

Corpus Christi MPO Annual Performance and Expenditure Report (APER) FY 2023

TASK 1 – ADMINISTRATION AND MANAGEMENT

Task 1 Included an overall description of the Corpus Christi MPO's administration and coordination efforts. Included were all subtasks listed in the FY 2023 - FY 2024 Unified Planning Work Program (UPWP) with a description of each subtask product received or work accomplished and the agency responsible. If work under a subtask was completed by a consultant or subcontractor, this is indicated. If an "amount expended" exceeded or is below the "amount budgeted" by 25% or more, this was noted in the task funding table and an explanation was provided for the variance.

Some of the funding for subtasks were underspent as expected and will be rolled over into the FY 2024 UPWP as multi-year tasks.

TASK 1 – OVERALL DESCRIPTION: ADMINISTRATION AND OUTREACH

Task 1.0 is managing and administering the federal transportation planning requirements in and for the Corpus Christi Metropolitan Planning Organization. Included in this task are the direct expenses associated with the planning effort and products to be delivered within the UPWP. An additional \$1.0 million of the total \$3.2 million of CRRSAA funds were allocated to this subtask after the approval and execution of a Non-Construction Advanced Funding Agreement (NCAFA).

OBJECTIVE – Coordinate the transportation planning activities of the Corpus Christi MPO with TxDOT, FHWA, and interested public agencies as part of the metropolitan transportation planning process. Maintain records of all activities needed for the comprehensive, coordinated, and continuing (3C) transportation planning process. Take actions to enhance the technical capacity of the planning process and insure a proactive public involvement process that provides full public access to key decisions in developing both short- and long-range plans and programs.

METHODOLOGY – Work elements in this activity are administrative and management tasks associated with the function, coordination, and day-to-day activities of the Corpus Christi MPO. The development of department goals and policies; committee structures and staffing; interagency coordination and communication; and staffing of various transportation planning related efforts. Required duties included communicating with the public and committee members regarding meetings, preparation of meeting packets, attendance at meetings, coordination of projects/programs, and oversight of planning activities. Additionally, this task met the technical objectives of the organization regarding computer equipment and/or software packages. Direct expenses are listed in subtask 1.9. The additional local funds through the Corpus Christi MPO's Strategic Reserve Fund pays for possible special projects and for individual professional membership dues for the Corpus Christi MPO staff members.

SUBTASK 1.1 – PROGRAM COORDINATION AND DIRECTION

This subtask is the administration of the Corpus Christi MPO program. Corpus Christi MPO staff prepared and submitted required reports, certification, and administrative documentation to maintain continuity and credibility of the Corpus Christi MPO. Staff also prepared requests for proposals, as required, and solicit for contractual services. We also assisted participating and collaborating agencies as needed.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following: Facilitation of the metropolitan transportation planning process for FY 2023, including compliance with all federal and state regulations, requirements, and certifications. These key processes involved the advance groundwork for the development of the 2050 Metropolitan Transportation Plan (2050 MTP), FY 2025-2028 Transportation Improvement Program (TIP), and FY 2025 and FY 2026 Unified Planning Work Program (UPWP), also the amendments of FY 2023 and FY 2024 UPWP and FY 2023-2026 TIP amendments.

 Maintained current planning agreements and executed annual contracts and amendments for planning funds

- Coordinated and consulted with Federal and State agencies on the development and implementation of all plans and programs
- Participated in local transportation-related planning studies, activities, meetings, and workgroups
- Monitored best practices for transportation planning by attending workshops, conferences, seminars, and webinars held by FHWA, TxDOT, Texas Transportation Institute (TTI), etc.
- Participated in industry associations such as Association of Metropolitan Planning Organizations (AMPO),
 Texas Association of MPOs (TEMPO), American Planning Association (APA), National Academies of Science
 Transportation Research Board (TRB), Institute of Transportation Engineers (ITE), American Society of Civil
 Engineers
- Conducted personnel evaluations, job description reviews, and a salary survey of TEMPO member's Directors
- Administered meetings:
 - Monthly technical and policy meetings
 - Consultant meetings
 - Regional Traffic Safety Task Force
 - Small Area Forecast Task Force
 - Public engagement meetings
 - o Active Transportation/Complete Streets/Micro-mobility Stakeholders Group meetings
- Monitored laws and ordinances (Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law) and addressed new requirements and emphasis areas.

SUBTASK 1.2 - UNIFIED PLANNING WORK PROGRAM (UPWP) DEVELOPMENT

In this subtask, Corpus Christi MPO staff revised the FY 2023 UPWP with Amendment 1 to reflect the changes to subtasks based on the regional priorities and funding levels. Corpus Christi MPO staff reviewed FY 2024 UPWP funding levels, allocation of the budget for each subtasks, and started the initial development of FY 2025 and FY 2026 UPWP based on the FY 2023 and FY 2024 UPWP activities and its status as well as new requirements under IIJA/BIL, Executive Orders, and FHWA/FTA guidance on the Planning Emphasis Area. Reviewed projects for eventual inclusion in the Annual Project Listing (APL) for FY 2022 for the transportation projects that used federal funds in FY 2023. Prepared and submitted FY 2022 Annual Performance and Expenditure Report (APER) and prepared the draft sections of the FY 2023 APER for future submission to TxDOT.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Amended the FY 2023 UPWP (1) to reflect changes in funding and planning priorities within the Corpus
 Christi MPO area. These were based on financial data availability for the Corpus Christi MPO's planning
 tasks as well as part of the analysis of monthly expenditures above or below expenditure estimates, but
 within the 25% limits for UPWP Tasks.
- Reviewed and amended FY 2024 UPWP budget, tasks and activities.
- Coordinated with local agencies to consolidate transportation planning related efforts and activities that were/will be conducted during FY 2023 and FY 2024.
- Prepared and submitted the Annual Performance and Expenditure Report (APER) for the FY 2022 UPWP.
- Prepared draft sections of the APER for FY 2023.
- Reviewed projects for eventual inclusion in the Annual Project Listing (APL) for FY 2022 for the transportation projects that used federal funds in FY 2022.

SUBTASK 1.3 – MONTHLY BILLING AND FINANCIAL MANAGEMENT

Prepared budgets maintained financial records, equipment inventory, and ensured monies were spent appropriately. Processed timesheets, billings and invoicing, budgeting, and management of transportation planning funds; the cost of operating the Corpus Christi MPO, office lease, furniture, equipment lease/rental. An Annual Performance and Expenditure Report (APER) was prepared at the end of the fiscal year (FY 2022) in

accordance with TxDOT policy and procedures for tasks that utilized FHWA and Federal Transportation Administration (FTA) planning funds. The Corpus Christi MPO sought state recommendation/federal approval for any expenditure exceeding \$25,000.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Prepared and monitored annual operating budgets.
- Submitted monthly billings to TxDOT for reimbursement.
- Performed general administrative functions such as purchasing, account payable, account receivable, filing, etc.
- Monitored UPWP task hours and submit the timesheets.
- Monitored and managed the Strategic Reserve Fund.
- Prepared and submitted the FY 2022 Single Audit Statement to TxDOT.

SUBTASK 1.4 – STAFF TRAINING AND EDUCATION

Subtask 1.4 is the Corpus Christi MPO staff professional development and training program. Transportation planning funds allowed staff members of the MPO to travel and attend transportation planning and professional development conferences, workshops, and training. The Corpus Christi MPO staff organized training sessions for the Transportation Policy Committee, the Technical Advisory Committee, and any subcommittee members, and for local governments and participating agencies. For out of state travel, the Corpus Christi MPO sought prior TxDOT approval as appropriate.

Work Performed and Status

Corpus Christi MPO staff participated in various training and education events provided by state and national committees through conferences, seminars, workshops, workgroups, and webinars. Corpus Christi MPO staff participated in-person and virtually in training and education provided by, but not limited to, the following associations:

- American Association of State Highway and Transportation Officials (AASHTO)
- AASHTO Center for Environmental Excellence
- American Planning Association (APA)
- American Public Transportation Association (APTA)
- American Society of Civil Engineers (ASCE)
- Association of Metropolitan Planning Organizations (AMPO)
- Coordinating Council on Access and Mobility
- US Department of Energy (DOE)
- Environmental Protection Agency (EPA)
- Executive Office of the President
- Environmental Protection Agency (EPA)
- Federal Emergency Management Agency (FEMA)
- Federal Highway Administration (FHWA)
- First Street Foundation
- Harte Research Institute (HRI)
- Institute of Transportation Engineers (ITE)
- National Aging and Disability Training Center (NADTC)
- National Highway Institute (NHI)
- National Highway Traffic Safety Administration (NHTSA)
- National Institute for Transportation and Communities (NITC)
- National Oceanic and Atmospheric Administration (NOAA)
- National Operations Center of Excellence (NOCoE)

- National Safety Council (NSC)
- National Transit Institute (NTI)
- RITIS User Group
- Safe Streets for All (SS4A)
- Road to Zero Coalition (RTZ)
- Software Suppliers
 - o Caliper
 - o ESRI
 - o INRIX
 - o PTV
 - o UrbanSim
- Texas A&M Transportation Institute (TTI)
- Texas Association of Metropolitan Planning Organizations (TEMPO)
- Texas Demographic Center (TDC)
- Texas Department of Transportation (TxDOT)
- Texas General Land Office (TXGLO)
- Texas Innovation Alliance
- Texas Pedestrian Safety Coalition
- Texas Transportation Institute (TTI)
- Texas Technology Task Force
- Transportation for America (T4A)
- Transportation Research Board (TRB)
- United States Chamber of Commerce
- US Census Bureau
- US Department of Transportation
- Vision Zero Network

SUBTASK 1.5 - LOCAL, STATE, AND FEDERAL AGENCY COLLABORATION ACTIVITIES

Subtask 1.5 is sponsoring and conducting meetings, including providing support to both the Transportation Policy Committee and the Technical Advisory Committee, attending mission-related meetings, along with bylaw/policy development and implementation. It is also coordinating and working with other agencies in Texas involved in planning and programming transportation projects, especially participation on partner agency committees and in transportation-related community planning efforts.

