downtown Austin. There would be 1 park & ride on the line at Oak Hill (shared with Oak Hill Express route).	\$ 12,100,000	2030	82
73-00003-00	Transit	CapMetro		Travis, Bastrop	US 290, IH 35	Elgin	Downtown Austin		Capital support for Express route from Elgin and Manor to downtown	\$ 1,000,000	2040	87
53-00015-00	Transit	CapMetro		Travis	US 290, MoPac	Oak Hill	Downtown Austin		Capital support for Express route from Oak Hill to downtown Austin	\$ 1,000,000	2040	77
53-00036-00	Transit	CapMetro		Travis	Various				Equitable Transit Oriented Development at CapMetro owned properties to include transit facilities as well as mixed-use development.	\$ 30,000,000	2030	65
53-00032-00	Transit	CapMetro		Travis	Various				Upgrades and rehabilitation to existing maintenance facilities to provide for Zero and Low emissions infrastructure, such as microgrid, meters and other power infrastructure.	\$ 50,000,000	2035	55
43-00009-00	Transit	CARTS		Hays	Belterra Microtransit Service			Belterra	Belterra Microtransit Service	\$ 250,000	2030	75
53-00027-00	Transit	CARTS		Travis	Briarcliff/Spicewo od Microtransit Service			Briarcliff/Spicew ood	Briarcliff/Spicewood Microtransit Service	\$ 250,000	2030	69
33-00005-00	Transit	CARTS		Caldwell, Hays	Burnet-Marble Falls-Scott & White Hospital Connector Service	City of Burnet	Baylor Scott & White Hospital		Burnet-Marble Falls-Scott & White Hospital Connector Service	\$ 250,000	2030	80
13-00005-00	Transit	CARTS		Bastrop	CARTS Bastrop Transit Station Relocation			City of Bastrop	Construction of new Bastrop Intermodal Facility with park-and-ride facility	\$ 3,000,000	2040	71
23-00005-00	Transit	CARTS		Burnet	CARTS Burnet Intermodal Station			City of Burnet	Construction of new Burnet Intermodal Station with park-and-ride facility	\$ 3,000,000	2030	74
43-00005-00	Transit	CARTS		Hays	CARTS Dripping Springs Intermodal Station			City of Dripping Springs	Construction of new Dripping Springs Intermodal Station with park-and-ride facility	\$ 3,000,000	2035	73

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63-00002-00	Transit	CARTS		Williamson	CARTS Jarrell Intermodal Station			City of Jarrell	Construction of new Jarrell Intermodal Station with park-and-ride facility	\$ 3,000,000	2040	77
33-00003-00	Transit	CARTS		Caldwell	CARTS Lockhart Intermodal Station			City of Lockhart	Construction of new Lockhart Intermodal Station with park-and-ride facility	\$ 3,000,000	2030	79
33-00004-00	Transit	CARTS		Caldwell	CARTS Luling Intermodal Station			City of Luling	Construction of new Luling Intermodal Station with park-and-ride facility	\$ 3,000,000	2035	77
23-00004-00	Transit	CARTS		Burnet	CARTS Marble Falls Transit Station Relocation			City of Marble Falls	Construction of new Marble Falls Intermodal Facility with park-and-ride facility	\$ 3,000,000	2035	69
43-00010-00	Transit	CARTS		Hays	CARTS San Marcos Station Rehabilitation			City of San Marcos	CARTS San Marcos Station Rehabilitation	\$ 2,000,000	2030	73
73-00017-00	Transit	CARTS		Williamson, Hays, Bastrop	CARTS System	Various	Various	Various	Increased Interurban Coach service	\$ 1,500,000	2025	70
73-00021-00	Transit	CARTS		Bastrop, Burnet, Caldwell, Hays, Travis, Williamson	CARTS System	Various	Various	Various	Rural Vanpool Program	\$ 500,000	2025	65
73-00020-00	Transit	CARTS		Bastrop, Burnet, Caldwell, Hays, Travis, Williamson	CARTS System	Various	Various	Various	Electric Vehicles for Rural Fleet	\$ 5,000,000	2030	45
74-00001-00	Transit	CARTS		Bastrop, Burnet, Caldwell, Hays, Travis, Williamson	CARTS System	Various	Various	Various	Upgrade digital network for data and voice system-wide and Smart Bus Transit Technology	\$ 2,000,000	2030	40
63-00003-00	Transit	CARTS		Williamson	CARTS Taylor Transit Station			City of Taylor	CARTS Taylor Transit Station improvements. Construction of new Amtrak rail platform.	\$ 500,000	2030	73
43-00006-00	Transit	CARTS		Hays	CARTS Wimberley/Woodcreek Intermodal Station			Woodcreek / Wimberley	Construction of new Wimberley Intermodal Station with park-and-ride facility	\$ 3,000,000	2035	74
13-00002-00	Transit	CARTS		Bastrop	City of Bastrop Microtransit Service			City of Bastrop	City of Bastrop Microtransit Service (Expanded)	\$ 500,000	2025	71
23-00001-00	Transit	CARTS		Burnet	City of Burnet Microtransit Service			City of Burnet	City of Burnet Microtransit Service	\$ 250,000	2030	74
43-00003-00	Transit	CARTS		Hays	City of Dripping Springs Microtransit Service			City of Dripping Springs	City of Dripping Springs Microtransit Service	\$ 250,000	2030	73

Note: Projects in the TIP and projects expected to be funded with 100% local funds do not receive a prioritization score for the Regional Transportation Plan.

MPO ID	Project Type	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Prioritization Score (0 to 100)
73-00015-00	Transit	CARTS		Bastrop, Travis	City of Elgin Microtransit Service			City of Elgin	City of Elgin Microtransit Service	\$ 500,000	2025	72
33-00001-00	Transit	CARTS		Caldwell	City of Lockhart Microtransit Service			City of Lockhart	City of Lockhart Microtransit Service (Expanded)	\$ 500,000	2025	69
33-00002-00	Transit	CARTS		Caldwell	City of Luling Microtransit Service			City of Luling	City of Luling Microtransit Service	\$ 250,000	2030	77
23-00003-00	Transit	CARTS		Burnet	City of Marble Falls Microtransit Service			City of Marble Falls	City of Marble Falls Microtransit Service	\$ 500,000	2025	70
23-00014-00	Transit	CARTS		Burnet	City of Marble Falls/Cottonwood Shores Expanded Microtransit Service			City of Marble Falls/Cottonwoo d Shores	City of Marble Falls/Cottonwood Shores Expanded Microtransit Service	\$ 125,000	2030	70
23-00013-00	Transit	CARTS		Burnet	City of Marble Falls/Granite Shoals Expanded Microtransit Service			City of Marble Falls/Granite Shoals	City of Marble Falls/Granite Shoals Expanded Microtransit Service	\$ 125,000	2030	70
13-00003-00	Transit	CARTS		Bastrop	City of Smithville Microtransit Service			City of Smithville	City of Smithville Microtransit Service	\$ 250,000	2030	77
63-00001-00	Transit	CARTS		Williamson	City of Taylor Microtransit Service			City of Taylor	City of Taylor Microtransit Service (Expanded to Samsung)	\$ 500,000	2025	68
53-00039-00	Transit	CARTS		Travis	Del Valle Microtransit Service			Del Valle	Del Valle Microtransit Service	\$ 250,000	2030	74
73-00019-00	Transit	CARTS		Hays, Travis	Dripping Springs- Belterra-Austin Connector Service	Dripping Springs	Austin		Dripping Springs-Belterra-Austin Connector Service	\$ 250,000	2030	85
43-00008-00	Transit	CARTS		Hays	Drippings Springs- Driftwood Connector Service	Dripping Springs	Driftwood		Drippings Springs-Driftwood Connector Service	\$ 125,000	2030	73
13-00011-00	Transit	CARTS		Bastrop	Elgin-Bastrop Connector Bus Service	Elgin	Bastrop		Elgin-Bastrop Connector Bus Service	\$ 100,000	2030	76
63-00006-00	Transit	CARTS		Williamson	Florence-Jarrell Connector Service	Florence	Jarrell		Florence-Jarrell Connector Service	\$ 125,000	2030	68
53-00038-00	Transit	CARTS		Travis	Hornsby Bend Microtransit Service			Hornsby Bend	Hornsby Bend Microtransit Service	\$ 250,000	2030	71

Note: Projects in the TIP and projects expected to be funded with 100% local funds do not receive a prioritization score for the Regional Transportation Plan.

MPO ID	Project Type	Sponsor	Co Sponsor	County	Roadway/ Facility	Limits From	Limits To	Limits At	Description	Total Cost	Let Year	Prioritization Score (0 to 100)
63-00007-00	Transit	CARTS		Williamson	Jarrell-Georgetown Connector Service	Jarrell	Georgetown		Jarrell-Georgetown Connector Service	\$ 125,000	2030	73
73-00014-00	Transit	CARTS		Williamson, Travis	Jarrell-Tech Ridge Express Bus Service	Downtown Jarrell	Capital Metro Tech Ridge Transit Center		Jarrell-Tech Ridge Express Bus Service	\$ 1,400,000	2025	80
33-00006-00	Transit	CARTS		Caldwell	Lockhart-Luling Connector Service	Lockhart	Luling		Lockhart-Luling Connector Service	\$ 125,000	2030	74
23-00012-00	Transit	CARTS		Burnet	North Bastrop Microtransit Service			North Bastrop County	North Bastrop Microtransit Service	\$ 250,000	2025	76
73-00016-00	Transit	CARTS		Williamson, Travis, Hays, Comal,Guada lupe, Bexar	Super Regional Intercity Bus Service	Jarrell	San Antonio		Super Regional Intercity Bus Service	\$ 5,000,000	2025	80
73-00013-00	Transit	CARTS		Williamson, Travis	Taylor-Hutto- Round Rock-Tech Ridge Express Bus Service	CARTS Taylor Transit Center	Capital Metro Tech Ridge Transit Center		Taylor-Hutto-Round Rock-Tech Ridge Express Bus Service	\$ 1,400,000	2025	79
13-00004-00	Transit	CARTS		Bastrop	Tucker Hill Lane Park-and-Ride expansion		Tucker Hill Lane Park-and-Ride facility		Expansion of existing park-and-ride facility	\$ 1,500,000	2030	73
43-00004-00	Transit	CARTS		Hays	Woodcreek/Wimb erley Microtransit Service		Woodcreek / Wimberley		Woodcreek/Wimberley Microtransit Service	\$ 250,000	2025	74

Note: Projects in the TIP and projects expected to be funded with 100% local funds do not receive a prioritization score for the Regional Transportation Plan.



Date: April 28, 2025
Continued From: January 27, 2025
Action Requested: Recommendation

To: Technical Advisory Committee
From: Mr. Ryan Collins, Short-Range Planning Manager
Agenda Item: 4
Subject: Discussion and Recommendation on Federal Transit Administration (FTA) Section 5310 Project Call

RECOMMENDATION

Staff requests the Technical Advisory Committee make a recommendation to the Transportation Policy Board regarding the Federal Transit Administration (FTA) Section 5310 Project Call evaluation process and resulting recommendation.

PURPOSE AND EXECUTIVE SUMMARY

The Capital Area Metropolitan Planning Organization (CAMPO) manages the competitive project selection process for awarding federal funding through the Section 5310 Program for the Austin Urbanized Area. CAMPO received nine applications for the 2026-2027 Project Call. Staff, in coordination with Capital Metro program administrators, reviewed the sponsor and activity eligibility, readiness, and budget submissions. Upon completion of the review, it was determined that all submissions met the program criteria therefore staff moved forward with the scoring and ranking process to ensure that all projects meet the goals and objectives of the 5310 program, Regionally Coordinated Transportation Plan, and ultimately enhance the mobility of seniors and persons with disabilities. Results of the scoring process are included in the draft recommendation for TAC discussion.

FINANCIAL IMPACT

This project call will potentially allocate up to \$6,025,115 funding to eligible projects with no less than \$3,508,096 (55% minimum program requirement) to be allocated to traditional capital projects and no more than \$2,517,019 (45% maximum program requirement) to be allocated for other eligible projects and operating expenses.

BACKGROUND AND DISCUSSION

The FTA Enhanced Mobility of Seniors and Individuals with Disabilities Section 5310 program is intended to enhance mobility for seniors and person with disabilities by providing funds for programs to serve the needs of transit-dependent populations beyond traditional public transportation services and ADA complementary paratransit services.

SUPPORTING DOCUMENTS

Attachment A – *FTA 5310 Project Call Information Packet*

Attachment B – *Project Funding Recommendation*

Federal Transit Administration (FTA)

Enhanced Mobility of Seniors and Individuals with Disabilities Section 5310 Program

Project Call Information

January 10, 2025



Overview

The Federal Transit Administration (FTA) Enhanced Mobility of Seniors and Individuals with Disabilities Section 5310 program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services.

The Capital Metropolitan Transportation Authority (CapMetro) serves as the designated recipient of FTA Section 5310 Funds in the Austin Urbanized Area and serves as the program administrator. Recipients of the grant funding are selected by the Capital Area Metropolitan Planning Organization (CAMPO) through a competitive process. Selected applicants enter into a grant agreement with CapMetro and become subrecipients for these funds. These grant agreements outline federal, state, and local requirements related to project administration and reporting and vary depending on the type of funding, project proposed, agency, and other factors.

The Section 5310 program is a reimbursable grant program that requires a local match, where the selected subrecipients incur expenses up front on eligible activities and submit invoices for reimbursement. Expenses are reimbursed at 80% for traditional capital expenses or 50% for operational expenses until the federal award is exhausted. Because of this, subrecipients must have sufficient funds available to incur program expenses and provide the locally required match.

Schedule

The Capital Area Metropolitan Planning Organization (CAMPO) is soliciting project proposals from eligible entities for the FTA 5310 program through a competitive selection process adherent to the schedule below.

Date	Milestone
1/10/2025	Call Announcement/Application Available
2/3/2025	Informational Webinar
3/14/2025	Applications Due - 5:00 P.M. Central
March	Technical Review and Scoring of Applications
4/14/2025	Transportation Policy Board
4/28/2025	Technical Advisory Committee
5/12/2025	Transportation Policy Board
Summer	Subrecipient Grant Execution with CapMetro

General Information

Project Call Guidance

This document is the primary resource for project call information and includes important information on the 5310 program and CAMPO selection process. This guide also includes links to resources including the FTA 5310 Circular which provides complete program information for applicants.

Funding Availability

This project call will potentially allocate up to \$6,025,115 in funding to eligible projects with no less than \$3,508,096 to be allocated to traditional capital projects and no more than \$2,517,019 to be allocated for other eligible projects and operating expenses that serve the Austin urbanized area.

Webinar

A Webinar will be held during the project call process. The webinar is open to everyone but will require registration to attend the event. Please ensure to register prior to the start of each webinar session. The presentation will be made available and posted online.

Webpage

The [Funding Opportunities](#) webpage on the CAMPO website will host all information and resources needed for sponsors to apply for the project call including all referenced materials, budget template, FTA resources, and scheduled webinar registration. Please bookmark this page and return periodically to ensure you have the most current information.

Contact Information

All questions, comments, or concerns regarding this process must be submitted in writing through the official project call email at funding@campotexas.org

Application

The project call application is available on the [Funding Opportunities](#) webpage. Please refer to the application presentation for application instructions and general information.

Submission

All applications must be submitted no later than 5:00 P.M. (Central) on March 14, 2025.

Evaluation Process

The approved evaluation process for FTA Section 5310 program represents a balanced quantitative and qualitative approach to project evaluation. Projects and sponsors will first be evaluated to determine eligibility including a review of the project location, sponsor, and project activities. This review will also include a readiness evaluation to ensure sponsors and their program or services are adequately prepared to receive federal funding. Projects that are determined to be eligible and ready will then be evaluated using the scoring criteria and the information provided in the application and supporting documentation. Final evaluations, scores, and recommendations will be provided to the Transportation Policy Board for approval at their discretion.

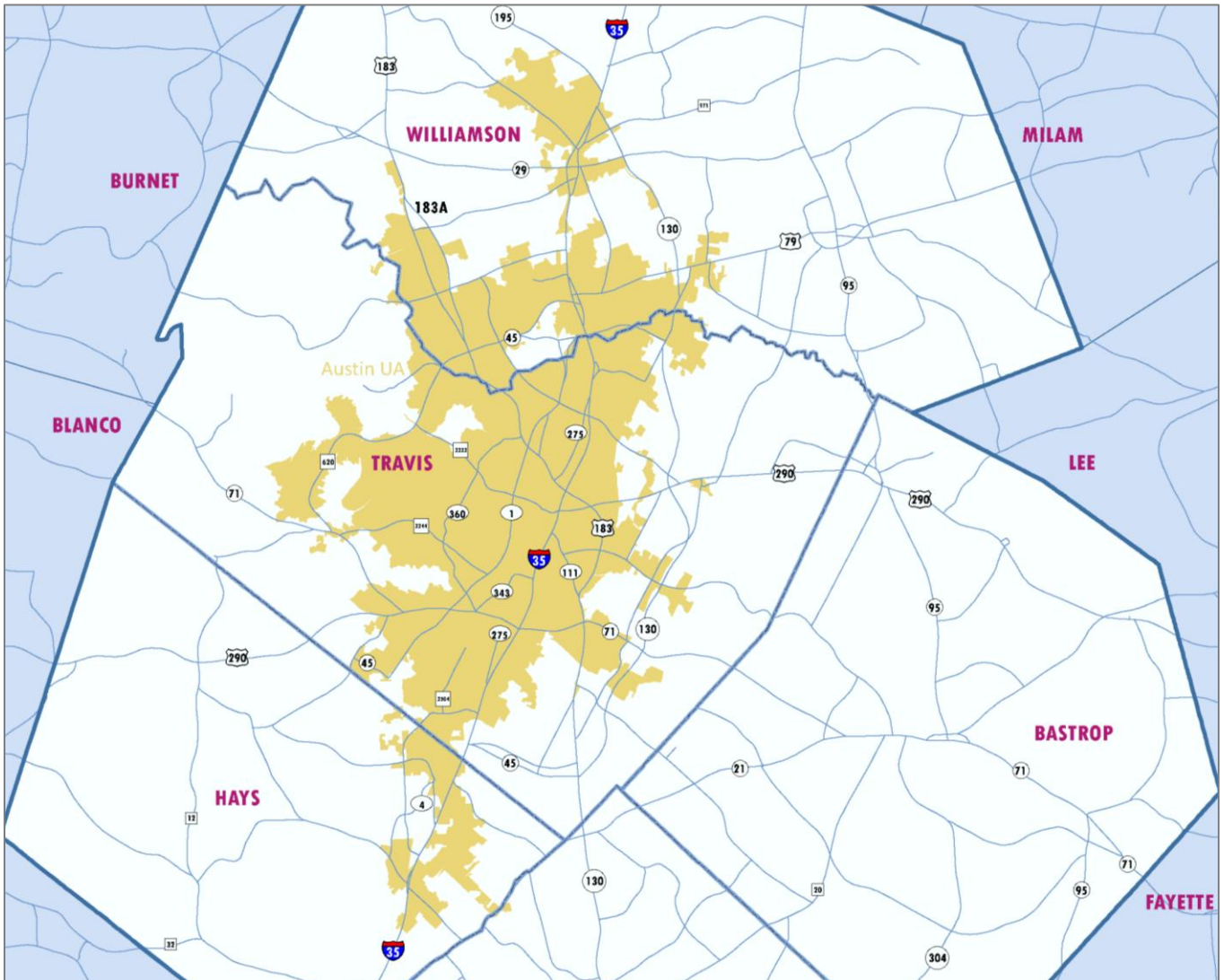
Application Process

Sponsors may apply by submitting an online application with all required supporting materials. Information provided in the application must be supported with attached documentation as noted in the criteria and application instructions. Sponsors must submit all applications and supporting materials no later than 5:00 P.M. Central by March 14, 2025. Please note the following information regarding the application process:

- Any applications or materials submitted after the due date and time will not be accepted.
- Online applications can be saved and resumed at any time however applications that have been inactive for longer than 30 days are automatically deleted.
- Attachments are not saved through the save and resume function (only form information), so please reserve attachments for the session you intend on submitting.
- Sponsors are responsible for any end-user technical issues, however CAMPO will provide assistance with any form service questions or concerns.
- Supporting material attachments will be required to verify information provided in the application. Please be sure to attach source materials and additional information as indicated in the application instructions.
- Attachments in the application are not always a required field to submit so that sponsors are not forced to attach something when it is not appropriate or needed. Whether supporting material attachments are warranted is subjective to the sponsor applicant, project, and response to the criteria. Sponsors are encouraged to use their best judgment, supporting materials bolster the authenticity of the criteria response, which can directly impact application scores.

Eligible Locations

Projects and activities must serve the Austin Urbanized Area identified in yellow below:



Eligible Applicants

Only certain organizations are eligible for FTA Section 5310 funding which is dependent on the type of project being submitted for potential funding. Below are the eligible entities as specified by the project type and activities.

Traditional Capital Projects

- A private non-profit organization
- A state or local governmental authority that is approved by the state to coordinate services for seniors and individuals with disabilities
- A state or local governmental authority that certifies that there are no non-profit organizations readily available in the area to provide the service

Other Capital and Operating Projects

- A state or local government authority
- A private non-profit organization
- An operator of public transportation that receives a FTA Section 5310 grant indirectly through a recipient

Eligible Activities

The FTA Section 5310 program provides federal funding for both capital and operating expenses to support the provision of transportation services to meet the specific needs of seniors and individuals with disabilities. Below are the general eligible activities for both traditional capital and other project types.

Traditional Capital Projects (Cost Share: 80% Federal / 20% Local)

1. Rolling stock and related activities for FTA Section 5310-funded vehicles.
2. Passenger facilities related to FTA Section 5310-funded vehicles.
3. Support facilities and equipment for FTA Section 5310-funded vehicles.
4. Lease of equipment when lease is more cost effective than purchase.
5. Acquisition of transportation services under a contract, lease, or other arrangement.
6. Support for mobility management and coordination programs among public transportation providers and other human service agencies providing transportation.
7. Capital activities to support ADA-complementary paratransit service.

Other Eligible Capital and Operating Expenses (Cost Share: 50% Federal / 50% Local)

1. Public transportation projects that exceed the requirements of the ADA.
2. Public transportation projects that improve accessibility.
3. Alternatives to public transportation that assist seniors and individuals with disabilities with transportation.
4. Operating assistance.

This is a summary of eligible activities and does not include the list of specific sub-categories, applicants must review Chapter 4 in the [FTA 5310 Circular Guidance](#) for the complete list of eligible activities and sub-categories of activities.

Readiness Evaluation

Sponsors and projects will be evaluated for readiness including a review of the budget, timeline, and ability of the sponsor to execute projects in a timely manner. Sponsors must provide the materials below with sufficient detail to accurately describe the project, expenditures, and timeline in order to move forward in the evaluation process.

Budget

Sponsors must submit a completed budget template for the funding request. At a minimum for each line item in the budget, sponsors must select the eligible activity category and provide an item description, quantity, unit cost, and total cost. Additional documentation must be provided to support and expand on the items in the budget and funding request for verification including, but not limited to, operation cost information, engineering estimates for capital projects, and vendor estimates for vehicle purchase orders.

Timeline

Sponsors must provide a detailed timeline of the program or services to be provided through the funding program with a schedule of activities and anticipated expenditures.

Good-Standing

Sponsors must be in good standing with the Federal Transit Administration, the designated recipient CapMetro, and the Capital Area Metropolitan Planning Organization. Sponsor's program history will be evaluated including a review for any significant unexpended out-standing balances on previous funding awards. Sponsors that have never received 5310 funding will be evaluated based on demonstrated success with similar funding programs.

Scoring Criteria

Sponsors and projects that have demonstrated readiness will be evaluated by the scoring criteria below. The points will be awarded based on the information provided in the applications and the supporting materials used to verify the responses. Indicated points are the maximum available per criterion.

Benefit (20 Points)

Sponsors must demonstrate how their project or program improve mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding the transportation mobility options available.

Program Sustainability (5 Points)

Sponsors must demonstrate the overall stability of the transportation program or service by providing evidence of long-term sustainability and support including any additional funding outside of the 5310 program, age of the program or service, and a demonstrated record of continual operations.

Program Experience (5 Points)

Sponsors must demonstrate experience with federal funding grant programs including but not limited to experience with the 5310 program and federal transportation reimbursement grants. Other funding and grants management experience will be considered as appropriate.

Coordination and Partnerships (5 Points)

Sponsors must demonstrate regional coordination efforts and official partnerships that enhance the transportation system in the region by providing information on coordination efforts, official agreements with partner agencies and details of activities.

Interconnectivity (5 Points)

Sponsors must demonstrate how the program or services connect with the existing system of public transportation, non-profit providers, medical transportation services, and special transit services in the region.

RTCC Plan Goals and Objectives (20 Points)

Sponsors must demonstrate that the program or services directly support the goals, sub-goals and transportation strategies listed in the current Regionally Coordinated Transportation Plan which is linked in the Resources section of this document.

Performance Measures and Monitoring (20 Points)

Sponsors must demonstrate that they have a formal system in place for measuring and monitoring the success of the program or services provided. This system must provide for the routine and continual gathering and disseminating of critical program performance data including ridership and trip information.

Cost-Benefit Analysis (20 Points)

Programs and services will be evaluated through a cost-benefit analysis that measures the comparative value of the program or services relative to the funding amount requested. For the Cost-Benefit Analysis, sponsors must provide the following information:

- Service area in square miles or total route lengths in miles.
- Most recent annual number of riders or users provided service for existing programs.
- Anticipated annual number of riders or users to be provided service through the program (estimation methodology must be provided).

Resources

[Enhanced Mobility of Seniors and Individuals with Disabilities Program Guidance](#)

The Federal Transit Administration (FTA) 5310 program guide contains detailed information on the program including additional information on sponsor and project eligibility.

[Enhanced Mobility of Seniors and Individuals with Disabilities Program Website](#)

The Federal Transit Administration (FTA) 5310 program website contains detailed information on the program including the guide linked above and frequently asked questions.

[Capital Area RTCC - Regionally Coordinated Transportation Plan](#)

The regionally coordinated transportation plan provides an assessment of available services, transportation needs, and provides the strategies, activities and projects that address the identified gaps and enhance the regional transportation system.

[A Guidebook for Developing a Transit Performance-Measurement System](#)

The guidebook provides a step-by-step process for developing a performance-measurement program that includes both traditional and non-traditional performance indicators that address customer-oriented and community issues.

[Regional Transit Study](#)

The Regional Transit Study outlines the region's current transit infrastructure outside of the CapMetro service area and provides local governments and project sponsors with resources for developing transit projects.

[CapMetro Performance Dashboard](#)

Dashboard that provides a real-time look at the performance measures tracked and reported by CapMetro and can provide a useful resource for sponsor's developing a performance management system.

FTA 5310 Subrecipient Award Recommendation							
Sponsor	Project	Traditional	Other (Capital)	Other (Operating)	Total	Score	Award
Drive a Senior (Chariot)	Vehicle Purchase, Maintenance, and Operations	\$432,000	-	\$642,733	\$1,074,733	85	\$1,074,733
CARTS	Vehicle Purchase	\$816,000	-	-	\$816,000	78	\$816,000
Faith in Action	Vehicle Purchase, Maintenance, and Operations	\$121,928	-	\$164,800	\$286,728	75	\$286,728
CapMetro	Office of Mobility Management	\$160,000		-	\$160,000	73	\$160,000
AGE of Central Texas	Vehicle Purchase, Maintenance, and Operations	\$262,116*	-	\$96,540*	\$358,655	71	\$358,655
Bluebonnet Trails	Third Party Contracted Services	\$445,790*	-	-	\$445,790	69	\$445,790
City of Buda	Scheduling Software	-	\$52,609*	\$94,218	\$146,827	65	\$146,827
City of Austin (PARD)	Senior Program Operations	-	\$112,258	\$641,058	\$753,316	62	\$753,316
Mary Lee Foundation	Vehicle Purchase, Maintenance, and Operations	\$78,400	-	-	\$78,400	59	\$78,400
Total		\$2,316,234	\$164,866	\$1,639,349	\$4,120,449		\$4,120,449

This recommendation is to be presented for Transportation Policy Board consideration on May 12, 2025. Funding amounts above represent the federal share and do not include the required local match. Traditional and Other (Capital) funding awards require a 20 percent cost share, Other (Operational) funding requires a 50 percent cost share.

*Transportation Development Credits (TDC) have been requested for these funding awards to be presented for approval consideration in a separate action.

Summary			
	Traditional	Operational	Total
Total Requested	\$2,316,234	\$1,804,215	\$4,120,449
Maximum Available	\$3,508,096	\$2,517,019	\$6,025,115
Total Recommended	\$2,316,234	\$1,804,215	\$4,120,449
Rollover	\$1,191,962	\$712,804	\$1,904,766

Full Award

Partial Award

No Award



Date: April 28, 2025
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Ms. Theresa Hernandez, Finance and Administration Manager
Agenda Item: 5
Subject: Presentation of Draft FY 2026 and 2027 Unified Planning Work Program (UPWP)

RECOMMENDATION

None. This item is for information purposes only.

PURPOSE AND EXECUTIVE SUMMARY

The purpose of this item is to allow comments on the Draft Fiscal Years (FY) 2026 and 2027 Unified Planning Work Program (UPWP) (Attachment A).

FINANCIAL IMPACT

The budget for the FYs 2026 and 2027 UPWP is based on anticipated FHWA PL-112/Section 5303 funds. In FY 2024 and 2025, CAMPO received a total of \$8,115,707 of PL-112/Section 5303 funds. CAMPO has programmed these funds, along with other funds among the five main tasks identified in the UPWP.

BACKGROUND AND DISCUSSION

The UPWP is the federally-required document that identifies work tasks to be completed in the CAMPO region. The UPWP is adopted every two years and may be amended if CAMPO planning programs change.