The Corpus Christi MPO utilized a regional approach to transportation planning by coordinating planning efforts and cooperating on information gathering and project implementation across multiple agencies – continuing and building upon previous working relationships and coordinating among: Local member government land use and development agencies; economic development agencies, the regional transit agency (CCRTA), environmental resource agencies, community and social agencies, the Texas Department of Transportation (TxDOT); the Federal Highway Administration (FHWA); and the Federal Transit Administration (FTA).

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Provided data, maps, reports, and guidance to the regional planning partners on various topics related to the Corpus Christi MPO activities, specifically the existing and proposed legislation and issues relevant to the regional transportation planning.
- Worked with San Patricio County and participating cities for the scoping of the San Patricio 21st Century Industrial Growth Plan as an administrator.

- Worked with the TxDOT- Corpus Christi District on efforts related to roadway projects in various stages of development as well as planning efforts to prioritize projects with various funding categories.
- Participated in member agency planning activities including the Port of Corpus Christi Long-range
 Planning, Harbor Bridge Project CAB, City of Corpus Christi Transportation Advisory Committee, CCRTA budget workshops, and Nueces County CIP plans.
- Joined the discussions with the City of Corpus Christi for their planning efforts for various corridors, area Development plan, Infrastructure Committee for the updated Roadway Master Plan in 2023.
- Other local discussions with planners for smaller developments and projects that may impact the regional planning.
- Local Government Transportation Project Development.
- Supported and participated in the Coastal Bend Air Quality Partnership meetings.

SUBTASK 1.6 – COMPUTER MAINTENANCE AND WEBSITE MANAGEMENT

This subtask supports the efficient operation of the Corpus Christi MPO office computer equipment and software and updates the Corpus Christi MPO website. We acquired supplies, services, software, and equipment to support the Corpus Christi MPO operations. Equipment purchases over \$5,000 per unit (including the cost of any modifications, attachments, accessories, or auxiliary apparatus necessary to make it usable for the purpose for which it is acquired) required prior State and Federal approval.

The system administrator assures the working order of the LAN Network, all computers and supporting systems. Funding is allocated and/or service contracts are in operation for the maintenance and upgrade of all automated information processing equipment and software purchased. Staff continued updating the Corpus Christi MPO equipment; audio/video equipment, server computers, computer hardware, and software, to include license maintenance of state of practice platforms like ESRI and Caliper. Staff also stayed abreast of current trends in technology. A description of computer hardware and software purchases in excess of \$5,000 were submitted to TxDOT for approval prior to acquisition. Maintenance of the LAN Network System required various annual licensing agreements for proprietary software, GIS server support, and web hosting expenses. Website information was updated as information became available. Agendas and committee packets were published to the website monthly.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Updated the website for the Corpus Christi MPO to comply with HTML5 and CSS3 and conforms to the
 World Wide Web Consortium (W3C) guidelines: WCAG 2.0 (Website Content Accessibility Guidelines) and
 ATAG 2.0 (Authoring Tool Accessibility Guidelines). The World Wide Web Consortium is an international
 community that includes a full-time staff, industry experts, and several member organizations. These
 groups work together to develop standards for the World Wide Web. The MPO site was tested quarterly
 for accessibility compliance through online W3C validators. Additionally, the MPO continuously tests
 performance on various desktop and mobile devices using current popular Web browsers.
- Pertaining to S.B. No. 1237, Section 1. Subchapter D, Chapter 472, Transportation Code, Section 472.036 –
 Internet and Broadcast and Archive of Open Meetings, the Corpus Christi MPO continued to broadcast
 over the internet live video of the Transportation Policy Committee's open meetings and made available
 on the Corpus Christi MPO website links to archive video with audio of each open meeting.
- Reviewed other MPO websites for best practices, developed plan for incorporating these into the website, especially in relation to the early planning for the upcoming 2050 MTP development processes.

We continued to evaluate the accessibility of MPO planning products as well as provide for the timely delivery of information about opportunities to engage in ongoing planning activities. The corpuschristi-mpo.org website sees over 1,500 visits per month and averages more than 800 downloads.

SUBTASK 1.7 – OUTREACH AND PUBLIC COMMENT

In FY 2023 the Corpus Christi MPO continued to address the typical difficulty to engage the public in transportation planning. Many community members are not familiar with technical terms and concepts or our processes. Good communication efforts are very different between the public, planners, and decision-makers. Within a performance-based planning and programming process, the goal continues to be to provide objective information to decision-makers, the public, and other interested parties on relevant issues so that the target audiences can easily understand issues and trade-offs.

The Corpus Christi MPO used public outreach and communication to increase transparency and enhance the Corpus Christi MPO's credibility in the eyes of policymakers and the general public. This subtask supported the development and implementation of the Public Participation Plan (PPP) including the day-to-day responses to the public (via email and/or phone calls), monitored social media, and participated in community outreach and public meetings/hearings as needed with emphasis on Environmental Justice populations. The Corpus Christi MPO monitored, evaluated, and implemented Title VI Civil Rights/Environmental Justice compliance, guidance, and requirements for plans and programs; continued to collect and analyze data related to minority or low-income populations and the effect of the transportation programs and system on those populations; identified ways to mitigate impacts of the system and programs on the identified populations; expanded the database of citizens and businesses in low income or minority areas to facilitate effective outreach to those populations. General information about Corpus Christi MPO activities and events were posted publicly as part of the Public Participation Process and provided the opportunity for all stakeholders to provide comments.

Transportation Policy Committee and Technical Advisory Committee meetings were held monthly. Dates and agendas were posted to Corpus Christi MPO's website and Corpus Christi Regional Transportation Authority's physical Bulletin Board as one of the official Corpus Christi MPO posting locations and usually sent out via email to an interested parties list one week before the meeting. The Transportation Policy Committee and Technical Advisory Committee meetings were open to the public and had time allotted on the agenda for public comments.

The Public Participation Plan was designed to facilitate participation by a wide range of community members, especially at-risk and traditionally under-served groups including minorities, low-income populations, seniors, and individuals with disabilities. Implementation of the tactics outlined in the plan provided an array of opportunities for meaningful public involvement and ensured compliance with all applicable federal regulations. Outreach efforts were undertaken as necessary in support of transportation planning activities as they occur in FY 2023.

Engage diverse stakeholders by "going to them" and integrating all voices into the decision-making process: The Corpus Christi MPO identified events with other agencies and organizations as possible opportunities for outreach. The intent was to outreach at existing events and meetings, and to engage those audiences during the course of their regularly scheduled meetings and events.

Engage Local Officials: In FY 2023, the Corpus Christi MPO held sub-regional meetings for local elected officials and municipal staff with the purpose of informing them about the Corpus Christi MPO's role in the region and their communities' role within the Corpus Christi MPO and soliciting input on the region's transportation needs and long-range plan. Staff had ongoing one-on-one meetings with newly elected officials (Board of Directors of Corpus Christi Regional Transportation Authority) and provided opportunities for all elected officials to engage with Corpus Christi MPO decision-making.

Engage vulnerable populations: The public involvement processes used to develop the transportation plan and investment programs were based on "seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low income and minority households, who may face challenges accessing employment and other services." (USC 450.318)

Understand residents' priorities through public opinion research: Gathering qualitative and quantitative information on the public's priorities involved ranking different goals or outcomes to help support making tradeoffs and prioritizing investments. The Corpus Christi MPO solicited public opinion via electronic surveys. The Corpus Christi MPO continued to gather data on public opinion using thorough outreach efforts such as the

update to the early activities for the next Metropolitan Transportation Plan (2050 MTP), as well as through general outreach such as online surveys.

Inform the public through collateral, e-dashboard, website, media, and social media: As the Corpus Christi MPO gathered increasing amounts of data and expanded our analysis capabilities, we worked to provide this wealth of information to the public in an interactive way. Having readily accessible information about performance not only helps drive performance-based planning but can also strengthen outreach to stakeholders and other agencies. By enhancing the website, users can efficiently access Corpus Christi MPO materials, including meeting agendas, reports, and studies. Staff continued to engage with the media on the progress of the regional priorities and other transportation issues impacting transportation. The Corpus Christi MPO developed and maintained a data dashboard that provides members with transportation data specific to their municipalities and the region.