The document is divided into five main task areas:

- Task 1 - Administration
- Task 2 - Data Development and Maintenance
- Task 3 - Short Range Planning
- Task 4 - Metropolitan Transportation Plan
- Task 5 - Special Studies

SUPPORTING DOCUMENTS

Attachment A – Draft FY 2026 and 2027 Unified Planning Work Program

FY 2026 and FY 2027

UNIFIED PLANNING WORK PROGRAM (UPWP)

Capital Area MPO

TRANSPORTATION MANAGEMENT AREA (TMA) STATUS:

Transportation Management Area (TMA)

AIR QUALITY STATUS:

Attainment

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), U.S. Department of Transportation (USDOT), under the State Planning and Research Program, Section 505 [or Metropolitan Planning, Section 104(d)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

This UPWP complies with federal and state requirements, is true and correct, and is approved by:

Adopted by the Transportation Policy Board: June 9, 2025

Federal Approval:

Capital Area MPO - 8303 N MoPac Expy., Suite A210 - Austin, TX 78759 - www.campotexas.org

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EXECUTIVE SUMMARY

The Unified Planning Work Program (UPWP) is a federally-required document which details the planning priorities and activities to be undertaken by the Capital Area Metropolitan Planning Organization (CAMPO) over a biennial period. CAMPO is the designated Metropolitan Planning Organization (MPO) for the six-county Capital Area in Central Texas covering the following counties: Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson. This UPWP documents CAMPO's planning activities for Fiscal Years 2026 and 2027, beginning on October 1, 2025. The MPO's tasks identified in the UPWP are organized into the following categories:

Task 1: Administration and Management

Task 2: Data Development and Maintenance

Task 3: Short Range Planning

Task 4: Metropolitan Transportation Plan

Task 5: Special Studies

Activities detailed in Task 1 include the overall administration of the agency; the development of required reporting documents such as the Annual Performance and Expenditure Report; and the implementation of the MPO's Public Participation Plan. Task 2 includes the development of demographic forecasts for the Regional Transportation Plan; development and maintenance of a travel demand model; and participating in environmental analyses for multimodal corridor studies. Task 3 focuses on the maintenance of the Transportation Improvement Program; calls for projects to provide funding to local and regional sponsors; and performance measure monitoring and reporting. Task 4 covers the development and maintenance of the long-range Regional Transportation Plan; the Coordinated Public Transit – Health and Human Services Transportation Plan; and safety planning efforts. Task 5 includes CAMPO's Project Readiness multimodal corridor studies program; the Interchange Bottleneck Study; and subarea transportation plans. Both Task 4 and Task 5 also include priority programs or studies led by partner agencies including the City of Austin, the Capital Metropolitan Transportation Authority, the City of San Marcos, and Travis County.

The goals that guide the subtasks detailed in the UPWP are: Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reduced Project Delivery Delays. Funding for the programs and activities in the UPWP come from federal, state, and local sources. Local funds come from the cities, counties, and transportation authorities in the CAMPO region, and state funds are administered through the Texas Department of Transportation (TxDOT). Federal funds include Transportation Planning Funds, made up of Federal Highway Administration PL-112 funds and Federal Transit Administration Section 5303 funds, Surface Transportation Program funds, and Surface Transportation Block Grants. The total funding from all sources and covering all expenditures including subtasks administered by other agencies in the CAMPO region is \$15,335,860 for FY 2026 and \$6,003,054 for FY 2027.

INTRODUCTION

The Federal Aid Highway Act of 1962 promulgated the requirement that all urban areas of 50,000 or more population develop and maintain a comprehensive, cooperative, and continuing (3-C) transportation planning process. The process would establish a transportation plan and provide the procedure by which it would be maintained and revised on a continuing basis.

A. PURPOSE

The Unified Planning Work Program (UPWP) provides descriptive details for the Capital Area Metropolitan Planning Organization (CAMPO) planning process for FYs 2024 and 2025. This activity is required under federal law defining the responsibilities of Metropolitan Planning Organizations (MPO). The UPWP serves as the document for identifying ways to carry out the continuing, cooperative and comprehensive transportation planning process in the six-county Capital Area in Central Texas. An MPO is required to perform all planning tasks set forth in federal laws and regulations, many of which are conducted annually. However, some tasks require more than one year to complete and are carried forward from one UPWP to the next. To effectively identify all work tasks, CAMPO prepares this UPWP with input from federal, state and local jurisdictions and transportation providers in the CAMPO region.

B. DEFINITION OF AREA

The CAMPO planning area includes all of Bastrop, Burnet, Caldwell, Hays, Travis and Williamson Counties (**Appendix B**) and the cities and villages in each of the six counties (a comprehensive list of these jurisdictions can be found at www.campotexas.org). By federal definition, CAMPO's planning area must at least include the urbanized area (as defined by the U.S. Bureau of the Census) and the contiguous area that may reasonably be expected to become urbanized in the next 20 years.

During the 2010 census, a very small portion of Guadalupe County was included as a part of the newly urbanized area of San Marcos. San Marcos intends to remain part of CAMPO. Therefore, an agreement was developed between CAMPO and the Alamo Area MPO (AAMPO) regarding the roles and responsibilities of each MPO concerning this portion of Guadalupe County. CAMPO agrees that staff will meet as needed to review progress of planning efforts to discuss key findings from program activities and to discuss the scope, plans, and implementation of activities. To help ensure continuity of federal and state funds, CAMPO agrees to abide by the methodology and process used to allocate funds to the respective MPOs. CAMPO agrees to abide by the methodology and process currently used to allocate federal transportation planning funds to the respective MPOs. CAMPO agrees to work with the AAMPO to identify the need for corridor projects that cross the CAMPO and AAMPO planning area boundary.

C. ORGANIZATION

The Transportation Policy Board (**Appendix A**), develops regional transportation policy, allocates state and federal funding to implement the short- and long-range transportation plans for CAMPO. The

Policy Board consists of 21 elected and appointed county, city, Texas Department of Transportation (TxDOT) and CapMetro officials.

Other committees, task forces or study groups may be formed from time-to-time throughout the year as necessary.

CAMPO currently operates with various professional staff positions. The professional staff covers the tasks listed in the UPWP. Depending on the budget and/or work tasks to be completed, CAMPO may employ a varying number of consultants, interns, permanent, or temporary personnel.

Functional Responsibilities of Planning Agencies

For the transportation planning process to function properly, the agencies involved must work together cooperatively. The Transportation Policy Board (TPB), the Texas Department of Transportation (TxDOT), Central Texas Regional Mobility Authority (CTRMA), Capital Metropolitan Transportation Authority (CapMetro), Capital Area Rural Transportation System (CARTS) and the local governments within the planning area are responsible for carrying out the urban transportation planning process consistent with local agreements. This process includes planning for roadways, bicycling facilities, pedestrian facilities, freight movement, passenger rail, and transit.

The following descriptions of functional responsibilities for each agency are not intended to limit the participation of any agency or local government in the study. Rather, they are brief descriptions of primary responsibilities.

Metropolitan Planning Organization - The MPO, in cooperation with CTRMA, mass transit operators, planning agencies and local governments:

- 1) Is responsible for carrying out and maintaining the urban transportation planning process to include:
 - a. Cooperative decision-making, principally, by elected officials of local governments.
 - b. Unified Planning Work Program (UPWP),
 - c. Transportation Improvement Program (TIP),
 - d. Metropolitan Transportation Plan (MTP), and
 - e. Congestion Management Process (CMP).
- 2) Executes contracts and/or agreements necessary to carry out the work outlined in the UPWP.
- 3) Develops and maintains transportation databases and analytical tools.

MPO staff have the following general responsibilities:

- 1) Provide staff support to the Transportation Policy Board (TPB), the Technical Advisory Committee (TAC), and committees of the Policy Board and TAC.

- 2) Review and report on items on the agenda(s) for the TPB, TAC, and appropriate committees.
- 3) Coordinate and perform the planning and data collection activities contained in the UPWP.
- 4) Prepare and submit an annual budget outlined in the UPWP for approval.
- 5) Receive and review all bills from consultants that the MPO has contracted with to perform work outlined in the UPWP.
- 6) Submit requests for reimbursement to the appropriate federal and/or state agencies for work performed according to the UPWP.
- 7) Prepare and submit grant applications for federal/other assistance in transportation planning, and related fields, as appropriate.
- 8) Prepare and submit the annual performance and expenditure report and annual project listing.
- 9) Coordinate the activities for the development and maintenance of the Unified Planning Work Program, the long-range Metropolitan Transportation Plan and the Transportation Improvement Program.
- 10) Refine and maintain a process for engaging the public in the transportation planning process; and
- 11) Perform any other administrative duties as required by the Transportation Policy Board; and,
- 12) Ensure compliance with Title VI Civil Rights and other federal requirements related to CAMPO's operations, activities and programs.

Texas Department of Transportation

The Texas Department of Transportation (TxDOT), within the realm of transportation planning, has the following varied responsibilities for the CAMPO planning area:

- Highway planning.
- Participating in and leading agency in appropriate transportation studies and environmental documents.
- Review of all FTA Section 5307, 5310 and Section 5311 capital grant applications that may involve state funding: and

In addition, TxDOT maintains certain transportation database files and forecasting models, and coordinates its planning efforts with the MPO through the UPWP.

Capital Area Rural Transportation System (CARTS)

CARTS is the rural public transportation provider for this region and has primary responsibility for rural transit planning and operations in the study area.

Capital Metropolitan Transportation Authority (CapMetro)

CapMetro is a provider of public transportation in the region. CapMetro has a primary responsibility for conducting various short and long-range transit studies, maintaining all transit data, and is responsible for transit planning and operation in the urban portion of the study area.

Counties

Williamson County acts as our fiscal agent and provides support for human resources, benefits, accounting, and information technology.

The Counties of Bastrop, Burnet, Caldwell, Hays, Travis and Williamson have the primary responsibility for the planning of all roads outside incorporated areas that are not on the State system. The counties also perform analyses on the state system in cooperation with the TxDOT – Austin District. The County coordinates its planning with TxDOT and incorporated areas in extraterritorial jurisdictional areas.

Cities

All jurisdiction cities in our planning area have the responsibility for the planning of all off-system roads within their incorporated area, and some have negotiated agreements with TxDOT to plan for roads on the state system as well in cooperation with TxDOT.

Public/Public and Public/Private Partnerships

The CAMPO region continues partnerships with local governments and transportation agencies and has actively pursued various partnerships with entities established to advance planning for and improve the area's transportation infrastructure).

D. NON-MPO INVOLVEMENT

Consultants have been and will continue to be used on an as-needed basis in CAMPO's transportation programs and planning processes. In the past, CAMPO has used private sector consultants for a variety of services ranging from legal services to corridor studies to improvements to the regional travel demand model. The use of consultants will continue as needed.

E. PLANNING ISSUES AND EMPHASIS

The Federal Highway Administration and Federal Transit Administration have jointly issued Planning Emphasis Areas (PEAs). The PEAs are planning topical areas for MPOs and State DOTs to develop and identify work tasks for FY 2026 and 2027. The Planning Emphasis Areas are:

1. ~~Tackling the Climate Crisis—Transition to a Clean Energy, Resilient Future: CAMPO is developing a Carbon Reduction Program as outlined in the Infrastructure Investment and Jobs Act (IIJA). This program will seek to reduce transportation emissions through the development of carbon reduction strategies and by providing funding for projects designed to reduce transportation emissions. The CAMPO plan will provide emission reduction strategies, guide the selection of projects for the program funding, and set the foundation for a regional air quality program for the six county region. Additionally, CAMPO is developing a Transportation Demand Management (TDM) Program to implement the agency's 2019 Regional Transportation Demand Management Plan. The TDM Program focuses on commuter behavior choices, technology, and options provided by employers and government entities, rather than focusing on infrastructure solutions to transportation congestion. Stewardship of environmental resources through measures that reduce, minimize, or avoid negative impacts to the environment are also included in project selection criteria for CAMPO's Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) and will continue to be used in the amendments and updates to those documents.~~
2. ~~Equity and Justice 40 in Transportation Planning—CAMPO's Public Participation Plan (PPP) was developed to ensure that all citizens have an equal opportunity to participate in the CAMPO decision-making process. CAMPO deliberately plans inclusive, diverse public participation programs as part of its transportation planning process. CAMPO's program engages with public and private transportation employees and stakeholders, freight interests, bicycle and pedestrian stakeholders, and stakeholders with and representing those with disabilities. These public participation programs also include communication and outreach methods specifically tailored to audiences and stakeholders. The PPP's strategies include but are not limited to using visualizations and clear, concise, non-technical language to describe proposed changes; seeking out low-income and minority environmental justice households and vulnerable populations who may face challenges accessing employment and other services; and holding public open houses at convenient times and locations while also offering virtual opportunities for input. Additionally, project selection criteria for CAMPO's TIP and RTP include equity considerations, with performance measures focusing on traditionally underserved populations, including low-income, minority, seniors, persons with disabilities, zero-car households, and limited-English proficiency households.~~
3. Complete Streets - CAMPO conducts studies in cooperation with local cities to develop transportation plans incorporating the concepts of complete street designs. These studies aim to create safe, convenient, and connected transportation networks that provide walkable and bikeable neighborhoods with access to jobs, homes, and amenities. CAMPO studies identify local concerns including but not limited to speed management, sidewalk connectivity, perceived lack of safety, access management, and limited transit access or coordination. Depending on the scope of the study, future land use may also be a consideration including the identification of catalytic redevelopment sites and compatible uses. The outcomes of these studies include implementation strategies that can be used by local governments, the Texas Department of Transportation, local transit agencies, and

private developers. Another aim of these studies is to identify potential projects for inclusion in the long-range Regional Transportation Plan. CAMPO will continue conducting these studies, partnering with local agencies to develop tailored projects including complete street recommendations.

4. Public Involvement - The CAMPO Public Participation Plan, adopted in 2019, includes provisions for virtual public involvement. This includes the development of an online open house for public involvement opportunities, created specifically for individual studies or routine activities including TIP and RTP updates. The online open houses include all of the information that would be found at an in-person meeting as well as ways for the public to submit comments. Additionally, online surveys are included for projects and online maps allow the public to see information related to proposed transportation project corridors. The meetings of CAMPO's Technical Advisory Committee (TAC) and Transportation Policy Board (TPB) are also streamed live and archived both on CAMPO's website and the agency's YouTube channel. The experience of public involvement through the Covid pandemic showed the utility of all these virtual involvement methods and CAMPO will continue to expand the use of these methods while ensuring that those in the region who do not have high-speed internet or cell phones are still able to provide feedback.
5. Strategic Highway Network (STRANET)/U.S. Department of Defense (DOD) Coordination – CAMPO will coordinate with the U.S. Department of Defense on the eight STRANET corridors within the region in the development of recommendations for the long-range Regional Transportation Plan and for corridor and area studies. Although there are no U.S. Department of Defense installations within the CAMPO region apart from the Army Futures Command, there are significant bases in the MPO regions immediately to the north and south of this region, with transportation through the CAMPO area. This includes Fort Cavazos in the Killeen-Temple Metropolitan Planning Organization area and Randolph Air Force Base, Fort Sam Houston, and Lackland Air Force Base in the Alamo Area Metropolitan Planning Organization area. We will continue our coordination with these partner MPO organizations and include outreach to the Department of Defense.
6. Federal Land Management Agency (FMLA) Coordination – CAMPO will coordinate with federal resource agencies in the development of transportation plans and recommendations in the region. The preservation of the natural environment is a priority in the CAMPO region, which is reflected in the local and state agency coordination with federal land management areas including the San Marcos Aquatic Resources Center and the Balcones Canyonlands National Wildlife Refuge. This coordination supports the stewardship element of CAMPO's project selection process, which awards points to projects that demonstrate designs which avoid, minimize, and mitigate negative impacts to water quality, air quality, and natural habitat.
7. Planning and Environment Linkage (PEL) – CAMPO will continue to conduct Planning and Environmental Linkages (PEL) studies across the region. Primarily this will be conducted under the Project Readiness Program. This CAMPO-led program has identified 9 corridors for study across all six MPO counties. These corridors were identified based on the connectivity they provide between activity centers in the region, higher-than average

crash rates, and their identification in transit studies, freight routes, and active transportation plans. All corridors are on the TxDOT system, and CAMPO is working closely with TxDOT to advance these studies. The Project Readiness Program will range from feasibility analyses to NEPA studies depending on the identified needs of each corridor. CAMPO is also working closely with the cities, counties, and transit agencies along the corridors and will conduct full public involvement efforts as well. This partnership will allow the results of the Project Readiness Program to seamlessly move into further environmental, design, and implementation stages.

8. Data in Transportation Planning – CAMPO has established a Data and Operations program area in order to coordinate the MPO’s role in data sharing and management. CAMPO has developed a series of data dashboards now available on the agency’s website to serve as analysis tools and community resources for the MPO region. Currently there are five data dashboards on CAMPO’s website including: American Community Survey (ACS) 2017-2019, ACS 2020 and Beyond, Performance Metrics, TxDOT Crash Records Information System, and Roadway Inventory. These dashboards are customizable and present a tremendous amount of data in comprehensible, graphical ways. CAMPO will continue making presentations on the availability of these dashboards and continue working with our partner agencies to provide more data on the dashboards which may be useful in regional transportation planning efforts

CAMPO will work cooperatively with TxDOT, CARTS and Capital Metropolitan Transportation Authority (CapMetro) to define performance measures that emphasize these seven federal goals:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Vitality
6. Environmental Sustainability
7. Reduced Project Delivery Delays

I. TASK 1 – ADMINISTRATION AND MANAGEMENT

A. OBJECTIVE

To accomplish, on a continuing basis, the plans and programs necessary to administer federal transportation planning requirements and maintain the transportation planning process in and for the Capital Area MPO's planning area.

B. EXPECTED PRODUCTS

Certified transportation planning process

FY 2025 & FY 2026 Single Audit

Unified Planning Work Program (FYs 2026 & 2027) and amendments

Development of Unified Planning Work Program (FYs 2028 & 2029)

FY 2025 & 2026 Annual Project Listing

FY 2025 & 2026 Annual Performance and Expenditure Report

New equipment and computer hardware/software

C. PREVIOUS WORK

Performed general administrative functions

FY 2024 & 2025 Unified Planning Work Program and amendments

FY 2023 & 2024 Annual Project Listing

FY 2023 & 2024 Annual Performance and Expenditure Report

FY 2023 & 2024 Single Audit

Updated Public Participation Plan

Updated Title VI Plan

Coordinated transportation planning and implementation activities with other agencies and organizations

Conducted a public involvement process compliant with federal and state regulations

Provided support for all meetings of the transportation planning process

Implemented policies to maintain the transportation planning process

Provided staff with access to courses, conferences, workshops and seminars

Statistics and Metrics Dashboard

D. SUBTASKS

Subtask 1.1 – MPO Staff Support for Task 1

The primary activities which will take place under MPO Staff Work include the following:

1.1.1 Program Administration:

This activity includes development and implementation of those policies and guidelines necessary to carry out and maintain the transportation planning process; maintenance of the FY 2026 & 2027 Unified Planning Work Program, development of the Annual Performance and Expenditure Report (APER) and Annual Project Listing (APL), development of the FY 2028 & 2029 Unified Planning Work Program, sponsoring and conducting meetings including providing support to policy and advisory bodies; coordinating and working with other agencies and organizations involved in planning, programming and implementation of transportation projects.

1.1.2 Public Participation:

This activity supports the implementation of the MPO's Public Participation Plan to include the conduct of community outreach and public meetings/hearings as needed with emphasis on vulnerable populations and the development/review processes of the Transportation Improvement Program, Metropolitan Transportation Plan and other planning products; develop and use of questionnaires, online surveys, newsletters and other participation techniques; and provide bilingual materials and translations as appropriate.

1.1.3 Title VI Civil Rights:

This activity supports monitoring and evaluating Title VI guidance and requirements, developing and implementing documents and procedures to ensure CAMPO's plans, programs and activities comply with Title VI guidance and requirements, collecting and analyzing data related to protected classes plus vulnerable populations such as, low income, limited English proficiency, seniors, and other populations vulnerable to potential disproportional adverse impacts from the planned transportation system and transportation projects, identifying possible strategies to minimize, avoid or mitigate potential disproportional adverse impacts on vulnerable populations, maintaining, coordinating efforts to develop the Regional Toll Network Analysis that evaluates the impacts of the regional toll network on the community (see Task 2.0), implementing the CAMPO Limited English Proficiency Plan and updating that plan as needed.

1.1.4 Travel and Training:

This activity supports staff development in the technical activities associated with the transportation planning process through travel to and attendance at appropriate conferences,

courses, seminars, and workshops (AMPO, APA, ESRI, TransCad, TxDOT, TRB, UT at Austin, CNU, TEMPO, Planning Conference, Planning Forum, etc.). CAMPO will seek prior approval from TxDOT for Out-of-State travel.

1.1.5 Equipment/Office Space & Computer Hardware/Software:

This activity is for the upgrade/addition of equipment/office space and computer hardware or software to ensure program efficiency. A description of equipment purchases in excess of \$10,000 will be submitted to the Texas Department of Transportation and the Federal Administration Highway for approval prior to acquisition. The MPO understands that split costs are not allowed.

Responsible Agency: CAMPO

Funding Requirement: \$4,917,964 PL

Product(s): Certified transportation planning process; updated or new documents and reports; new equipment and/or computer hardware/software; APL; APER

Subtask 1.2 – Legal Services – Consultant Work

1.2.1 Legal Services:

This activity is for legal services that are necessary for planning purposes. Ongoing contract.

Responsible Agency: CAMPO

Funding Requirement: \$160,000 PL

Product(s): Legal opinion(s) and counsel, as necessary and appropriate, with prior approval from TxDOT and FHWA

Subtask 1.3 – Audit Services – Consultant Work

1.3.1 Audit Services:

This activity is for audit services that are necessary to comply with the Single Audit Act. Ongoing contract.

Responsible Agency: CAMPO

Funding Requirement: \$56,000 PL

Product(s): Single Audit Report, financial statements

E. FUNDING SUMMARY

Table 1a: Task 1 – FY 2026 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ²
1.1	CAMPO	2,376,429				2,376,429	
1.2	CAMPO	80,000				80,000	
1.3	CAMPO	27,000				27,000	
Total		2,483,429				2,483,429	

Table 1b: Task 1 – FY 2027 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ³	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ⁴
1.1	CAMPO	2,541,535				2,541,535	
1.2	CAMPO	80,000				80,000	
1.3	CAMPO	27,000				27,000	
Total		2,650,535				2,650,535	

¹ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

² 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

³ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

⁴ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

II. TASK 2 - DATA DEVELOPMENT AND MAINTENANCE

A. OBJECTIVE

Provide updated information, demographic data and analysis to support the Metropolitan Planning Organization's planning efforts.

B. EXPECTED PRODUCTS

Series of technical reports documenting the ongoing GIS data updates on traffic counts and mapping

Transportation related air quality data collection and analysis, air quality planning and outreach products

2050 Plan related performance measures

Demographic forecasts and travel demand model for the 2055 Plan updates

Interactive Web Viewer updates

UrbanSim (Demographic Allocation Tool)

Development 2055 Travel Demand Model

C. PREVIOUS WORK

Updated demographic forecasts and travel demand model for the 2045 Plan

2045 Plan related performance measures

Development 2050 Travel Demand Model

UrbanSim (Demographic Allocation Tool)

D. SUBTASKS

Subtask 2.1 – MPO Staff Support for Task 2

The primary activities which will take place under MPO Staff Work include the following:

2.1.1 General Administration:

This subtask allows for administrative activities related to data development and maintenance including procurement, contract management and appropriate review/processing of monthly

billings for work related to Task 2, as well as conducting the activities in subtasks 2.1.2, 2.1.3, 2.1.4, and 2.1.5 and developing related performance measures.

2.1.2 General GIS:

Specific activities will include reviewing and providing direction on the development and dissemination of geospatial databases on residential and commercial growth and transportation data; mapping databases supporting CAMPO programs; maintenance of the demographic and modeling databases of the 2050 Plan; develop and maintain the interactive web viewer for sharing GIS data on growth and projects; develop maps and materials for work group and public meetings; develop technical memoranda documenting work completed.

2.1.3 Demographic Forecasting:

Run UrbanSim for producing demographic forecasts for 2055 Plan and TIP amendments. Specific activities will include production and review of demographic forecasts to be used for the required 2055 Plan. Develop the datasets for running the Allocation Tool for the 2055 Plan.

2.1.4 Travel Demand Modeling:

Run CAMPO's FTA-compliant and time-of-day model. Specific activities will include coordination with TxDOT on development of the new 2025 base year model, performing model runs for the amendments of the 2050 Plan, 2025-2028 TIP and the development of the 2055 Plan; refinements of in-house modeling capabilities; and regular updates of computer hardware, software, and necessary peripherals for supporting the demographic forecasting and travel demand modeling activities.

2.1.5 Environmental Analysis:

This subtask includes facilitating planning and environmental linkages by participating in NEPA related studies and Planning and Environmental Linkages (PEL) studies, monitoring and evaluating the effect of CAMPO plans and programs on the environment, identifying potential mitigation activities and locations where they might occur, coordinating outreach with resource agencies and working groups, developing and updating GIS analyses using GISST, and other relevant data. CAMPO is participating in NEPA related studies to facilitate the proper integration of planning outcomes in the environmental process.

Responsible Agency: CAMPO

Funding Requirement: \$469,196 PL

Product(s): Technical memoranda, final reports, PEL and NEPA related reports and analyses.

Subtask 2.2 – GIS, Demographic Forecast, & Travel Demand – MPO Staff/Consultant Work

2.2.1 Demographic Forecast and Travel Demand Modeling Projects for 2055 Plan:

Conduct activities related to the travel demand model in support of development of the 2055 Plan. It is noted that the demographic forecasting and travel demand modeling procedures applied in the CAMPO area are integrated. Conduct activities related to the production of the regional employment and population profiles for inclusion in the CAMPO travel demand model and the 2050 toll analysis. Ongoing contract.

Responsible Agency: CAMPO

Funding Requirement: \$50,000 PL

Product(s): Interactive Web Viewer, UrbanSim, Development 2055 Travel Demand Model, Model files for development of the 2050 RTA, draft and final 2050 RTA document.

DRAFT

E. FUNDING SUMMARY

Table 2a: Task 2 – FY 2026 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ⁵	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ⁶
2.1	CAMPO	240,977				240,977	
2.2	CAMPO						
Total		240,977				240,977	

Table 2b: Task 2 – FY 2027 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ⁷	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ⁸
2.1	CAMPO	278,219				278,219	
2.2	CAMPO						
Total		278,219				278,219	

⁵ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

⁶ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

⁷ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

⁸ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

III. TASK 3 - SHORT RANGE PLANNING

A. OBJECTIVE

Conduct short-range transportation and transportation-related planning activities with short-term planning and implementation focus, including the development and administration of the Transportation Improvement Program.

B. EXPECTED PRODUCTS

Maintenance of 2025-2028 Transportation Improvement Program

Development and maintenance of 2027-2030 Transportation Improvement Program

10 Year Plan

Annual Listing of Obligated Projects (ALOP)

Performance Measure Report

Project Progress Report

2026-2029 Call for Projects -TASA/CRP

2028-2031 Call for Projects - STBG

Congestion Management Process (CMP)

C. PREVIOUS WORK

2025-2028 Transportation Improvement Program

Project Tracking

10 Year Plan

Annual List of Obligated Projects

Performance Measure Report

Project Progress Report

Congestion Management Process (CMP)

D. SUBTASKS

Subtask 3.1 – MPO Staff Work for Task 3.0

3.1.1 General Administration:

This subtask allows for MPO staff support for administrative activities related to short range planning, including the development and management of agency contracts; procurement, development, and management of consultant contracts for projects in Task 3; and the review and processing of monthly billings for work related to Task 3.

3.1.2 General Activities:

Specific activities will include, but are not limited to, maintenance of the FY 2025-2028 Transportation Improvement Program, and the development of the FY 2027-2030 Transportation Improvement Program, along with related performance measures.

3.1.3 Public Participation:

This subtask includes MPO staff participation in public outreach activities including video production, developing website information, writing newsletter articles, developing other printed materials, and public meeting facilitation as needed.

3.1.4 Congestion Management Process (CMP), Intelligent Transportation Systems (ITS) and Operations Planning:

This subtask covers activities related to conducting the CMP, ITS and Operations Planning. Specific activities include, but are not limited to, developing, updating, refining, and implementing the CMP, incorporating congestion analysis results into the regional planning process, and incorporating ITS, systems management and operations into the planning process.

3.1.5 Transportation Improvement Program:

The four-year Transportation Improvement Program (TIP) lists surface transportation projects that are funded with federal dollars and are consistent with the long-range plan developed for the area. The TIP may also include non-federally funded projects that are regionally significant. The TIP development process includes public involvement activities and opportunities for public review and comment on all aspects of the program. TIP management includes the administration of project funding calls.

Responsible Agency: CAMPO

Funding Requirement: \$586,096 PL

Product(s): Contract procurement materials and billing packages, meeting packages and materials, technical memos, 2023-2026 TIP amendments, 2025-2028 TIP, Congestion Management Process (CMP) Plan

Subtask 3.2 – Congestion Management – Consultant Work

3.2.1 Congestion Management Process Data Collection and Analysis:

This subtask provides support for the CMP through congestion data collection and analysis.

Responsible Agency: CAMPO

Funding Requirement: \$250,000 PL

Product(s): Congestion data and analysis, data in GIS format

Subtask 3.3 – Regional Transportation Demand Management Program– Consultant Work

3.3.1 Regional Transportation Demand Management Program:

The Regional Transportation Demand Management (TDM) Program will provide TDM services throughout the region with the goal of reducing congestion without adding capacity on the region's roadway network. Contract ongoing.

Responsible Agency: CAMPO

Funding Requirement: \$3,840,000 STP 768,000 TDCs

Product(s): Contract procurement materials and billing packages, meeting packages and materials, technical memos

E. FUNDING SUMMARY

Table 3a: Task 3 – FY 2026 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ⁹	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ¹⁰
3.1	CAMPO	329,999				329,999	
3.2	CAMPO	250,000				250,000	
3.3	CAMPO			1,920,000		1,920,000	
Total		579,999		1,920,000		2,499,999	

Table 3b: Task 3 – FY 2027 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹¹	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ¹²
3.1	CAMPO	256,097				256,097	
3.2	CAMPO						
3.3	CAMPO			1,920,000		1,920,000	
Total		256,097		1,920,000		2,176,097	

⁹ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

¹⁰ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

¹¹ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

¹² 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

IV. TASK 4 - METROPOLITAN TRANSPORTATION PLAN

A. OBJECTIVE

To develop, maintain and update a multi-modal Regional Transportation Plan for the CAMPO planning area for a 25-year horizon that meets federal requirements and regional goals.

B. EXPECTED PRODUCTS

Maintenance of the 2050 Regional Transportation Plan

Update and implementation of Coordinated Public Transit – Health and Human Services Transportation Plan

Maintenance of Regional Active Transportation Plan

Regional State of Safety Report

C. PREVIOUS WORK

2050 Regional Transportation Plan

2045 Regional Transportation Plan Amendments

Regional Active Transportation Plan

Regional Bicycle and Pedestrian Facility Inventory

Coordinated Public Transit – Health and Human Services Transportation Plan Update

Regional Traffic Safety Plan

Regional State of Safety Report

D. SUBTASKS

Subtask 4.1 – MPO Staff Work for Task 4.0

4.1.1 General Administration:

This subtask allows for MPO staff support for administrative activities related to long range planning including procurement, development, management of consultant contracts for projects in Tasks 4.1, 4.2, and 4.3, review and processing of monthly billings for work related to Tasks 4.1, 4.2, and 4.3, conduct access management, safety, sub-regional traffic

management, and other related corridor studies, participation in study oversight committee meetings, amending and maintaining the CAMPO 2050 Regional Transportation Plan and supporting materials and cooperatively developing related performance measures.

4.1.2 Public Participation:

This subtask includes MPO staff participation in public outreach activities including video production, developing website information, newsletter articles, other printed materials, and public meeting facilitation as needed.

4.1.3 Regional Public Transportation Coordination:

This subtask allows for MPO staff support for regional public transportation coordination including coordinating the Regional Transit Coordination Committee (RTCC) and associated activities, and implementing, maintaining and amending the Capital Area Coordinated Transit – Health and Human Services Transportation Plan, as needed.

4.1.4 Bicycle and Pedestrian Planning:

This subtask includes conducting planning activities related to bicycle and pedestrian facilities and updating the regional bicycle and pedestrian facility inventory.

4.1.5 Safety Planning:

This subtask includes access management and corridor studies for the region, crash data hot spot analyses for regional and local governments, coordinating the regional safety coalition and its safety emphasis area team's associated activities, including, but not limited to, regional workshops, Safety Summits, data analyses, and updating and maintaining the safety analysis tool. This subtask also includes maintenance and implementation tasks associated with the Regional Safety Action Plan.

Responsible Agency: CAMPO

Funding Requirement: \$932,155 PL

Product(s): Planning documents, data sets, contract procurement materials and billing packages, and networks

Subtask 4.2 – 2050 Metropolitan Transportation Plan

4.2.1 2050 Metropolitan Transportation Plan

Maintenance of the 2050 Regional Transportation Plan and associated data products, including regular amendments and out of cycle amendments, as directed.

Responsible Agency: CAMPO

Funding Requirement: \$100,000 PL

Product(s): Meeting materials, technical report(s), plan documents

Subtask 4.3 – Regional Transit Coordination - Related MPO Staff Work

4.3.1 Regional Transit Coordination

This subtask provides support for regional public transportation coordination including the Regional Transit Coordination Committee and associated activities, implementing, maintaining and updating the Capital Area Coordinated Transit-Health and Human Services Transportation Plan. A update of the Coordinated Transit-Health and Human Services Transportation Plan is expected to be completed by the end of 2026.

Responsible Agency: CAMPO

Funding Requirement: \$140,000 FTA 5304

Product(s): Reports, memos, agendas

Subtask 4.4 – Planning Studies – Other agencies in the CAMPO region (MPO Staff Work is not applicable)

4.4.1 Capturing Transit Value for Community Development: Pilot Sites for TOD Implementation with an Equity Lens

The Capital Metropolitan Transportation Authority received funding to plan for a pilot TOD site at the North Lamar Transit Center. The plan would enhance economic and community development by creating mixed-use development, increasing affordable housing, supporting bicycle and pedestrian access, and bringing essential services to the area.

Responsible Agency: CapMetro

Funding Requirement: \$900,000 FTA and \$500,000 Local Funds

4.4.2 Capital Metro Training Academy – Staff Recruitment and Retention Plan for Service Restoration Post COVID-19

Funding would support planning and implementation efforts to define a training program that will improve the recruitment and retention of frontline staff.

Responsible Agency: CapMetro

Funding Requirement: \$780,100 FTA Funds

4.4.3 Connecting Austin Equitably Mobility Study

The study, Our Future 35: Connecting Austin Equitably Mobility Study, focuses on 8 miles of I-35 corridor from US 290 (north) to SH 71 (south). The study will identify affordable housing, anti-displacement and business support strategies for neighborhoods surrounding new freeway caps, identify transportation equity-focused action items, develop a placemaking plan, and evaluate transportation-related health and environmental justice concerns, and recommend mitigation for impacted neighborhoods.

Responsible Agency: City of Austin

Funding Requirement: \$1,120,000 USDOT Funds and \$280,000 Local Funds

4.4.4 Collaborative Northeast District Plan

The Collaborative Northeast District Plan aims to create a data-driven and community-led strategy focused on equitable analysis, design, implementation, and evaluation. This plan is a joint effort between the City of Austin and Travis County, guided by resolutions from both entities. Both parties will dedicate staff time and resources to achieve collaborative deliverables, including forming a cross-jurisdictional Working Group, summarizing existing conditions, engaging the community, and developing an implementation strategy. The implementation strategy will focus on addressing identified infrastructure, housing, economic development, and social service gaps in the Northeast District. It will guide the prioritization and funding of short-, medium-, and long-term projects, including improvements to roads, sidewalks, transit, broadband, utilities, affordable housing, fresh food access, and community amenities.

Responsible Agency: City of Austin and Travis County

Funding Requirement: \$2.08 million Local Funds

4.4.5 Conventional Passenger Rail Service Feasibility Study (Austin to San Antonio)

The Feasibility Study will provide recommendations on the best approach for implementing an efficient passenger rail system between Austin and San Antonio.

Responsible Agency: Travis County

Funding Requirement: \$500,000 Local Funds

4.4.6 City of San Marcos Transportation Master Plan

2018 Transportation Master Plan update.

Responsible Agency: City of San Marcos

Funding Requirement: \$750,000 Local Funds

E. FUNDING SUMMARY

Table 4a: Task 4 – FY 2026 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹³	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ¹⁴
4.1	CAMPO	415,775				415,775	73,574
4.2	CAMPO	50,000				50,000	
4.3	CAMPO			34,000		34,000	
4.4	OTHER AGENCIES			2,800,100	4,110,000	6,910,100	
Total		465,775		2,834,100	4,110,000	7,409,875	73,574

Table 4b: Task 4 – FY 2027 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹⁵	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ¹⁶
4.1	CAMPO	516,380				516,380	73,574
4.2	CAMPO	50,000				50,000	
4.3	CAMPO			106,000		106,000	
4.4	OTHER AGENCIES						
Total		566,380		106,000		672,380	73,574

¹³ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

¹⁴ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

¹⁵ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

¹⁶ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

V. TASK 5 - SPECIAL STUDIES

A. OBJECTIVE

To conduct special studies of transportation facilities and/or corridors and transportation-related topics and to implement specialized studies. Includes the assessment of capital investment and other strategies to preserve the existing and future transportation system and reduce the vulnerability of the existing transportation infrastructure to natural disasters.

B. EXPECTED PRODUCTS

Continued analysis of corridors in the region

Marathon Road and Garrison Road Connectivity Study

Interchange Bottleneck Study

Project Readiness for Regional Corridor Improvement Projects

Regional Carbon Reduction Plan

C. PREVIOUS WORK

Austin Avenue Corridor Study

Northeast Burnet County Corridor Study

FM 1626/RM 967 Intersection

Freight Study

SL 150/Chestnut Street Corridor Study

Austin Avenue Corridor Study

Regional Safety Action Plan

D. SUBTASKS

Subtask 5.1 – MPO Staff Work for Task 5.0

5.1.1 General Activities:

This subtask allows for MPO staff support for activities related to special transportation planning studies in Subtask 5.1 and 5.2. Specific activities will include participating in special studies. MOU/MOA or other similar documents will be developed to address specific written provision for cooperatively developing and sharing information related to transportation performance data; selection of performance targets; reporting performance targets; reporting and tracking progress.

Responsible Agency: CAMPO

Funding Requirement: \$389,456 PL

Product(s): Contract procurement materials and billing packages, meeting packages and materials, technical memos

Subtask 5.2 Special Studies (undertaken by CAMPO and/or Consultant(s))

5.2.1 Marathon Road and Garrison Road Connectivity Study

Corridor and connectivity analysis in the City of Buda and Hays County, examining connectivity between the future Marathon Road corridor and Garrison Road. Contract TBD.

Responsible Agency: CAMPO and City of Buda

Funding Requirement: \$280,000 STBG and \$70,000 Local Funds

5.2.2 Interchange Bottleneck Study

The Interchange Bottleneck Study will evaluate major interchanges throughout CAMPO's six-county region. Currently, most freeway-to-freeway interchanges in the CAMPO region lack full connectivity through direct-connect ramps and drivers must use frontage road intersections to make connections between many highways. The Bottleneck Study will evaluate these interchanges to identify where improvements between highways may be needed, including additional direct-connect ramps. The Study will also evaluate connections between high-volume principle arterial roadways to identify bottlenecks where intersection or interchange improvements may be needed. Contract ongoing.

Responsible Agency: CAMPO

Funding Requirement: \$150,000 STBG and 37,500 TDCs

5.2.3 Project Readiness for Regional Corridor Improvement Projects

Multimodal corridor studies to advance recommendations for inclusion in CAMPO's long-range Regional Transportation Plan (RTP) and for future funding consideration in CAMPO's Transportation Improvement Program (TIP). Contract ongoing.

Responsible Agency: CAMPO

Funding Requirement: \$800,000 State Funds

5.2.4 Regional Carbon Reduction Plan

Develop a comprehensive, data-driven, and practical transportation emission reduction plan that will evaluate emissions related to transportation and provide a regional implementation strategy that will contribute to their reduction. Contract ongoing.

Responsible Agency: CAMPO

Funding Requirement: \$587,947 STP and 146,987 TDCs

5.2.5 Regional Truck Parking Plan

This plan will identify areas of deficiency in truck parking availability in the region and identify ways to address those challenges. Contract TBD.

Responsible Agency: CAMPO

Funding Requirement: \$650,000 PL

E. FUNDING SUMMARY

Table 5a: Task 5 – FY 2026 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹⁷	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ¹⁸
5.1	CAMPO	163,633				163,633	
5.2	CAMPO	650,000		1,817,947	70,000	2,537,947	
Total		813,633		1,817,947	70,000	2,701,580	

Table 5b: Task 5 – FY 2027 Funding Summary Table

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹⁹	FTA Section 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amount of 2.5% Safety/Complete Streets Set-Aside Funding ²⁰
5.1	CAMPO	225,823				225,823	
5.2	CAMPO						
Total		225,823				225,823	

¹⁷ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

¹⁸ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

¹⁹ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

²⁰ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

BUDGET SUMMARY

Table 6a: Funding Summary - FY 2026

UPWP Task	Description	TPF ²¹	FTA Sect. 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amt of 2.5% Safety/Complete Streets Set-Aside Funding ²²
1.0	Administration – Management	2,483,429				2,483,429	
2.0	Data Development and Maintenance	240,977				240,977	
3.0	Short Range Planning	579,999		1,920,000		2,499,999	
4.0	Metropolitan Transportation Plan	465,775		34,000		499,775	73,574
4.0	MTP (Other Agencies)			2,800,100	4,110,000	6,910,100	
5.0	Special Studies	813,633		1,817,947	70,000	2,701,580	
Total		4,583,813		6,572,047	4,180,000	15,335,860	73,574

Table 6b: Funding Summary - FY 2027

UPWP Task	Description	TPF ²³	FTA Sect. 5307 Funds	Other Federal Funds	Local Funds	Total Funds	Amt of 2.5% Safety/Complete Streets Set-Aside Funding ²⁴
1.0	Administration – Management	2,650,535				2,650,535	
2.0	Data Development and Maintenance	278,219				278,219	
3.0	Short Range Planning	256,097		1,920,000		2,176,097	
4.0	Metropolitan Transportation Plan	566,380		106,000		672,380	73,574
4.0	MTP (Other Agencies)						
5.0	Special Studies	225,823				225,823	
Total		3,977,054		2,026,000		6,003,054	73,574

²¹ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

²² 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

²³ TPF – This includes both FHWA PL-112 (including the 2.5% Safety/Complete Streets Set-Aside) and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor work hours, they are not reflected in the funding tables.

²⁴ 2.5% Safety/Complete Streets Set-Aside – This funding must come from the PL funds within TPF.

Combined TPF Allocations (WO 1 and WO 2) for FY 2024
and FY 2025

\$8,115,707

Estimated Unexpended TPF Carryover (WO 3) from
Previous FYs

\$3,615,950

TOTAL TPF for FY 2026 and FY 2027

\$8,560,867

DRAFT

APPENDIX A

Transportation Policy Board Membership

Member	Position	Municipality/Agency
Cynthia Long, Chair	County Commissioner	Williamson County
Rudy Metayer, Vice Chair	Council Member	City of Pflugerville
Clara Beckett	County Commissioner	Bastrop County
Joe Don Dockery	County Commissioner	Burnet County
Edward Theriot	County Commissioner	Caldwell County
Debbie Ingalsbe	County Commissioner	Hays County
Andy Brown	County Judge	Travis County
Ann Howard	County Commissioner	Travis County
Amy Patillo	County Representative	Travis County
Jeff Travillion	County Commissioner	Travis County
Vanessa Fuentes	Mayor Pro Tem/Council Member	City of Austin
Krista Laine	Council Member	City of Austin
Zohaib "Zo" Qadri	Council Member	City of Austin
Mike Siegel	Council Member	City of Austin
Jim Penniman-Morin	City Mayor	City of Cedar Park
Josh Schroeder	City Mayor	City of Georgetown
Travis Mitchell	City Mayor	City of Kyle
Christine Delisle	City Mayor	City of Leander
Craig Morgan	City Mayor	City of Round Rock
Jane Hughson	City Mayor	City of San Marcos
Matt Harris	Agency Representative	CapMetro
Tucker Ferguson, P.E.	District Engineer	TxDOT Austin District

Technical Advisory Committee (TAC) Membership

Member	Municipality/Agency
Emily Barron, Chair	City of Pflugerville
Aimee Robertson	Bastrop County
Kennedy Higgins	Bastrop County, Smaller Cities
Greg Haley	Burnet County
Russell Sander	Burnet County, Smaller Cities
Ed Theriot	Caldwell County
Vacant	Caldwell County, Smaller Cities
Jennifer Moczygemba	Hays County
Angela Kennedy	Hays County, Smaller Cities
Charlie Watts	Williamson County
Cathy Stephens	Travis County, Smaller Cities
Bob Daigh	Williamson County
Matthew Rector	Williamson County, Smaller Cities
Cole Kitten	City of Austin
Erica Leak	City of Austin
Richard Mendoza	City of Austin
Randall Skinner	City of Cedar Park
Lua Saluone	City of Georgetown
Lu Zhang	City of Kyle
Ann Weis	City of Leander
Brian Kuhn	City of Round Rock
Shaun Condor	City of San Marcos
Sharmila Mukherjee	CapMetro
Dave Marsh	CARTS
Mike Sexton	CTRMA
Heather Ashley-Nguyen	TxDOT

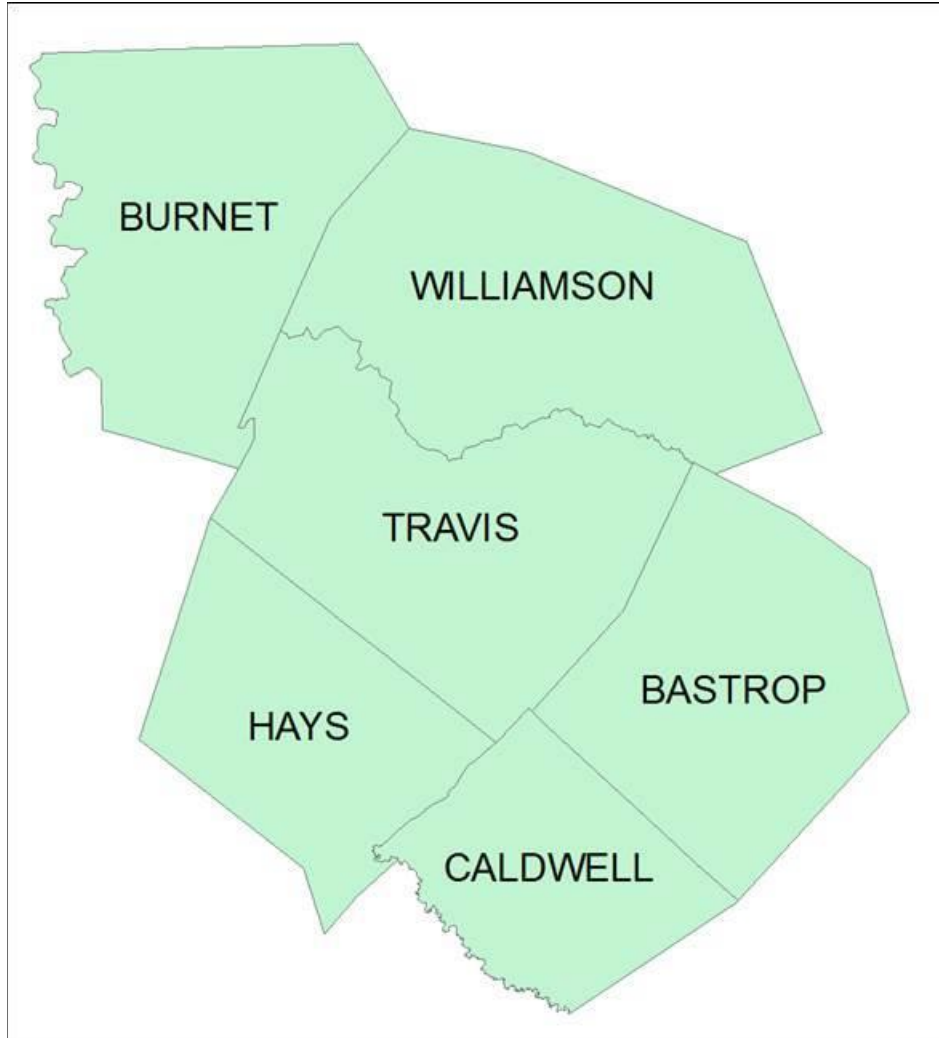
MPO Staff

Staff	Role
Ashby Johnson	Executive Director
Chad McKeown	Deputy Executive Director
Ryan Collins	Short Range Planning Manager
Theresa Hernandez	Finance and Administration Manager
Taylor Hunter	Regional Data Planner
Lena Krajicek	GIS and Data Analyst
Greg Lancaster	Travel Model Manager
William Lisska	Regional Planning Manager
Doise Miers	Community Outreach Manager
Kimberly Petty	Executive Assistant
Nicholas Samuel	Senior Regional Planner
Simone Serhan	Regional Planner
Nirav Ved	Data & Operations Manager

APPENDIX B

Metropolitan Planning Area Boundary Map

(Texas Transportation Commission Minute Order #113554, April 25, 2013)



APPENDIX C

Debarment Certification

(Negotiated Contracts)

(1) The Capital Area **MPO** 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*

Commissioner Cynthia Long, Williamson County

Title of elected official / Name / Entity or Agency

Transportation Policy Board - Chair

Name of MPO Policy Committee – Chair

Capital Area MPO

Name of MPO

Date

APPENDIX D

Lobbying Certification

The undersigned certifies to the best of their 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.

Commissioner Cynthia Long, Williamson County

Title of elected official / Name / Entity or Agency

Transportation Policy Board - Chair

Name of MPO Policy Committee – Chair

Capital Area MPO

Name of MPO

Date

APPENDIX E

Certification of Contract and Procurement Procedures Compliance

I, Commissioner Cynthia Long,

a duly authorized officer/representative of Capital Area 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.

Commissioner Cynthia Long, Williamson County

Title of elected official / Name / Entity or Agency

Date

Transportation Policy Board - Chair

Name of MPO Policy Committee – Chair

Capital Area MPO

Name of MPO

Attest:

Name

Title

APPENDIX F

Certification of Internal Ethics and Compliance Program

I, Commissioner Cynthia Long

a duly authorized officer/representative of Capital Area 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 43 TAC § 31.39 "Required Internal Ethics and Compliance Program" and 43 TAC § 10.51 "Internal Ethics and Compliance Program" as it may be revised or superseded.

Commissioner Cynthia Long, Williamson County

Title of elected official / Name / Entity or Agency

Transportation Policy Board - Chair

Name of MPO Policy Committee – Chair

Capital Area MPO

Name of MPO

Date

Attest:

Name

Title

APPENDIX G

Amendment Summary

Capital Area MPO

FY 2026 (and 2027) UPWP Amendment Summary

(Optional)

Policy Board Action DATE	Federal Approval DATE	UPWP Amendment Resolution Number	UPWP Page #(s)	CIV Reporting- DBE Goal	UPWP Amendment Summary
6/xx/20XX	10/1/20XX	20XX.xx	pg. xx-xx	9/x/20XX	Amend FY 20XX funds to Task x.x Project Prioritization from \$xx,000 to \$xxx,000

APPENDIX H

Completed UPWP Checklist (Optional)

DRAFT



Date: April 28, 2025
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Mr. Nirav Ved, Data and Operations Manager
Agenda Item: 6
Subject: Discussion and Presentation on 2025 Regional Intelligent Transportation System (ITS) Architecture Update

RECOMMENDATION

None. This item is for informational purposes only.

PURPOSE AND EXECUTIVE SUMMARY

A Regional Intelligent Transportation Systems (ITS) architecture for the CAMPO region provides a long-range plan for the deployment, integration, and operations of ITS. Completing and regularly updating the plan is also required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to use federal transportation funds for ITS projects in the region. The first regional ITS architecture for the CAMPO region was developed in 1996, with subsequent updates occurring in 2007, 2015, and most recently in 2019. This item will detail the process and development for the 2025 Update.

FINANCIAL IMPACT

None.

BACKGROUND AND DISCUSSION

Regional ITS architectures are necessary to satisfy the ITS conformity requirements first established in the Transportation Equity Act for the 21st Century (TEA-21) highway bill passed in 1998 and continued in subsequent federal transportation funding bills. ITS projects must show conformance with their regional ITS architecture to be eligible for funding from FHWA or FTA. To adequately demonstrate this conformance, it is necessary that regions deploying ITS have an updated regional ITS architecture in place.

SUPPORTING DOCUMENTS

Attachment A – Draft Central Texas Regional ITS Architecture and Deployment Plan



Central Texas Regional ITS Architecture and Deployment Plan

2025 Update

Draft

Prepared by the Capital Area Metropolitan Planning Organization in coordination with stakeholder agencies throughout Central Texas.

March 2025

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LIST OF ACRONYMS

ATMS	Advanced Traffic Management System
ATSPM	Automated Traffic Signal Performance Measures
AVL	Automated Vehicle Location
CAMPO	Capital Area Metropolitan Planning Organization
CAPCOG	Capital Area Council of Governments
CARTPO	Capital Area Regional Transportation Planning Organization
CARTS	Capital Area Rural Transportation System
CAV	Connected and Automated Vehicles
CCTV	Closed-Circuit Television
CTR	Center for Transportation Research (University of Texas)
CPP	Construction Partnership Program
CTECC	Combined Transportation, Emergency and Communications Center
CTTMS	Central Texas Traffic Management System
DM	Data Management
DMS	Dynamic Message Sign
EMS	Emergency Medical Services
EVP	Emergency Vehicle Preemption
FHWA	Federal Highway Administration
FSSP	Freeway Safety Service Patrol
FTA	Federal Transit Administration
GPS	Global Positioning Satellites
ITS	Intelligent Transportation System
MMC	Mobility Management Center
MPO	Metropolitan Planning Organization
PS	Public Safety
RAD-IT	Regional Architecture Development for Intelligent Transportation
RIDI	Regional ITS Data Infrastructure
RWIS	Road Weather Information System
SDO	Standards Development Organization
ST	Sustainable Travel
SU	Support
TI	Traveler Information
TM	Traffic Management
TMC	Traffic Management Center
TPAS	Truck Parking Availability Systems
TxDOT	Texas Department of Transportation
USDOT	United States Department of Transportation
VS	Vehicle Safety
WX	Weather



Executive Summary

EXECUTIVE SUMMARY

The **Central Texas Regional Intelligent Transportation System (ITS) Architecture and Deployment Plan** provides a long-range plan for the deployment, integration, and operation of ITS in Central Texas. The Regional ITS Architecture and Deployment Plan allows stakeholders to plan for what they want their system to look like in the long term, then organizes the system into smaller pieces that can be implemented over time as funding permits. Development of a regional ITS architecture encourages interoperability and resource sharing among agencies and allows for cohesive long-range planning among regional stakeholders. Completing and regularly updating the plan is also required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to use federal transportation funds for ITS projects in the region.

The 2025 Central Texas Regional ITS Architecture and Deployment Plan was developed by the **Capital Area Metropolitan Planning Organization (CAMPO)** in close coordination with stakeholders representing local, regional, and state agencies that operate ITS in Central Texas. The geographic boundaries of the Regional ITS Architecture and Deployment Plan includes the same counties and CAMPO's service area and includes **Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties**.

Central Texas Regional ITS Architecture

The Regional Architecture Development for Intelligent Transportation (RAD-IT) Version 9.3 was used to develop the Central Texas Regional ITS Architecture. Formerly referred to as Turbo Architecture, RAD-IT is a software application that was developed by the United States Department of Transportation (USDOT) to be used as a tool for documenting and maintaining ITS architectures. An interactive version of the Central Texas Regional ITS Architecture was built using RAD-IT and allows users to access the Regional ITS Architecture online and focus specifically on sections that apply to their agency. The **Interactive ITS Architecture** is available at CAMPO's website. Training on how to show conformity of an ITS project to the Regional ITS Architecture is also available on CAMPO's website.

INTERACTIVE ITS ARCHITECTURE

The **Interactive ITS Architecture** can be accessed on the CAMPO website under the **Plans & Studies** tab, or through the link provided below. Throughout this report, look for blue call out boxes that will note key parts of the Regional ITS Architecture that can be accessed online via the **Interactive ITS Architecture**.



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The 2025 update to the Central Texas Regional ITS Architecture focuses primarily on **building a connected region**. Many of the stakeholders in Central Texas have made significant investments in ITS and operations within their jurisdictions. The deployments, as well as significant regional ITS project and programs, are included in the graphic on the next page. However, most stakeholders noted that to fully optimize operations there is additional connectivity needed between agencies to operate the regional

CENTRAL TEXAS

KEY ITS INFRASTRUCTURE AND PROGRAMS



TRAFFIC ITS INFRASTRUCTURE

- Traffic Management Center (TMC)
- Closed Circuit Television (CCTV) Cameras
- Centralized Traffic Signal System
- Comparative Travel Time Signs (CTTS)
- Dynamic Message Signs (DMS)
- Electronic Toll Collection
- Emergency Vehicle Signal Preemption
- Flood Monitoring
- Freeway Safety Service Patrol
- Railroad Detection and Notification
- Transit Signal Priority



TRANSIT ITS INFRASTRUCTURE

- Transit Operations Center (TOC)
- Automated Fare Payment
- Automated Passenger Counters
- Bus Rapid Transit
- Real-Time Traveler Information
- Transit Signal Priority
- Transit Vehicle Tracking



PLANNED SYSTEM

CITY OF CEDAR PARK

- TMC (Mobility Management Center)
- CCTV Cameras
- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption
- Railroad Detection and Notification

CITY OF AUSTIN

- TMC
- CCTV Cameras
- Centralized Traffic Signal Control System
- DMS
- Emergency Vehicle Signal Preemption
- Flood Monitoring
- Transit Signal Priority

CITY OF SAN MARCOS

- TMC
- CCTV Cameras
- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption
- Flood Monitoring
- Railroad Detection and Notification

CITY OF LEANDER

- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption

CITY OF GEORGETOWN

- CCTV Cameras
- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption
- Flood Monitoring

CITY OF ROUND ROCK

- TMC
- CCTV Cameras
- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption
- Flood Monitoring

CITY OF PFLUGERVILLE

- Centralized Traffic Signal Control System
- Emergency Vehicle Signal Preemption



REGIONAL INITIATIVES

- Central Texas Traffic Management System (CAMPO)
- Construction Partnership Program (TxDOT Austin District)
- Regional Traffic Management Center (TxDOT Austin District)
- SMARTTrack (University of Texas)

TxDOT AUSTIN DISTRICT

- TMC
- CCTV Cameras
- Centralized Traffic Signal System
- CTTS
- DMS
- Flood Monitoring
- Freeway Safety Service Patrol

CTRMA

- TMC
- CCTV Cameras
- DMS
- Electronic Toll Collection
- Flood Monitoring
- Freeway Safety Service Patrol

SH 130 CONCESSIONAIRE

- TMC
- CCTV Cameras
- CTTS
- DMS
- Electronic Toll Collection

CAPITAL METRO

- TOC
- Automated Fare Payment
- Automated Passenger Counters
- Bus Rapid Transit
- On-Board CCTV Cameras
- Real-Time Traveler Information
- Transit Signal Priority
- Transit Vehicle Tracking

CARTS

- TOC
- Automated Fare Payment
- Automated Passenger Counters
- Real-Time Traveler Information
- Transit Vehicle Tracking

transportation network as one integrated system. The National ITS Architecture service packages were reviewed by the stakeholders and selected based on the relevance of the functionality that the ITS service package could provide to the region. Stakeholders selected 57 separate ITS service packages for implementation in the region. Stakeholders also noted the need for a more **robust communications system** that utilized fiber optics for high bandwidth reliable communications.

Regional ITS Deployment Plan

The ITS Deployment Plan section of the Central Texas Regional ITS Architecture and Deployment Plan serves as a tool to identify projects that should be deployed to achieve the desired functionality identified in the Regional ITS Architecture. The ITS Deployment Plan builds on the ITS Architecture by outlining project and program recommendations for the region, potential stakeholders, and deployment timeframes. The **focus is on larger multi-agency projects and programs that could significantly benefit travelers** throughout Central Texas.

Central Texas stakeholders noted a strong need for the implementation of systems and programs to meet regional needs. Regional needs generally focused on data integration, public transportation, traffic management, and improved communication systems.

Stakeholders identified **nine regional deployment projects and programs** for ITS in Central Texas. These projects and programs do not encompass all the regional ITS needs within the Central Texas, but stakeholders recommended that emphasis be placed on implementation related to these projects and programs to provide the greatest benefit to travelers.

Regional ITS Deployment Plan Projects and Programs	
» Regional Traffic Management Center	» Highway Emergency Response Operator (HERO) Roadside Assistance Expansion
» Real-Time Data Sharing	» Regional Transit Fare Payment Platform
» Regional Live Video Sharing Platform	» Automation of Operational Capabilities
» Railroad Crossing Detection and Notification Systems	» Increased Staffing for ITS Operations and Maintenance
» Regional Fiber Network Plan	

Document Maintenance and Architecture Update Process

The Central Texas Regional ITS Architecture and Deployment Plan is considered a **living document**. Shifts in regional needs and focus, advances in technology, and changes in the National ITS Architecture, will necessitate that the Central Texas ITS Architecture and Deployment Plan be updated periodically to remain a useful resource for the region. CAMPO will review the Plan after major ITS deployments in the region and evaluate if an update is needed. CAMPO will also lead the effort to maintain the Regional ITS Architecture and Deployment Plan for Central Texas.