Use Visualizations: Visualizations helped translate data into more easily understood graphics and images and more effectively communicate information. Visualizations are highly useful in a performance-based planning process to communicate performance information, particularly for complex, spatially relevant transportation data. The intent of visualization in public engagement is to help the public understand the context, to add insight to problem solving and to communicate with the public. It was used to communicate performance measures, trends, and impacts of strategies to the transportation system. Visualization also can help communicate the complex nature of trade-offs between investing in various types of transportation projects and programs.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Amended the Corpus Christi MPO FY 2023-2026 TIP (1).
- Periodically reviewed and updated when necessary, the Corpus Christi MPO 2021 Public Participation Plan (PPP) with more detailed strategies, methods, and procedures to involve the general public.
- Updated the 2021 Corpus Christi MPO Program For Addressing Discrimination (PAD) to 2023 PAD including policies related to environmental justice (EJ) and Title VI of the Civil Right Act, Limited English Proficiency (LEP), and Achieving Racial Equity (ARE) that complies with federal guidance and provisions.
- Researched and analyzed the new requirements on Public Involvement by IIJA/BIL, Executive Orders, FHWA/FTA guidance and discuss how to implement these new requirements in transportation planning.
- Maintained and updated the Corpus Christi MPO's contact database to expedite outreach efforts.
- Published Public Notices in publications of regional circulation, as appropriate for public meetings related to the FY 2023 2026 TIP amendment and FY 2023-FY 2024 UPWP amendment.
- Delivered public presentations in various community forums about the MPO planning process and specific
 ongoing strategic planning initiatives, specifically the CCRTA Board and Committees, City of Portland, City
 of Corpus Christi, Nueces County, and San Patricio County. Additionally presented the Corpus Christi MPO
 activities to local business groups such as Chambers of Commerce and Economic Development
 Corporations and the South Texas Military Task Force.
- Conducted media interviews for the Corpus Christi MPO's role and responsibility for the regional transportation planning.
- Documentation of all public involvement activities and efforts was conducted in FY 2023.
- Public access—in person and via live broadcast—to meetings of the Corpus Christi MPO's TPC.
- Webinars / Workgroups / Training

SUBTASK 1.8 – PROGRAM EVALUATION

The Corpus Christi MPO reviewed and evaluated the work accomplished during the previous fiscal year (FY 2022) under this subtask. This effort provides analysis of lessons learned, best practices, and recommendations for future planning, training, and process development. As improvement actions are identified and addressed, it is important that any relevant plans, policies, and procedures are updated accordingly.

The Corpus Christi MPO staff developed an After-Action Report for the last MTP development process to identify strengths of planning and programming processes that should be maintained and built upon, as well as identifying

potential areas for improvement. This specifically included developing/reviewing processes used to develop the Transportation Improvement Program, Metropolitan Transportation Plan, and the Congestion Management Program. The effort included a focus on participation techniques and activities taken to comply with Title VI/EJ guidance and requirements, collecting and analyzing data related to minority, low income, limited English proficiency, and other populations vulnerable to potential disproportional adverse impacts from the planned transportation system and transportation projects. For each major step in the MTP and TIP processes answers to the following questions were sought:

- What did we want to accomplish?
- How did this change as the process progressed?
- What did the process accomplish?
- Why was there a difference between what we wanted to do and what we did?
- What went well and why?
- What could have gone better?
- What advice would you give yourself if you were to go back to where you were at the start of the project?
- What should we have learned from this project a year from now?
- How do we adapt our processes for a better outcome OR how do we repeat our successes?

Corpus Christi MPO staff performed and completed the following:

- Reviewed items in the MTP/TIP After-Action Report.
- Evaluated the Corpus Christi MPO processes in an effort to fairly distribute the benefits and burdens of transportation investments, eliminate participation barriers, and engage minority and low-income populations in transportation planning decisions.
- Continued implementation and refinement of performance metrics to inform project prioritization and assess the functionality of the regional mobility system overall.
- Transportation Policy Committee Action Items
 - TxDOT 2024 UTP Category 2 and 4U Project Nomination
 - o Corpus Christi MPO Small Area Forecast Task Force Formation
 - Resolution to Enter into a Non-Construction AFA with TxDOT for \$2.0 million of STBG Program
 Funds
 - Adoption of 2023 Safety (PM1), Pavement and Bridge Condition (PM2), and System Performance and Freight (PM3) Performance Measures and Targets
 - Adoption of Transit Asset Management (TAM) Plan and Public Transportation Agency Safety Plan (PTASP) Performance Measures and Targets
 - FY 2022 Annual Listing of Obligated Projects (APL) Approved by Resolution 23-06
 - Corpus Christi MPO 2023 Program for Addressing Discrimination (PAD)
 - Small Area Forecast Task Force Recommended Population and Employment Control Totals for the 2050 MTP
 - FY 2023-2026 Transportation Improvement Program (TIP) Amendment 1
 - FY 2023 and FY 2024 Unified Planning Work Program (UPWP) Amendment 1
- Discussion Items
 - Harbor Bridge Project Monthly Updates
 - Corpus Christi MPO Regional Coordination Group for Federal Transportation Grants
 - o 2050 Metropolitan Transportation Plan Updates
 - o TxDOT 2024 Unified Transportation Plan Updates
 - o Census Urban Area Updates
 - Small Area Forecast Task Force Briefings
 - Regional Traffic Safety Task Force Briefings
 - Regional Stakeholder Group for the Complete Streets, Active Transportation, and Micro-mobility
 Plan creation
 - Corpus Christi MPO Regional Household Travel Survey Process Briefing
 - TxDOT 2023 Transportation Alternatives (TA) Statewide Call for Projects

- CCRTA Fleet Forward 2022 Long Range System Plan Briefings
- o Corpus Christi MPO Regional Resiliency Plan Phase 1 Briefing
- Corpus Christi MPO Functional Classification of Roads Overview

SUBTASK 1.9 – DIRECT EXPENSES

Direct Expenses were products and services directly related to the operation of the Corpus Christi MPO to deliver the UPWP tasks. Typically, these products and services are paid for directly through purchase orders and contracts, leases, and agreements. These generally included office rent, fiscal agent services, consultant contracts, external demographic and planning datasets and supporting information, communications costs for leases and equipment, office supplies and equipment purchases or leases, conference expenses, travel costs, paper, computer equipment, and IT system components and software and the associated maintenance fees. Budgeted items for direct expenses are shown below and detailed in Appendix I.

TASK 1 - FUNDING SUMMARY

Funding Source	Amount Budgeted	Amount Expended	Balance	% Expended
Transportation Planning Funds (PL 112 & FTA 5303)	\$1,214,100	\$524,945.41	\$689,154.59	43.24%
Local Planning Funds	\$0	\$0	\$0	0
FTA (Sec. 5309)	\$0	\$0	\$0	0
CMAQ	\$0	\$0	\$0	0
STBG MM	\$0	\$0	\$0	0
TOTAL	\$1,214,100	\$524,945.41	\$689,154.59	43.24%

The MPO staffing levels were 5 of 6 FTEs from October 1, 2022 through September 30, 2023. We kept 1 FTE vacant so we could evaluate our particular needs for the position related to consultant assistance for the remainder of FY 2023.

In FY 2023, we did not have the need to augment the FHWA PL funds with local funds for special projects.

For FY 2023, we allocated \$1.0 million of federal CRRSAA funds for consultant services. Consultant services were delayed due to contracting schedule, therefore the amount anticipated to be spent was more than 25% less than budgeted in Task 1.

	SUBTASK 1.9 BUDGETED EXPENDITURES					
	FY 2023 Direct Expense Revenues by Source		FY 2023			
		Federal Funds	\$2,008,000			
		Other Funds	\$0			
	FY 2023 Direct Expense Expenditures by Subtask		FY 2023			
Subtask		Direct Expense	Amount			
1.9 a	Contract Services: Fiscal Agent, Office Rent, Traffic and Spe Consultant assistance as needed	ecial Studies,	\$208,000			
1.9 b	Printing/Reproduction Services		\$3,500			
1.9 c	Education/Training/Conference		\$4,000			
1.9 d	Travel Out-of-State		\$5,500			
1.9 e	Travel In-State		\$2,500			
1.9 f	Supplies		\$6,000			
1.9 g	Support Services		\$5,500			
1.9 h	1.9 h Memberships/Subscriptions/Publications					
1.9 i	1.9 i Maintenance - Software/Equipment		\$5,500			
1.9 j	Capital - Furniture/Equipment		\$15,000			
1.9 k	Consultant Services		\$2,800,000			
		Direct Expenses	\$3,058,000			

TASK 2 – DATA DEVELOPMENT AND ANALYSES

Task 2 included the Corpus Christi MPO's data development and maintenance activities. All subtasks listed in the UPWP included a description of each subtask product received, or work accomplished and agency responsible. If work under a subtask was completed by a consultant/subcontractor, this is indicated. If an "amount expended" has exceeded or is below the "amount budgeted" by 25% or more, this is noted in the task funding table and an explanation provided for the variance. Expenditures for FY 2023 were within budgetary limits. Funds remaining in a subtask were rolled over to FY 2024 along with their activities.

TASK 2 – OVERALL DESCRIPTION

The Corpus Christi MPO continued to develop a systematic data collection and performance monitoring processes that meet federal performance-based planning and programming requirements. The Corpus Christi MPO team updated existing and forecast transportation conditions, along with related social, economic, and ecological conditions that support analyses related to adopted goals and objectives. The data were needed to support future analyses at a level that allows comparison between individual investments and identification of tradeoffs within investments. There must be sufficient detail on investments to compare their relative effectiveness and identify tradeoffs between investments across the spectrum of goals.

OBJECTIVE – The Corpus Christi MPO collected data primarily using collaborative partnerships with member agencies, including local governments, TxDOT, CCRTA, and other partner agencies. Gathering socio-economic data, traffic count data, travel speed data, accident surveillance and analysis, infrastructure condition data, and non-motorized and transit usage data provided the information upon which all other planning and programming activities drew. The metropolitan planning process involves extensive use of various forms of data including population, income, household size, employment, car ownership, street configuration, street capacity, traffic counts, bicycle counts, and land use. Collecting data on traffic conditions, roadway conditions, and system users

were a vital component of efficient and effective performance-based processes. Data helps leaders make informed investment decisions regarding investments into roadway maintenance and expansion priorities and can even feed into other technologies to provide real-time feedback and help maximize operational performance. Data also kept travelers informed and safe. Examples of data used every day in transportation planning include cellular and Bluetooth data, which can record travel times, travel direction, and provide information about trip origin/destination. Inductive loop detection, video vehicle detection, and Bluetooth detection can provide accurate counts of vehicles and bicycles using a facility. These technologies also assisted with signal timing, alerting signals when users are approaching or at an intersection. More recently, communities have begun investing in fiber-optic networks to help connect the data driven components of the transportation network.

METHODOLOGY – The Corpus Christi MPO was committed to monitoring performance of the transportation system at both the regional scale and corridor scale and using our findings to inform and prioritize both capital investments and implementation of policies that impact transportation. This work task was needed to monitor area travel characteristics and factors affecting travel such as socioeconomic, community, and land use data, transportation system data, natural, physical, and human environmental concerns, and issues in the Corpus Christi Metropolitan Area. Task 2.0 maintained and expanded the transportation, socioeconomic, environmental, and land-use data and encompassed the development of models to forecast future conditions. The data supported statistical analyses for a wide variety of performance-based planning activities.

SUBTASK 2.1 - MPO GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE MANAGEMENT

This subtask allowed staff to manage and update the GIS database as part of the MPO's continuous planning process. Data for state and national performance measures were collected and updated annually. Data for regional performance measures (i.e. measures used to evaluate the performance of the metropolitan transportation system overall) was also collected and updated annually. Project scale performance measures (i.e. those used to prioritize capital investments on individual corridor segments) are updated at a minimum of every two years to inform project selection in conjunction with updates to the TIP, or as needed to guide regional decision-making. There were efficiencies that were gained by coordinating this data collection. The Corpus Christi MPO needed to use financial resources to acquire data directly. Examples included the hiring of firms to collect data and conduct surveys as occurred in the past. This is especially effective when done in conjunction with the 2020 US Census. It required the acquisition through TxDOT or the MPO purchase of regionally specific data from one or more of the "Big Data" compiler agencies.

A brief list of these sources* included:

- Crash Record Information System
- Statewide Traffic Analysis Reporting System
- https://tti.tamu.edu/
- https://www.cattlab.umd.edu/
- https://www.streetlightdata.com/
- https://www.airsage.com/
- http://inrix.com/
- https://www.innovarytech.com/turning-movement-counts/
- https://www.here.com/products
- https://mysidewalk.com/
- https://www.waze.com/
- https://www.tomtom.com/en_gb/traffic-index/
- http://www.ihsglobalinsight.com/ProductsServices/ProductDetail838.htm

The Corpus Christi MPO acquired, aggregated, reviewed, and formatted data in a geospatial format to inform internal planning processes and the activities of the broader planning community. Analysis of the 2020 Census demographic (population only available) and land use data were performed for the geographic distribution and

^{*}Listing these companies in no way, shape, or form, suggests that the Corpus Christi MPO advocates or endorses their work. This is for information purposes only.

aggregation. The Corpus Christi MPO coordinated with local and state agencies to develop trend data on changes in land use through the analysis and review of existing demographic data.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Disseminated data to inform regional planning efforts.
- We provided technical support to partners to facilitate effective use of the data generated by the updated Corpus Christi MPO models (Travel Demand Model, CRASH, etc.).
- Maintained the GIS databases that incorporate the most current data available from various sources, including, U.S. Census American Community Survey data, Texas Demographic Center, Crash Records Information System, etc.
- Maintained the Corpus Christi MPO developed web mapping applications and story maps relating to various Corpus Christi MPO planning documents and datasets.
- Continued development of an internal MPO Open Data website.
- Coordinated with TxDOT on the development of the TransCAD 2021-2050 travel demand model refresh.
- Coordinated with TxDOT on the development of the TransCAD 2016-2045 enhanced time of day travel demand model.
- Coordinated with consultants (PTV/UrbanSim/WRA) on the development of the PTV 2021-2050 time of day travel demand model.
- Coordinated with TxDOT on the development of the 2020 Adjusted Census Urbanized Area.
- Provided technical support to consultant during the development of various plans and tools, including but not limited to, to the MTP, CMP, Resiliency, Active Transportation Plan, etc.
- Developed an enhanced GIS database that supported the review of projects within the MTP, TIP, and CMP to assist in prioritizing projects.

SUBTASK 2.2 – TRAVEL DEMAND AND CORRIDOR MODEL DEVELOPMENT AND UPDATE

The Corpus Christi MPO staff coordinated with TxDOT to develop both a refreshed and enhanced regional Travel Demand Model in TransCAD. The Corpus Christi MPO staff also contracted with a consultant to develop multiresolution travel model (regional meso-scale model) in Visum and Vistro to provide more detail into some of the complex travel situations in the region. These will be used during the Congestion Management Process and the Transportation System Management Operations process to aid analyses of conditions, needs, and solutions. Implementation of the multiresolution model includes simulation-based traffic assignment, time-of-day, mode of travel, intersection control, tours instead of trips, and multiple socio-economic conditions to bracket potential future land use conditions. Transit and bicycle-pedestrian information were evaluated for potential inclusion in the next update.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- The Corpus Christi MPO staff collaborated with TxDOT, TTI, and private consulting staff to both enhance and refresh the TransCAD travel demand model.
- Completed a calibrated regional Travel Demand Model in Visum that includes Time of Day, enhanced assignment, tours instead of trips, along with and updated TAZs and enhanced the network for use in a multi-resolution environment. Further refinement will continue into 2024.
- Initiated a regional meso-level traffic model for traffic analyses at both the corridor level and at individual signalized/unsignalized intersections under multiple land use futures. This is continued into FY 2024.
- Initiated development of an Urbansim socio-economic model to provide multiple futures as inputs into the multiresolution regional model.
- Continued from FY 2022, the Corpus Christi MPO identified intersections to acquire supplemental information. Emphasis was on identifying problematic traffic flows including consideration of operations, design, surrounding land uses, and roadway characteristics.

- Identified and evaluated impedances, centroids, external points, screen lines, and other factors that may require alternations from the regional model.
- Calibration to both travel volumes and travel speeds was investigated.
- Intersection geometries and signal timings are being coded into the model.
- Participated in RITIS User group
- Participated in AMPO Emerging Technologies Working Group
- Participated in AMPO Data Working Group
- Viewed Census Bureau and Texas State Office of Demography briefings.

SUBTASK 2.3 – SOCIO-ECONOMIC ALLOCATION MODEL DATA ACQUISITION AND CALIBRATION

Reviewed local land use files, property information, employment information, and U.S. Census databases and updated databases as needed. Developed population, income, household, and employment data that are used in the Corpus Christi MPO's planning and forecasting processes. Explored and scoped with consultant help, an advanced allocation model of UrbanSim.

The socioeconomic database was compiled and updated using local land use files, property information, employment information, and U.S. Census materials such as American Community Survey (ACS), Woods and Poole forecasts, and other information as required.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Acquired the UrbanSim Socio-Economic Allocation Model for Nueces, San Patricio, and Aransas counties.
- Approved the initial scope of work for 2050 socio-economic suballocation with UrbanSim. This model can
 allocate growth and development by simulating the dynamic interaction of households, jobs, real estate
 markets and the regional transportation system within the constraints of local growth policies. It will help
 inform policy makers' decisions with relation to long-run patterns of growth and development, as well as
 infrastructure investments.
- Collected and compared socio-economic data from various sources including Woods and Poole, the Texas State Demography Center, the Texas Water Board, and other local entity studies.
- Reviewed the 2 population forecasts produced by the State Demography Center and received approval from the Transportation Policy Board on which to use to develop the Small Area Forecast
- Reviewed estimates of actual population change, including declines.
- Researched components of population change and ongoing changes in fertility and population composition in the region.
- Participated in a webinar on the useability of UrbanSim in allocating households and jobs.