Introduction

INTRODUCTION

Overview

The Central Texas Regional Intelligent Transportation System (ITS) Architecture and Deployment Plan provides a long-range plan for the deployment, integration, and operation of ITS in Central Texas. The Regional ITS Architecture and Deployment Plan allows stakeholders to plan for what they want their system to look like in the long term, then organizes the system into smaller pieces that can be implemented over time as funding permits. Development of a regional ITS architecture encourages interoperability and resource sharing among agencies and allows for cohesive long-range planning among regional stakeholders. Completing and regularly updating the plan is also required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to use federal transportation funds for ITS projects in the region.

The 2025 update to the Central Texas Regional ITS Architecture and Deployment Plan focuses primarily on establishing a connected region. Many of the stakeholders in the region have made significant investments in ITS and operations within their jurisdictions. However, most noted that to fully optimize operations there is additional connectivity needed between agencies to operate the transportation system as a single, seamless, integrated system. Emphasis in Central Texas includes improved sharing of real time data and live video, construction closure information, relevant incident notifications, performance metrics and archived data, and planning for connected and autonomous vehicle (CAV) deployment. The need for a robust fiber communications system to support ITS deployments was also a key emphasis area.

The Central Texas Regional ITS Architecture and Deployment Plan was developed with significant input from local, regional, and state officials. Individual interviews were conducted with stakeholders and a workshop was conducted for all stakeholder agencies in the region. Input was requested to ensure that the Plan reflects the unique needs of the region. The Plan was developed based on how the stakeholders envision the implementation and operation of ITS over the next ten years. The Plan identifies projects that may address the gaps in ITS and needs identified by the stakeholders as priorities for their agency and will help the region progress towards its vision for ITS. Additionally, a website was developed that includes documentation related to the 2025 update of the Plan and an interactive version of the Regional ITS Architecture. The website, including the Interactive ITS Architecture, is located on the Capital Area Metropolitan Planning Organization's (CAMPO) website at www.CAMPOTexas.org under the **Plans & Studies** tab.

The Central Texas Regional ITS Architecture and Deployment Plan strives to present an accurate snapshot of existing ITS deployment and future ITS plans in the region. However, needs and priorities of the region will change over time, and to remain

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effective, this Plan will be periodically reviewed and updated.

Background

In Central Texas, the first regional plan for ITS was the Austin Area-Wide Intelligent Vehicle Highway System (IVHS) Plan and IH 35 Corridor Deployment Plan, which was developed in 1996. This plan served as the predecessor to the first Regional ITS Architecture and Deployment Plan which was developed in 2002. Since then, many new ITS projects have been implemented and the National ITS Architecture, which served as the basis for the Central Texas Regional ITS Architecture, has been updated several times. In order to reflect these changes, the Texas Department of Transportation (TxDOT) Austin District, working closely with stakeholders throughout the region, completed updates to the Regional ITS Architecture and Deployment Plan in 2007, 2015, and most recently in 2019. In the past, the Plan was maintained by the TxDOT Austin District and geographic coverage of the Plan consisted of the 11 counties that make up the TxDOT Austin District. In 2024, CAMPO and the TxDOT Austin District agreed that CAMPO would take over maintenance of the Plan. Future updates of the Plan, including this 2025 update, will only focus on the six counties that are included within the CAMPO boundaries.

Regional ITS architectures are necessary to satisfy the ITS conformity requirements first established in the Transportation Equity Act for the 21st Century (TEA-21) highway bill passed in 1998 and continued in subsequent federal transportation funding bills. In response to Section 5206(e) of TEA-21, the FHWA issued a final rule and the FTA issued a final policy that required regions implementing any ITS project to have an ITS architecture in place by April 2005. After this date, any ITS projects must show conformance with their regional ITS architecture to be eligible for funding from FHWA or FTA. To adequately demonstrate this conformance, it is important that regions deploying ITS have an updated regional ITS architecture in place.

Central Texas Region

Geographic Boundaries

This plan defines Central Texas as the CAMPO service area encompassing six Texas counties: Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson. **Figure 1** shows the Central Texas boundary and its included counties. Central Texas encompasses approximately 5,300 square miles and has a population of approximately 2.33 million according to the US Census Bureau's 2020 census. By January 2024, the population of Central Texas had grown to 2.59 million according to the Texas Demographic Center.

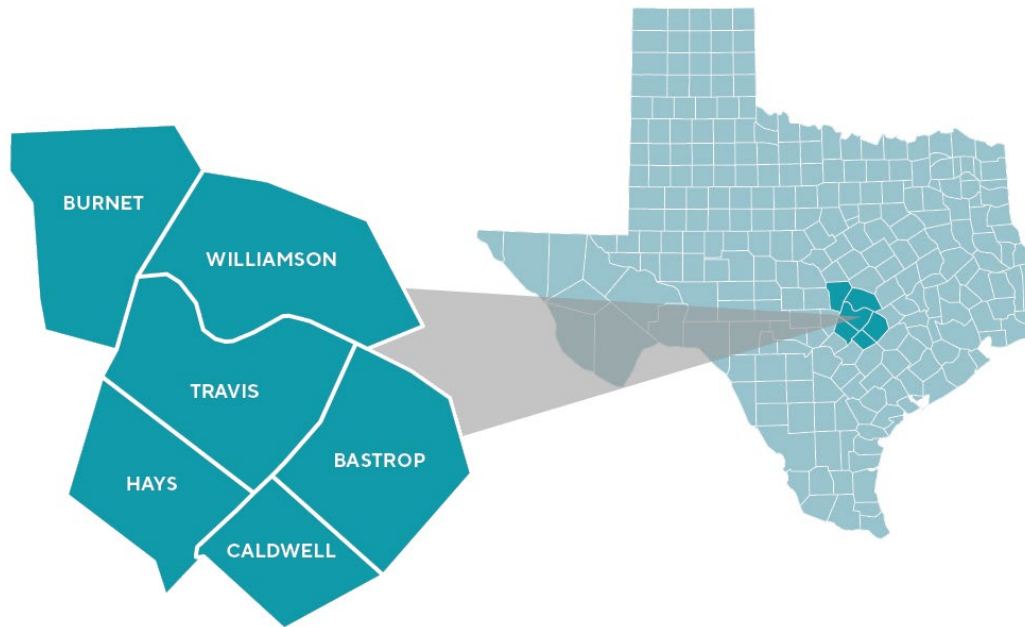


Figure 1: Central Texas Regional ITS Architecture Boundary

Transportation Infrastructure

Central Texas utilizes the Federal Highway Administration’s (FHWA) functional classifications to characterize the level of mobility and degree of access a roadway provides. **Figure 2** displays the functional classification of the existing roadway facilities, eligible to receive federal funding, within Central Texas.

The region is served by a significant number of federal and state highways. The primary access-controlled facilities include IH 35, US 183, US 290, SH 45, SH 71, SH 130, Loop 1 (MoPac), 183A Toll, 183 South Toll, and 290 Toll (Manor Expressway). Several of those facilities are either tolled for their entire length (183A Toll, 183 South Toll, SH 45, SH 130) or have sections or lanes that are tolled (US 290, SH 71, and Loop 1 (MoPac)). Toll roads in the region are either managed by TxDOT, the Central Texas Regional Mobility Authority (CTRMA), or the SH 130 Concession Company.

IH 35 is the primary Interstate highway in the region, extending from Laredo, Texas at the US-Mexico border to Duluth, Minnesota. The effective operation of IH 35 is critical to the movement of goods and people through the State of Texas as well as the United States. Construction and incidents along IH 35 can have a severe impact on commercial vehicle traffic and motorists traveling through the region on this significant cross-country thoroughfare. The on-going IH 35 Capital Express Project will reconstruct IH 35 through Travis County. It is anticipated that the construction will cause significant impacts and delays over the next several years.

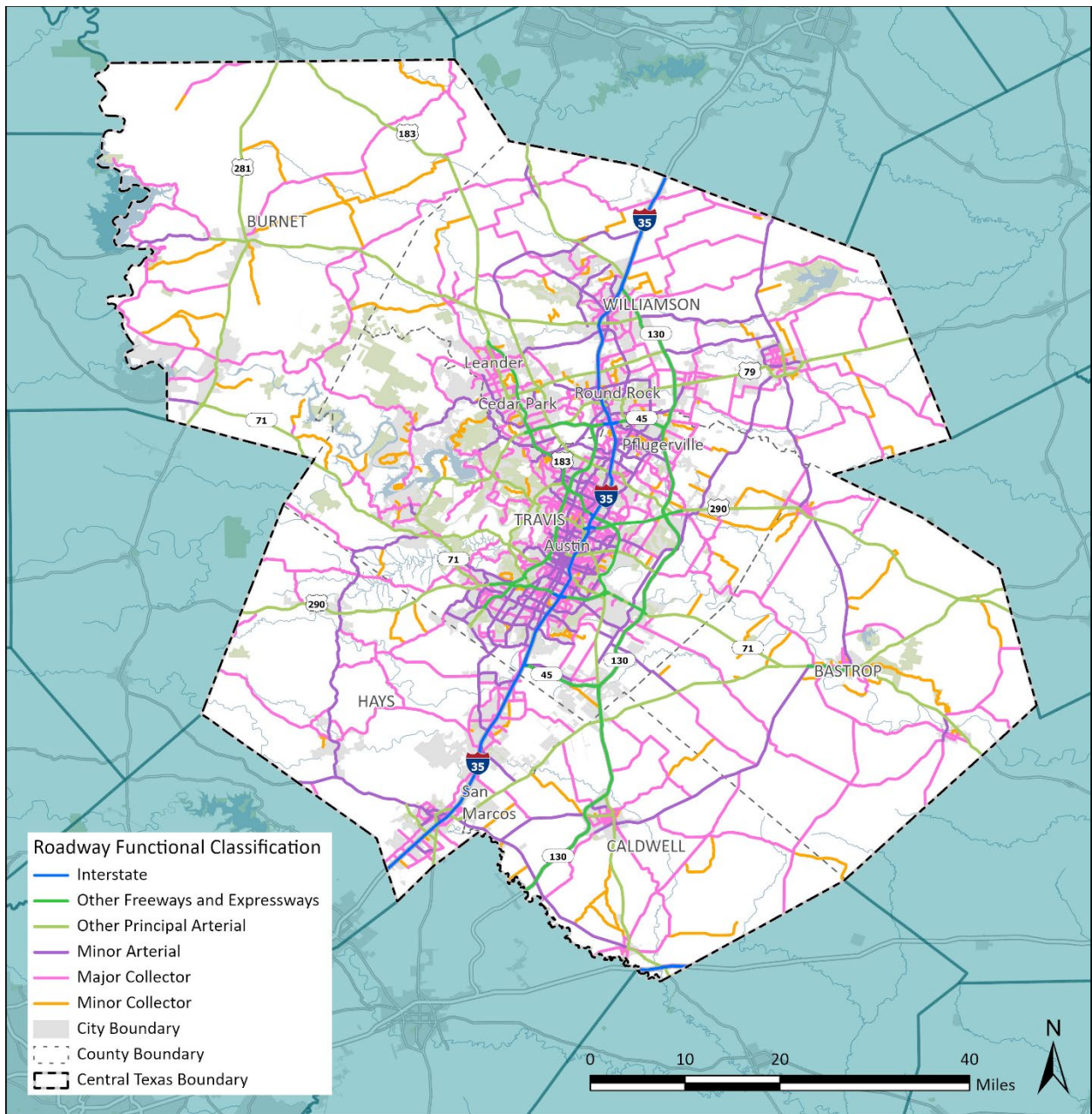


Figure 2: Central Texas Roadway Functional Classification

Fixed-route and paratransit services are provided in Travis County and portions of Hays and Williamson Counties by the Capital Metropolitan Transportation Authority (CapMetro). CapMetro operates the University of Texas Shuttle in the City of Austin near the University of Texas campus. Commuter rail is provided by CapMetro and serves the City of Austin and the City of Leander. The Capital Area Rural Transportation System (CARTS) provides fixed-route and paratransit services in the six counties included in the Central Texas Regional ITS Architecture and Deployment Plan. CARTS operates the Texas State University Bobcat Shuttle, a fixed-route bus service for students in the City of San Marcos. CARTS also provides a fixed-route bus service for commuters between the City of Austin and City of San Marcos. Demand response service in Central Texas is provided primarily by CapMetro and CARTS in the same areas in which they provide fixed-route service.

Key Components of the Plan

The Central Texas Regional ITS Architecture and Deployment Plan consists of several key components:

Regional ITS Inventory – The inventory describes each stakeholder’s ITS deployments and programs that either are existing, in progress of being implemented, or planned for the region.

Regional ITS Needs – The needs describe the transportation related needs in the region that could possibly be addressed by ITS.

Regional ITS Architecture – This section includes the regional ITS service packages, which describe the services that stakeholders in the region want ITS to provide. ITS service package diagrams have been developed to illustrate how each service will be deployed and operated by each agency in the region that expressed interest in a particular service. ITS service package diagrams are available on the Interactive ITS Architecture.

Regional ITS Deployment Plan – The Regional Deployment Plan documents potential ITS projects that could be implemented to provide the ITS services that stakeholders identified as important to the region.

Use and Maintenance – The use and maintenance section of the report describes how to use the Regional ITS Architecture and Deployment Plan for ITS planning and design efforts, such as the development of a systems engineering analysis. It also describes how the Regional ITS Architecture should be maintained in the future.

Interactive ITS Architecture – Available at the CAMPO website, the Interactive ITS Architecture includes the full inventory of existing, planned, and future systems, ITS service packages, roles and responsibilities for stakeholders, and associated national standards.

RAD-IT Database – The Regional Architecture Development for Intelligent Transportation (RAD-IT) is a software application developed by the United States Department of Transportation (USDOT) that’s used as a tool for documenting and maintaining ITS architectures. The RAD-IT database for Central Texas is available for download at the CAMPO website.



Regional ITS Architecture and Deployment Plan Development Process

REGIONAL ITS ARCHITECTURE AND DEPLOYMENT PLAN DEVELOPMENT PROCESS

The 2025 update of the Central Texas Regional ITS Architecture and Deployment Plan relied heavily on stakeholder input to ensure that the ITS architecture reflected regional needs. Interviews were conducted with individual representatives from many of the regional stakeholder agencies to gather input, a workshop was held with stakeholders to discuss initial findings and recommendations, and a website was developed with the draft and final Regional ITS Architecture and Deployment Plan documents. The website includes an interactive version of the Regional ITS Architecture generated from the RAD-IT database. Additional guidance on the use and maintenance of the Regional ITS Architecture is also included on the website.

Stakeholder Involvement

The process followed for the region was designed to ensure that stakeholders could provide input and review for the development of the Region's ITS Architecture and Deployment Plan. **Figure 3** illustrates the process that was followed.

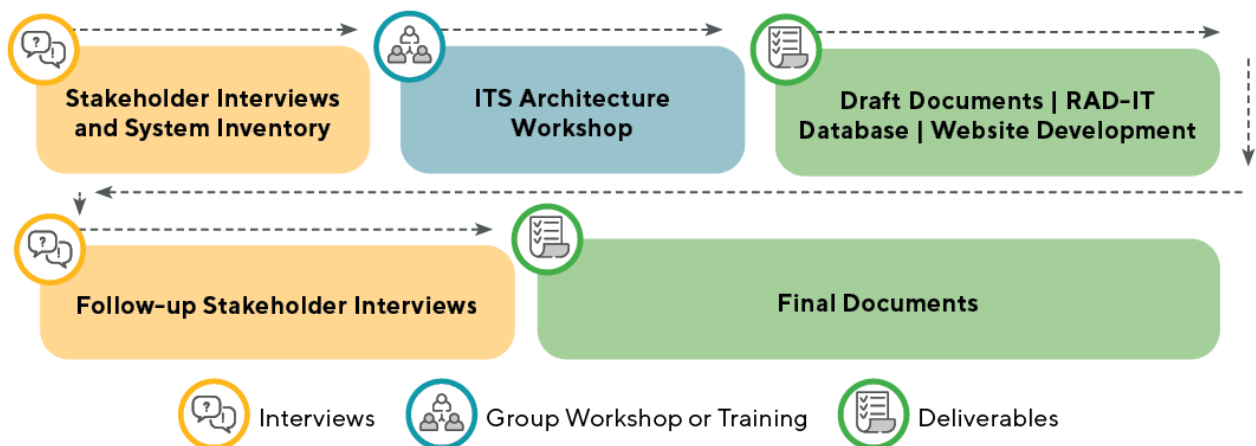


Figure 3: Central Texas Regional ITS Architecture and Deployment Plan Development Process

The key components of the stakeholder involvement process are described below.



Stakeholder Interviews (June – August 2024)

Stakeholder input was first gathered through a series of interviews that were conducted with individual stakeholder agencies. The interviews were used to develop the system inventory for Central Texas, define how ITS services are currently being operated, define how ITS services could be operated in the future, and identify potential regional ITS projects for Central Texas. Stakeholders were given the choice of conducting the interviews in-person at their offices or remotely with the project team.



ITS Architecture Workshop (October 2024)

Stakeholders were invited to the Stakeholder Review Workshop, an in-person workshop where an overview of the Regional ITS Architecture and Deployment Plan was provided, regional boundaries were defined, existing and planned ITS deployments in the region were reviewed, ITS needs for the region were identified, and regional ITS projects and programs recommended by stakeholders in interviews were discussed.



Draft Documents (December 2024)

Following the stakeholder input through interviews and the workshop, a draft report was developed which identified the roles and responsibilities of stakeholders in the operation and implementation of the ITS system, identified initial recommended projects and programs for deployment, and established a maintenance plan. Additionally, the Regional ITS Architecture and Deployment Plan website was updated to allow stakeholders access to an interactive version of the Central Texas RAD-IT architecture database and the Regional ITS Architecture and Deployment Plan report. Once completed, the draft report was shared with the Central Texas stakeholders for their review and comments.



Follow-Up Stakeholder Discussions (January 2025)

Follow-up discussions were conducted with stakeholders as needed to resolve outstanding questions about ITS services and project deployments prior to finalizing the Central Texas Regional ITS Architecture and Deployment Plan.



Final Documents (February 2025)

The final 2025 update of the Central Texas Regional ITS Architecture and Deployment Plan was developed, which included an executive summary, written report, RAD-IT architecture database, and Regional ITS Architecture and Deployment Plan website with an interactive version of the Regional ITS Architecture.

Since ITS often transcends traditional transportation infrastructure, it is important to involve a wide range of local, regional, and state stakeholders in the ITS architecture development process. Input from these stakeholders is a critical part of defining the interfaces, integration needs, and overall vision for ITS in a region. When developing the stakeholder group, CAMPO identified the appropriate local, regional, and state agencies. Stakeholders included representatives from traffic, transit, public safety, emergency management, and toll agencies within Central Texas.

Table 1 contains a listing of Central Texas stakeholders who participated in stakeholder interviews and workshop to provide input. Other stakeholders that were invited to participate but were not able to attend were provided PDFs of the presentations and were notified when copies of reports were available for review on the Regional ITS Architecture and Deployment Plan website to encourage their participation. A complete listing of all stakeholders that participated in the interviews and workshops is including in the stakeholder database in **Appendix A**.

Table 1: Participating Central Texas Stakeholder Agencies

Local Agencies	Regional Agencies	State Agencies
City of Austin	Capital Area Council of Governments	Texas Department of Public Safety
City of Cedar Park	Capital Metropolitan Transportation Authority	TxDOT Austin District
City of Georgetown	Capital Area Regional Transportation Planning Organization	University of Texas Center for Transportation Research
City of Leander	Capital Area Rural Transportation System	
City of Pflugerville	Combined Transportation, Emergency and Communications Center	
City of Round Rock	Central Texas Regional Mobility Authority	
City of San Marcos	SH 130 Concession Company	
Hays County		
Travis County Office of Emergency Management		

ITS Architecture Components

A regional ITS architecture consists of the following components.

Stakeholders

A regional ITS architecture results from the consensus input of a diverse set of stakeholders, encompassing traffic, transit, public safety, and many other operating agencies at local, state, and national levels. It includes both public and private sectors and spans the organizations that manage, support, or are impacted by the surface transportation system, with particular focus on agencies that operate transportation systems in a region.

Inventory

Each stakeholder agency, company, or group owns, operates, maintains, or plans ITS systems in the region. A regional ITS architecture inventory is a list of elements that represent all existing, planned, and future ITS systems in a region as well as non-ITS systems that provide information to or get information from the ITS systems. The inventory can be sorted by physical object or by stakeholder.

Needs






The stakeholder needs identified in a regional ITS architecture determine what the system needs to do and what users need from the system. They are written from the perspective of a system user or stakeholder in that system and are categorized by the ITS service packages that comprise the regional ITS architecture. Service packages provide an accessible, service-oriented perspective to the overall system architecture used to describe a region or project. They identify the pieces of the physical view that are required to implement a particular ITS service. Each of these service packages has a set of needs associated with it that can be used as the basis for stakeholder validation, setting proper expectations, and eliciting requirements for the systems and devices to be implemented.








ITS Service Packages

In the National ITS Architecture, services that are provided by ITS are referred to as ITS service packages. ITS service packages provide a visual representation of how ITS services are deployed and how information is shared. ITS service packages can include several stakeholders and elements that work together to provide a service in a region. Examples of service packages from the National ITS Architecture include Infrastructure-Based Traffic Surveillance, Traffic Information Dissemination, and Transit Vehicle Tracking.

There are currently 157 ITS service packages identified in the National ITS Architecture Version 9.3, which was the most recent version available of the National ITS Architecture at the time of the 2025 Central Texas Regional ITS Architecture update. The National ITS Architecture groups these service packages into 12 ITS architecture service areas, described in **Table 2**.

Table 2: ITS Architecture Service Areas

Service Area	Description
 Commercial Vehicle Operations (CVO)	<p>CVO addresses the management of commercial vehicle fleets and the movement of freight.</p> <p><i>Example Service Packages: Roadside CVO Safety, Smart Roadside and Virtual Weigh-in-Motion, HAZMAT Management</i></p>
 Data Management (DM)	<p>DM addresses the management of data that can be used by transportation agencies to support transportation planning, performance monitoring, safety analysis, and research.</p> <p><i>Example Service Packages: ITS Data Warehouse, Performance Monitoring</i></p>
 Maintenance and Construction (MC)	<p>MC addresses the monitoring, maintaining, improving, and managing of the roadway physical condition and its associated infrastructure equipment.</p> <p><i>Example Service Packages: Maintenance and Construction Vehicle and Equipment Tracking, Work Zone Management, Infrastructure Monitoring</i></p>
 Parking Management (PM)	<p>PM addresses the management of parking operations including both space management and electronic payment for parking.</p> <p><i>Example Service Packages: Parking Space Management, Smart Park and Ride System, Parking Electronic Payment</i></p>
 Public Safety (PS)	<p>PS addresses the management by public safety agencies of emergencies or incidents in the transportation. It also addresses how emergency operations centers interact with transportation and public safety agencies to support response to disasters and for evacuations impacting the transportation network.</p> <p><i>Example Service Packages: Emergency Vehicle Preemption, Roadway Service Patrols, Disaster Response and Recovery</i></p>

Service Area	Description
 Public Transportation (PT)	<p>PT addresses the management, operations, maintenance, and security of public transportation. This area covers both fixed-route and on-demand systems, as well as those passenger rail systems operated by transit agencies.</p> <p><i>Example Service Packages:</i> Transit Vehicle Tracking, Transit Traveler Information, Transit Signal Priority</p>
 Support (SU)	<p>SU addresses monitoring, maintaining, and managing of the connected vehicle system. Service packages in this service area are generally applied most directly to private-sector services, many of which are operating their services throughout the U.S. As a result, these service packages are not always included in regional ITS architectures and are instead described at the project architecture level if needed.</p> <p><i>Example Service Packages:</i> Map Management, Location and Time, Object Registration and Discovery</p>
 Sustainable Travel (ST)	<p>ST addresses the operation of the transportation system to minimize the environmental impact. It promotes a balance of accessibility, mobility, protection of human safety and environment.</p> <p><i>Example Service Packages:</i> Emissions Monitoring, Electric Charging Stations Management, HOV/HOT Lane Management</p>
 Traveler Information and Personal Mobility (TI)	<p>TI addresses the provision of both static and dynamic information about the transportation network to users both prior to and during their trips.</p> <p><i>Example Service Packages:</i> Broadcast Traveler Information, Personalized Traveler Information, In-Vehicle Signage</p>
 Traffic Management (TM)	<p>TM addresses the management of the movement of all types of vehicles and travelers throughout the transportation network. It deals with information collection, dissemination, and processing for the surface transportation system.</p> <p><i>Example Service Packages:</i> Traffic Signal Control, Traffic Incident Management System, Variable Speed Limits</p>
 Vehicle Safety (VS)	<p>VS addresses the vehicle's safety for automated, connected, and non-equipped vehicles.</p> <p><i>Example Service Packages:</i> Curve Warning, Queue Warning, Automated Vehicle Operations</p>
 Weather (WX)	<p>WX addresses activities that monitor and notify users and transportation network managers of weather and environmental conditions that have an impact on the road transportation network.</p> <p><i>Example Service Packages:</i> Weather Data Collection, Weather Information Processing and Distribution, Spot Weather Impact Warning</p>

The service packages in the National ITS Architecture are meant to be customized to reflect the unique systems, subsystems, and terminators in a region. ITS service packages represent a service that will be deployed as an integrated capability by a particular stakeholder. Each service package is shown graphically with the service package name, agencies involved, and desired data flows. ITS service packages consist of the two primary pieces:

Elements – Elements represent ITS inventory assets deployed by all stakeholders in a region. Elements are classified as existing, planned, or future. An element classified as existing means at least one or more of the element is deployed, however addition elements may be needed. For example, a city may have deployed a small number of CCTV cameras which are classified as existing but may have a need to deploy many more of this element. Planned elements indicate that the element is in the process of being deployed or has been funded, while future elements indicate the stakeholder(s) has expressed interest in deploying the element at some point in the future but no plans are in place for deployment.

Architecture Flows – Architecture flows provide a standardized method for documenting the types of information that flow between elements. Similar to elements, flows are also classified as existing, planned, or future.

Figure 4 is an example of a template ITS service package diagram from the National ITS Architecture for a Traffic Signal Control. This ITS service package describes the information flows between a Traffic Management Center and ITS Roadway Equipment (Traffic Signal and Controller), as well as interactions of the ITS Roadway Equipment with travelers and pedestrian and the Traffic Management Center with Traffic Operations Personnel. The rectangles represent the elements involved in the ITS service package, color coded based on the subsystem each element is classified as. The lines with arrows connecting elements to each other represent information flows. The color and style of the information flow indicate the level of security surrounding the information, and whether an information flow is acknowledged, whether a flow is unicast, multicast, or broadcast. Each flow has a name or label identifying the type of information that is flowing between the elements, some of which are preceded by a number to indicate the time sensitivity of the data within the flow and a letter to indicate the geospatial relevance of the data.

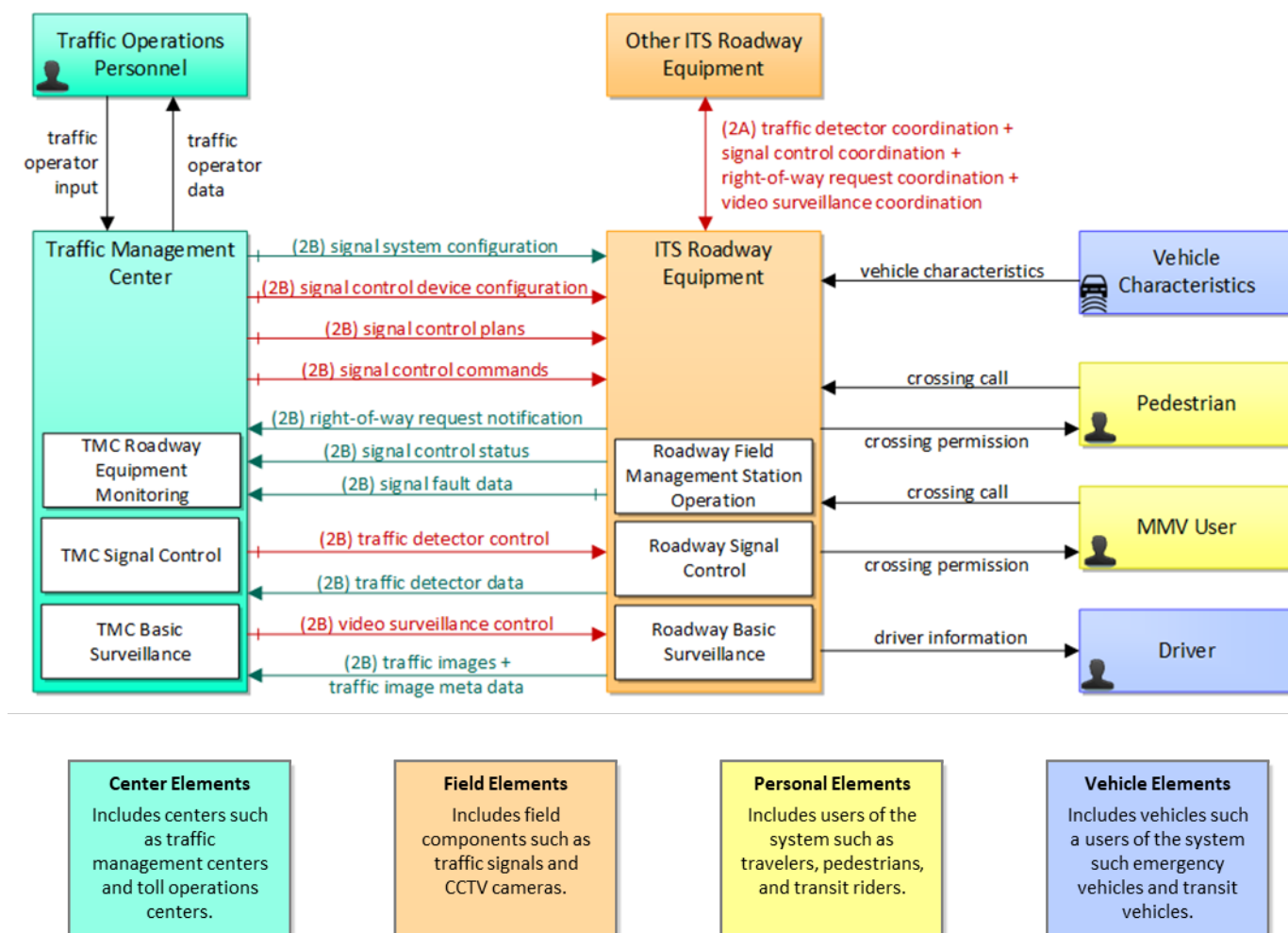


Figure 4: Example ITS Service Package Diagram (TM03 – Traffic Signal Control)

Roles and Responsibilities

A regional ITS architecture documents the current and future roles and responsibilities of each stakeholder in the operation of the regional transportation system across a range of transportation services and related support services.

Standards

Standards are an important tool that allow efficient implementation of the elements in a regional ITS architecture over time. Standards facilitate deployment of interoperable systems at local, regional, and national levels without impeding innovation as technology advances, vendors change, and as new approaches evolve. The USDOT's ITS Joint Program Office is supporting Standards Development Organizations (SDOs) with an extensive, multi-year program of accelerated, consensus-based standards developed to facilitate successful ITS deployment in the United States.

Projects and Programs

To address the ITS needs identified in the Regional ITS Architecture and provide the desired functionality of ITS, a Regional ITS Architecture should identify a series of projects and programs that will allow stakeholders to meet that functionality. These projects and programs make up the Regional ITS Deployment Plan. They focus on larger multi-agency type projects that will impact at least two or more stakeholders. Projects in the ITS Deployment Plan often require a high level of planning and interagency coordination in order to be successfully deployed and operated.

Agreements

Agreements provide the institutional underpinnings for the technical integration identified in a regional ITS architecture. A regional ITS architecture can be a tool to compile ITS related agreements between stakeholder agencies within a region.

RAD-IT Database

RAD-IT is a software application that was developed by the USDOT to be used as a tool for documenting and maintaining ITS architectures. Version 9.3 of RAD-IT was released in December 2024 and was developed to support Version 9.3 of the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT), the National ITS Architecture framework. The Systems Engineering Tool for Intelligent Transportation (SET-IT) Version 9.3 can be used to generate ITS service package diagrams for a regional ITS architecture and could be used in greater detail by agencies to develop project architectures for ITS deployments, pilots, and test beds. Both FHWA and FTA recommend using RAD-IT and SET-IT software in development of regional ITS architectures. Therefore, Version 9.3 of RAD-IT and SET-IT were utilized for the 2025 update of the Central Texas Regional ITS Architecture.

RAD-IT saves data in Microsoft Access compatible data files and therefore RAD-IT files can be accessed using Microsoft Access. However, use of Microsoft Access will not provide the same amount of capabilities as accessing the files using the RAD-IT software. The USDOT offers RAD-IT and SET-IT available for download free of charge from the ARC-IT website. At the time this report was written, that site was located at www.arc-it.net and Version 9.3 was the most recent version available.

Online Interactive ITS Architecture

RAD-IT generates an online interactive ITS architecture database with all components of the ITS architecture, described previously. SET-IT allows the user to quickly access any standards that are associated with the data flows and to generate reports and diagrams that assist in reviewing the data.

RAD-IT Reports

Some examples of the useful reports and diagrams that may be generated using RAD-IT, several of which make up the components of the online Interactive ITS Architecture, are included in **Table 3**.

Table 3: RAD-IT Reports and Diagrams

Report or Diagram Name	Functions
Stakeholder Summary	Provides a description of the stakeholder and the associated elements for each stakeholder in an ITS architecture.
Inventory Summary	Provides a description and status for each element in an ITS architecture.
Service Packages Summary	Identifies each of the ITS service packages selected for a region and the elements associated with each ITS service package.
Interconnect Report	Identifies for each element all the other elements that are connected and the status of each connection.
Standards Activities Report	Identifies relevant standards associated with each of the data flows used in an ITS architecture.
Subsystem Diagram	Identifies the subsystems from the National ITS Architecture that are included in an ITS architecture.
Interconnect Diagrams	Identifies for each element all the other elements that are connected and the status of each connection. The Interconnect Diagrams can be customized to show all elements in an ITS architecture or a single element can be selected so that only the connections it has with other elements are shown. Interconnect Diagrams can also be viewed by individual ITS service packages to view all the elements and connections in each ITS service package.
Context Diagrams	Context Diagrams show all the data flows coming to and from a center (such as a Traffic Management Center), physical object, functional object, or a terminator (such as a vehicle). (Context diagrams can also be exported from SET-IT.)
Flow Diagrams	Flow Diagrams are similar to Interconnect Diagrams; however, the actual data flows that are part of each connection between elements are also shown.
Website	RAD-IT generates a customized interactive regional ITS architecture website with a hyperlinked database of stakeholders, ITS elements, data standards, and other elements of the architecture for reference.



Regional ITS Inventory

REGIONAL ITS INVENTORY

Central Texas has already deployed many ITS projects, programs, and initiatives that have come from multiple agencies and cover a range of transportation modes. During the stakeholder interviews and the stakeholder workshop, each stakeholder identified key existing and planned ITS deployments, as well as larger long-term ITS efforts that were underway.

Existing and Planned ITS Deployments

Table 4 shows the Regional ITS Deployment Inventory consisting of key ITS deployments for each stakeholder agency. In many cases, a deployment classified as existing might still need to be enhanced to attain the service level desired by the stakeholder. The deployments documented in this regional ITS inventory make up the majority of the elements included in the Regional ITS Architecture.

Following **Table 4**, a summary of each agency in the table is provided, including a discussion of the larger ITS efforts that each has underway as of 2024. Some of the larger multi-agency regional ITS efforts underway that are discussed in the summary, but are not shown in **Table 4**, include the following initiatives.

CAMPO Central Texas Transportation Management System (CTTMS) – CAMPO led effort to establish a platform for sharing transportation network data in real time. The initial focus of CTTMS is on sharing traffic signal timing data among partner agencies to streamline data sharing processes and improve traffic signal coordination across jurisdictional boundaries

TxDOT Regional Traffic Management Center (TMC) – TxDOT Austin District led effort to create a concept for a regional TMC. The effort is in the early planning phase, with key decisions on which agencies will be involved and the level of physical versus virtual infrastructure yet to be determined.

TxDOT Construction Partnership Program (CPP) –TxDOT Austin District led effort to develop an agency coordination and traveler information application to support major roadway construction projects and help the traveling public make informed route selection decisions. The initial focus of the CPP is the reconstruction of IH 35 through Central Texas, but the partnership could support all future regional construction projects.

University of Texas Safety, Mobility, Autonomy Research and Testing Track (SMARTTrack) – University of Texas Center for Transportation Research led effort to design and construct a three-tier test track for emerging ITS and CAV technologies and strategies. The effort also aims to compile a database for the capabilities and limitations of all tested technologies.

ITS INVENTORY IN THE INTERACTIVE ITS ARCHITECTURE

All ITS elements in the Central Texas Regional ITS Architecture can be found in the online **Interactive ITS Architecture**. To access the ITS elements, select the **Inventory** link on the left side bar of the **Interactive ITS Architecture**. To search by stakeholder, select **By Stakeholder**.



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Table 4: Central Texas ITS Deployment Inventory

Agency	Freeway and Arterial Applications																				Transit Applications														
	Archived ITS Data	Blank Out Message Signs	Bluetooth Detection	CCTV Cameras	Centralized Traffic Signal Control Systems	Comparative Travel Time (CTT) Signs	Dynamic Message Signs (DMS)	Electronic Toll Collection	Emergency Vehicle Signal Preemption	Flood Monitoring Drones	Flood Monitoring Roadside Equipment	Freeway Safety Service Patrol	Lane Control DMS	Parking Management Systems	Pedestrian Hybrid Beacons	Portable Changeable Message Signs (PCMS)	Railroad Detection and Notification System	Real-Time Traveler Info. Website/Mobile Data	Road Weather Information Systems (RWIS)	Smart Work Zones	Traffic Management/Operations Center	Vehicle Detection - Arterial Intersections	Vehicle Detection - Freeways	Archived Transit Data	Automated Fare Payment	Automated Passenger Counters	Bus Rapid Transit	On-Board CCTV Cameras	Real-Time Traveler Info. at Transit Centers/Stops	Real-Time Traveler Info. Website/Mobile Data	Transit Operations Center	Transit Security Systems	Transit Signal Priority	Transit Vehicle Tracking	
Regional																																			
TxDOT Austin District	●		●	●	●	●	●				●	●	●			●		●	●	●	●	●	●	●											
TxDOT Tolling				●				●				●									●														
CAMPO	○																																		
CTRMA	●		●	●			●	●			●	●							●		●		●												
SH 130 Concessionaire				●		●	●	●													●			●											
Travis County OEM				○						○																									
Municipal																																			
City of Austin	●	●		●	●		●		●		●		●	●	●	●		●		●		●	●										●		
City of Cedar Park		●	●	●	●				○						●		●					●	●												
City of Georgetown				●	●				○		●			○									●												
City of Leander					●				●														●												
City of Pflugerville					●				○														●												
City of Round Rock				●	●				●		●			●		●						●	●												
City of San Marcos	●			●	●				●		●			○	●		●	●	○			●	●												
Transit																																			
CapMetro																								●	●	●	●	●	●	●	●	●	●	●	●
CARTS																								●	●	●			●	●	●	●			●

● Existing System

○ Planned System

LOCAL AGENCIES



City of Austin

The City of Austin Mobility Management Center (MMC) utilizes advanced traffic management system software that is used to actively monitor and operate traffic signals, dynamic message signs (DMS), field sensors, and closed-circuit television (CCTV) cameras. The City of Austin is continuing to explore pilot projects to test connected and autonomous vehicles in the City.

Advanced Traffic Signal Systems – The City of Austin operates almost 1,200 traffic signals. About 75 percent of its traffic signals and ITS devices are connected via the City’s fiber network. The City of Austin is planning to have battery backup units deployed at all its traffic signals within the next five years as part of an effort to be more resilient during inclement weather events. In coordination with CapMetro, the City of Austin has transit signal priority implemented at about 150 traffic signals. About 200 of the City of Austin traffic signals have optical emergency vehicle preemption (EVP). However, the City is moving away from the optical EVP system and is piloting GPS-based EVP for its fire department and EMS vehicles. The City of Austin also has railroad preemption implemented at many signalized intersections with railroad crossings.

Combined Transportation, Emergency and Communications Center (CTECC) – CTECC is a partnership between the City of Austin, Travis County, TxDOT, and CapMetro. The building includes the TxDOT Austin District Traffic Management Center (TMC), City of Austin 911 and 311 answering and dispatch, CapMetro dispatch, and the Region’s Emergency Operations Center (EOC).

Agencies currently located in CTECC include the following:

- » City of Austin – Austin-Travis County Emergency Medical Services, Austin Fire Department, Austin Police Department, Office of Homeland Security and Emergency Management
- » Travis County – Travis County Sheriff’s Office, Travis County Constable, Office of Emergency Management
- » TxDOT Austin District – TMC and HERO dispatch
- » CapMetro – Transit Dispatch (on an ad hoc basis) and CapMetro Police Department

In Spring 2024, the City of Austin purchased an office complex in South Austin with significantly more space that is available at CTECC. The complex is anticipated to house CTECC 2.0. The preliminary plans for CTECC 2.0 include a larger operations floor with state-of-the-art technology, increased resiliency, and space for new agencies to locate some operations to CTECC including the University of Texas and Austin Independent School District.



City of Cedar Park

The City of Cedar Park has been increasing its surveillance coverage of its transportation network by installing CCTV cameras at all new traffic signals and deploying cameras at existing traffic signals. The City of Cedar Park has also increased ITS deployments by installing blank out signs for no right turns for vehicles at railroad crossings and major crosswalks. These signs are activated when a train or pedestrian is blocking the road for a vehicle turning right, where a vehicle would normally be able to turn right, particularly turning right on red.

School Zone Warning – The City of Cedar Park recently updated all of its school zone flashing beacons to have cellular modems. The City partnered with Glance to utilize an app that

notifies drivers when they enter a school zone. However, this app's notifications are limited to just drivers that open the app before their trip and leave the app running on their mobile device while they drive.

Traffic Signal Detection Systems – The City of Cedar Park plans to replace its existing traffic signal detection systems with a more integrated system. This would enable CAV capabilities, EVP, and ATSPM performance measures. The City of Cedar Park does not currently have EVP but plans to implement a partially GPS-based system that supplements GPS data from onboard units in emergency vehicles with advanced detection cameras.



City of Georgetown

Since the 2019 update of the Regional ITS Architecture, the City of Georgetown took over the operation and maintenance of TxDOT traffic signals within the City's boundaries, as well as blank out signage to warn drivers of trains blocking a railroad crossing and wrong-way driving detectors.

Parking Availability System – The City of Georgetown recently began construction of a large downtown parking garage with parking space availability technology. The parking garage will initially show parking space availability status using red and green lights above each space. In the mid-term future, the City hopes to be able to share parking space availability information online in real-time. In the long-term future, the City would like to deploy parking space availability systems in all its flat parking lots and street parking areas.



City of Leander

Since the 2019 update of the Regional ITS Architecture, the City of Leander took over the operation and maintenance of TxDOT traffic signals within the City's boundaries, which all have detection

cameras that allow the City staff to see the traffic signal, detection status, and timing in real time. Several of the City of Leander's traffic signals have EVP implemented.

School Zone Systems – The City of Leander recently upgraded its school zone flashing beacon system to enable remote programming capabilities. The City of Leander has several speed feedback systems deployed in school zones and has the desire to deploy more.



City of Pflugerville

The City of Pflugerville recently took over the operation and maintenance of the TxDOT traffic signals within the City's boundaries, which currently utilize a mix of detection types including video, radar, and loop detection. The City of Pflugerville is exploring ways to shift from relying on contractors for traffic signal operations, maintenance, and ITS related activities and bring those in-house.

Adaptive Traffic Signal Timing – The City of Pflugerville recently signed a 10-year agreement with Applied Information to utilize Glance, a software platform for asset management and operations. The City plans to upgrade the City's traffic signal controllers to be on the same platform and establish a communication connection via cell modems in order to implement Glance. The City plans to pilot Glance to establish adaptive traffic signal timing at ten pilot intersections along FM 685, near SH 130. Glance supports the traffic signal cabinet aspects of EVP and the City recently purchased the compatible in-vehicle EVP system for its police department vehicles.



City of Round Rock

The City of Round Rock has implemented several new ITS systems since the 2019 update of the Regional ITS Architecture, such as piloting new detection systems that utilize radar and video, radar speed

feedback signs for school zones, and parking space availability systems in parking garages. The City of Round Rock has also made improvements to its traffic signal network by deploying battery backup units at every signal which trigger automated notifications when a signal's status switches to rely on the battery backup unit.

Dedicated TMC – The City of Round Rock now has a dedicated space in the Public Works building for a TMC with a video wall for monitoring the City's traffic signals. The new TMC has improved capabilities to remotely monitor and implement traffic signal timing changes as well as monitor and control CCTV cameras at various locations throughout the City for traffic surveillance. The TMC has one dedicated full-time staff member during standard business hours and is staffed outside of standard business hours as needed, such as for major special events.



City of San Marcos

The City of San Marcos has continued to expand its use of ITS and has implemented a traffic signal system that includes signal monitoring and control capabilities as well as pan-tilt-zoom CCTV cameras and GPS-based emergency vehicle preemption.

Virtual TMC Interactive Map – The City of San Marcos has developed an interactive map to compile and track the City's transportation asset data and make it accessible to the public. A key purpose of the map is to support virtual TMC operations because the City of San Marcos does not have the funds, staff, or space for a physical full-time TMC. The map allows City staff to set up automatic alerts triggered by various events such as asset status changes. This eliminates the need for City staff positions dedicated to monitoring traffic and the City's assets. The map identifies where the City has CCTV cameras and

provides a link to a live stream site on YouTube. Another purpose of the map is to encourage residents and students to utilize alternate modes of transportation by showing bus routes, bus stops, and bus locations in real time, SPIN scooter locations and remaining charge range, sidewalk, bike lanes, etc. The map also shows the status of railroad crossings so travelers and emergency responders can see if a train is blocking their route in real-time and the duration the crossing has been blocked.



Travis County Office of Emergency Management (OEM)

Transportation Network

Surveillance – Travis County OEM does not currently own, operate or monitor its own CCTV cameras, but is considering deploying CCTV cameras on Travis County facilities. Travis County OEM currently has access to the City of Austin CCTV camera feeds and more of the TxDOT camera feeds while in the Travis County EOC at CTECC. Travis County OEM also has access to remote cameras on helicopters and feeds from police. Travis County OEM is working on developing unmanned aerial vehicles (UAVs) for real-time video surveillance. These drones could allow Travis County OEM monitor crowd activity during special events such as the April 8, 2024 solar eclipse. The drones could also help monitor floods and assess damages after major weather events, tasks that are often difficult or unsafe to do when cameras and roads are damaged.

Public Alert System – Travis County OEM utilizes Warn Central Texas, a service provided to the Capital Area Council of Governments (CAPCOG) region. This service enables emergency centers and public safety answering points (PSAPs) to send messages to subscribers' phones. Travis County OEM also utilizes Integrated Public Alert System (IPAS), a system that allows emergency centers and weather centers to send a message, such as AMBER alerts and weather alerts, to all

mobile devices within a geofenced area. The message can be set for a duration so if anyone enters the geofenced area after the message is programmed, they will receive the message. Unlike Warn Central Texas, IPAS does not

require a subscription. Not all counties in Central Texas can send messages because they have not gone through the process to apply to get access to IPAS.

REGIONAL AGENCIES



Capital Area Metropolitan Planning Organization (CAMPO)

While CAMPO does not deploy, manage, maintain, or operate ITS devices themselves, the agency leads the facilitation of ITS related discussions to identify and address challenges the transportation network faces at a regional level.

Central Texas Transportation Management System (CTTMS) – CAMPO is leading an effort to establish a platform for sharing transportation network data in real time. The initial focus of CTTMS is on sharing traffic signal timing data among partner agencies to streamline data sharing processes and improve traffic signal coordination across jurisdictional boundaries.



Capital Metropolitan Transportation Authority (CapMetro)

CapMetro has developed an extensive ITS program that includes automated vehicle location (AVL), automated passenger counters, security cameras both on buses and at multimodal stations, transit signal priority at City of Austin traffic signals for the entire CapMetro fleet, and automated transit fleet monitoring for fixed-route and paratransit vehicles.

Mobile Device Applications – Additionally, CapMetro has developed a separate mobile device application for each of its transit services that allow riders to view routes and schedules, purchase tickets, track CapMetro vehicles in real time, and request rides, varying depending on the service the application is for. CapMetro also shares real-time bus occupancy data in its applications including availability thresholds set to 'many seats', 'few seats', and 'full'.

Assisted and Autonomous Buses – CapMetro is exploring assisted buses, which means that the buses are not completely autonomous but would incorporate safety and operation features common in passenger cars such as back up cameras, blind spot monitoring, and lane assist. CapMetro is also working with the Federal Transit Administration (FTA) to develop an automated bus yard, in which busses would be able to pull out of their parking spot when they are done for the day and drive themselves through the wash, refuel themselves, and return to their parking spot.



Capital Area Rural Transit (CARTS)

CARTS buses include AVL, automated passenger counters, security systems, and automated maintenance tracking and alert systems.

Trip Planning Software – CARTS is developing a trip planner software with the goal to incorporate all CARTS services on one platform, as well as CapMetro information. CARTS

currently utilizes a different software for each of its transit services, which allow riders to purchase tickets, track CARTS vehicles in real time, and request rides, varying depending on the service the application is for.



Central Texas Regional Mobility Authority (CTRMA)

CTRMA has implemented several emerging ITS technologies and strategies along its toll facilities to actively monitor general traffic operations, detect and monitor traffic incidents, and manage the pricing of its toll lanes. CTRMA has also deployed wrong-way driving detection and warning systems that warns the wrong-way driver and automatically alerts CTRMA operators, TxDOT, and law enforcement. CTRMA is currently evaluating its existing shared-use paths to identify other potential technologies that could be beneficial, such as smart lighting at crossings, additional CCTV cameras, and classification kiosks that provide information regarding how many shared-use path users are walking and biking

Automated Transportation Management –

CTRMA also utilizes Rekor for managing, monitoring, and analyzing most of its ITS deployments and collected data. CTRMA, as well as the TxDOT Austin District, utilizes Rekor's decision support system for incident detection and management. Rekor enables CTRMA's fixed CCTV camera arrays to detect traffic incidents and unexpected queueing and can then send automated notifications to alert CTRMA operators and other staff. Rekor uses microwave sensors to detect unexpected queueing and trigger queue notifications. Rekor

enables CTRMA to have two-way communication with WAZE regarding traffic incidents, maintenance activities, planned construction, congestion, and other closures. Data linked to Rekor allows CTRMA staff to see where TxDOT HERO vehicles are in real-time using AVL data. CTRMA also uses Rekor to create crash risk heat maps for tracking metrics and planning purposes.



SH 130 Concession Company

Electronic Toll Payment – Within Central Texas, the SH 130

Concession Company operates Segments 5 and 6 of SH 130 in Caldwell and Travis Counties. This portion of SH 130 also operates using open road tolling, which accepts electronic tags including TxDOT's TxTAG, NTTA's TollTag, HCTRA's EZ TAG, Kansas Turnpike Authority's K-Tag, and Oklahoma Turnpike Authority's Pikepass.

Advanced Traffic Management System (ATMS)

Software – The SH 130 Concession Company is nearing the completion of an upgrade to its ATMS software which would allow staff to control CCTV cameras and stream camera feeds on mobile devices.

Smart Truck Parking Facility RAISE Grant – To support Caldwell County with a recent RAISE Grant award, the SH 130 Concession Company is also getting involved with the initial planning stage of constructing a technologically advanced truck parking facility near the SH 130 and SH 80 interchange. This parking facility is anticipated to have over 100 long-term parking sites, amenities, electric vehicle (EV) charging stations, and an online platform with real-time parking space availability and reservation capabilities.

STATE AGENCIES



TxDOT Austin District

Highway Emergency Response Operator (HERO) Program –

TxDOT operates the HERO Program, which is a safety service patrol program that provides roadside assistance and incident management services along 138 miles of IH 35, US 183, US 290, SH 71, and Loop 1 (Mopac). All HERO vehicles are equipped with traffic and lane control devices to assist at crash scenes, pressurized air to fill low tires, gasoline, battery jump-start cables, and more to support relocating disabled vehicles to safety and removing obstacles from the roadway. Several HERO trucks are also equipped with lane blades or push bumpers to remove debris or disabled vehicles from travel lanes, respectively. TxDOT recently expanded its fleet to have six vehicles with tow capabilities to remove vehicles from the roadway faster.

Regional Traffic Management Center (TMC) –

The TxDOT Austin District is creating a concept for a regional TMC. The effort is in the early planning phase, beginning with identifying what ITS deployments partner transportation agencies have and could potentially supply information to a regional TMC. The TxDOT Austin District met with its partner transportation agencies to determine that a hybrid of in-person and virtual operations would be the most feasible and beneficial type of TMC for the region.

Construction Partnership Program (CPP) –

The TxDOT Austin District established a working group, CPP, that is developing an agency coordination and traveler information application to support major roadway construction projects and help the traveling public make informed route selection decisions. The idea of the working group was initially sparked by the need to coordinate construction

during the upcoming major reconstruction of IH 35, along intersecting routes and key alternate routes. The impact of work zones and need for coordination of closures do not end at IH 35, therefore the app will compile all planned construction projects from all participating agencies in the region. The effort will provide public notifications and access to construction information via 511 and the app.

Automated Freight Corridor –

The TxDOT Austin District is working with Cavnue to pilot ITS deployments for an automated trucking corridor. This SH 130 Smart Freight Corridor project focuses on a 21-mile segment of SH 130 through the greater Austin area. The effort includes the deployment of cameras with artificial intelligence computation power to communicate with connected and automated commercial vehicles, which could also be used to support WWD detection and warning.



University of Texas Center for Transportation Research (UT CTR)

Safety, Mobility, Autonomy Research and

Testing Track (SMARTTrack) – UT CTR, in coordination with transportation partners throughout the region, are designing and constructing a three-tier test track for putting emerging technologies and strategies through a thorough verification process. A key goal of SMARTTrack is to standardize the vetting process for all vendors and serve as a technology certification testbed. SMARTTrack also aims to compile a database for the capabilities and limitations of all tested technologies for transportation agencies throughout the region to reference when considering emerging technologies and strategies.

Regional ITS Data Infrastructure (RIDI) – With funding from the TxDOT Austin District, UT CTR is working on an effort referred to as RIDI. The goal is to compile transportation data from various data sources throughout the region, analyze that data, and disseminate inferences based on the analysis results and metrics. A key focus of this data processing project will be to

establish methods and standards for communication flows and protocol among partner agencies, as well as how to react to the analysis results. This effort supports SMARTTrack’s long-term goal for establishing an instantaneous data feedback loop involving connected and autonomous vehicles (CAVs).













Upon completion of the regional ITS deployment inventory, the next step in the development of the Regional ITS Architecture was to identify the level of deployment of ITS services that are important to Central Texas. The twelve groups of ITS service areas from the National ITS Architecture are shown in **Table 5**. Each service area is shown in the table with the current level of deployment in the region based on stakeholder feedback aggregated from the interviews and the stakeholder workshop. Limited, partial, and substantial levels of deployment in the region were considered for each of the service areas.

ITS services related to Public Transportation and Traffic Management were considered to have substantial deployment. These were the areas of ITS that were most mature and complete, although additional ITS services and more integration of these services was still desired.

ITS services related to Sustainable Travel and Vehicle Safety were the most limited. Sustainable travel, which includes infrastructure like HOV lanes and electric vehicle charging stations, is still very limited within Central Texas but offers many opportunities for additional deployment. Vehicle Safety services, which primarily include on-board vehicle safety features, is generally not something driven by public sector stakeholders so there was only limited deployment. Stakeholders did recognize there were opportunities to integrate more with CAV and will continue to look at opportunities to do so.

The Support service area ITS service packages tends to focus on support of ITS, such as mapping software or communications protocols, and there were not specific services identified that are deployed by stakeholders in Central Texas. The Support service area will be primarily addressed at the national level and ITS service packages for Central Texas will not be recommended.

Table 5: Central Texas ITS Architecture Service Areas

Service Area	Level of Deployment
 Commercial Vehicle Operations	Partial Deployment
 Data Management	Partial Deployment
 Maintenance and Construction	Partial Deployment
 Parking Management	Partial Deployment
 Public Safety	Partial Deployment
 Public Transportation	Substantial Deployment
 Support	Not Applicable
 Sustainable Travel	Limited Deployment
 Traveler Information and Personal Mobility	Partial Deployment
 Traffic Management	Substantial Deployment
 Vehicle Safety	Limited Deployment
 Weather	Limited Deployment

Existing Stakeholder Agency Agreements

The Central Texas ITS Architecture has identified numerous agency interfaces, information exchanges, and integration strategies necessary to deliver the ITS services and systems desired by stakeholders in Central Texas. Establishing these interfaces and information flows among public and private entities in the region will necessitate agreements among agencies to define parameters for sharing information. This is essential for supporting traffic management and incident management, providing traveler information, and performing other functions identified in the Regional ITS Architecture.

With the implementation of ITS technologies and the anticipated volume of information exchange outlined in the Central Texas ITS Architecture, it is likely that formal agreements between agencies will become necessary in the future. These agreements, while possibly not requiring financial commitments from agencies in Central Texas, should clearly outline specific roles, responsibilities, data exchanges, levels of authority, and other aspects of regional operations. Additionally, some agreements may outline specific funding responsibilities where appropriate and applicable.

Agreements should avoid being overly specific regarding technology whenever possible. As technology is likely to evolve, agreements that are not technology-neutral could necessitate updates with every technological advancement. Therefore, the primary focus of the agreements should be on the responsibilities of the agencies and the types of information that need to be exchanged.

Table 6 provides a list of existing agreements for Central Texas ITS operations. It is important to note that as ITS services and systems are implemented in the region, the planning and review process for those projects should include a thorough evaluation of potential agreements necessary for implementation or ongoing operations.

In **Appendix B**, templates have been provided for agreements that may be needed for two of the projects introduced in the Regional ITS Deployment Plan section. These templates cover agreements that may need to be established between agencies for the Regional TMC recommendation and the Real-Time Data Sharing recommendation. Several other recommended projects and programs in the Regional ITS Deployment Plan section either already have agreements in place, such as those TxDOT has developed for HERO services, or may not require agreements, such as Railroad Crossing Detection and Notification System which may be implemented independently by each municipality. The templates provided in **Appendix B** serve as a starting point and could be modified for use for a variety of future ITS projects and programs that may be implemented in Central Texas.

Table 6: Central Texas ITS Architecture Service Areas

Agreement	Description
Austin-Area Incident Management for Highways (AIMHigh) Memorandum of Regional Cooperation	Memorandum that outlines regional coordination among the State, local agencies, and private entities within the Austin region regarding traffic incident management.
CAMPO Open Roads Policy	Policy adopted by the CAMPO board that prioritizes safe and quick clearance of traffic incidents on major roads in Central Texas.
CapMetro/CARTS Real Time Bus Arrival Agreement	Agreement between CapMetro and CARTS to share real-time bus arrival information.
CapMetro/City of Austin Transit Signal Priority Agreement	Agreement between the City of Austin and CapMetro regarding transit signal priority at specific signals that are along CapMetro MetroRapid BRT routes.
City of Georgetown/TxDOT Wrong Way Driving Equipment Agreement	Agreement between the City of Georgetown and the TxDOT Austin District for Georgetown to maintain wrong-way driving equipment deployed on state routes in Georgetown.
City of Round Rock/CapMetro Fixed-Route Transit System Operation	Agreement between the City of Round Rock and CapMetro for fixed-route transit service in Round Rock.
CTECC Joint Operations Agreement	Agreement among all agencies located at CTECC for the operations and maintenance of CTECC facilities.
SMARTTrack Regional Partner Memorandum of Understanding	Agreement between the University of Texas and the TxDOT Austin District, CAMPO, City of Austin, and CTRMA to work together for the implementation and operation of Texas SMARTTrack.
TxDOT Agreement for Sharing ITS Data with the Media	Agreement between the TxDOT Austin District and various media outlets for the sharing of TxDOT CCTV camera feeds.
TxDOT Agreement for Fiber Sharing with Local Governments	Agreement between the TxDOT Austin District and local governments for the connection and sharing of fiber optic cable or related infrastructure owned by either TxDOT or a local government.