SUBTASK 2.4 – CRASH DATA ACQUISITION AND CRASH MODEL CALIBRATION

The CRIS (CRIS) is a database of accidents that occur on roads throughout the state. This database is maintained by the Traffic Engineering and Safety Systems Branch of TxDOT. The Corpus Christi MPO staff acquired and refined crash data and supporting information such as traffic volumes and turning movement counts. These data were applied into the Vision Zero Suite tool to create a calibrated crash analysis model that highlights unusual locations. Activities also included participation in multi-disciplinary safety initiatives at the local, regional, or state level and we initiate a regional traffic safety task force.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

 Contracted for Crash Data Analysis with DiExSys Vision Zero Suite software and received training on its capabilities.

- "Cleaned" the 2016-2021 crash data and acquired TTI/TxDOT SPF data to provide diagnostic capabilities, a library of crash modification factors, and economic evaluation capabilities to provide effective and defensible risk management platform for safety decisions.
- Verified that the model can conduct observational Before-After Studies to evaluate effectiveness of constructed improvements, including correcting for Regression to the Mean Bias using the Empirical Bayes method.
- Convened a Regional Safety Task Force and merged it with the TxDOT Wrong Way Driver Task Force.
- Began analyzing corridors and intersection locations for anomalous crash occurrences.
- Contracted with Halff Associates and DiExSys to identify 30 locations that are very susceptible to safety improvements using FHWA proven safety countermeasures.

SUBTASK 2.5 - INFRASTRUCTURE CONDITION DATA AGGREGATION AND ANALYSES MODELS

The Corpus Christi MPO staff acquired infrastructure condition data from the City of Portland, the City of Corpus Christi and TxDOT. This data will be integrated into FHWAs HERS software to identify deficiencies and apply economic principles to determine the outcome of different investment strategies. Due to some financial contracting issues this effort has been postponed into FY 2024. The Corpus Christi MPO staff worked with local technical staff to review local roadway and bridge maintenance policies and procedures. The types of interventions and cost escalations were reviewed. National data on how climate and extreme weather can impact maintenance needs were also reviewed.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Completed consultant contract with Cambridge Systematics to use of FHWA's Highway Economic
 Resource System (HERS) pavement management model based on both TxDOT sample data and overall
 data acquired by local governments.
- Acquired and harmonized available pavement condition data from local and state agencies.
- Worked with TxDOT to acquire bridge condition data.
- Discussed processes to obtain culvert information and a method of estimating maintenance needs.
- Discussed at TRB how hardening infrastructure based on a resilience plan can impact transportation asset management plans. Volunteered to be a test site for these concepts.
- The actual conduct of the HERS model will occur in 2024.

SUBTASK 2.6 – COMMUNITY IMPACT MODEL DEVELOPMENT AND IMPLEMENTATION

Due to some financial contracting issues the primary effort has been postponed into FY 2024. When completed this tool will support a process that incorporates the Equity impacts into the Project Prioritization Tool (also developed by High Street) to return scores for direct inclusion in project rankings. Work that did occur in this subtask includes:

- Updated the regional 2023 Program Addressing Discrimination data using the 2020 Census and 2017-2021
 American Community Census data
- Contracted with a consultant to develop a process and tool that quantifies distributional equity using an
 online tool, likely in a census-based zonal system. This included reviewing over 20 existing tools provided
 by state and federal agencies, including:
 - US DOT's Equitable Transportation Community Explorer (ETCE),
 - Council on Environmental Quality's Climate and Economic Justice Screening Tool,
 - EPA's Environmental Justice Screening and Mapping Tool (EJScreen),
 - FHWA's Screening Tool for Equity Analysis of Projects (STEAP),
 - Volpe Center Transportation for Social Equity (TransportSE),
 - TxDOT's Community Impacts Data Tool,
 - USDOT's Area of Persistent Poverty (AoPP),

- USDOT's Historically Disadvantaged Communities (HDC),
- FEMA's National Risk Index (NRI),
- NOAAs Climate Resilience Toolkit,
- The Climate Mapping for Resilience and Adaptation tool (CMRA),
- the US Census Community Resilience Estimates for Equity and Disasters,
- the Bureau of Transportation Statistics National Noise Impact map,
- Center for Disease Control Environmental Justice Index (EJI),
- Explorer and Social Vulnerability Index (SVI),
- FEMA's Resilience Analysis and Planning Tool (RAPT),
- TransitCenters Equity Dashboard,
- American Enterprise Institute (AEI)
- Housing and Economic Analysis Toolkit (HEAT),
- the Center for Neighborhood Technology H+T Affordability Index,
- the Texas Broadband Development Map

SUBTASK 2.7 – ENVIRONMENTAL RESOURCE / LINKAGES MODEL DEVELOPMENT AND IMPLEMENTATION

The federal requirement to incorporate mitigation into regional transportation plans requires a continuous, cooperative, and comprehensive process that responds to local, state, federal, and non-profit agency needs and priorities. The Corpus Christi MPO acquired plans and began the process to understand the goals of these agencies and how they impact or are impacted by transportation. The MPO discussed the process to acquire the data, and to create a tool, or develop a process to overlay the locations of critical social, cultural, or ecological attributes such as streams, wetlands, rare plant habitats, and historic sites, along with maps of potential transportation projects. A consulting firm was retained to scope out the development of forecasting tools and/or processes. The exact effort cannot be known until the relationship with each of these agencies is known. This effort increases opportunities for collaboration that did not easily exist in the past. By sharing information with partner agencies and stakeholders early in the planning process, transparency that creates conditions for more efficient and effective approaches to both projects and mitigation can be identified. This subtask results in the data and process necessary to identify both the types of potential environmental mitigation activities that may have the greatest potential to restore and maintain the environmental functions affected by the projects included in the MTP and where the areas to carry out these activities are located.

SUBTASK 2.8 – HAZUS / RESILIENCY MODEL DEVELOPMENT AND IMPLEMENTATION

The Corpus Christi MPO staff coordinated with TxDOT, the General Land Office, the Regional Resiliency Partnership, and local entities to begin developing a regional resiliency plan. The Corpus Christi MPO staff contracted with a private consultant to collect the data and help develop the planning process to provide more detail into some of the complex situations in the region. The Corpus Christi MPO had staff participate in the National Cooperative Highway Research Program (NCHRP) project 23-32: Transportation Asset Risk and Resilience.

Corpus Christi MPO completed the following:

- Assessment of resiliency impact tools and processes to aid identification of vulnerable assets,
- Pursuit and acquisition of the FHWA Resilience and Disaster Recovery Tool Suite,
- Draft Technical memo identifying the vulnerable transportation assets by type,
- Draft Technical Memo documenting the review and selection of hazards,
- Spatial criticality/hazard data set conflated with Corpus Christi's Asset Inventory for identified asset types
- Scope and budget for next phase of the Regional Resiliency Plan for conduct in 2024.

SUBTASK 2.9 – ECONOMIC ANALYSES MODEL DEVELOPMENT AND IMPLEMENTATION

Due to some financial contracting issues the primary effort has been postponed into FY 2024. Work that did occur in this subtask includes:

- Acquisition of future land use and suitability information,
- Updates to regional economic development plans.
- Identification of analysis tool and scope and budget for private consulting help from EBP consultants.
- Discussion on how to integrate TREDIS into decision making and how core economic metrics and monetized benefits from the TREDIS software could be integrated into an impact-based project prioritization process.

TASK 2 – FUNDING SUMMARY

Funding Source	Amount Budgeted	Amount Expended	Balance	% Expended
Transportation Planning Funds (PL 112 & FTA 5303)	\$164,200	\$160,913.31	\$3,286.69	98.00%
Local Planning Funds	\$0	\$0	\$0	0%
FTA (Sec. 5309)	\$0	\$0	\$0	0%
CMAQ	\$0	\$0	\$0	0%
STP MM	\$0	\$0	\$0	0%
TOTAL	\$164,200	\$160,913.31	\$3,286.69	98.00%

TASK 3 – SHORT RANGE PLANNING

Task 3 included an overall description of the Corpus Christi MPO's short range planning activities. This task included all subtasks listed in the UPWP with a description of each subtask product received or work accomplished and agency responsible. If work under a subtask was completed by a consultant/subcontractor, this is specified. If an "amount expended" exceeded or is below the "amount budgeted" by 25% or more, this is noted in the task funding table and an explanation must be provided for the variance. Expenditures were within budgeted limits. Any funding in a task that was underspent, it was rolled over into the FY 2024 UPWP along with the tasks to be performed.

TASK 3 – OVERALL DESCRIPTION

The process of building, operating, maintaining, and reconstructing the region's surface transportation system is complex and demands ongoing metropolitan planning efforts. The activities described in this task depend upon collaborative and coordinated information and decision-making processes among state and local government agencies, transportation providers, and the users of the regional system. The cooperation among all these stakeholders simplifies and harmonizes metropolitan transportation planning efforts and leads to greater mobility and accessibility benefits.