Regional Transportation Goals and ITS Needs

REGIONAL TRANSPORTATION GOALS AND ITS NEEDS

Regional needs that could be addressed by ITS were identified by stakeholders during the individual stakeholder interviews in June and July 2024 and the Stakeholder Review Workshop held in October 2024. The Capital Area Metropolitan Planning Organization's (CAMPO) 2050 Regional Transportation Plan (RTP) and the TxDOT Austin District's Transportation Systems Management and Operations (TSMO) Program Plan were also reviewed to determine other regional needs that could possibly be addressed through ITS. The needs identified through the regional ITS architecture and deployment plan development process as well as the CAMPO 2050 RTP and TxDOT Austin District TSMO Program Plan help determine which ITS service packages should be included in the Central Texas Regional ITS Architecture.

Regional Transportation Goals

CAMPO 2050 Regional Transportation Plan (RTP)

CAMPO is currently updating their RTP, which will be referred to as the 2050 Regional Transportation Plan. The draft CAMPO 2050 RTP outlines six goals related to Safety, Mobility, Stewardship, Economy, Equity, and Innovation. The deployment, integration, and operation of ITS can support all of these goals, with ITS strategies especially able to support goals related to safety and mobility.

Safety – Objectives include crash reduction and achieving vision zero metrics. Road service patrols such as the TxDOT Highway Emergency Response Operator (HERO) Program aid in making highways safer by assisting emergency responders, removing disabled vehicles from the roadway and shoulder, clearing debris from the roadway, and aiding stranded motorists. Network surveillance utilizing CCTV cameras and vehicle field sensors can provide a real-time view of conditions to improve incident detection times. Once detected, agencies can provide advanced warning of incidents or other potential safety issues that might impact travelers to reduce secondary crashes. ITS can also be used to disseminate traveler information, as well as emergency alerts including missing children, missing elderly, or suspected criminals can be broadcast to the public.

Mobility – Objectives include improving connectivity and reliability, proving more travel choices, and more regional coordination. ITS can provide traveler information for upcoming work zone delays or travel time comparisons which can be disseminated via different sources such as using roadside field equipment like DMS, through in-vehicle messaging, and directly to driver's personal device. Sensors, detectors, and cameras can enable real-time data collection which can support sharing existing transportation network condition information among partner transportation agencies so each can make informed decisions for how to proactively or reactively adjust the assets within their jurisdiction for a seamless and cohesive driver experience.

Stewardship – Objectives including system preservation through optimization and improving public health through air quality protection. ITS provides freeways, arterials, and transit systems with the tools to better operate and maximize the capacity of the system. ITS allows transportation system managers to coordinate with one another and with other agencies, such as public safety, that play a critical role in operations. ITS can be used to reduce the idle time of vehicles through coordinated signals and

adaptive signal timing. As a result, these technologies help reduce energy consumption and air pollution.

Economy – Objectives include economic development and keeping people and goods moving to reduce lost hours of productivity. ITS can support the movement and the regulation of commercial vehicles that carry essential goods to consumers in addition to hazardous materials. By reducing the impacts of traffic incidents, work zones, and weather events, ITS can reduce delays to goods and lost hours of productivity to limit negative impacts to the economy. ITS can also support the operation of the transportation network during special events to assist with managing visitor traffic and atypical traffic patterns.

Equity – Objectives include providing access to opportunity and minimizing impact on human environment. ITS can improve transit operations, safety, and user experience by providing signal priority to transit vehicles, alerting transit vehicles of nearby pedestrians, and streamlining the process of trip planning and purchasing fares. ITS can benefit vulnerable road users such as pedestrians and bicyclists by alerting motor vehicles of their presence. ITS can also automate tasks and processes that historically require dedicated staff, therefore bringing new transportation network management capabilities to jurisdictions with fewer resources.

Innovation – Objectives including leveraging technology to increase efficiency of travel and improving the flexibility of the system to meet changing needs, conditions, and emergency technologies. ITS can establish communication and remote control capabilities infrastructure to allow signal technicians to remotely troubleshoot traffic signal issues, to allow adjustments traffic signal timings when volumes are diverted due to unexpected closures or congestion, and to make the system compatible with CAVs. Adaptive signal timing systems allow the transportation network to accommodate fluctuating traffic patterns in real time.

TxDOT Austin District Transportation Systems Management and Operations (TSMO) Program Plan

TSMO is an approach that aims to improve mobility, safety, and reliability for all modes of transportation. The approach makes use of mobility solutions and ITS that can be implemented faster and at a lower cost than other projects seeking to add roadway capacity. Recognizing the need to operate the system in an integrated and coordinated fashion, the TxDOT Austin District completed its TSMO Program Plan in June 2018. This TSMO Program Plan identifies the strengths and needs related to transportation operations within the District, which lead the District to develop seven goals to strive for over the next five years to improve operations of the existing transportation network. Of these seven goals, the following five can be addressed by ITS as described:

Reliability – ITS can enable real-time data collection and automate data analysis to support decision-making processes. This can include sensors collecting data to provide real-time travel time comparison information to drivers via DMS or map applications on their mobile devices to assist them in making informed routing decisions.

Efficiency – ITS can establish communication and remote control capabilities infrastructure to allow signal technicians to remotely troubleshoot traffic signal issues, to enable adjustments traffic signal timings when volumes are diverted due to unexpected closures or congestion, and to make the system

compatible with CAVs. ITS can also include adaptive signal timings to accommodate fluctuating traffic patterns in real time.

Customer Service – ITS can provide real-time traveler information such as upcoming work zone delays, travel time comparisons, and transit vehicle locations by utilizing sensors, Bluetooth data, or AVL. This information can be disseminated via various sources such as posting on roadside field equipment like DMS, through in-vehicle messaging, sent directly to driver’s personal device, or updating information on a mobile device application. ITS can improve transit operations and user experience by providing signal priority to transit vehicles and streamlining the process of trip planning and purchasing fares.






Collaboration – ITS can enable transportation agencies to collect and share transportation network data in real time. This allows agencies to optimize their transportation network assets based on the surrounding traffic conditions and creates a seamless traveler experience across jurisdictional boundaries.

Technology – The deployment and implementation of ITS enables real-time data collection, data processing, and ultimately decision making for not only transportation agency operations staff, but for the driving public and CAVs. Additional data provide a more accurate picture of the existing traffic conditions and allows operations staff to better understand what impacts changes to the transportation network may have.

Regional ITS Needs

Regional ITS needs were defined based on stakeholder input gathered through the individual stakeholder interviews and the Stakeholder Review Workshop, as well as review of existing studies and reports in the region such as the draft CAMPO 2050 RTP and the TxDOT Austin District TSMO Program Plan discussed previously. The primary ITS regional needs identify most often by Central Texas stakeholders are presented in **Table 7**, organized by ITS service area. The goals most often expressed by stakeholders were related to the ITS service areas of: Data Management, Maintenance and Construction, Public Safety, Public Transportation, and Traffic Management.

Table 7: Central Texas Regional ITS Needs

ITS Need	
 Data Management	Share traffic signal timing, closure, and relevant incident data among agencies in real time for both operational and planning initiatives.
	Share live CCTV camera feeds among all agencies for improved active traffic monitoring and incident detection.
	Develop a local or regional fiber plan to inventory existing fiber optic cable deployments and to support future ITS bandwidth.
 Maintenance and Construction	Improve coordination of maintenance and construction activities between agencies for traffic operations.
 Public Safety	Expand freeway safety service patrol coverage to help maintain traffic operations on principal arterials.
	Improve coordination between agencies during large-scale incidents and other events.
 Public Transportation	Develop a regional transit fare payment system that could accommodate the transfer of passengers between modes and agencies.
 Traffic Management	Improve coordination of traffic signal system timing between agencies.
	Improve coordination between all agencies for traffic and transit operations.
	Establish railroad crossing monitoring capabilities and communicate blockages to drivers, transit, and emergency personnel.
	Increase staffing and additional training to operators and signal technicians to ensure that deployments of ITS are fully utilized and issues are resolved efficiently.



Regional ITS Architecture

REGIONAL ITS ARCHITECTURE

Upon completion of the Central Texas ITS inventory and identification of ITS related regional needs, the next step in the development of the Regional ITS Architecture was to identify the ITS services that are important to the region.

ITS Service Packages

The Central Texas stakeholders reviewed the National ITS Architecture service packages and selected based on the relevance of the functionality that each ITS service package could provide to the region, as well as to each individual agency.

Selection and Prioritization of Service Packages

Stakeholders selected 76 ITS service packages for implementation in Central Texas. The selected ITS service packages are identified in **Table 8**, organized by the applicable ITS service area from the National ITS Architecture and implementation priority. Detailed descriptions of each ITS service package in the National ITS Architecture are located in the online Interactive ITS Architecture at CAMPO's website.

The Interactive ITS Architecture ITS Service Package section provides customized version of the ITS service packages for stakeholders that currently, or plan to operate, specific services. Most ITS services have been customized for agencies, however in some cases ITS service packages were developed for a general Municipality/County stakeholder rather than specifically for each city or county separately. Regional and state agencies, such as TxDOT, CTRMA, and Capital Metro do have all their ITS service packages customized.

While the Support ITS service area did draw some interest from Regional stakeholders, the ITS service packages within the Support service area generally applied most directly to existing private-sector services, many of which are operating their services in regions throughout the United States. Examples including mapping services and communication protocols. As a result, the Support ITS service area service packages are not included in the Central Texas Regional ITS Architecture and will instead be described at the project architecture level if needed for future projects that may use these services.

SERVICE PACKAGES IN THE INTERACTIVE ITS ARCHITECTURE

All ITS service packages that were customized for the Central Texas Regional ITS Architecture can be found in the online **Interactive ITS Architecture**. To access the ITS service packages, select the **Services** link on the left side bar of the **Interactive ITS Architecture**, then click on the desired ITS service package. To see the ITS service package diagram, select the link below **Diagram**.



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Table 8: Central Texas ITS Service Package Prioritization by Service Area


Legend

 **High Priority Service Packages**
 **Medium Priority Service Packages**
 **Low Priority Service Packages**

 COMMERCIAL VEHICLE OPERATIONS <ul style="list-style-type: none">  CVO12 HAZMAT Management  CVO07 Roadside CVO Safety  CVO08 Smart Roadside and Virtual WIM 	 PARKING MANAGEMENT <ul style="list-style-type: none">  PM01 Parking Space Management  PM03 Parking Electronic Payment  PM02 Smart Park and Ride System  PM04 Regional Parking Management 	 PUBLIC TRANSPORTATION <ul style="list-style-type: none">  PT01 Transit Vehicle Tracking  PT02 Transit Fixed-Route Operations  PT03 Dynamic Transit Operations  PT04 Transit Fare Collection Management  PT05 Transit Security  PT06 Transit Fleet Management  PT08 Transit Traveler Information  PT09 Transit Signal Priority  PT07 Transit Passenger Counting  PT11 Transit Pedestrian Indication  PT12 Transit Vehicle at Station/ Stop Warnings  PT14 Multi-modal Coordination
 DATA MANAGEMENT <ul style="list-style-type: none">  DM01 ITS Data Warehouse  DM02 Performance Monitoring 	 PUBLIC SAFETY <ul style="list-style-type: none">  PS01 Emergency Call-Taking and Dispatch  PS02 Emergency Response  PS03 Emergency Vehicle Preemption  PS08 Roadway Service Patrols  PS10 Wide-Area Alert  PS12 Disaster Response and Recovery  PS13 Evacuation and Reentry Management  PS14 Disaster Traveler Information 	
 MAINTENANCE AND CONSTRUCTION <ul style="list-style-type: none">  MC05 Roadway Maintenance and Construction  MC06 Work Zone Management  MC08 Maintenance and Construction Activity Coordination  MC01 Maintenance and Construction Vehicle and Equipment Tracking  MC07 Work Zone Safety Monitoring  MC02 Maintenance and Construction Vehicle Maintenance  MC09 Infrastructure Monitoring 		 SUSTAINABLE TRAVEL <ul style="list-style-type: none">  ST06 HOV/HOT Lane Management  ST02 Eco-Traffic Signal Timing  ST05 Electric Charging Stations Management  ST01 Emissions Monitoring

Legend

High Priority Service Packages


TRAVELER INFORMATION AND PERSONAL MOBILITY

- T101** Broadcast Traveler Information
- T102** Personalized Traveler Information
- T107** In-Vehicle Signage

Medium Priority Service Packages


TRAFFIC MANAGEMENT

- TM01** Infrastructure-Based Traffic Surveillance
- TM03** Traffic Signal Control
- TM06** Traffic Information Dissemination
- TM07** Regional Traffic Management
- TM08** Traffic Incident Management System
- TM10** Electronic Toll Collection
- TM12** Dynamic Roadway Warning
- TM13** Standard Railroad Grade Crossing
- TM15** Railroad Operations Coordination
- TM19** Roadway Closure Management
- TM25** Wrong-Way Vehicle Detection and Warning
- TM02** Vehicle-Based Traffic Surveillance
- TM04** Connected Vehicle Traffic Signal System
- TM17** Speed Warning and Enforcement
- TM16** Reversible Lane Management

Low Priority Service Packages


VEHICLE SAFETY

- VS05** Curve Speed Warning
- VS07** Road Weather Motorist Alert and Warning
- VS08** Queue Warning
- VS12** Vulnerable Road User Safety
- VS13** Intersection Safety Warning and Collision Avoidance
- VS09** Reduced Speed Zone Warning/Lane Closure
- VS11** Oversize Vehicle Warning
- VS16** Automated Vehicle Operations
- VS10** Restricted Lane Warnings
- VS15** Infrastructure Enhanced Cooperative Adaptive Cruise Control


WEATHER

- WX01** Weather Data Collection
- WX02** Weather Information Processing and Distribution
- WX03** Spot Weather Impact Warning

The needs identified in the stakeholder engagement efforts, as well as needs from the CAMPO 2050 RTP and TxDOT Austin District TSMO Program Plan are listed in **Table 9**. The table also identifies which ITS service packages address each ITS need.

Customization of ITS Service Packages

After selecting the ITS service packages in the National ITS Architecture that were applicable for Central Texas, each ITS service package and the elements that could be included to customize it for the region were reviewed for each specific stakeholder. The selected ITS service packages were customized to reflect the unique systems, subsystems, and data flows in Central Texas.

ITS service packages represent a service that will be deployed as an integrated capability. Each ITS service package is shown graphically with the ITS service package name, agencies involved, and desired data flows. The data flows are shown as either existing, planned, or future. Data flows shown as existing indicate that the connection exists in at least one location within the jurisdiction. Data flows shown as existing should not be interpreted to mean that deployment of that service is complete as there are many cases where a data flow exists in an ITS service package but a need has been identified to expand the service to additional locations. Planned flows indicate a connection that is in the process of being established or has funding procured. Future flows indicate that the stakeholder(s) has expressed interest in creating the connection but does not have concrete plans developed or dedicated funding to do so.

Customized ITS service packages were created for the Central Texas Regional ITS Architecture based on stakeholder input during the stakeholder interviews and stakeholder workshop. If a stakeholder specified a system has been deployed, there are plans for deploying a new system that has dedicated funding, or the stakeholder has interest in the system in the future, a customized ITS service package for that system was developed for that stakeholder. If a stakeholder did not identify existing deployments or the potential for future deployments of a particular system, a custom ITS service package for that system was not developed for the stakeholder.

As noted earlier in this section, most ITS services have been customized for agencies, however in the case of cities, ITS service packages were developed for a general Municipality/County stakeholder rather than specifically for each city or county separately. The primary reason for this was due to limitations of RAD-IT and the number of ITS service packages and elements that it can include. For these cities, customized ITS service packages that are specific to individual cities or counties can be developed at the project level. The Municipal/County ITS service packages should provide a good starting point and generally match what most cities have, or have planned, for deployment. The one exception is the City of Austin. Because the City of Austin had the greatest number of unique deployments and is the largest city by population in Central Texas, the City of Austin ITS service packages are customized.


Regional and state agencies, such as TxDOT, CTRMA, and Capital Metro do have all their ITS service packages customized. The ITS service package diagrams for all service packages identified for Central Texas are included on the CAMPO website on the Interactive ITS Architecture section of the Regional ITS Architecture page. The status of all ITS service packages for all stakeholders, provided as existing, planned, or future, can be found in **Appendix C**.

Regional ITS Needs and Corresponding ITS Service Packages

Input received from stakeholders during the stakeholder interview and stakeholder workshop provided valuable information for the ITS service package customization process. The needs that were identified by stakeholders and presented in Regional Transportation Goals and ITS Needs section of this report are included in **Table 9**. **Table 9** also identifies how each need was addressed and includes all of the ITS service packages that were identified and customized to address the ITS need.

Table 9: Central Texas Regional ITS Needs and Corresponding ITS Service Packages

ITS Need	Corresponding ITS Service Packages
 Data Management Related Needs	
Share traffic signal timing, closure, and relevant incident data among agencies in real time for both operational and planning initiatives.	DM01 – ITS Data Warehouse TM03 – Traffic Signal Control TM08 – Traffic Incident Management System MC05 – Roadway Maintenance and Construction MC06 – Work Zone Management
Share live CCTV camera feeds among all agencies for improved active traffic monitoring and incident detection.	DM01 – ITS Data Warehouse TM01 – Infrastructure-Based Traffic Surveillance TM06 – Traffic Information Dissemination TM08 – Traffic Incident Management System
Develop a local or regional fiber plan to inventory existing fiber optic cable deployments and to support future ITS bandwidth.	DM01 – ITS Data Warehouse M01 – Infrastructure-Based Traffic Surveillance TM03 – Traffic Signal Control TM06 – Traffic Information Dissemination TM07 – Regional Traffic Management
 Maintenance and Construction Related Needs	
Improve coordination of maintenance and construction activities between agencies for traffic operations.	MC05 – Roadway Maintenance and Construction MC06 – Work Zone Management MC08 – Maintenance and Construction Activity Coordination
 Public Safety Related Needs	
Expand freeway safety service patrol coverage to help maintain traffic operations on principal arterials.	PS02 – Emergency Response PS08 – Roadway Service Patrols
Improve coordination between agencies during large-scale incidents and other events.	PS02 – Emergency Response PS12 – Disaster Response and Recovery TM06 – Traffic Information Dissemination TM07 – Regional Traffic Management TM08 – Traffic Incident Management System TM19 – Roadway Closure Management WX02 – Weather Info Processing and Dissemination
 Public Transportation Related Needs	
Develop a regional transit fare payment system that could accommodate the transfer of passengers between modes and agencies.	PT04 – Transit Fare Collection Management PT14 – Multi-modal Coordination

ITS Need	Corresponding ITS Service Packages
 Traffic Management Related Needs	
Improve coordination of traffic signal system timing between agencies.	ST02 – Eco-Traffic Signal Timing TM03 – Traffic Signal Control TM07 – Regional Traffic Management
Improve coordination between all agencies for traffic and transit operations.	TM07 – Regional Traffic Management
Establish railroad crossing monitoring capabilities and communicate blockages to drivers, transit, and emergency personnel.	TM13 – Standard Railroad Grade Crossing TM15 – Railroad Operations Coordination
Increase staffing and additional training to operators and signal technicians to ensure that deployments of ITS are fully utilized and issues are resolved efficiently.	TM03 – Traffic Signal Control TM07 – Regional Traffic Management

Architecture Interfaces

The Central Texas Regional ITS Architecture not only identifies the various systems and stakeholders involved, but it also emphasizes the importance of connectivity between transportation systems. The system interconnect diagram provides a high-level overview of the relationships between subsystems in the architecture, such as the relationship between various types of centers, field devices, and vehicles. The system interconnect diagram helps explain the high-level interfaces between all subsystems.

The National ITS Architecture system interconnect diagram has been customized for the Central Texas Regional ITS Architecture and is shown in **Figure 5**. The customized system interconnect diagram is based on the system inventory and information gathered from the stakeholders. Each of the subsystems that are included in the Central Texas Regional ITS Architecture have been shown in black text. Subsystems that are not included in the Central Texas Regional ITS Architecture are shown in gray text.

Element interconnect diagrams have also been developed, which show each element from the Central Texas ITS Architecture and all of the other elements it interfaces with in the architecture. These diagrams are available through the Interactive website on CAMPO's website and include all elements and data flows between them.

INTERFACES IN THE INTERACTIVE ITS ARCHITECTURE

Interfaces between elements in the Central Texas Regional ITS Architecture can be found in the online **Interactive ITS Architecture**. To access the interfaces, select the **Interfaces** link on the left side bar of the **Interactive ITS Architecture**, then click on the element you are interested in to see the data flows between the element and all other elements with which it interfaces.



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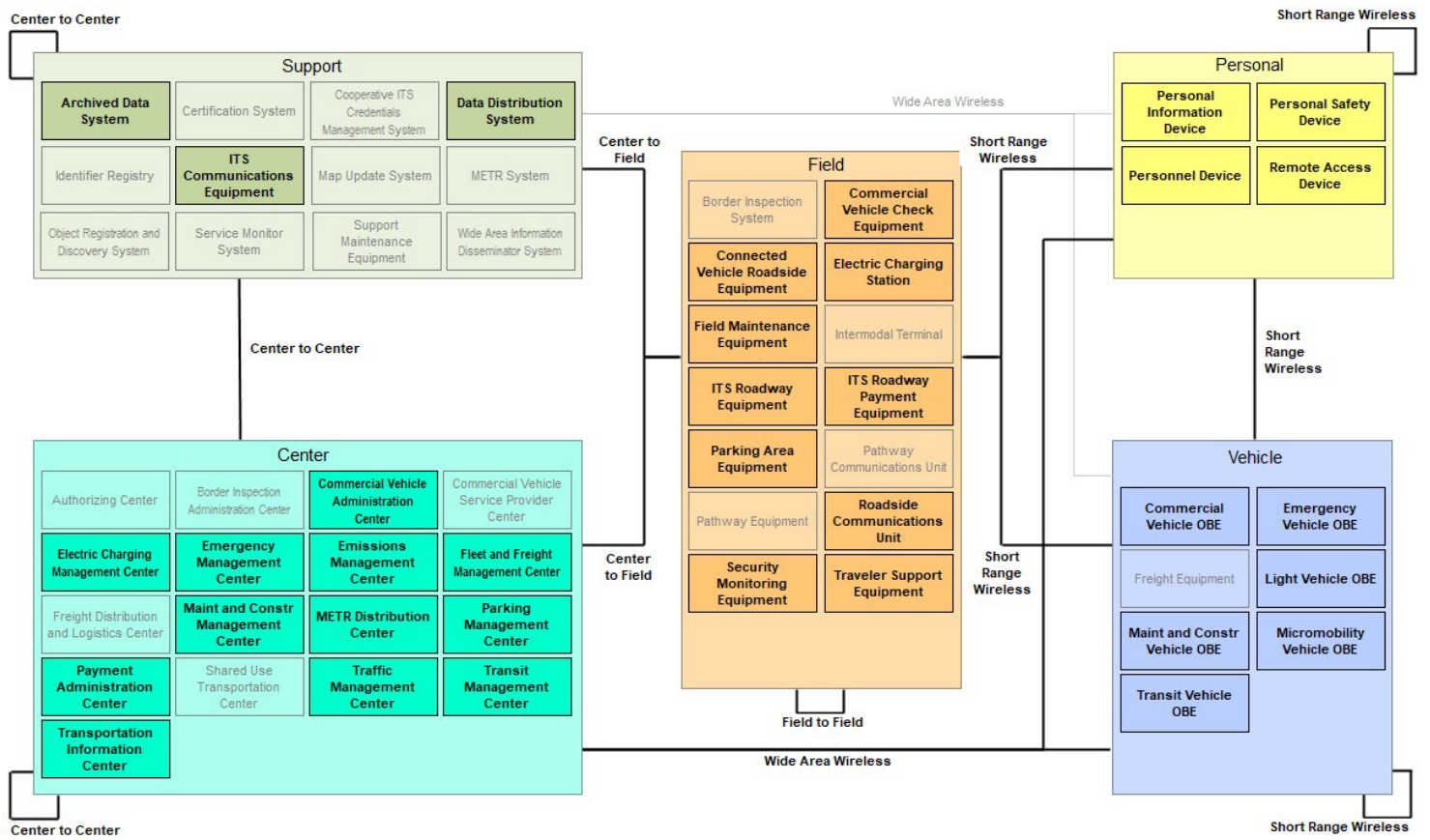


Figure 5: Central Texas System Interconnect Diagram

Roles and Responsibilities

Roles and responsibilities related to the operations of the ITS in Central Texas are included in the Interactive ITS Architecture. In the Central Texas Regional ITS Architecture, these roles and responsibilities are documented for eight separate service area, with each area describing an aspect of the operation of an interconnected, regional ITS network. The service areas covered are described briefly below:

Archived Data System – Operation of systems to collect and maintain archived data.

Emergency Management – Operation of systems to provide emergency call taking, public safety dispatch, and emergency operations center operations.

Freeway Management – Operation of systems to provide wrong-way driving warning, variable speed limits, service patrols, and roadside traveler information.

Incident Management – Operation of systems to provide rapid and effective response to traffic incidents. This service area includes systems to detect and verify incidents as well as coordinated agency response to the incidents.

Parking Management – Operations of systems for regional and local parking information dissemination.

Maintenance and Construction Management – Operation of systems to monitor and manage roadside maintenance and construction work zone activities.

Traffic Signal Management – Operation of traffic signal systems that react to changing traffic conditions and provide coordinated intersection timing over a corridor or an area.

Transit Services – Operation of systems to manage fleets of transit vehicles and overall transit systems more efficiently.

Traveler Information Dissemination – Operation of systems to provide static and real-time transportation information to travelers.

ROLES AND RESPONSIBILITIES IN THE INTERACTIVE ITS ARCHITECTURE

Roles and responsibilities in the Central Texas Regional ITS Architecture can be found in the online **Interactive ITS Architecture**. To access the roles and responsibilities, select the **Roles and Responsibilities** link on the left side bar of the **Interactive ITS Architecture**, then click on the desired area



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Standards

Standards are an important tool that will allow efficient implementation of the elements in the Central Texas Regional ITS Architecture over time. Standards facilitate deployment of interoperable systems at local, regional, and national levels without impeding innovation as technology advances, vendors change, and as new approaches evolve. The USDOT's ITS Joint Program Office is supporting Standards Development Organizations (SDOs) with an extensive, multi-year program of accelerated, consensus-based standards development to facilitate successful ITS deployment in the United States.

Standards are based on the physical subsystem architecture flows identified in the customized ITS service packages for the Central Texas region. Standards for specific ITS architecture flows in the Central Texas Regional ITS Architecture are available through the National ITS Architecture website. Since the website is updated more frequently than the RAD-IT software and links directly to additional information about the applicable standard, the website is the preferred method for determining which standards apply to a particular architecture flow. To locate this information, do the following:

Go to the main page of the National Architecture website at <http://www.arc-it.net/>



Select the link for **Information Flow** embedded in the sub-bullet titled **Views**.



Select the desired information flow from the alphabetical list of information flows.



Scroll to find the appropriate application of the information flow you are researching.



Select the information flow name again to find additional detail about the information flow, including applicable standards found in the **Communication Solutions** tab

RAD-IT Database

The USDOT RAD-IT Version 9.3 was used generate document the Central Texas Regional ITS Architecture and generate the ITS service package diagrams and other pieces of the Regional ITS Architecture discussed in this section. The RAD-IT database can be downloaded directly from CAMPO's website. To access the file, it is recommended that the user download the free RAD-IT software directly from the USDOT National ITS Architecture website. Version 9.3 or newer will be required to view the CAMPO Regional ITS Architecture RAD-IT database.

RAD-IT DATABASE

The **RAD-IT** database can be downloaded directly from the CAMPO website under the Regional ITS Architecture and Deployment Plan section.



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Regional ITS Deployment Plan

REGIONAL ITS DEPLOYMENT PLAN

The ITS Deployment Plan Section identifies regionally significant ITS projects and programs in Central Texas that should be implemented to achieve the desired functionality outlined in Regional ITS Architecture. The ITS Deployment Plan Section expands upon the ITS Architecture by providing recommendations and strategies for projects and programs in Central Texas, potential stakeholders involved, and proposed timelines for implementation. The ITS Deployment Plan Section also connects each regional project and program to the ITS Architecture by identifying ITS service packages that correspond to respective projects and programs.

Project and Program Development

Stakeholder input was gathered through a review of existing ITS inventory and deployments, stakeholder interviews, and a stakeholder workshop. The regional needs identified in the Regional ITS Architecture, as well as the prioritized list of ITS service packages, also contributed to projects and programs that have been identified in this section.

The ITS Deployment Plan Section provides stakeholders with a comprehensive list of regionally significant ITS projects and programs that align with the Regional ITS Architecture and aim to address transportation needs in Central Texas. It is important to note that the Plan is not limited by financial constraints. The included projects represent the desired implementations of stakeholders, although funding will still be required to bring these projects to fruition. It should also be noted that this plan focuses primarily on larger, multi-agency, regional projects. Many of the stakeholders in Central Texas have plans to expand existing system or add new systems within their agencies. These existing and planned systems are presented in the Regional ITS Inventory section of this report.

Each of the projects and program recommended in the Regional ITS Deployment Plan has been checked against the Regional ITS Architecture to ensure they are in conformance. This should assist agencies deploying these projects in the future with meeting FHWA and FTA requirements for ITS architecture conformity. The projects in the Plan could also feed into the long-range planning process and provide CAMPO with a list of priority ITS projects for consideration during future calls for projects.

Recommended Regional Projects and Programs

Stakeholders identified nine regionally significant ITS deployment projects and programs for ITS in Central Texas. These projects do not encompass all the regional ITS needs within the Central Texas; however, stakeholders recommended that emphasis be placed on implementation related to these nine in order to provide the greatest benefit to travelers. The nine projects and programs included are:

- » Regional Traffic Management Center
- » Real-Time Data Sharing
- » Regional Live Video Sharing Platform – Regional Traffic Information Dissemination
- » Railroad Crossing Detection and Notification System
- » Regional Fiber Network Plan
- » HERO Expansion

- » Regional Transit Fare Payment Platform
- » Automation of Operational Capabilities
- » Increased Staffing for Operations and Maintenance

A summary of each of the nine regional projects and programs is provided in this section. For each in addition to a description of the project or program, the following information is provided:

Basis of Need – Describes how the regional deployment project or program meets one of more of the regional ITS needs that were identified in the Regional ITS Architecture.

Benefits – Potential benefits that might be realized with implementation of the project or program.

Timeframe – Describes the approximate timeframe it may take to develop and implement each project.

- » Short-Term: Within the next five years
- » Medium-Term: Within the next six to ten years
- » Long-Term: Anything over ten years

Lead and Supporting Agencies – The agencies identified as most likely to lead and support the implementation of the project or program.

Relevant ITS Service Packages – The ITS service packages identified in the Regional ITS Architecture that support this implementation and should be used to show ITS architecture conformity if federal funding is being used. These ITS service packages can also be used to support the development of a systems engineering analysis.