OBJECTIVE – In addition to maintaining a TIP that outlines a four-year schedule of transportation improvements for the study area and reflects the planning priorities of federal legislation, the Corpus Christi MPO carried out various planning studies to assess the need for other projects that have not yet been identified in the MTP or TIP. Such studies functioned to guide capital investments and project prioritization by municipalities and other entities in the MPO area.

METHODOLOGY

Maintained an up-to-date FY 2023-2026 TIP

- Identified EJ/Title VI funding and project list in the TIP and MTP
- Implemented new requirements under IIJA/BIL, Executive Orders, and FHWA/FTA's Planning Emphasis Areas in the FY 2023-2026 TIP
- Reviewed and analyzed a myriad of Performance Metric data sources relating to congestion and regional Goal Areas, per the MPO's performance-based planning framework, as defined in the CMP to assist in prioritizing projects and assess the functionality of the regional transportation network, including evaluating the severity of congestion
- Compiled traffic count data from various multiple sources to aid crash diagnostic analyses
- Participated in the identification of a process for the TSMO/ITS Architecture Plan
- Commenced the new Active and Micro-mobility Transportation Plan
- Began the Regional Complete Streets Policy planning
- Participated in the Statewide/Regional Freight Planning efforts
- Attended operations plan public meeting for transit at the CCRTA
- Performed with consultant assistance a Crash Analysis and Incident Management Planning

SUBTASKS - The subtasks are listed in detail on the following pages.

- Subtask 3.1 Transportation Improvement Program (TIP) Update
- Subtask 3.2 CMP/TSMO/ITS Architecture Plan Development
- Subtask 3.3 Complete Streets, Active Transportation and Micro-mobility Planning
- Subtask 3.4 Regional Multimodal Freight and Urban Goods Planning
- Subtask 3.5 Equity and Justice 40 Planning
- Subtask 3.6 Economic Analyses of Projects and Portfolios
- Subtask 3.7 Infrastructure Lifecycle Analysis and Reporting
- Subtask 3.8 Crash Analyses and Regional Safety Action Plan
- Subtask 3.9 Coordinated Public Transit Human Services Transportation Plan Update
- Subtask 3.10 Regional Resiliency Improvement Plan
- Subtask 3.11 Planning and Environmental Linkages

SUBTASK 3.1 – TRANSPORTATION IMPROVEMENT PROGRAM (TIP) UPDATE

One of the primary responsibilities of the Corpus Christi MPO is developing a Transportation Improvement Program (TIP). The TIP includes all transportation projects within the Corpus Christi Metropolitan Planning Area for which federal and/or state funds is used, as well as all projects that have regional significance and are funded using local or private funds. The Corpus Christi MPO staff developed the FY 2023 – 2026 TIP, and also maintained and amended the FY 2021-2024 TIP to reflect changes in area priorities, scope, accessibility, and funding for roadways and transit projects. A cooperative interagency input process was part of the public involvement component of this task.

Category 9 project application was created and provided, in an easily understood manner and with sufficient detail, the design concept and scope descriptions of all existing and proposed transportation facilities to permit the development of cost estimates for major transportation investments for which analyses are not complete. An application form for other Funding Categories was discussed, and in the process of development with the help of a consultant. The application shall identify study corridors and subareas and may stipulate either a set of assumptions (assumed alternatives) concerning the proposed improvements or a no-build condition pending the completion of a corridor or subarea level analysis under Sec. 450.318, sufficient descriptive material (i.e., type of work, termini, length, etc.) to identify the project or phase.

An important and challenging effort is refining the decision support system to reflect adopted regional priorities and aid in allocating funds to those projects and programs. The Corpus Christi MPO also monitored the delivery of capital projects to support on-time and on-budget construction. Another focus was on developing priority projects to the level that allows the Corpus Christi Metropolitan area to compete nationally for discretionary funds.

This task also produced the required system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the adopted performance targets

including progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports; and an analysis of how the preferred investment scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Completed a scope and budget for a consultant to develop a project scoring tool.
- Developed an Amendment to the FY 2023-2026 TIP as articulated on the website pages illustrating the process and public meetings and TAC and TPC recommendations and approvals.
- Continued coordination with consultant on development of a TIP project selection tool for Performance-Based Planning & Programming
- Maintained an up-to-date FY 2023-2026 TIP by processing technical changes as necessary as well as administrative amendments and Transit amendments based on project status and additional FHWA/FTA funding.
- Identified and documented roadway projects being accomplished by local governments and agencies to gain an understanding of the projects and determine if the nonfederal project should be amended into the existing current TIP or wait for inclusion in the next TIP.

SUBTASK 3.2 - CMP/TSMO/ITS ARCHITECTURE PLAN DEVELOPMENT

The Corpus Christi MPO continued to work toward convening a CMP Committee and enhancing the ITS Architecture Plan and ITS Strategic Implementation Plan to include current technologies, along with connected and autonomous vehicle systems. Initiated several conversations multiple times with TxDOT CRP District about ITS Architecture and TSMO plans for the region. We discussed the internal process for efforts to occur after completion of the updated travel models in that each Regionally Significant Corridor from the adopted CMP shall be evaluated for short, medium, and long-range planning horizons based on capacity and operations as compared to expected demand.

This effort was discussed internally as we await the development of the regional draft ITS plan by the TxDOT CRP District office. The Corpus Christi MPO staff reviewed the initial scope for the Regional ITS plan drafted by the TxDOT CRP District. The development of the draft Regional ITS plan is ongoing and some of the staff funds for this task were rolled over to FY 2024. We discussed the process for when the draft is finalized and reviewed by the Corpus Christi MPO, performance shall be measured using adopted goals and performance metrics. The process will result in a list of roadway segments that have deficiencies when evaluated using adopted metrics for both existing conditions and forecast future conditions, using updated models and information. The relatedness of individual facilities to a corridor should be tested by changing network features and reviewing impacts to other facilities. The effort will include evaluating recurring and non-recurring congestion as part of the overall evaluation of the regional transportation network. The Corpus Christi MPO staff began review of cost-effective interventions, based on the adopted Congestion Management Program, to address these "identified deficiencies."

The CMP established a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the safety and mobility of people and goods in the Corpus Christi Metropolitan Area. Modern roadway operations are driven primarily through advancements in technology, though proper planning and physical projects may play a role as well.

The Intelligent Transportation System (ITS) Architecture plan, once finalized refined will identify technologies to improve mobility, increase safety, and reduce delays. We continued to discuss the aspects of the ITS that improves the existing roadway system's operations in a cost-effective manner.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

Received training on using INRIX and RITIS tools.

Attended a kickoff meeting for the Corpus Christi District ITS Architecture Plan.

SUBTASK 3.3 – COMPLETE STREETS, ACTIVE TRANSPORTATION AND MICRO-MOBILITY PLANNING

The Corpus Christi MPO strives to reflect non-vehicular and micro-mobility modes of transportation in its transportation planning. The Corpus Christi MPO staff contracted with a consultant to develop a regional Complete Streets policy as part of the regional Active Transportation and Micro-mobility Plan effort. This policy will also aid development of the Regional Safety Action Plan and the Regional Safe System Plan.

Corpus Christi MPO staff performed and completed the following:

- Continued to update the regional Sidewalk Inventory.
- Acquired and reviewed the available ADA Transition Plans in the region.
- Procured WalkScore, Bikescore, and Transitscore at the block level throughout the region.
- Participated on AMPO Active Transportation Working Group
- Attended TxDOT's virtual Bicycle and Pedestrian Advisory Committee (BPAC)
- · Hired a consultant for the development of Active Transportation and Micromobility Plan
- Hired a consultant to develop the Regional Complete Streets Policy

SUBTASK 3.4 – REGIONAL MULTIMODAL FREIGHT AND URBAN GOODS PLANNING

Safe and efficient multi-modal freight mobility is a cornerstone of the regional economy. Expanding rail capacity, enhancing trucking safety, and bolstering the nexus between modes are Corpus Christi MPO priorities. The Corpus Christi MPO staff initiated discussions with TxDOT and the Port of Corpus Christi to update the designation of state and national freight network routes in the region.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Participated as committee member representing TEMPO in the statewide planning efforts for the TxDOT 2050 Freight Mobility Plan.
- Participated in the statewide Port Authority Advisory Committee planning efforts that fed into the 2050 Freight Mobility Plan.
- Reviewed the 2045 MTP Freight Chapter and solicited updates to this chapter for the 2050 MTP using the adopted TxDOT 2050 Freight Mobility Plan.

SUBTASK 3.5 – EQUITY AND JUSTICE40 PLANNING

The Corpus Christi MPO had staff participate on several National Cooperative Highway Research Program (NCHRP) projects including:

- 08-159 Understand How Accessibility to Employment, Health Care, Education, and Other Vital Needs Varies for Different Population Groups in Different Settings, and Methods for Effectively Assessing Mobility and Accessibility Needs
- 08-161 Identify Emerging Approaches for Public Engagement to Meaningfully Involve Minorities, Low-Income, and Other Vulnerable Populations

This includes a process that incorporates the Equity impacts estimated by the Community Impact tool into the Project Prioritization Tool (developed by High Street) for direct inclusion into project rankings.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Updated the 2021 Program Addressing Discrimination (PAD) to a 2023 PAD, which is inclusive of the Title VI policy document and procedures, the Environmental Justice policy, and the Limited English Proficiency Plan.
- Hired a consultant to aid public outreach to disadvantaged communities and the general public.