REGIONAL TRAFFIC MANAGEMENT CENTER

The establishment of a Regional Traffic Management Center (TMC) in Central Texas has been prioritized by several stakeholders, including TxDOT, CAMPO, and various municipal agencies. A Regional TMC would enhance traffic operations in the Central Texas Region by increasing opportunities to share real-time information, facilitate inter-agency communication, and enable collaborative operational decisions that impact multiple agencies. The Regional TMC will likely be a virtual or hybrid model (a physical building with many partners participating virtually) since many municipalities noted interest in participating but face challenges in sending staff to a physical location outside their own municipality. TxDOT is currently leading an effort to study the feasibility of a Regional TMC.

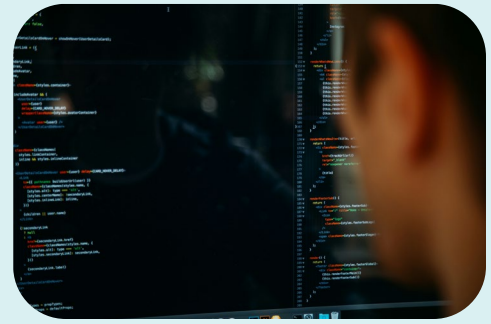
Basis of Need

Several Central Texas stakeholders have emphasized the need to connect the region's transportation agencies via a Regional TMC to improve traffic signal coordination across jurisdictional boundaries. These stakeholders also noted the necessity of real-time traffic monitoring and management, particularly along the regional surface street network during major freeway construction planned for the region. Stakeholders highlighted the need for better incident management, coordination of work zones, and preparation for inclement weather and planned special events. CAPCOG's Homeland Security Task Force ITS Subcommittee identified the need for a regional transportation resource list to facilitate multi-agency coordination, resource sharing, and swift emergency responses. A Regional TMC could provide the type of multi-agency coordination recommended by CAPCOG.





Benefits

A Regional TMC would support improved coordination among agencies for improved signal timing and better management of incidents, construction, inclement weather, and planned special events. Beyond coordination between traffic agencies, a Regional TMC could also enable better coordination with transit, public safety, and location emergency management agencies. Additionally, the Regional TMC could provide access to resources and information for smaller municipalities that do not have the means to establish their own TMC.

Houston TranStar, the joint operations center in Houston, estimated a **benefit-cost ratio of 21.5** for 2023.



Relevant ITS Service Packages

-  **TM03** Traffic Signal Control
-  **TM06** Traffic Information Dissemination
-  **TM07** Regional Traffic Management
-  **TM08** Traffic Incident Management System

Timeframe

Short to Mid-Term

Lead Agency

TxDOT Austin District

Supporting Agencies

All Central Texas Stakeholders

Related Efforts

The TxDOT Austin District is studying the establishment of a Regional TMC like the one described here, which includes participation from TxDOT, local municipalities, and CTRMA. TxDOT is considering a hybrid TMC format that would offer a physical space for staff from regional agencies who wish to collocate, as well as a virtual connection option for agencies that prefer not to send staff to a physical TMC. Additionally, the City of Austin is expanding CTECC with CTECC 2.0, which could serve as the location for the Regional TMC. CTECC 2.0 provides more floor space than the original CTECC and could likely accommodate additional traffic agencies on the operations floor.

REAL-TIME DATA SHARING

The ability to share real-time traffic operations data has been identified as a key need in Central Texas. Real-time data needs include traffic signal timing, incidents, construction closures, rail crossing blockages, and weather. Guidance from the USDOT has also emphasized making real-time transportation data available so agencies can more reliably track the performance of a transportation network. Many stakeholders have access to real-time data for their own agency but have limited or no access to real-time data from other stakeholders in the region. The CAMPO CTTMS is piloting a deployment of a real-time data sharing system for traffic signal timing, which could eventually be expanded to provide much of the needed real-time regional data. The TxDOT CPP will provide additional real-time data for construction closures. The CPP is initially focused on closures related to construction on IH 35 but could be expanded to provide closure information regionwide.

Basis of Need






Almost all stakeholders identified the need to improve access to real-time data including traffic signal coordination, incident management, maintenance activities, and construction among agencies in Central Texas. Information from a real-time data sharing system will help agencies make operational decisions that consider the conditions beyond their own jurisdiction and impacts to the entire transportation system.

Benefits

Improving operations begins with a complete understanding and situational awareness of the full transportation system. Sharing real-time information related to traffic signal timing, incidents, construction closures, and other conditions will allow transportation operators to make informed decisions and quickly understand the impact of changes to the system. Shared information will also enable public and private sector agencies to provide more complete traveler information to the public. Information can be shared with public safety and emergency operations agencies to provide advance situational awareness throughout the region during emergencies. Additionally, real-time data sharing systems can provide real-time information to CAVs, improving their performance and safety.



Relevant ITS Service Packages

-  **DM01** ITS Data Warehouse
-  **MC05** Roadway Maintenance and Construction
-  **MC06** Work Zone Management
-  **TM03** Traffic Signal Control
-  **TM08** Traffic Incident Management System

Timeframe

Short to Mid-Term

Lead Agencies

CAMPO • TxDOT Ausitn District

Supporting Agencies

All Central Texas Stakeholders

Related Efforts

Central Texas systems with real-time data sharing capabilities include the CAMPO CTTMS and the TxDOT CPP. The CTTMS is focused on providing real-time traffic signal timing information on corridors that cross jurisdictional boundaries but could be expanded to include many other types of data in the future. The CPP is focused on construction closure information on IH 35 but could expand to include other routes and additional types of data. The Regional TMC effort led by TxDOT would also provide agencies the ability to share real-time information if multiple agencies work through a single hybrid or virtual TMC.

REGIONAL LIVE VIDEO SHARING PLATFORM

A regional platform for sharing live video from CCTV cameras would enable agencies to share video from TxDOT, CTRMA, municipalities, and other traffic operations agencies with public sector transportation, public safety, and emergency management agencies. This sharing platform could be designed to allow the owning agency the ability to quickly terminate any video feeds if needed. Only the owning agency of a CCTV camera would have the ability to pan, tilt, and zoom the camera unless a joint operations agreement is signed between two or more agencies to share control of the CCTV cameras.

Basis of Need

Stakeholders expressed concerns that the lack of live video sharing between agencies in the region could lead to less organized responses to major events impacting traffic along the Central Texas region's most heavily traveled corridors, such as IH 35 and Loop 1 (MoPac). This regional project deployment would provide agencies with on-demand access to traffic conditions at various points throughout the region. Stakeholders identified several needs that could be addressed through the development of a regional platform for live video sharing, including improved communication and coordination between agencies for traffic operations, transit operations, incident management, and enhanced accuracy, timeliness, and availability of regional travel information. In addition to stakeholder discussions, this regional project was also identified as a need in the CAMPO Regional Incident Management Strategic Plan and Performance Assessment completed in 2018.

Benefits

The regional live video sharing platform would allow operations staff to better assess real-time road surface conditions, traffic levels, and driving conditions. For example, with video sharing, all participating stakeholders would be able to observe how road and traffic conditions change when a winter storm arrives and impacts the first jurisdiction. Additionally, such a platform would help neighboring jurisdictions monitor queues and congestion levels related to nearby incidents or construction that may soon affect other areas. Stakeholders from across Central Texas can use this information from the live video sharing platform to update signal timings and Dynamic Message Sign (DMS) content in anticipation of impacts from conditions originating in other jurisdictions.



Relevant ITS Service Packages

-  **TM01** Infrastructure-Based Traffic Surveillance
-  **TM06** Traffic Information Dissemination
-  **TM07** Regional Traffic Management
-  **TM08** Traffic Incident Management System

Timeframe

Short-Term

Lead Agencies

CAMPO • TxDOT Austin District

Supporting Agencies

All Central Texas Stakeholders

Related Efforts

None

RAILROAD CROSSING DETECTION AND NOTIFICATION SYSTEM

Railroad crossing detection and notification systems are designed to detect when a train is at a railroad crossing and inform motorists of the blockage. Traditionally, these systems use sensors and gates with flashing beacons to automatically close the road when a train is approaching the crossing. Modern systems often still utilize sensors and gates but also incorporate cameras paired with AI to improve detection and communication links, enabling automated notifications to operations staff, transit operators, and emergency personnel. These systems can provide information to drivers by engaging blank-out signs to prohibit certain turning movements when a train is present at the crossing, as well as updating railroad crossing information online, and ultimately may support CAV applications to facilitate alternate routing during extended blockages.

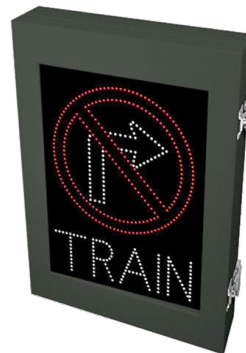
Basis of Need

Many Central Texas stakeholders identified the need for improved real-time information regarding railroad crossing blockages and automated notifications, as rail lines run through almost every large city in Central Texas. Cities with existing railroad crossing detection systems noted challenges with high frequencies of false triggers.




The City of San Marcos is a good example of the need for improved rail crossing and detection systems. The City noted several crossings where trains often stop for 30 minutes to an hour, cutting off one side of the City from the other. As the frequency of stopped trains has been increasing, this has become a growing concern for emergency responders who are unable to quickly travel throughout the city. The main CARTS station in San Marcos is located between two railroads, resulting in transit delays when trains block crossings. Other cities noted similar challenges when discussing the need for railroad crossing detection and notification systems.

Benefits

Automatic notifications triggered when a train is approaching a railroad crossing could allow transit operators and emergency responders to select alternate routes in advance of route decision points, reducing delays. Publicly available real-time traveler information related to railroad crossing blockages could also reduce driver frustration, as drivers are informed as to why they are stopped, how long they have been stopped, and if they should reroute. Notifications triggered when a crossing's gates have been down for an extended period would allow operations staff to quickly detect and address issues with the crossing.



Relevant ITS Service Packages

-  **TM01** Infrastructure-Based Traffic Surveillance
-  **TM06** Traffic Information Dissemination
-  **TM13** Standard Railroad Grade Crossing
-  **TM15** Railroad Operations Coordination

Timeframe

Short to Mid-Term

Lead Agencies

Austin • CAMPO • Cedar Park
• Georgetown • Leander •
Round Rock • San Marcos

Supporting Agencies

CAPCOG • TxDOT Austin
District

Related Efforts

San Marcos has developed an Interactive Transportation Map that includes real-time rail crossing blockages, however they have noted additional crossing locations need to be added to their system. Austin, Cedar Park, and Georgetown have blank out signs deployed prohibiting turns onto roads with rail crossing blockages.

REGIONAL FIBER NETWORK PLAN

Nearly every stakeholder interviewed emphasized the need for a robust, reliable, high-bandwidth communication system to support their existing and future ITS deployments. A fiber-optic network was identified as the best solution to support local and regional ITS deployments. A transportation-focused regional fiber network plan typically involves an inventory of existing fiber-optic cable deployments, identification of gaps in the communications network, and strategic design and implementation of fiber-optic infrastructure across the region. Developing such a plan can standardize fiber installation and establish a robust fiber network to support the bandwidth needed for future ITS deployments throughout Central Texas.

Basis of Need

Central Texas stakeholders identified the need for a transportation-focused regional fiber network plan because they either do not have an existing fiber plan or their existing fiber plan was not focused on transportation or the bandwidth required for ITS. Several stakeholders also noted that they lack a current map or database detailing the locations of the existing fiber network within their jurisdiction, making it difficult to determine where all their fiber assets are. Fiber optic deployment is typically incorporated into major roadway construction projects as funding permits, resulting in sections of fiber being scattered throughout the region, often with no consistent design or overall connectivity plan.

Benefits

Fiber-optic communications can transmit large amounts of data at extremely high speeds with very low latency, allowing for real-time monitoring and management of traffic conditions. Fiber-optic technology also facilitates the integration of data from various sources, such as traffic cameras, sensors, and public transit systems, helping traffic managers make informed decisions to optimize traffic flow and enhance safety. Fiber networks offer robust and consistent connectivity, reducing the chances of communication disruptions that can affect traffic management systems and ITS deployments.

Developing a regional fiber network plan with standardized fiber design and installation procedures can improve the efficiency of prioritizing and constructing new fiber connections. Established standards can also reduce the need to reconstruct existing fiber lines for tie-ins with new fiber, minimizing the additional materials, labor, and time required for connecting existing lines located on opposite sides of a road.



Relevant ITS Service Packages



DM01 ITS Data Warehouse



TM01 Infrastructure-Based Traffic Surveillance



TM03 Traffic Signal Control



TM06 Traffic Information Dissemination



TM07 Regional Traffic Management

Timeframe

Short-Term

Lead Agency

CAMPO

Supporting Agencies

TxDOT Austin District • Austin • Cedar Park • Georgetown • Round Rock • San Marcos

Related Efforts

The TxDOT Austin District has been inventorying existing fiber. No other current planning efforts were identified for Central Texas.

HERO EXPANSION

The existing HERO Roadside Assistance Program offers free services such as changing flat tires, providing fuel, or moving disabled vehicles off the road, enhancing motorists' safety along IH 35, US 183, US 290, SH 71, and Loop 1 (MoPac). There is a need to expand the existing weekday HERO Program coverage to principal arterials such as Loop 360, RM 620, and RM 2222 to help these regionally significant corridors perform better and reduce the impact of incidents. Stakeholders also noted the need to expand HERO coverage during major construction to all impacted freeways and principal arterials during closures.

Basis of Need

Central Texas stakeholders emphasized the region's rapid growth in population and tourism, resulting in rapidly increasing traffic volumes on all roads. Higher volumes lead to more incidents and greater delays, particularly along principal arterials that were not designed to handle the demanded capacity. The next phase of the IH 35 Capital Express Central project, which involves the reconstruction of the Lady Bird Lake segment, is expected to begin in early 2025. This will result in large volumes of traffic being diverted onto alternate routes, primarily principal arterials, meaning more travelers would be impacted by incidents or debris along these alternate routes.

Benefits

HERO provides a quick response to crashes and other road incidents, reducing the duration of these events and their impact on traffic. By clearing incidents quickly, HERO patrols help maintain smoother traffic flow, minimizing congestion and reducing secondary crashes. HERO reduces the economic and environmental impact of incidents and congestion by quickly clearing incidents, which can save fuel costs and reduce emissions released during idling. HERO responders managing vehicle assistance and minor incidents also free up law enforcement officers to focus on more critical tasks.

Expanding HERO coverage to principal arterials could improve operations and safety on these routes and subsequently on freeways, as more drivers may utilize these arterials, especially during major construction in the region. HERO coverage in major construction work zones could enhance safety for both construction workers and motorists by assisting disabled vehicles or responding to minor incidents within the work zone, quickly clearing hazards where the roadway may already be constricted.

In 2018, the TxDOT HERO Program **benefit-cost ratio** was estimated at **34:1** in the CAMPO Regional Incident Management Strategic Plan.



Relevant ITS Service Packages



PS08 Roadway Service Patrol



TM08 Traffic Incident Management System

Timeframe

Short to Mid-Term

Lead Agency

TxDOT Austin District

Supporting Agencies

CTRMA • Austin • Cedar Park • Round Rock • San Marcos

Related Efforts

TxDOT had been expanding HERO services with funding through CAMPO for more than a decade. This program has provided a high return on investment for the region and should continue expansion.

REGIONAL TRANSIT FARE PAYMENT PLATFORM

CapMetro and CARTS currently have separate payment systems that are not compatible with each other. The CapMetro payment systems include transit passes that can be purchased for a set number of days or a stored value card funded at a user-determined prepaid amount. Until 2025, CapMetro also had its own mobile ticketing application that allowed users to purchase tickets from their smartphones. CapMetro recently transitioned to a widely used payment application that allows riders to purchase fares for multiple transit agencies that have implemented this platform in a single application. CARTS allows users to purchase fare cards through their website with a stored value. These fare cards can be used for Curb-to-Curb service (also known as Country Bus), but eventually CARTS aims to implement fare cards for all services.

There are existing routes that combine both CapMetro and CARTS services on a single bus, but riders must pay twice using separate fare boxes. CARTS has identified the need for a shared payment system on these routes, allowing riders to pay with either a CapMetro or CARTS card, with a reconciliation process between the two agencies. The system architecture of the combined payment system has not been determined yet, but CapMetro and CARTS should collaborate to develop such a solution.

Basis of Need



Transit users who need to access routes combining CapMetro and CARTS services must purchase two fares. Both CARTS and CapMetro staff have identified the need to consolidate to a single regional transit fare payment platform. Staff from both agencies also noted that each has a different mobile application for their unique services and highlighted the need to consolidate to either a single application for each transit agency or a unified application for all transit agencies in the Region.

Benefits

A single payment system would simplify the process for riders using services from multiple transit agencies or riding a single fixed-route service operated by both CapMetro and CARTS, such as Route 990. Instead of needing separate tickets or passes for different systems, riders could use one fare card or app across all agencies, making their travel experience smoother and more convenient. The ease of use provided by a unified payment system could encourage more people to use public transportation, potentially increasing ridership and reducing traffic congestion and pollution. A single payment platform would also enable better data collection and analysis across different transit systems, helping agencies understand ridership patterns, optimize routes, and improve overall service planning and coordination.



Relevant ITS Service Packages

-  **PT04** Transit Fare Collection Management
-  **PT14** Multi-modal Coordination

Timeframe

Mid-Term

Lead Agencies

CapMetro • CARTS

Supporting Agencies

CAMPO

Related Efforts

None

AUTOMATION OF OPERATIONAL CAPABILITIES

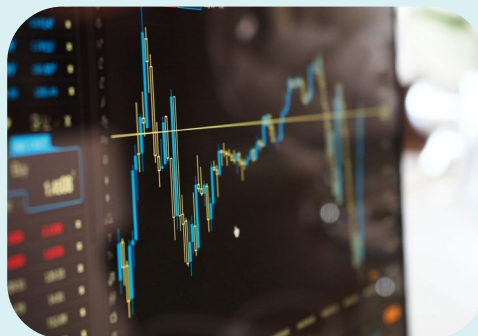
Automation of operational capabilities refers to the development of tools for Central Texas stakeholders that utilize available transportation data without requiring dedicated staff time. Ideally, these tools can provide easily digestible summaries of key transportation network conditions, enabling agency staff to make informed decisions about managing their transportation network. In some cases, the system may implement an action automatically based on the analysis. Examples of these tools include data dashboards that process incoming information and display key performance indicators, such as travel delays or road surface conditions, in real-time, as well as data processing tools that analyze multiple data sources and suggest actions operators can take, such as updating DMS or adjusting traffic signal timing plans.

Basis of Need




Almost all stakeholders identified the need for real-time data sharing, but many noted that simply receiving access to transportation data would not be useful without tools to help analyze and utilize the data to support decision-making. Several stakeholders noted challenges with limited staffing levels and available resources to review transportation data. Stakeholders highlighted difficulties in filtering through traffic incident updates to determine what information is relevant to their agency. CAPCOG's Homeland Security Task Force ITS Sub-committee identified the need for more efficient dissemination of traffic incident information and traffic management around incidents. The Sub-committee suggested using dispatched public safety vehicle locations to automatically geo-fence the area impacted by an incident and send traveler information to the public while adjusting traffic signal timings in real-time to redirect traffic away from the incident.

Benefits

Tools that automate operational capabilities for transportation management staff reduce the time and effort required by staff to process data. For agencies with limited staffing and small operations budgets, these tools can significantly expand the range of traffic management activities. Regardless of staffing levels, these tools can also support, suggest, or even implement traffic management actions by drawing from a larger breadth of data than a human operator could process quickly.



Relevant ITS Service Packages

-  **TM03** Traffic Signal Control
-  **TM06** Traffic Information Dissemination
-  **TM07** Regional Traffic Management

Timeframe

Short to Mid-Term

Lead Agencies

All Central Texas Stakeholders

Supporting Agency

CAMPO

Related Efforts

The CAMPO CTTMS pilot includes tools that automate the processing of transportation data. The University of Texas at Austin's SMARTTrack initiative may also provide opportunities to test the automation of operational capabilities related to the processing of connected and autonomous vehicle data. Additionally, the University of Texas is leading the RIDI initiative, which serves as a technology and ITS device library for testing and evaluating systems, compiling use cases, and establishing best practices for transportation agencies throughout the region to reference. Another goal of RIDI is to establish a method for collecting, processing, and analyzing data to enhance traffic management.

INCREASED STAFFING FOR OPERATIONS AND MAINTENANCE

Many agencies noted that without increased staffing and investments in training, local and regional investments in traffic management and ITS technology will likely remain underutilized. Agencies need to increase funding to support additional staff for the operations and maintenance of ITS and traffic management systems. This requires support from decision-makers and intentional budgeting efforts. Additionally, investing in formal training is crucial to streamline onboarding and support the development and retention of staff, thereby preserving institutional knowledge typically acquired through on-the-job experience.

Basis of Need



Stakeholders highlighted challenges due to limited staff and resources, particularly in reviewing received information and filtering relevant traffic incident updates. High turnover and lack of training further reduce the capacity to address traffic management needs. For instance, new signal technicians often lack knowledge of past signal issues, leading to unnecessary equipment replacement, which results in road closures, higher costs, and wasted time and resources.

Benefits

Increased staffing and training for ITS and traffic management roles will enhance the ability of agency to actively manage its system, improve troubleshooting efficiency, reduce equipment downtime, save agency time and resources, and minimize impacts on the traveling public. Investing in training leads to more capable staff, higher job satisfaction, and improved retention. These benefits collectively help retain an agency's institutional knowledge regarding its deployed ITS and traffic management technology.



Relevant ITS Service Packages

-  **DM02** Performance Monitoring
-  **PT02** Transit Fixed-Route Operations
-  **TM03** Traffic Signal Control
-  **TM06** Traffic Information Dissemination
-  **TM08** Traffic Incident Management System

Timeframe

Short to Long-Term

Lead Agencies

All Central Texas Stakeholders

Supporting Agencies

CAMPO

Related Efforts

None



Use and Maintenance

USE AND MAINTENANCE

The Central Texas Regional ITS Architecture and Deployment Plan addresses the region's vision for ITS implementation at the time the Plan was developed. With the growth of the region, needs will change and as technology progresses, new ITS opportunities will arise. Shifts in regional needs and focus as well as changes in the National ITS Architecture will necessitate that the Regional ITS Architecture and Deployment Plan be updated periodically to remain a useful resource for the region. As projects are developed and deployed, it will be important that those projects conform to the Regional ITS Architecture so that they are consistent with both the region's vision for ITS as well as the national standards. In some cases, if projects do not conform, it may be necessary to modify the Regional ITS Architecture to reflect changes in the region's vision for ITS rather than modify the project. In this section, a process for determining ITS architecture conformity of projects is presented and a plan for how to maintain and update the Central Texas Regional ITS Architecture and Deployment Plan is described.

Incorporation into the Regional Planning Process

Stakeholders invested considerable effort in the development of the Regional ITS Architecture and Deployment Plan. This plan should be incorporated into the regional planning process to ensure that the ITS needs for the Central Texas are considered during the implementation of ITS projects. By incorporating recommendations from the Regional ITS Architecture and Deployment into the regional planning process, the region can maintain eligibility for federal funding for ITS projects, as the FHWA and FTA require any project funded with federal money to conform to the Regional ITS Architecture.

The Regional ITS Architecture can serve as a valuable resource in developing the RTP. **Figure 6** illustrates the CAMPO planning process and the involvement of the Regional ITS Architecture. The ITS needs identified in the Regional ITS Architecture should be considered by CAMPO when identifying regional transportation needs. During the project selection process, the ITS service packages and project prioritization set by the Regional ITS Architecture stakeholders (and presented in this report) should be utilized to select projects for inclusion in the RTP.

As projects transition from the RTP to the Transportation Improvement Program (TIP), each project should be evaluated to determine if it includes any ITS elements. If a project contains an ITS

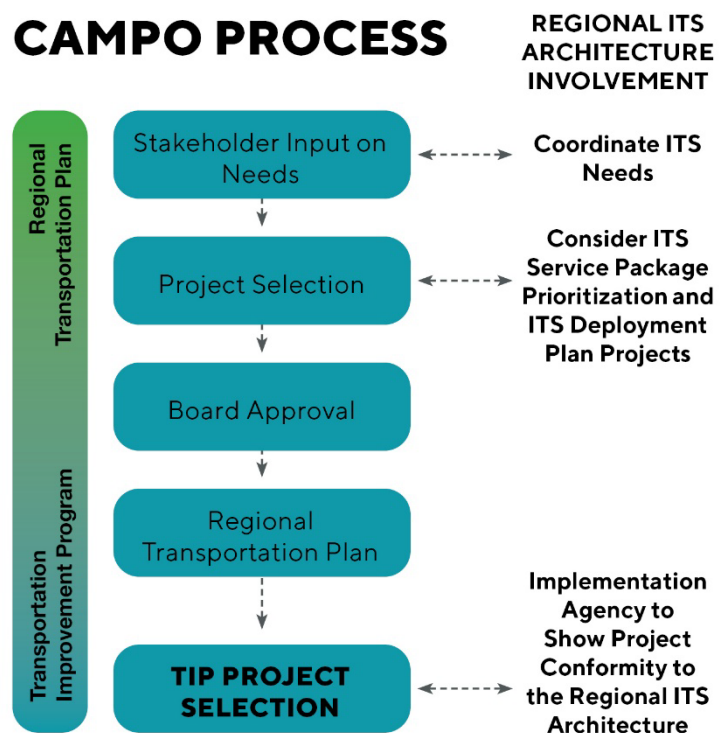


Figure 6: CAMPO ITS Project Selection Process

element, the Regional ITS Architecture must be reviewed to ensure conformance. CAMPO will assist agencies in this examination as part of the project application process, using the procedure outlined in the next section.

Process for Determining ITS Architecture Conformity

The Central Texas Regional ITS Architecture documents the customized ITS service packages that were developed as part of the ITS architecture process. To satisfy FHWA and FTA requirements and remain eligible to use federal funds, a project must be accurately documented. The steps of the process are as follows:

1. Identify the ITS components in the project.
2. Identify the corresponding ITS service packages from the Regional ITS Architecture.
3. Locate the ITS components within the ITS service packages.
4. Compare the connections to other agencies or elements documented in the Regional ITS Architecture as well as the information flows between them to the connections that will be part of the project.
5. Document any changes necessary to the Regional ITS Architecture or the project to ensure there is conformance.

ITS ARCHITECTURE USE TRAINING

Training on the how to modify the Regional ITS Architecture to establish project conformity is available on CAMPO's website at the link below. Select the tab for **Training** to access videos and a guide.



www.CAMPOTexas.org

The steps for determining ITS architecture conformity of a project are described in more detail below. Additional resources are included on the Regional ITS Architecture and Deployment Plan section of CAMPO's website.

Step 1 – Identify the ITS Components

ITS components can be fairly apparent in an ITS focused project such as CCTV or DMS deployments but could also be included in other types of projects where they are not as apparent. For example, an arterial widening project could include the installation of signal system interconnect, signal upgrades, and the incorporation of the signals in the project limits into a city's closed loop signal system. These are all ITS functions and should be included in the Regional ITS Architecture.

Step 2 – Identify the Corresponding ITS Service Packages

If a project was included in the ITS Deployment Plan section's list of projects, then the applicable ITS service package(s) for that project were also identified. However, ITS projects are not required to be included in the ITS Deployment Plan to be eligible for federal funding; therefore, ITS service packages might need to be identified for a project. In that case, the ITS service packages selected and customized for the Central Texas Regional ITS Architecture should be reviewed to determine if they adequately cover the project.

Step 3 - Identify the Component within the ITS Service Package

Once the element is located within the appropriate ITS service package, the evaluator should determine if the element name used in the ITS service package is accurate or if a change to the name is needed. If a general ITS service package that was developed for Municipal/County is being used, the elements in that ITS service package should be renamed to match the agency that is implementing the ITS service.

Step 4 – Evaluate the Connections and Flows

The connections and architecture flows documented in the ITS service package diagrams were selected based on the information available at the time the Regional ITS Architecture was developed. As the projects are designed, decisions will be made on the system layout that might differ from what is shown in the ITS service package. These changes in the project should be documented in the ITS service packages.

Step 5 – Document Required Changes

If any changes are needed to accommodate a project under review they should be documented per this section and through the use of the form on CAMPO's website. Any changes will be incorporated during the next Regional ITS Architecture update. Conformance will be accomplished by documenting how the ITS service packages should be modified so that the connections and data flows are consistent with the project.

ITS Architecture Maintenance Process

CAMPO will be responsible for leading the process to update the Central Texas Regional ITS Architecture and Deployment Plan. **Table 10** summarizes the maintenance process agreed upon by stakeholders in the region.

Table 10: Central Texas Regional ITS Architecture Maintenance Plan

Maintenance Details	Full Plan Update Guidance
Timeframe for Updates	Updates will occur on an as needed basis as determined by CAMPO and FHWA. CAMPO will review the Regional ITS Architecture after major ITS deployments in the region and evaluate if an update is needed.
Scope of Update	Entire Regional ITS Architecture
Lead Agency	CAMPO
Participants	Entire Stakeholder Group
Results	Updated Regional ITS Architecture and Deployment Plan, RAD-IT Architecture Database, and Interactive ITS Architecture on CAMPO's website

Stakeholders agreed that a full update of the Central Texas Regional ITS Architecture and Deployment Plan should occur on an as needed basis. CAMPO will work with the FHWA Texas Division to determine if

there have been enough changes to warrant a full update. Changes that will be considered when evaluating the need to update the Plan include:

- » Major ITS deployments in the region that add new functionality not currently covered in the Central Texas Regional ITS Architecture and Deployment Plan
- » Major updates to the National ITS Architecture that add new ITS service packages, or substantially change existing ITS service packages, to the extent that the Central Texas Regional ITS Architecture and Deployment Plan is no longer consistent with the National ITS Architecture.

As with all projects in the RTP, ITS projects are reviewed for compliance with all federal rules and regulations, just as non-ITS projects. If new proposed projects are found to be non-compliant corrective action will be taken or not included for federal funding.

CAMPO, in coordination with the FHWA Texas Division, will be responsible for completing updates of the ITS Deployment Plan when needed. During the update process, all stakeholder agencies that participated in the original development of the Central Texas Regional ITS Architecture and Deployment Plan should be included in addition to any other agencies in the region that are deploying or may be impacted by ITS projects.

Procedure for Submitting ITS Architecture Changes Between Updates

Updates to the Central Texas Regional ITS Architecture and Deployment Plan will occur as described earlier to maintain the architecture as a useful planning tool. In between updates, ITS project owners will need to submit documentation of any requested change to the Plan to CAMPO, the agency designated as the Regional ITS Architecture maintainer.