• Completed the scope and budget for a consultant to develop a Community Impact Assessment Model

SUBTASK 3.6 – ECONOMIC ANALYSIS OF PROJECTS AND PORTFOLIOS

The Corpus Christi MPO staff developed a scope of services and corresponding budget for a consultant to create a localized TREDIS tool to provide econometric assessment of transportation projects and quantify the incremental benefits and costs (BCA) and Net Present Value (NPV) of the various proposed projects to help ensure that federal transportation funding is devoted to projects that are an efficient and effective investment for the region. Investment decisions are typically based on analyses of benefit-cost analysis (BCA), and/or cost-effectiveness analysis (CEA), to appraise economic viability. This includes a process that leverages asset condition benefits estimated inside the Project Prioritization Tool (also developed by High Street) to return scores for direct inclusion in project rankings. Due to workflow and budget issues the conduct of this effort was postponed into FY 2024.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- As part of the 2050 MTP development process, we discussed a myriad of Performance Metric data—
 including seven congestion-specific metrics per the MPO's performance-based planning framework, as
 defined in the CMP. These datasets, which are available from multiple sources, will be used to assess
 capital projects and the functionality of the regional transportation network, including evaluating the
 severity of congestion.
- Assessed possible revisions to the current CMP with enhancements added throughout FY 2023 as new
 information and exhibits were updated as part of the continuous CMP efforts.
 A process that leverages mobility, safety, and asset condition benefits estimated inside the Project
 Prioritization Tool (also developed by a consultant) to return results to the tool for direct inclusion in
 project rankings.

SUBTASK 3.7 – INFRASTRUCTURE LIFECYCLE ANALYSIS AND REPORTING

The Corpus Christi MPO staff developed a scope of services and corresponding budget for a consultant to customize FHWA Highway Economic Requirements System (HERS) investment forecast tool, including incorporation of local vehicle operating costs and revisions to pavement condition data using locally acquired data. The model specifications and usage will reflect current USDOT economic infrastructure investment principles. The Contractor shall produce a regionally customized version of HERS, including: an estimate cost of needed maintenance on the federally eligible road system, the resulting conditions using historic levels of funding, the resulting conditions using all reasonably available federal funding, the gap between needed and actual.

Due to workflow and budget issues the conduct of this effort was postponed into FY 2024. Eventually, the HERS model will produce a description of the condition of the assets and the costs of operations and maintenance activities. This includes a process that leverages asset condition benefits estimated inside the Project Prioritization Tool (also developed by consultants) to return scores for direct inclusion in project rankings. Performance deficiencies are identified, and lifecycle cost analysis can suggest potential investment strategies for local entities to undertake. In combination with financial planning, this can encourage conversations about long-term goals, issues, opportunities, and revenue needs.

SUBTASK 3.8 – CRASH ANALYSIS AND REGIONAL SAFETY ACTION PLAN

This subtask comprised the rigorous analysis of crashes on all public roads in the region. The activities included participation in multi-disciplinary safety initiatives at the local, state, or national levels to address traffic safety in a holistic manner; research and analysis of crash data from TxDOT's Crash Record Information System (CRIS), and coordination of training and workshops on safety related issues for agencies and regional implementers, if available or needed.

The Corpus Christi MPO created a regional safety task force to aid this effort. The MPO regional safety task force was then merged with the TxDOT Wrong Way Drivers Task force to enhance the effectiveness of both efforts. The

Regional Safety Action Plan (RSAP) will identify safety improvement measures to achieve the National Roadway Safety Strategy and the US Department of Transportation's goal of zero deaths and serious injuries on our nation's roadways. The approach is based on FHWA's Proven Safety Countermeasures in a Countermeasure with Promise (CWIP) approach, using direct diagnostic methods for intersections and pattern recognition analysis for segments. The consultant prepared an abbreviated analysis relating crash causality to roadway geometrics, roadside features, traffic control devices, traffic operations, driver's behavior, and road and weather conditions. Safety evaluation of the selected sites will include predictive and diagnostic analyses performed in the office setting.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Cleaned the CRIS data to better locate the crashes on the system by severity
- Calibrated the Vision Zero Suite Crash Model
- Developed Safety Performance Functions
- Participated the Statewide Traffic Safety Task Force discussions
- Continued coordination with consultant team to conduct traffic crash data analysis by using DiExSys Vision Zero Suite software to identify the safety issues in the region.
- Continued meetings of the Regional Traffic Safety Task Force that is comprised of multi-agencies for collaborative efforts to address the safety issues in the region and Safety Performance Measures (PM1).

SUBTASK 3.9 – COORDINATE PUBLIC TRANSIT – HUMAN SERVICES TRANSPORTATION PLAN UPDATE

This plan serves two primary purposes: guide the programming process for FTA Section 5310 funding and provide guidance to enhanced mobility providers on how to best advance the mobility independence of older adults, individuals with disabilities, low-income populations, and veterans in the Corpus Christi Urbanized Area. This effort emphasized coordination among all the key players including public transit providers, private operators, and volunteer driver programs. It also includes the customers, staff, and stakeholders from human services and health care agencies.

The Corpus Christi region worked to more fully incorporate mobility management into planning processes to help ensure that decisions on funding transportation projects can result in more equitable distribution of services, facilities, and resources. The Corpus Christi MPO staff fulfilled requirements related to the 5310 Program: Enhanced Mobility of Seniors and Individuals with Disabilities, including participating in a regional rating and ranking committee for the program. The performance measures included in the updated Coordinated Public Transit – Human Services Transportation Plan required the collection of quantitative and qualitative information, as available, concerning modifications to the geographic coverage of transportation service, the quality of transportation service, or service times that increase the availability of transportation services for seniors and individuals with disabilities; ridership; and accessibility improvements.

SUBTASK 3.10 – REGIONAL RESILIENCY IMPROVEMENT PLAN

The Corpus Christi MPO staff contracted with a consultant to determine the transportation infrastructure assets that will be evaluated as part of the Regional Resiliency Plan. This effort also determined the relevant natural and human-caused hazards, along with establishing a "Criticality Framework" that considered economic cost and social equity. This effort was coordinated among the Corpus Christi MPO and its planning partners to identify the vulnerable transportation assets for each relevant hazard.

The Corpus Christi MPO also developed a scope of services and corresponding budget for a consultant to localize the FHWA Resilience and Disaster Recovery (RDR) Tool Suite that will enable the Corpus Christi MPO to assess transportation resilience return on investment (ROI) for specific transportation assets over a range of potential future conditions and hazard scenarios. This can then be used as a consideration in existing project prioritization processes. The results of the analyses will help address deeply uncertain future scenarios and ensure that federal transportation funding is devoted to projects that are an efficient and effective investment for the region. This includes a process that incorporates the resiliency benefits estimated by the RDR tool into the Project Prioritization Tool (also developed by consultants) to return scores for direct inclusion in project rankings.

SUBTASK 3.11 – PLANNING AND ENVIRONMENTAL LINKAGES

The Corpus Christi MPO aspires to being as deliberate in identifying environmental impacts and developing coordinated and collaborative mitigation activities as we are in identifying transportation needs and developing transportation projects. With this in mind, the Corpus Christi MPO collaborated with local governments, non-profit organizations, and state and federal resource and regulatory agencies to mitigate adverse impacts of transportation policies and projects. Collaboration among transportation planning, economic development, land development, and wildlife conservation efforts is critical because the impacts of transportation will cut across all these individual efforts. A desired outcome of the Corpus Christi MPO collaboration process is that transportation planning and decision making, including project selection (transportation and mitigation), integrates and coordinates land use, water quality, and natural resource planning and management. Identifying as many environmental concerns as possible will occur early in the transportation planning and project development process to help efficiently and effectively Avoid, Minimize, Mitigate, Enhance and Remediate impacts.