For situations where a change is required, an ITS Architecture Maintenance Documentation Form was developed and is in **Appendix D**. This form should be completed and submitted to CAMPO whenever a change to the Regional ITS Architecture is proposed.

Change Information – The type of change that is being requested can include an Administrative Change, Functional Change (Single Agency or Multiple Agency), or a Project Change. A description of each type of change is as follows:

- » Administrative Change – Basic changes that do not affect the structure of the ITS service packages in the Regional ITS Architecture. Examples include changes to stakeholder or element names, element status, or information flow status.
- » Functional Change (Single Agency) – Structural changes to the ITS service packages that impact only one agency in the Regional ITS Architecture. Examples include the addition of a new ITS service package or changes to information flow connections of an existing ITS service package. The addition or change would only impact a single agency.
- » Functional Change (Multiple Agencies) – Structural changes to the ITS service packages that have the potential to impact multiple agencies in the Regional ITS Architecture. Examples include the addition of a new ITS service package or changes to information flow connections of an existing ITS service package. The addition or changes would impact multiple agencies and require coordination between the agencies.

- » **Project Change** – Addition, modification, or removal of a project in the ITS Deployment Plan section of the Central Texas Regional ITS Architecture and Deployment Plan.

Description of the Requested Change – A brief description of the type of change being requested should be included.

ITS Service Packages being Impacted by the

Change – Each of the ITS service packages that are impacted by the proposed change should be listed on the ITS Architecture Maintenance Documentation Form. If the proposed change involves creating or modifying an ITS service package, then the agency completing the ITS Architecture Maintenance Documentation Form is asked to include a sketch of the new or modified ITS service package.

ITS ARCHITECTURE CHANGES

To formally document and submit changes to CAMPO, forms and additional information can be found at the **Use and Maintenance** section of CAMPO’s website at the link below. Select the tab for **Use and Maintenance** once on the site.



www.CAMPOTexas.org

Impact of Proposed Change on Other Stakeholders – If the proposed change is expected to have any impact on other stakeholders in the region, then those stakeholders should be listed on the ITS Architecture Maintenance Documentation Form. A description of any coordination that has occurred with other stakeholders that may be impacted by the change should be also included. Ideally all stakeholders that may be impacted by the change should be contacted and consensus should be reached on any new or modified ITS service packages that will be included as part of the Central Texas Regional ITS Architecture and Deployment Plan.

Moving Forward

The Central Texas Regional ITS Architecture and Deployment Plan was developed to provide Central Texas with a long-range plan for the deployment, integration, and operation of ITS. The Plan encourages interoperability and resource sharing among agencies and supports the building of a more connected region. The Plan also meets the FHWA and FTA requirements that state a region needs to have an updated regional ITS architecture and projects must conform to that ITS architecture to use federal transportation funds for ITS projects.

As with any plan, real success comes from implementation. The Central Texas Regional ITS Architecture and Deployment Plan identifies nine regional projects and programs that should be implemented to significantly address stakeholder needs. These projects and programs support not only stakeholder needs identified in this plan, but also key needs from the CAMPO 2050 RTP. In addition to the nine regional projects and programs, many of the stakeholders in Central Texas have identified projects that are specific to their agency and are also important to meeting identified needs. Continued focus on implementing all the regional and local projects, as well as providing the staffing and maintenance to be sure systems are fully operational, is vitally important for Central Texas to operate a safe, efficient, and reliable transportation system.



Appendix

Appendix A: Stakeholder Database

	Agency	First Name	Last Name	Email Address	Attended Stakeholder Interview	Attended Stakeholder Workshop
Local Agencies	City of Austin	Joshil	Bhatpuria	joshil.bhatpuria@austintexas.gov		✓
		Brian	Craig	brian.craig@austintexas.gov	✓	✓
		Matt	Holmes	matt.holmes@austintexas.gov		✓
		Lewis	Leff	lewis.leff@austintexas.gov		✓
		Matt	McElearney	matthew.mcelearney@austintexas.gov		✓
		Boniface	Njoroge	boniface.njoroge@austintexas.gov		✓
		Kirk	Scanlon	kirk.scanlon@austintexas.gov		✓
	City of Cedar Park	Stephen	Hanuscin	stephen.hanuscin@cedarparktexas.gov	✓	
		Logan	Williams	logan.williams@cedarparktexas.gov	✓	
	City of Georgetown	Eric	Johnson	eric.johnson@georgetowntexas.gov	✓	
		Danny	Thiele	danny.thiele@georgetowntexas.gov	✓	
		Randell	Young	randell.young@georgetowntexas.gov	✓	
	City of Leander	Roman	Poudyal	rpoudyal@leandertx.gov	✓	✓
		Michael	Riley	mriley@leandertx.gov		✓
	City of Round Rock	Matthew	Bushak	mbushak@roundrocktexas.gov		✓
		Brian	Kuhn	bkuhn@roundrocktexas.gov	✓	
	City of San Marcos	Sabas	Avila	savila@sanmarcostx.gov	✓	✓
		Ning	Zou	nzou@sanmarcostx.gov		✓
	Hays County Office of Emergency Services	Mike	Jones	mike.jones@hayscountytexas.gov		✓
	Travis County Office of Emergency Management	Courtland	Ballou	courtland.ballou@traviscountytexas.gov	✓	
		Blake	Clampffer	blake.clampffer@traviscountytexas.gov	✓	
		Fabio	Santos	fabio.santos@traviscountytexas.gov	✓	
Regional Agencies	Capital Area Council of Governments (CAPCOG)	Gabriel	Bailey	gbailey@capcog.org		✓
		Douglas	Havron	dhavron@catrac.org		✓
		Martin	Ritchey	mritchey@capcog.org	✓	
		Charles	Simon	csimon@capcog.org	✓	✓

	Agency	First Name	Last Name	Email Address	Attended Stakeholder Interview	Attended Stakeholder Workshop
	Capital Metro (CapMetro)	Daryl	Weinberg	daryl.weinberg@capmetro.org	✓	
Regional Agencies (continued)	Capital Area Rural Transportation System (CARTS)	Adrian	Elliott	adrian@ridecarts.com	✓	✓
		Dave	Marsh	dave@ridecarts.com	✓	
	Combined Transportation, Emergency and Communications Center (CTECC)	Robert	Turner	robert.turner@austintexas.gov	✓	
	Central Texas Regional Mobility Authority (CTRMA)	Craig	Bluhm	cbluhm@ctrma.org	✓	
		Greg	Mack	gmack@ctrma.org	✓	
		Fabiola	Newman	fnewman@ctrma.org	✓	
	SH 130 Concession Company	Manish	Jain	mjain@sh130cc.com	✓	
		Jason	Kerby	jkerby@sh130cc.com	✓	
		James	Lovett	jlovett@sh130cc.com	✓	✓
		Binny	Paul	bpaul@sh130cc.com		✓
	Texas Department of Public Safety (DPS)	Nick	LaRocque	nick.larocque@dps.texas.gov		✓
State Agencies	TxDOT Austin District	Mike	Arellano	miguel.arellano@txdot.gov	✓	
		Carolina	Baumanis	carolina.baumanis@txdot.gov		✓
		John	Gold	john.gold@txdot.gov		✓
		Brenda	Guerra	brenda.guerra@txdot.gov	✓	
		Kevin	Plumlee	kevin.plumlee@txdot.gov	✓	✓
		Douglas	Turner	douglas.l.turner@txdot.gov	✓	
	University of Texas Center for Transportation Research	Heidi	Ross	heidewross@austin.utexas.edu	✓	✓
Other	Tetra Tech (Consultant for CTTMS)	Brent	Christian	brent.christian@tetrattech.com		✓
	Atkins Realis (Consultant for CPP)	David	McDonald	david.mcdonald@atkinsrealis.com		✓
		Neil	Mehta	neil.mehta@atkinsrealis.com		✓
		George	Villarreal	george.villarreal@atkinsrealis.com		✓

Appendix B: Regional Agreement Templates

Regional Traffic Management Center Agreement Template

Live Video Sharing Agreement Template

Regional Traffic Management Center Agreement Template

THIS AGREEMENT is made and entered into as of [Effective Date] by and between [Agency Name 1], located at [Address of Agency 1], and [Agency Name 2], located at [Address of Agency 2] (hereinafter collectively referred to as the "Parties").

RECITALS

WHEREAS, the Parties recognize the mutual benefits and efficiencies obtained by the regional operation of a Regional Traffic Management Center;

WHEREAS, the Parties desire to share resources, data, and responsibilities to enhance traffic management and operations across their respective jurisdictions;

NOW, THEREFORE, in consideration of the mutual promises and benefits described herein, the Parties agree as follows:

1. PURPOSE

The purpose of this Agreement is to establish the terms and conditions under which the Parties will jointly operate the Regional Traffic Management Center.

2. SCOPE OF THE REGIONAL TRAFFIC MANAGEMENT CENTER

2.1 The Regional Traffic Management Center will provide real-time traffic monitoring, incident management, and coordination of traffic control devices within the jurisdictions of the Parties.

2.2 The Regional Traffic Management Center will house and utilize advanced traffic management technologies to facilitate data sharing and collaborative traffic management strategies.

3. FORMATION OF REGIONAL TRAFFIC MANAGEMENT CENTER COMMITTEE

3.1 A Regional Traffic Management Center Committee (hereinafter referred to as the "Committee") will be formed, comprising representatives from each Party.

3.2 The Committee will oversee the operation, maintenance, and policy formation for the Regional Traffic Management Center.

4. DUTIES AND RESPONSIBILITIES

4.1 The Parties agree to share data, resources, and personnel as necessary for the efficient operation of the Regional Traffic Management Center.

4.2 Each Party shall appoint and maintain at least one representative to the Committee.

4.3 The Parties agree to contribute to the financial, operational, and maintenance costs of the Regional Traffic Management Center, as outlined in the cost-sharing schedule attached as Exhibit A.

5. FUNDING AND COST SHARING

5.1 The costs associated with the Regional Traffic Management Center, including initial setup, ongoing operations, and maintenance, shall be shared by the Parties according to the cost-sharing schedule outlined in Exhibit A.

5.2 Each Party shall be responsible for securing its share of the funding for the Regional Traffic Management Center.

6. COMPLIANCE WITH LAWS

Both agencies agree to comply with all applicable federal, state, and local laws and regulations relating to data sharing, privacy, and security.

7. TERM AND TERMINATION

7.1 This Agreement shall commence on the effective date and continue for a period of [Number] years, unless terminated earlier as provided herein.

7.2 Either Party may terminate this Agreement upon [Number] days' written notice to the other Party in the event of a material breach, insolvency, or as otherwise required by law.

8. DISPUTE RESOLUTION

In the event of a dispute arising out of or relating to this Agreement, the Parties agree to first attempt to resolve the dispute through good faith negotiations. If unresolved, the Parties may pursue mediation or arbitration as mutually agreed upon.

9. AMENDMENT

This Agreement may be amended only by the written agreement of the Parties.

10. MISCELLANEOUS

10.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Texas.

10.2 This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior agreements and understandings.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

Agency Name 1

By: _____

Name: [Name of Agency 1's Authorized Representative]

Title: [Title of Agency 1's Authorized Representative]

Date: _____

Agency Name 2

By: _____

Name: [Name of Agency 2's Authorized Representative]

Title: [Title of Agency 2's Authorized Representative]

Date: _____

Real-Time Data Sharing Agreement Template

THIS AGREEMENT is made and entered into as of [Effective Date] by and between [Agency Name 1], located at [Address of Agency 1], and [Agency Name 2], located at [Address of Agency 2] (hereinafter collectively referred to as the "Parties").

RECITALS

WHEREAS, the Parties realize the mutual benefits of sharing real-time data to improve traffic management, public safety, transportation planning, and research initiatives; and

WHEREAS, the Parties desire to enter into this Agreement to define their rights and responsibilities regarding the sharing real-time data;

NOW, THEREFORE, in consideration of the mutual covenants and promises herein contained, the Parties agree as follows:

1. PURPOSE

The purpose of this Agreement is to establish the terms under which the Parties will share real-time data to enhance traffic management, improve public safety, support transportation planning, and facilitate research initiatives.

2. RESPONSIBILITIES OF THE PARTIES

2.1 [Agency 1] shall: a. Collect and provide accurate and timely traffic data as agreed upon in this Agreement. b. Ensure the data shared is free from errors and anomalies to the best of their ability. c. Implement and maintain data security measures to protect the data during transmission.

2.2 [Agency 2] shall: a. Utilize the traffic data solely for the permitted purposes outlined in this Agreement. b. Maintain the confidentiality and security of any received data. c. Share feedback or insights derived from the traffic data with [Agency 1].

3. DATA SHARING PROTOCOLS

3.1 Data Specifications

3.1.1 Types of Data: *Specify traffic counts, speeds, incidents, travel times, road conditions, etc.*

3.1.2 Data Collection Frequency: *Specify frequency, e.g., real-time, daily, weekly, etc.*

3.1.3 Data Format: *Specify formats, e.g. CSV, JSON, TXT, etc.*

3.2 Method of Data Sharing

3.2.1 Data Transfer Method: *Specify file transfer protocols.*

3.2.2 Security Measures: *Specify encryption during transit and storage, access controls, and other security.*

4. CONFIDENTIALITY AND DATA PROTECTION

Both parties agree to maintain the confidentiality of the traffic data and ensure it is not disclosed to unauthorized entities. Both agencies commit to implementing robust security measures to protect the data against unauthorized access, handling, or breaches.

5. DATA USAGE

The traffic data shared under this agreement may be used for: Traffic management and control; transportation planning and policy-making; public safety and emergency response; research and analysis for enhancing traffic operations.

6. FINANCIAL RESPONSIBILITIES

The Parties agree to share costs related to the deployment of infrastructure and maintenance of systems needed to share traffic data.

7. COMPLIANCE WITH LAWS

Both agencies agree to comply with all applicable federal, state, and local laws and regulations relating to data sharing, privacy, and security.

8. TERM AND TERMINATION

8.1 This Agreement shall commence on the effective date and continue for a period of [Number] years, unless terminated earlier as provided herein.

8.2 Either Party may terminate this Agreement upon [Number] days' written notice to the other Party in the event of a material breach, insolvency, or as otherwise required by law.

9. INDEMNIFICATION

Each Party agrees to indemnify, defend, and hold harmless the other Party from any claims, damages, or liabilities arising out of or related to their own use or maintenance of the Real-Time Data Sharing system.

10. CONFIDENTIALITY

The Parties agree to maintain the confidentiality of all sensitive information disclosed under this Agreement, except as required by applicable law or regulation.

11. DISPUTE RESOLUTION

In the event of a dispute arising out of or relating to this Agreement, the Parties agree to first attempt to resolve the dispute through good faith negotiations. If unresolved, the Parties may pursue mediation or arbitration as mutually agreed upon.

12. MISCELLANEOUS

12.1 This Agreement constitutes the entire agreement between the Parties and supersedes all prior negotiations, representations, and agreements.

12.2 Any amendments to this Agreement must be in writing and signed by authorized representatives of both Parties.

12.3 This Agreement shall be governed by, and construed in accordance with, the laws of the State of Texas.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

Agency Name 1

By: _____

Name: [Name of Agency 1's Authorized Representative]

Title: [Title of Agency 1's Authorized Representative]

Date: _____

Agency Name 2

By: _____

Name: [Name of Agency 2's Authorized Representative]

Title: [Title of Agency 2's Authorized Representative]

Date: _____

Appendix C: ITS Service Package Status by Agency

Stakeholder	Commercial Vehicle Operations (CVO)			Data Management (DM)		Maintenance and Construction (MC)						
	CVO07: Roadside CVO Safety	CVO08: Smart Roadside and Virtual WIM	CVO12: HAZMAT Management	DM01: ITS Data Warehouse	DM02: Performance Monitoring	MC01: Maintenance and Construction Vehicle and Equipment Tracking	MC02: Maintenance and Construction Vehicle Maintenance	MC05: Roadway Maintenance and Construction	MC06: Work Zone Management	MC07: Work Zone Safety Monitoring	MC08: Maintenance and Construction Activity Coordination	MC09: Infrastructure Monitoring
State Agencies												
Texas DPS												
TxDOT Austin District	⚡	⚡		○	○	○	⚡	⚡	○	⚡	○	⚡
Regional Agencies												
CAMPO				○								
CapMetro				●								
CARTS				●								
City of Austin and Travis County (CTECC)												
CTRMA				●				⚡			○	
Independent School District												
Regional TMC												
SH 130 Concessionaire												
University of Texas at Austin				○								
Local Agencies												
City of Austin				●	●	○	⚡	⚡	⚡	⚡	○	
Municipal/County*				⚡	⚡	⚡	⚡	⚡	⚡	⚡	○	
City of Round Rock				⚡	⚡	○	⚡		⚡		○	
City of Georgetown				⚡	⚡						○	
City of Cedar Park				○	⚡						○	
City of Leander				⚡	⚡						⚡	
City of San Marcos				●	●	⚡	⚡				⚡	
City of Pflugerville				⚡	⚡						○	
Other												
Commercial Vehicles			○									

*The Central Texas Regional ITS Architecture only has specific local agency level service package instances for the City of Austin due to the City's advanced capabilities and plans for deploying emerging technologies. Due to the limitations of the RAD-IT software, all other municipalities and counties within the region are grouped into a general Municipal/County service package instance when applicable, with the exception of TM25 for the City of Georgetown due to the City's takeover of TxDOT's wrong-way vehicle detection and warning system. The general Municipal/County service package instance can be used as a template by other municipalities and counties to create their unique service package instances when there is a need to show project conformity with the Regional ITS Architecture. To aid this future effort, the other municipalities within Central Texas with a population over 50,000 have been listed in this table and their relevant service packages and status are indicated by the brown symbols.

- Existing System
- Planned System
- ⚡ Future System

Stakeholder	Parking Management (PM)				Public Safety (PS)							
	PM01: Parking Space Management	PM02: Smart Park and Ride System	PM03: Parking Electronic Payment	PM04: Regional Parking Management	PS01: Emergency Call-Taking and Dispatch	PS02: Emergency Response	PS03: Emergency Vehicle Preemption	PS08: Roadway Service Patrols	PS10: Wide-Area Alert	PS12: Disaster Response and Recovery	PS13: Evacuation and Reentry Management	PS14: Disaster Traveler Information
State Agencies												
Texas DPS					○	○						
TxDOT Austin District								●	●			○
Regional Agencies												
CAMPO												
CapMetro	⚡	⚡		⚡								
CARTS		⚡										
City of Austin and Travis County (CTECC)					●	⚡				○	○	
CTRMA									●			
Independent School District												
Regional TMC												
SH 130 Concessionaire								●	●			
University of Texas at Austin												
Local Agencies												
City of Austin	●		●	●			●		●			●
Municipal/County*	○		●		●	⚡	○		⚡	⚡	⚡	⚡
City of Round Rock	●		●		●	⚡	●					⚡
City of Georgetown	○		●		●	⚡	○					⚡
City of Cedar Park	⚡		●		●	⚡	○					⚡
City of Leander			●				●					⚡
City of San Marcos	○		●		●	⚡	●					⚡
City of Pflugerville			●		⚡	⚡	○					⚡
Other												
Commercial Vehicles												

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● Existing System

○ Planned System

⚡ Future System

Stakeholder	Public Transportation (PT)													
	PT01: Transit Vehicle Tracking	PT02: Transit Fixed-Route Operations	PT03: Dynamic Transit Operations	PT04: Transit Fare Collection Management	PT05: Transit Security	PT06: Transit Fleet Management	PT07: Transit Passenger Counting	PT08: Transit Traveler Information	PT09: Transit Signal Priority	PT11: Transit Pedestrian Indication	PT12: Transit Vehicle at Station/Stop Warnings	PT14: Multi-modal Coordination	PT15: Transit Stop Request	
	State Agencies													
	Texas DPS													
	TxDOT Austin District													
	Regional Agencies													
	CAMPO													
	CapMetro	●	●	●	●	●	●	●	●	●	○	○	○	○
	CARTS	●	●	●	●	●	●	●	●	⚡	○	⚡	○	○
	City of Austin and Travis County (CTECC)													
	CTRMA													
	Independent School District	○	○											
	Regional TMC													
	SH 130 Concessionaire													
	University of Texas at Austin													
Local Agencies														
City of Austin														
Municipal/County*														
City of Round Rock														
City of Georgetown														
City of Cedar Park														
City of Leander														
City of San Marcos														
City of Pflugerville														
Other														
Commercial Vehicles														

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- Existing System
- Planned System
- ⚡ Future System

Stakeholder	Sustainable Travel (ST)				Traveler Information and Personal Mobility (TI)		
	ST01: Emissions Monitoring	ST02: Eco-Traffic Signal Timing	ST05: Electric Charging Stations Management	ST06: HOV/HOT Lane Management	TI01: Broadcast Traveler Information	TI02: Personalized Traveler Information	TI07: In-Vehicle Signage
State Agencies							
Texas DPS							
TxDOT Austin District			⚡	⚡	●	○	⚡
Regional Agencies							
CAMPO							
CapMetro							
CARTS			⚡				
City of Austin and Travis County (CTECC)							
CTRMA				●			
Independent School District							
Regional TMC							
SH 130 Concessionaire							
University of Texas at Austin							
Local Agencies							
City of Austin	⚡	⚡	⚡		⚡		⚡
Municipal/County*		⚡	⚡		⚡	⚡	⚡
City of Round Rock			⚡		⚡		⚡
City of Georgetown					⚡		⚡
City of Cedar Park			⚡		⚡		⚡
City of Leander					⚡		⚡
City of San Marcos			⚡		⚡		⚡
City of Pflugerville					⚡		⚡
Other							
Commercial Vehicles							

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- Existing System
- Planned System
- ⚡ Future System

Stakeholder	Traffic Management (TM)									
	TM01: Infrastructure-Based Traffic Surveillance	TM02: Vehicle-Based Traffic Surveillance	TM03: Traffic Signal Control	TM04: Connected Vehicle Traffic Signal System	TM06: Traffic Information Dissemination	TM07: Regional Traffic Management	TM08: Traffic Incident Management System	TM10: Electronic Toll Collection	TM12: Dynamic Roadway Warning	TM13: Standard Railroad Grade Crossing
State Agencies										
Texas DPS										
TxDOT Austin District	●	●	●		●	●	●		⚡	●
Regional Agencies										
CAMPO										
CapMetro										
CARTS										
City of Austin and Travis County (CTECC)										
CTRMA	●	●			●	●	●	●	⚡	
Independent School District										
Regional TMC						○				
SH 130 Concessionaire	●				●		●	●		
University of Texas at Austin										
Local Agencies										
City of Austin	●	●	●	⚡	●	●	●			●
Municipal/County*	○	⚡	○	⚡	⚡	⚡	⚡		⚡	●
City of Round Rock	●		●			⚡	⚡			●
City of Georgetown	○		○	⚡		⚡	⚡			●
City of Cedar Park	●		●	⚡	⚡	⚡	⚡			●
City of Leander	⚡		○			⚡	⚡			●
City of San Marcos	●		●	⚡	⚡	⚡	⚡			●
City of Pflugerville	⚡		○			⚡				
Other										
Commercial Vehicles										

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- Existing System
- Planned System
- ⚡ Future System

Stakeholder	Traffic Management (TM) (Continued)								
	TM15: Railroad Operations Coordination	TM16: Reversible Lane Management	TM17: Speed Warning and Enforcement	TM19: Roadway Closure Management	TM20: Variable Speed Limits	TM21: Speed Harmonization	TM22: Dynamic Lane Management and Shoulder Use	TM24: Tunnel Management	TM25: Wrong-Way Vehicle Detection and Warning
State Agencies									
Texas DPS									
TxDOT Austin District	⚙️		⚙️	⚙️	⚙️	⚙️	●	⚙️	●
Regional Agencies									
CAMPO									
CapMetro									
CARTS									
City of Austin and Travis County (CTECC)									
CTRMA			⚙️						●
Independent School District									
Regional TMC									
SH 130 Concessionaire									⚙️
University of Texas at Austin									
Local Agencies									
City of Austin		⚙️			⚙️		●		
Municipal/County*	⚙️		⚙️	⚙️					
City of Round Rock									
City of Georgetown									●
City of Cedar Park									
City of Leander									
City of San Marcos									
City of Pflugerville									
Other									
Commercial Vehicles									

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- Existing System
- Planned System
- ⚙️ Future System

Stakeholder	Vehicle Safety (VS)										Weather (WX)		
	VS05: Curve Speed Warning	VS07: Road Weather Motorist Alert and Warning	VS08: Queue Warning	VS09: Reduced Speed Zone Warning / Lane Closure	VS10: Restricted Lane Warnings	VS11: Oversize Vehicle Warning	VS12: Vulnerable Road User Safety	VS13: Intersection Safety Warning and Collision Avoidance	VS15: Infrastructure Enhanced Cooperative Adaptive Cruise Control	VS17: Automated Vehicle Operations	WX01: Weather Data Collection	WX02: Weather Information Processing and Distribution	WX03: Spot Weather Impact Warning
State Agencies													
Texas DPS													
TxDOT Austin District	⚡	⚡	⚡	⚡		⚡	⚡	⚡	⚡	⚡	●	○	
Regional Agencies													
CAMPO													
CapMetro													
CARTS													
City of Austin and Travis County (CTECC)													
CTRMA			⚡	⚡							●		
Independent School District													
Regional TMC													
SH 130 Concessionaire											⚡		
University of Texas at Austin													
Local Agencies													
City of Austin			⚡		⚡		●				●	○	
Municipal/County*	⚡	⚡	⚡	⚡		⚡	⚡	⚡		⚡	⚡	⚡	⚡
City of Round Rock											⚡		
City of Georgetown											⚡		
City of Cedar Park											⚡		
City of Leander											⚡		
City of San Marcos											●	●	
City of Pflugerville											⚡		
Other													
Commercial Vehicles													

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- Existing System
- Planned System
- ⚡ Future System

Appendix D: Regional ITS Architecture Maintenance Documentation Form

Central Texas Regional ITS Architecture

ITS Architecture Maintenance Form



Please complete the following form to document changes to the 2025 Central Texas Regional Intelligent Transportation System (ITS) Architecture. Forms should be submitted to CAMPO for review and acceptance. All accepted changes will be kept on file by CAMPO. Changes will be incorporated into the Central Texas Regional ITS Architecture during the next scheduled update.

Contact Information

Agency	
Agency Contact Person	
Street Address	
City	
State, Zip Code	
Telephone	
E-Mail	

Change Information

Please indicate the type of change to the Regional ITS Architecture:

- ☐ Administrative Change – Basic changes that do not affect the structure of the ITS service packages in the Regional ITS Architecture.
Examples Include: Changes to stakeholder or element name, element status, or data flow status.
- ☐ Functional Change – Single Agency: Structural changes to the ITS service packages that impact only one agency in the Regional ITS Architecture.
Examples Include: Addition of a new ITS service package or changes to data flow connections of an existing ITS service package. The addition or changes would only impact a single agency.
- ☐ Functional Change – Multiple Agencies: Structural changes to the ITS service packages that have the potential to impact multiple agencies in the Regional ITS Architecture.
Examples Include: Addition of a new ITS service package or changes to data flow connections of an existing ITS service package. The addition or changes would impact multiple agencies and require coordination between the agencies.
- ☐ Project Change – Addition, modification, or removal of a project in the Regional ITS Architecture.
- ☐ Other: _____

Submittal

Please submit Regional ITS Architecture Maintenance Documentation form to:

CAMPO
8303 N. Mopac Expressway, Suite A210
Austin, Texas 78759
E-mail: campo1@campotexas.org

Form Submittal Date: _____

Central Texas Regional ITS Architecture

ITS Architecture Maintenance Form



Question 1 Describe the requested change to the Central Texas Regional ITS Architecture.	
Question 2 Are any of the Regional ITS Architecture service packages impacted by the proposed change?	<input type="checkbox"/> Yes: Please complete Questions 2A and 2B <input type="checkbox"/> No: Please proceed to Question 3 <input type="checkbox"/> Unknown: Please coordinate with CAMPO to determine impacts of the change to the Central Texas Regional ITS Architecture
Question 2A List all ITS service packages impacted by the proposed change.	
Question 2B Include a copy of the ITS service packages diagrams for all ITS service packages impacted by the proposed change. Mark any proposed modifications to the ITS service packages requested. Add any additional notes on proposed changes in this section.	
Question 3 Does the proposed change impact any stakeholder agencies other than the agency completing this form?	<input type="checkbox"/> Yes: Please complete Questions 3A and 3B <input type="checkbox"/> No: Form is complete <input type="checkbox"/> Unknown: Please coordinate with CAMPO to determine impacts of change to other agencies in the Central Texas Regional ITS Architecture
Question 3A Identify the stakeholder agencies impacted by the change and a contact person for each agency.	
Question 3B Describe the coordination that has occurred with the stakeholder agencies and the results of the coordination?	



Date: April 28, 2025
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Mr. Ryan Collins, Short-Range Planning Manager
Agenda Item: 7
Subject: Discussion on 2026-2029 Call for Projects for Transportation Alternatives Set- Aside (TASA) and Carbon Reduction Program (CRP) Funding

RECOMMENDATION

None. This item is for informational purposes only.

PURPOSE AND EXECUTIVE SUMMARY

The Capital Area Metropolitan Planning Organization (CAMPO) issued a Call for Projects requesting applications for transportation projects that serve the six-county CAMPO region. This competitive project call will select projects for Transportation Alternative Set-Aside and Carbon Reduction Program funding.

CAMPO received 31 applications from 14 project sponsors. These applications were subject to an extensive readiness assessment process which concluded with individual project readiness assessment reports and project sponsor debriefing. Of the 30 projects submitted, 11 projects were determined to be sufficiently ready for federal funding and to be evaluated through the benefit evaluation process which is currently underway. Staff will provide an in-depth review and analysis of the readiness assessment process, outcomes, and sponsor feedback for discussion.

Upon conclusion of the evaluation process, a recommendation will be developed and brought back to the Technical Advisory Committee for review and recommendation to the Transportation Policy Board.

FINANCIAL IMPACT

Projects selected by the Transportation Policy Board will be programmed with federal program funding currently apportioned to the region or forecast to be apportioned in future fiscal years. The funding amounts available for this project call are based on a financial forecast developed from the current federal authorization and most recently available information from the Federal Management Information System (FMIS), TxDOT's Financial Reports, and other state and federal financial resources.

BACKGROUND AND DISCUSSION

The Transportation Policy Board is responsible for directly allocating TASA, CRP, and Surface Transportation Block Grant (STBG) funding for transportation projects in the six-county capital region. These funds are administered through a competitive, performance-based project selection process.

SUPPORTING DOCUMENTS

None.