TASK 3 – FUNDING SUMMARY

Funding Source	Amount Budgeted	Amount Expended	Balance	% Expended
Transportation Planning Funds (PL 112 & FTA 5303)	\$197,800	\$182,299.45	\$15,500.55	92.16%
Local Planning Funds	\$0	\$0	\$0	0%
FTA (Sec. 5309)	\$0	\$0	\$0	0%
CMAQ	\$0	\$0	\$0	0%
STP MM	\$0	\$0	\$0	0%
TOTAL	\$197,800	\$182,299.45	\$15,500.55	92.16%

TASK 4 - METROPOLITAN TRANSPORTATION PLAN (MTP) UPDATE

TASK 4 – OVERALL DESCRIPTION

Task 4.0 reflects efforts in support of developing the new (2050 MTP) and review the existing (2045) 25-year Metropolitan Transportation Plan (MTP) for possible amendments. Key activities for FY 2023 were reviewing and anticipating possible plan amendments; evaluating the process used in the future MTP development; and anticipating potential impacts from new federal guidance and legislation. Most of the work anticipated to begin developing the 2050 MTP were postponed into FY 2024 due to delays stemming from the 2020 Census data. Development of the 2050 MTP has several subcomponents inherent in an update, including:

- Demographic Forecasts/Small Area Forecast
- Congestion Management Process
- Regional ITS Plan
- Regional Freight Plan
- Transit Plan (in coordination with CCRTA)
- Specialized Transit Plan (in coordination with Coastal Bend COG and CCRTA)
- Regional Nonmotorized Plan
- Regionally Significant Corridor Studies
- Transportation System Reporting and Needs Identification Studies

SUBTASK 4.1 – REFINE VISION AND GOALS

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. When it does occur, this effort will involve the public and stakeholders in defining a vision, a performance-based plan requires clear agreed-upon goals and objectives. The goals and objectives of other agency plans inform the development of the goals and objectives of the transportation plan. The process of developing the transportation plan encourages decision-makers and the public to explore goals and objectives from different plans, identify potential conflicts and commonalities, and create a prioritization system.

Work Performed and Status

Corpus Christi MPO staff performed and completed the following:

- Collected multiple related plans and their updates.
- Participated in development of related planning efforts to aid collaboration amongst agencies.

SUBTASK 4.2 – REFINE PERFORMANCE MEASURES AND EVALUATION CRITERIA

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. This effort will directly feed into project analyses tools. The Corpus Christi MPO staff will develop specific criteria and analysis procedures that compare portfolios and scenarios comprised of distinct projects and policies for progress toward achieving the regional, state, and national performance goals.

Work Performed and Status

Corpus Christi MPO staff performed the following:

Reviewed performance measures available from private data suppliers such as Inrix and Replica. These
measures were examined to determine if they can best be used at the regional level, corridor level, or
individual project level.

SUBTASK 4.3 – IDENTIFY NEEDS AND DEFICIENCY LOCATIONS

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. This effort requires the performance measures in Subtask 4.2, along with public feedback, to determine the types and locations of needs, such as: safety issues, unacceptable pavement or bridge conditions, operational problems, lack of interconnectivity, congestion, or other issues.

Work Performed and Status

Corpus Christi MPO staff performed the following:

- Maintained an up-to-date fiscally constrained 10-Year Plan for the periods of FY 2023-2032.
- Identified opportunities to partner and leverage public resources for projects.
- Collected planned projects from state and local agencies as an analog for existing and future needs.

SUBTASK 4.4 - DEVELOP A FINANCIAL PLAN OF REASONABLE AVAILABLE FUNDING

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. The Corpus Christi MPO staff, in cooperation with CCRTA, local municipalities and counties, and TxDOT, will forecast reasonably foreseeable revenue resources using realistic and collaboratively developed assumptions about existing funding sources, potential funding sources, alternative financing strategies, and inflation rate.

SUBTASK 4.5 – DEVELOP, ANALYZE, AND REFINE SCENARIOS FOR ANALYSIS AND INVESTMENT

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. The Corpus Christi MPO staff has, as part of participation in other planning efforts

throughout the region, begun identifying potential philosophies that could frame scenarios for examining future needs and system performance. These include: growth as usual, growth impacted by extreme weather or sea level rise, more infill growth, growth impacted by ecosystem conservation, a change in transportation resulting from more telework, a change in transportation resulting from more autonomous vehicles, a change in transportation resulting from more on-line purchasing and less "shopping". Additional scenario philosophies will be developed as the planning project moves forward.

SUBTASK 4.6 – DOCUMENT PLAN AND PROCESSES

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024. Draft freight chapter updates were distributed for review.

SUBTASK 4.7 – EVALUATE IMPACTS AND DEVELOP MITIGATION

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024.

SUBTASK 4.8 – PLANNING AND PROGRAMMING PROCESS EVALUATION AND DEBRIEF

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024.

SUBTASK 4.9 – PROCESS DOCUMENTATION AND ENHANCEMENT

Due to delays in tool development and corresponding short term planning efforts, the bulk of this effort was postponed into FY 2024.

TASK 4 - FUNDING SUMMARY

Funding Source	Amount Budgeted	Amount Expended	Balance	% Expended
Transportation Planning Funds (PL 112 & FTA 5303)	\$70,100	\$42,695.40	\$27,404.60	60.91%
Local Planning Funds	\$0	\$0	\$0	\$0
FTA (Sec. 5309)	\$0	\$0	\$0	\$0
CMAQ	\$0	\$0	\$0	\$0
STP MM	\$0	\$0	\$0	\$0
TOTAL	\$70,100	\$42,695.40	\$27,404.60	60.91%

The Corpus Christi MPO staffing levels were 5 of 6 FTEs in FY 2023.

TASK 5 - SPECIAL STUDIES

Task 5 included an overall description of the Corpus Christi MPO's special studies activities. These included all subtasks listed in the UPWP with a description of each subtask product received or work accomplished and agency responsible. If work under a subtask was completed by a consultant/subcontractor, this is indicated. If an "amount expended" has exceeded or is below the "amount budgeted" by 25% or more, this must be noted in the task funding table and an explanation must be provided for the variance. For FY 2023 all tasks were completed within the budgetary limitations with no variance.

TASK 5 – OVERALL DESCRIPTION

Task 5.0 was envisioned to encompass any special projects undertaken by the Corpus Christi MPO.

SUBTASK 5.1 – REGIONAL SAFETY PLANNING

Corpus Christi MPO staff cancelled this Task previously in FY 2022 and carried over the funds for the FY 2023 - FY 2024 UPWP. For FY 2023, the MPO reviewed and worked with partners to acquire the TxDOT-purchased INRIX data for Texas MPOs' to use. Aspects of this proposed effort were combined into the Corpus Christi MPO's efforts with the development of the 2050 MTP and the 2024 CMP.

Work Performed and Status

No projects were developed for this Task 5.0 in FY 2023.

SUBTASK 5.2 – NO PROJECTS WERE SPECIFIED FOR THIS TASK.

N/A

Work Performed and Status

N/A

TASK 5.0 – FUNDING SUMMARY

Funding Source	Amount Budgeted	Amount Expended	Balance	% Expended
Transportation Planning Funds (PL 112 & FTA 5303)	\$0	\$0	\$0	\$0
FHWA Resiliency Pilot Grant*	\$0	\$0	\$0	\$0
Local Planning Funds	\$0	\$0	\$0	\$0
FTA (Sec. 5309)	\$0	\$0	\$0	\$0
CMAQ	\$0	\$0	\$0	\$0
STP MM	\$0	\$0	\$0	\$0
TOTAL	\$0	\$0	\$0	\$0

BUDGET SUMMARY

The following table shows a recap of the FY 2023 funding amounts budgeted, expended, the remaining balance and the total percent (%) expended. A "budget summary" table is provided for each funding source identified in the UPWP and repeated in the APER.

TOTAL TRANSPORTATION PLANNING FUNDS (TPF) BUDGETED AND EXPENDED FOR FY 2023

UPWP Task	Amount Budgeted	Amount Expended	Balance	% Expended
1.0	\$1,214,100	\$524,945.41	\$689,154.59	43.24%
2.0	\$164,200	\$160,913.31	\$3,286.69	98.00%
3.0	\$197,800	\$182,299.45	\$15,500.55	92.16%
4.0	\$70,100	\$42695.40	\$27,404.60	60.91%
5.0	\$0	\$0	\$0	0.00%
TOTAL	\$1,646,200	\$910,853.57	\$735,346.43	55.33%

The MPO staffing levels were 5 of 6 FTEs from October 1, 2022 through September 30, 2023. We kept 1 FTE vacant so we could evaluate our particular needs for the position related to consultant assistance for the remainder of FY 2023.

In FY 2023, we did not have the need to augment the FHWA PL funds with local funds for special projects.

For FY 2023, we allocated \$1.0 million of federal CRRSAA funds for consultant services. Consultant services were delayed due to contracting schedule, therefore the amount anticipated to be spent was more than 25% less than budgeted in Task 1.

FTA (Sec. 5307) Funds Budgeted and Expended for FY 2023

UPWP Task	Amount Budgeted	Amount Expended	Balance	% Expended
1.0	0	0	0	0
2.0	0	0	0	0
3.0	0	0	0	0
4.0	0	0	0	0
5.0	0	0	0	0
TOTAL	\$ O	\$ 0	\$ 0	0 %

CMAQ Funds
Budgeted and Expended for FY 2023

UPWP Task	Amount Budgeted	Amount Expended	Balance	% Expended
1.0	0	0	0	0
2.0	0	0	0	0
3.0	0	0	0	0
4.0	0	0	0	0
5.0	0	0	0	0
TOTAL	\$ 0	\$ 0	\$ 0	0 %

STP – MM Funds Budgeted and Expended for FY 2023

UPWP Task	Amount Budgeted	Amount Expended	Balance	% Expended
1.0	0	0	0	0
2.0	0	0	0	0
3.0	0	0	0	0
4.0	0	0	0	0
5.0	\$ 0	\$ 0	\$ 0	0 %